GENERATING SETS

visa.it

Synergy of people producing energy

ONIS VISA

Generating sets range 2015 PERKINS STAMFORD

Voltage

380 V 60 Hz

INDEX

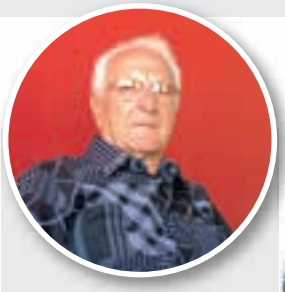
ONIS VISA
SYNERGY OF PEOPLE PRODUCING ENERGY

Visa SpA is a **leading Italian Company** based in Fontanelle (TV) that designs and manufactures generating sets **from 9 to 3000 kVA** for its **standard range** of products, thanks to its **high-performance production plant** and Research & Development department. In addiction, Visa Spa puts its engineering expertise into practice by designing **tailor-made generating sets** and **power plants**. We also offer services with high added value like: training, after-sales service, spare parts. Visa offers the most **suitable solutions with an high standard of quality and technology** in many areas, including industry, construction, mining, oil and gas sector, telecommunications, military, food industries, hospitals and health care centers, finance, hotels and tourism, chemical field, entertainment, naval sector, civil protection, public corporations and many more.

"Visa S.p.a. is an important manufacturer of generating sets present in a large number of markets and sectors"

Visa S.p.A. via I° Maggio, 55 - 31043 Fontanelle (TV) Italy web: www.visa.it email: visa@visa.it

THE HISTORY



The Founder
Benvenuto Barro

Visa, officially born in 1960 as the vision of its founder Benvenuto Barro, is today, after more than half a century, the example of the Italian miracle: from workshop boy to industrial group, orientated today on a global scale and present in more than 60 countries with high-quality standards and indisputable products reliability.

55 Years of Excellence 1960 2015

THE HEADQUARTER

As of January 01, 2009 Visa moved into a new modern 34000sqm production facility, 17000sqm of which are for generating set assembly.
The LEAN MANUFACTURING process is the philosophy and method for innovation processes. The system has been implemented in the VISA production cycle in order to improve work phases and reducing delivery times while maintaining elevated quality levels. The assembly islands have been organized according to genset size, designed to increase efficiency in line with the continuous improvement process.

160 PEOPLE

34000 sqm
Production facility

THE POWER OF THE GROUP


RENTAL DIVISION

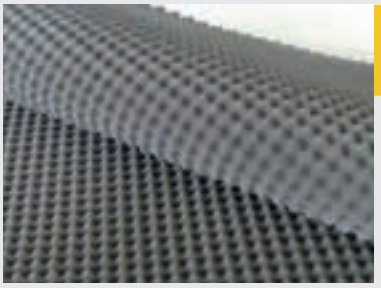
Visa Rent offers a fleet of 300 sound-attenuated generators, of recent production, ranging from 18 kVA to 1900 kVA equipped with safety features that comply with current regulations available to meet different needs.

11000 SQ.M — 8 PEOPLE


WATER DIVISION

Manufacturer of systems and units for various applications in the agriculture and the construction industry. Nettuno® is the company division specialized on manufacture and sale hose reel irrigators and motorpumps.

2000 SQ.M — 20 PEOPLE

SOUND ATTENUATING DIVISION

Meteor® Srl is specialized in the production and distribution of a wide range of noise absorption and acoustic containment products. Rustication type panels, pyramid type, smooth type, coupled with lead or charged rubber are always available.

2500 SQ.M — 5 PEOPLE


METALWORKS DIVISION

Valmec® ITALIA Srl - since 1981 has been producing sheet metal parts for industrial machinery and equipment. Over the years it has specialized in supplying metal frames for tooling machinery, switch cabinets, compressed air technology, soundproofed canopies, cabs for earth moving machinery.

8000 SQ.M — 56 PEOPLE


STRUCTURAL METAL DIVISION

Manufacturer of soundproofed and customized CONTAINERS, ENCLOSURES, SHELTERS in order to satisfy the acustic reduction of every kind of industrial equipment .

6500 SQ.M — 49 PEOPLE

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LARGE STOCK WAREHOUSE - Controlled Temperature

MORE THAN
+1000 UNITS
ALWAYS
IN STOCK

ALTERNATORS WAREHOUSE

ENGINE WAREHOUSE

COMPONENTS WAREHOUSE

CANOPIES AND BASEFRAMES WAREHOUSE

FINISHED GOOD WAREHOUSE

OUR FACILITY PHOTO GALLERY

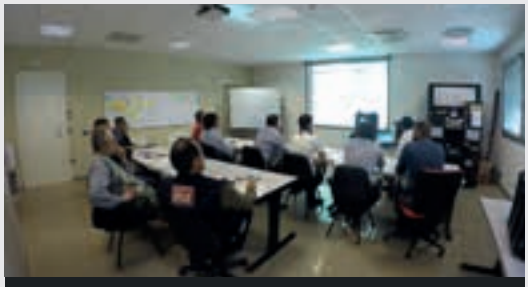
FAST DELIVERY AREA

BIG SIZE GENERATOR SETS ASSEMBLY AREA

CONTROL ROOM TESTING AREA

TESTING A GENERATOR SET WITH REMOTE RADIATOR

TRANSFORMER AND HIGHT VOLTAGE CONTAINERS STOCK AREA



TRAININGS ROOM

CONTROL PANEL SETTINGS

SAFETY WORK

Visa S.p.A. via I° Maggio, 55 - 31043 Fontanelle (TV) Italy web: www.visa.it email: visa@visa.it

QUALITY MANAGEMENT APPROACH

Visa is officially certified ISO 9000 and 2002 ISO 1400 and has been since 1997. In 2009, Visa upgraded to ISO 9001-2008 and ISO 14001-2004. Tailoring its production standards to international technical specifications combined with rigid product testing, has allowed Visa to become a worldwide symbol of efficiency and quality.

TEST CERTIFICATES

At the end of the manufacturing process, every generator set that we build goes to our test centre, where it is subjected to a load test which is carried out in our modern test bays according to ISO Quality procedures.

- Each test 45 / 60 /120 minutes (according to product version);
- Mechanical checks;
- Simulation of alarms and protections installed in the genset;
- Different steps test: 10%, 25%, 50%, 75%, 100% and 110% of load;
- All gensets have their test certificate, signed by our technicians.

OTHER CERTIFICATES

AEO

lavorosicuro

Corporate Environmental & Social Responsibility (CSR) Initiative

INTERNATIONAL REFERENCES

SOME OF OUR CUSTOMERS

TELECOMMUNICATIONS

DATA CENTERS

FINANCE

HOTEL CHAIN

LARGE-SCALE RETAIL TRADE

INDUSTRY

CONSTRUCTIONS - INFRASTRUCTURES - BUILDINGS

PUBLIC & DEFENCE AND CIVIL AID SECTOR

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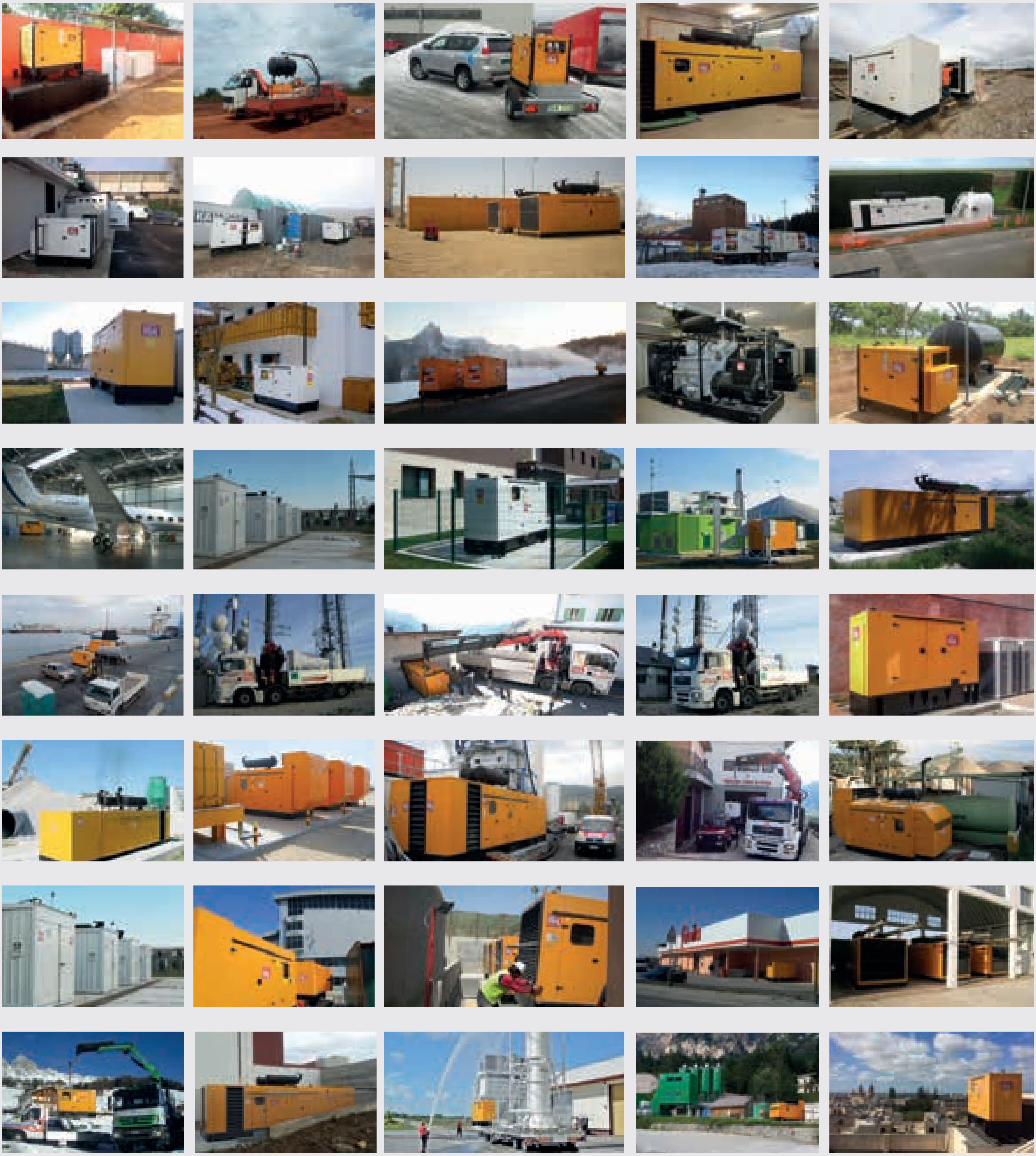
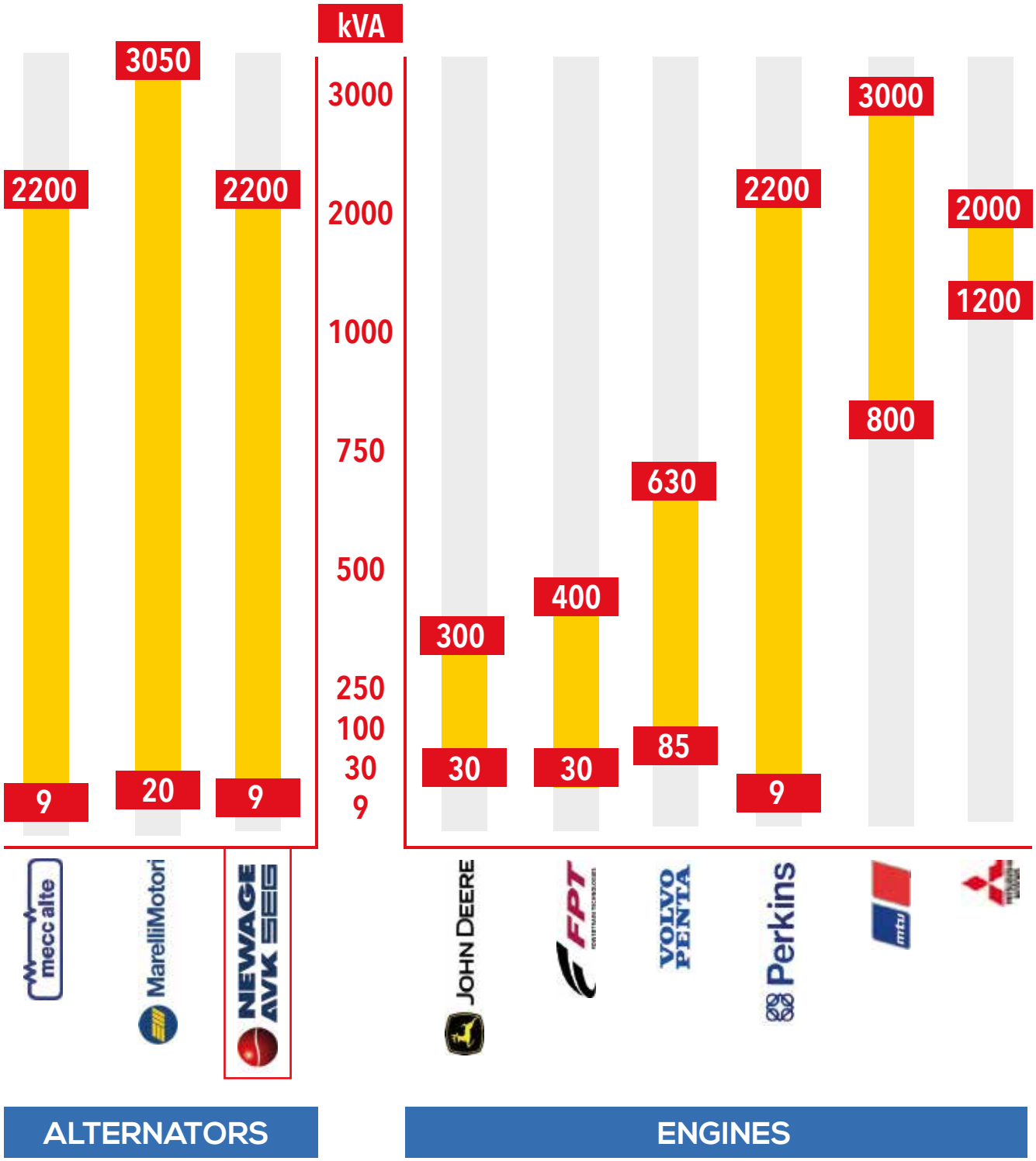
INSTALLATION WORLDWIDE EXAMPLES




kVA
3000
2000
1000
750
500
250
100
30
9
2200
9
3050
20
2200
9
300
30
400
30
630
85
2200
9
3000
800
2000
1200
mecc alte
MarelliMotori
NEWAGE AVK SEG
JOHN DEERE
FPT
VOLVO PENTA
Perkins
mtu
ALTERNATORS
ENGINES

kVA 9 30 100 250 500 750 1000 2000 3000

9.00 20.00

FOX

20.00 60.00

BiG-FOX

30.00 750.00

GALAXY "GX"

30.00 300.00

GALAXY "VM"

750.00 1500.00

POWERFULL "S"

30.00 750.00

GALAXY "GO"

9.00 800.00

POWERFULL "B"

750.00 3000.00

POWERFULL "U"

MAIN FEATURES

The B version POWERFULL generating set range offers a large choice of engines with powers ranging from 9 to 800kVA at 50 or 60Hz. The main features of the B range include a T-type baseframe designed to provide maximum compactness and contain overall generating set dimensions, which is often an essential requirement for installations in small spaces; the baseframe also acts as a fuel tank, ensuring high capacity fuel on-board. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

Mod. P 200 B

EQUIPMENT

STANDARD EQUIPMENT

- Industrial engine, complete with cooling system, injection system with automatic speed regulator, electrical ignition system and battery charger - Industrial, brushless alternator with electronic voltage control system - Control and governing panel box with the Guard Evo. device - 3 or 4 pole circuit breaker - Differential (standard on units with Manual Guard Evolution for the CE market) - T-series modular frame acts as a fuel tank with electronic level sensor, plugs, loading and unloading (see model data sheet for quantity) - High damping anti-vibration mounts placed between the engine/alternator and baseframe - Fuel decanter filter - Exhaust silencer (supplied loose) - Exhaust line expander (supplied loose) - rain cap - flange and gasket on engine - Thermosetting powder coated paint - Battery cut-off switch (only in the CE version)

OPTIONAL EQUIPMENT

- Set-up for quick release fittings (auxiliary, external tank connection) - Engine oil extraction pump (standard for engine powers greater than 300 kVA) – Racor or similar fuel filter - External sockets - Oversize tank - AMF automatic panel and autostart - ATS panel - 220V electric pre-heater (standard in engine powers greater than 700 kVA) – PW005 terminal board for external electrical control panel - Electronic speed regulator (if not provided as standard) - IN SYNC parallel panel - Remote management and control software - Air extraction conveyor - High sound insulating exhaust silencer - SilentWall systems – BELL canopies – HD and HT containers – On request, the canopy colour can be different from standard – Radiator liquid level sensor.

VERSIONS

MODEL T1

MODEL T2

MODEL T3

MODEL T4

DESCRIPTION

The range includes, as standard, the well-tested and reliable Guard Evolution controller, equipped with a very efficient software that has no equal in the market in terms of accuracy and number of functions.

The POWERFULL "B" model is equipped with strong support feet to facilitate forklift handling and stabilizing the unit on uneven ground. The support feet have holes to permanently fasten the generating set on site.

All "B" models are equipped with fuel and lubricant-resistant rubber anti vibration mountings.

In all "B" models there is a metal battery rack with wings to secure the batteries.

All POWERFULL "B" models are provided with: filler cap, fuel gauge, draining caps and sleeves to connect any accessories.

PICTURE

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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Mail: visa@visa.it Web: www.visa.it SAP 109000000021-001-00 28-09-2015

MAIN FEATURES

Open version generating sets in the Powerfull B series are made with the new T-type baseframe that guarantees the generating set with an operating autonomy of at least 8 hours at 75% of the PRP power (the operating autonomy varies according to the installed power and baseframe size). The frames are divided into 4 sizes with uniform dimensions, called T 1- T 2 - T 3 - T4. For every size of trailers, different models of generating set can be mounted, according to their power, to engine and alternator brand name.

DESCRIPTION	PICTURE
CONSTRUCTION FEATURES The frames are made of S235JR quality or higher steel sheet metal, and are assembled by welding carried out by skilled workers. In addition to supporting the coupling, the baseframe also acts as a tank. For this reason every piece that is built is then subjected to pressure so as to test the seal of the welded seams.	
SOLUTIONS The top part of the tank is shaped so as to serve as a retention basin for any dripping during normal filling and maintenance operations. The baseframe is fitted with supporting feet to keep it raised off the floor and therefore allow the generating set to be handled with a fork lift. There are slots on the supporting feet so that the baseframe can be secured to the floor.	
PAINTING Each component has a powder-coated thermoset paint containing a polyester resin base highly resistant to atmospheric agents; the pigments are stable against light and heat. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Minimum paint thickness is 70 micron. After the powder-coated paint is applied, the component is kept in the oven until polymerisation is complete. RAL 9005 (black) is the standard colour. Other colours are available on request.	
INSTALLATION Crossbeams fitted with fuel and lubricant-resistant vulcanised rubber anti-vibration mounts are bolted onto the baseframe and sized so as to support the engine/alternator coupling and damper vibrations at no less than the values provided in table C1 of Standard ISO8528-9.	
EQUIPMENT T-series frames are all equipped with the following accessories: - filler cap; - electric fuel level gauge; - sleeves for the automatic loading system connection; - connecting sleeves for the engine power supply circuit; - bottom plugs to empty and clean the tank.	

OPTIONAL ACCESSORIES

-Colours and oversize capacities on request.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

POWERFULL - P 9 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**11.2**	(kVA)
Continuous power (PRP)	**9.0**	(kW)
Stand-by power (LTP)	**12.4**	(kVA)
Stand-by power (LTP)	**9.9**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	910	mm
Length	1420	mm
Height	1114	mm
Weight	480	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	403D-11G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	1.13	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	5-6½	
BMEP	0	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	10.7	kW
Flywheel Stand-by Power	11.8	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	3.8	l/h
Fuel Cons. at 100% (P.R.P)	3.1	l/h
Fuel Cons. at 75% (P.R.P.)	2.4	l/h
Fuel Cons. at 50% (P.R.P.)	1.8	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	4.9	l
Engine Antifreeze capacity	3.3	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	10.2	kW
Heat from exhaust	8.9	kW
Heat from radiation	2.6	kW

Exhaust data

Exhaust temperature	437	°C
Cooling air flow	35.40	m³/min
Combustion air flow	0.90	m³/min
Exhaust gas flow	2.21	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	On request	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	PI044F	
P.R.P. Power	12.5	kVA
L.T.P. Power	13.8	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 10	
Silencer outlet diameter	48.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

Guard Touch MANUAL OR AUTOMATIC is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy the myriad of requests from the end-user, from manual function to totally automatic management.

The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 14 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**15.0**	(kVA)
Continuous power (PRP)	**12.0**	(kW)
Stand-by power (LTP)	**16.5**	(kVA)
Stand-by power (LTP)	**13.2**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	403D-15G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	1.50	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	4-7½	
BMEP	650	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	14.7	kW
Flywheel Stand-by Power	16.2	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	4.8	l/h
Fuel Cons. at 100% (P.R.P)	4.3	l/h
Fuel Cons. at 75% (P.R.P.)	3.3	l/h
Fuel Cons. at 50% (P.R.P.)	2.4	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	6.0	l
Engine Antifreeze capacity	2.6	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	13.6	kW
Heat from exhaust	10.3	kW
Heat from radiation	4.0	kW

Exhaust data

Exhaust temperature	455	°C
Cooling air flow	34.80	m³/min
Combustion air flow	1.23	m³/min
Exhaust gas flow	3.14	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	On request	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	PI044G	
P.R.P. Power	15.0	kVA
L.T.P. Power	16.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 10	
Silencer outlet diameter	48.0	mm

Available control panels

Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 21 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**24.0**	(kVA)
Continuous power (PRP)	**19.2**	(kW)
Stand-by power (LTP)	**26.6**	(kVA)
Stand-by power (LTP)	**21.3**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	920	mm
Length	1420	mm
Height	1260	mm
Weight	620	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	404D-22G	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	2.22	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	4-7½	
BMEP	658	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	22.0	kW
Flywheel Stand-by Power	24.3	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	7.3	l/h
Fuel Cons. at 100% (P.R.P)	6.4	l/h
Fuel Cons. at 75% (P.R.P.)	4.8	l/h
Fuel Cons. at 50% (P.R.P.)	3.5	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	10.6	l
Engine Antifreeze capacity	3.6	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	19.9	kW
Heat from exhaust	16.6	kW
Heat from radiation	3.8	kW

Exhaust data

Exhaust temperature	440	°C
Cooling air flow	39.60	m³/min
Combustion air flow	1.74	m³/min
Exhaust gas flow	4.34	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	On request
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI144E	
P.R.P. Power	25.0	kVA
L.T.P. Power	27.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 10	
Silencer outlet diameter	48.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 30 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**34.9**	(kVA)
Continuous power (PRP)	**27.9**	(kW)
Stand-by power (LTP)	**38.2**	(kVA)
Stand-by power (LTP)	**30.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	920	mm
Length	1580	mm
Height	1375	mm
Weight	800	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	669	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	33.2	kW
Flywheel Stand-by Power	36.4	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	9.5	l/h
Fuel Cons. at 100% (P.R.P)	8.6	l/h
Fuel Cons. at 75% (P.R.P.)	6.6	l/h
Fuel Cons. at 50% (P.R.P.)	4.9	l/h
Fuel Cons. at 25% (P.R.P.)	3.1	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

POWERFULL - P 30 B

Heat from engine

Heat from radiator	18.0	kW
Heat from exhaust	27.0	kW
Heat from radiation	5.0	kW

Exhaust data

Exhaust temperature	520	°C
Cooling air flow	70.00	m³/min
Combustion air flow	2.60	m³/min
Exhaust gas flow	6.40	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI144H	
P.R.P. Power	35.0	kVA
L.T.P. Power	38.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 10	
Silencer outlet diameter	48.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 41 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**50.0**	(kVA)
Continuous power (PRP)	**40.0**	(kW)
Stand-by power (LTP)	**55.0**	(kVA)
Stand-by power (LTP)	**44.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	910	mm
Length	1640	mm
Height	1400	mm
Weight	990	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33TG1	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1020	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	50.5	kW
Flywheel Stand-by Power	55.6	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	14.3	l/h
Fuel Cons. at 100% (P.R.P)	12.9	l/h
Fuel Cons. at 75% (P.R.P.)	9.9	l/h
Fuel Cons. at 50% (P.R.P.)	7.1	l/h
Fuel Cons. at 25% (P.R.P.)	4.3	l/h

Speed regulation

Electronic regulator	On request
Precision class	G2

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	31.0	kW
Heat from exhaust	39.0	kW
Heat from radiation	8.0	kW

Exhaust data

Exhaust temperature	510	°C
Cooling air flow	70.00	m³/min
Combustion air flow	3.70	m³/min
Exhaust gas flow	8.80	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224D	
P.R.P. Power	50.0	kVA
L.T.P. Power	55.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 12	
Silencer outlet diameter	60.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 65 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**68.1**	(kVA)
Continuous power (PRP)	**54.5**	(kW)
Stand-by power (LTP)	**75.1**	(kVA)
Stand-by power (LTP)	**60.1**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	905	mm
Length	1750	mm
Height	1375	mm
Weight	990	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33TG2	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1279	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	63.3	kW
Flywheel Stand-by Power	69.6	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	18.2	l/h
Fuel Cons. at 100% (P.R.P)	16.6	l/h
Fuel Cons. at 75% (P.R.P.)	12.5	l/h
Fuel Cons. at 50% (P.R.P.)	8.8	l/h
Fuel Cons. at 25% (P.R.P.)	5.1	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	41.0	kW
Heat from exhaust	52.0	kW
Heat from radiation	11.0	kW

Exhaust data

Exhaust temperature	534	°C
Cooling air flow	111.00	m³/min
Combustion air flow	4.70	m³/min
Exhaust gas flow	11.80	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224F	
P.R.P. Power	72.5	kVA
L.T.P. Power	80.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 12	
Silencer outlet diameter	60.0	mm

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 80 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**85.0**	(kVA)
Continuous power (PRP)	**68.0**	(kW)
Stand-by power (LTP)	**90.8**	(kVA)
Stand-by power (LTP)	**72.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	905	mm
Length	1885	mm
Height	1375	mm
Weight	1090	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1104A-44TG2	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	4.40	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1280	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	84.5	kW
Flywheel Stand-by Power	92.7	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	24.4	l/h
Fuel Cons. at 100% (P.R.P)	22.3	l/h
Fuel Cons. at 75% (P.R.P.)	16.9	l/h
Fuel Cons. at 50% (P.R.P.)	11.9	l/h
Fuel Cons. at 25% (P.R.P.)	6.5	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.0	l
Engine Antifreeze capacity	7.0	l
Radiator standard	IM50	

POWERFULL - P 80 B

Heat from engine

Heat from radiator	53.0	kW
Heat from exhaust	68.0	kW
Heat from radiation	14.0	kW

Exhaust data

Exhaust temperature	535	°C
Cooling air flow	111.00	m³/min
Combustion air flow	6.20	m³/min
Exhaust gas flow	15.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224G	
P.R.P. Power	85.0	kVA
L.T.P. Power	90.8	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 15	
Silencer outlet diameter	70.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 105 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**114.0**	(kVA)
Continuous power (PRP)	**91.2**	(kW)
Stand-by power (LTP)	**125.0**	(kVA)
Stand-by power (LTP)	**100.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	940	mm
Length	1925	mm
Height	1400	mm
Weight	1200	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1104C-44TAG2	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	4.40	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1618	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	106.8	kW
Flywheel Stand-by Power	116.9	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	29.7	l/h
Fuel Cons. at 100% (P.R.P)	26.9	l/h
Fuel Cons. at 75% (P.R.P.)	20.2	l/h
Fuel Cons. at 50% (P.R.P.)	14.1	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	8.0	l
Engine Antifreeze capacity	7.0	l
Radiator standard	IM50	

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Heat from engine

Heat from radiator	57.7	kW
Heat from exhaust	89.8	kW
Heat from radiation	8.5	kW

Exhaust data

Exhaust temperature	517	°C
Cooling air flow	225.60	m³/min
Combustion air flow	7.75	m³/min
Exhaust gas flow	18.40	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274D	
P.R.P. Power	114.0	kVA
L.T.P. Power	125.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T1	
Standard tank	160	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 15	
Silencer outlet diameter	70.0	mm

Available control panels

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Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

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For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**160.0**	(kVA)
Continuous power (PRP)	**128.0**	(kW)
Stand-by power (LTP)	**175.0**	(kVA)
Stand-by power (LTP)	**140.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1090	mm
Length	2340	mm
Height	1730	mm
Weight	1810	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1106A-70TAG2	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	7.01	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1478	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	155.4	kW
Flywheel Stand-by Power	171.8	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	41.7	l/h
Fuel Cons. at 100% (P.R.P)	38.2	l/h
Fuel Cons. at 75% (P.R.P.)	29.1	l/h
Fuel Cons. at 50% (P.R.P.)	19.1	l/h
Fuel Cons. at 25% (P.R.P.)	11.0	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	16.5	l
Engine Antifreeze capacity	9.5	l
Radiator standard	IM50	

POWERFULL - P 151 B

Heat from engine

Heat from radiator	112.7	kW
Heat from exhaust	120.6	kW
Heat from radiation	12.3	kW

Exhaust data

Exhaust temperature	407	°C
Cooling air flow	245.00	m³/min
Combustion air flow	14.97	m³/min
Exhaust gas flow	32.29	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274F	
P.R.P. Power	160.0	kVA
L.T.P. Power	175.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T2	
Standard tank	520	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 20	
Silencer outlet diameter	89.0	mm

Available control panels

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Options

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For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**200.0**	(kVA)
Continuous power (PRP)	**160.0**	(kW)
Stand-by power (LTP)	**218.0**	(kVA)
Stand-by power (LTP)	**174.4**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1090	mm
Length	2400	mm
Height	1730	mm
Weight	1860	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1106A-70TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	7.01	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	2-11½	
BMEP	1717	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	180.5	kW
Flywheel Stand-by Power	199.7	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	51.0	l/h
Fuel Cons. at 100% (P.R.P)	46.4	l/h
Fuel Cons. at 75% (P.R.P.)	35.3	l/h
Fuel Cons. at 50% (P.R.P.)	22.7	l/h
Fuel Cons. at 25% (P.R.P.)	12.4	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	16.5	l
Engine Antifreeze capacity	9.5	l
Radiator standard	IM50	

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Heat from engine

Heat from radiator	131.1	kW
Heat from exhaust	159.9	kW
Heat from radiation	19.5	kW

Exhaust data

Exhaust temperature	485	°C
Cooling air flow	230.00	m³/min
Combustion air flow	16.37	m³/min
Exhaust gas flow	38.35	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274H	
P.R.P. Power	200.0	kVA
L.T.P. Power	220.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	T2	
Standard tank	520	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 20	
Silencer outlet diameter	89.0	mm

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

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For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**280.0**	(kVA)
Continuous power (PRP)	**224.0**	(kW)
Stand-by power (LTP)	**310.0**	(kVA)
Stand-by power (LTP)	**248.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60 Hz
Voltage (V)	380 V

Dimensions and noise level

Width	N.D. mm
Length	N.D. mm
Height	N.D. mm
Weight	N.D. kg
Sound pressure 7 m.	0.0 dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS
Engine model	1506A-E88TAG3
Cylinders	6 nr.
Speed	1800 r.p.m.
Cubic capacity	8.8 l
Air intake	Turbocharged
Standard voltage	24 Vdc
Optional voltage	Vdc
Sae	N.D.
BMEP	2250 kPa
Cooling	Water

Engine power

Flywheel P.R.P. Power	257.0 kW
Flywheel Stand-by Power	284.0 kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	69.8 l/h
Fuel Cons. at 100% (P.R.P)	63.1 l/h
Fuel Cons. at 75% (P.R.P.)	47.5 l/h
Fuel Cons. at 50% (P.R.P.)	33.1 l/h
Fuel Cons. at 25% (P.R.P.)	N.D. l/h

Speed regulation

Electronic regulator	Standard
Precision class	G2

Engine dimensions and liquids

Oil quantity	41.0 l
Engine Antifreeze capacity	13.9 l
Radiator standard	IM50

POWERFULL - P 251 B

Heat from engine

Heat from radiator	120.0	kW
Heat from exhaust	204.0	kW
Heat from radiation	12.0	kW

Exhaust data

Exhaust temperature	496	°C
Cooling air flow	482.00	m³/min
Combustion air flow	19.80	m³/min
Exhaust gas flow	48.9	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4D	
P.R.P. Power	300.0	kVA
L.T.P. Power	330.0	kVA

Alternator wirings

Connection	Series star	
Phases	Three phases with neutral	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T2	
Capacity	520	l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 25	
Silencer outlet diameter	114.0	mm

Available control panel

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Optional control panels

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Options

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For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**340.0**	(kVA)
Continuous power (PRP)	**272.0**	(kW)
Stand-by power (LTP)	**375.0**	(kVA)
Stand-by power (LTP)	**300.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	1506A-E88TAG5	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	8.80	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	1-14	
BMEP	2462	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	325.0	kW
Flywheel Stand-by Power	358.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	85.7	l/h
Fuel Cons. at 100% (P.R.P)	77.1	l/h
Fuel Cons. at 75% (P.R.P.)	56.8	l/h
Fuel Cons. at 50% (P.R.P.)	38.9	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	41.0	l
Engine Antifreeze capacity	13.9	l
Radiator standard	IM50	

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Heat from engine

Heat from radiator	224.0	kW
Heat from exhaust	259.0	kW
Heat from radiation	16.0	kW

Exhaust data

Exhaust temperature	512	°C
Cooling air flow	482.00	m³/min
Combustion air flow	23.60	m³/min
Exhaust gas flow	59.60	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4E	
P.R.P. Power	350.0	kVA
L.T.P. Power	380.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Standard tank	900	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 30	
Silencer outlet diameter	140.0	mm

Available control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 350 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**400.0**	(kVA)
Continuous power (PRP)	**320.0**	(kW)
Stand-by power (LTP)	**425.0**	(kVA)
Stand-by power (LTP)	**340.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1220	mm
Length	3200	mm
Height	2200	mm
Weight	3350	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2206C-E13TAG2	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	12.50	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	1-14	
BMEP	1984	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	367.8	kW
Flywheel Stand-by Power	400.4	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	90.0	l/h
Fuel Cons. at 100% (P.R.P)	84.0	l/h
Fuel Cons. at 75% (P.R.P.)	65.0	l/h
Fuel Cons. at 50% (P.R.P.)	46.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	40.0	l
Engine Antifreeze capacity	51.4	l
Radiator standard	IM50	

POWERFULL - P 350 B

Heat from engine

Heat from radiator	127.5	kW
Heat from exhaust	250.6	kW
Heat from radiation	36.5	kW

Exhaust data

Exhaust temperature	680	°C
Cooling air flow	716.00	m³/min
Combustion air flow	28.10	m³/min
Exhaust gas flow	68.30	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4F	
P.R.P. Power	400.0	kVA
L.T.P. Power	425.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Standard tank	900	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 30	
Silencer outlet diameter	140.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 450 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**500.0**	(kVA)
Continuous power (PRP)	**400.0**	(kW)
Stand-by power (LTP)	**530.0**	(kVA)
Stand-by power (LTP)	**424.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1260	mm
Length	3550	mm
Height	2200	mm
Weight	4280	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2506C-E15TAG1	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	15.20	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	½-14	
BMEP	2036	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	450.5	kW
Flywheel Stand-by Power	505.5	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	114.0	l/h
Fuel Cons. at 100% (P.R.P)	100.0	l/h
Fuel Cons. at 75% (P.R.P.)	77.0	l/h
Fuel Cons. at 50% (P.R.P.)	57.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	58.0	l
Radiator standard	IM50	

POWERFULL - P 450 B

Heat from engine

Heat from radiator	150.0	kW
Heat from exhaust	299.0	kW
Heat from radiation	29.5	kW

Exhaust data

Exhaust temperature	550	°C
Cooling air flow	866.00	m³/min
Combustion air flow	34.30	m³/min
Exhaust gas flow	96.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5D	
P.R.P. Power	500.0	kVA
L.T.P. Power	530.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Standard tank	900	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 570 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**569.0**	(kVA)
Continuous power (PRP)	**455.0**	(kW)
Stand-by power (LTP)	**625.0**	(kVA)
Stand-by power (LTP)	**500.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2506C-E15TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	15.20	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	½-14	
BMEP	N.D.	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	495.0	kW
Flywheel Stand-by Power	543.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	132.0	l/h
Fuel Cons. at 100% (P.R.P)	121.0	l/h
Fuel Cons. at 75% (P.R.P.)	96.0	l/h
Fuel Cons. at 50% (P.R.P.)	77.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard
Precision class	G3

Engine dimensions and liquids

Oil quantity	60.0	l
Engine Antifreeze capacity	58.0	l
Radiator standard	IM50	

POWERFULL - P 570 B

Heat from engine

Heat from radiator	N.D.	kW
Heat from exhaust	N.D.	kW
Heat from radiation	N.D.	kW

Exhaust data

Exhaust temperature	N.D.	°C
Cooling air flow	N.D.	m³min
Combustion air flow	N.D.	m³/min
Exhaust gas flow	N.D.	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5E	
P.R.P. Power	600.0	kVA
L.T.P. Power	660.0	kVA

Alternator wirings

Connection	Series star	
Phases	Three phases with neutral	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Capacity	900	l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 600 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**625.0**	(kVA)
Continuous power (PRP)	**500.0**	(kW)
Stand-by power (LTP)	**687.0**	(kVA)
Stand-by power (LTP)	**549.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1536	mm
Length	3500	mm
Height	2275	mm
Weight	4590	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2806C-E18TAG1A	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	18.13	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	2087	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	558.0	kW
Flywheel Stand-by Power	613.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	144.0	l/h
Fuel Cons. at 100% (P.R.P)	130.0	l/h
Fuel Cons. at 75% (P.R.P.)	100.0	l/h
Fuel Cons. at 50% (P.R.P.)	71.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	61.0	l
Radiator standard	IM50	

POWERFULL - P 600 B

Heat from engine

Heat from radiator	162.0	kW
Heat from exhaust	457.0	kW
Heat from radiation	43.0	kW

Exhaust data

Exhaust temperature	487	°C
Cooling air flow	857.00	m³/min
Combustion air flow	45.00	m³/min
Exhaust gas flow	114.00	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	Standard	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5F	
P.R.P. Power	673.0	kVA
L.T.P. Power	738.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Standard tank	900	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Options

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POWERFULL - P 680 B

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**673.0**(kVA)
Continuous power (PRP)	**538.0**(kW)
Stand-by power (LTP)	**738.0**(kVA)
Stand-by power (LTP)	**590.0**(kW)
Power factor	**0.8**

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	2806C-E18TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	18.13	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	N.D.	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	592.0	kW
Flywheel Stand-by Power	652.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	158.0	l/h
Fuel Cons. at 100% (P.R.P)	145.0	l/h
Fuel Cons. at 75% (P.R.P.)	112.0	l/h
Fuel Cons. at 50% (P.R.P.)	79.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard
Precision class	G3

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	61.0	l
Radiator standard	IM50	

POWERFULL - P 680 B

Heat from engine

Heat from radiator	N.D.	kW
Heat from exhaust	N.D.	kW
Heat from radiation	N.D.	kW

Exhaust data

Exhaust temperature	N.D.	°C
Cooling air flow	N.D.	³/min
Combustion air flow	N.D.	m³/min
Exhaust gas flow	N.D.	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Standard
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5F	
P.R.P. Power	673.0	kVA
L.T.P. Power	738.0	kVA

Alternator wirings

Connection	Series star
Phases	Three phases with neutral
Winding	12 terminals Winding 311
Terminal Number	12 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	T3	
Capacity	900	l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

MAIN FEATURES

The established range of POWERFULL generating sets, in the U version, offers a broad choice of engines and with power ranges from 800 to 3000 kVA at 50 or 60Hz. The main feature is the extreme solidity of the U frame, built using profiles that are created according to two specifications: either to make the machines as compact as possible or to build them according to the standard measurements that allow them to be installed in C60, C65 and C70 sound-insulated canopies, which are particularly appreciated for their compact size (see specific document). Standard and personalised accessories can be installed on the frame, on client request. As with all Visa products, prior to delivery all of the machine's parts are subject to strict operating tests involving over 30 checks.

Mod. P 1260 U

EQUIPMENT

STANDARD EQUIPMENT

-Industrial engine, complete with cooling system, injection system with automatic rpm governor, electrical ignition system and battery charger -Industrial, brushless alternator with electronic tension control system - Control and governing panel box with Guard Evo. Man. device -3 or 4 pole circuit breaker -Differential (standard on machines with Guard Evo. Man. for the EC market) -Modular frame made with steel profiles -220v electric pre-heater with circulator -High damping anti-vibration devices placed between the engine/alternator and frame -Fuel decanter filter -Exhaust silencer (supplied unassembled) -Exhaust line dilator (supplied unassembled) -Engine oil extraction pump -Rain cover -Flange and gasket on engine -Thermosetting powder coating -Battery cut-off switch (only in the EC version)

OPTIONAL EQUIPMENT

-Standard or larger fuel tank -Collection tray for tanks -Pre-arrangement to install quick-fit connections (auxiliary, external tank connection) -Racor or similar fuel pre-filters -External sockets -Larger tank -AMF automatic panel and auto start -ATS changeover switch panel -PW005 intermediate control terminal block for external electrical panel -Electronic rpm governor (if not included in the standard version) -In SYNC parallel panel -Management software and remote control -POWERFULL canopies in canopy, silent and super silent versions -Air extraction conveyor -High sound insulating exhaust silencer -SilentWall systems -BELL canopies -HD and HT containers -Canopy colour can be requested if different from RAL yellow 1007 -Radiator liquid level sensor.

VERSIONS

MODEL ST60

VERSION WITH OPTIONAL C60 CANOPY

DESCRIPTION

PICTURE

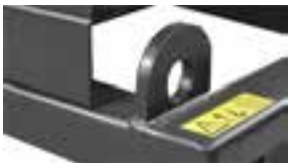
The range includes, as standard, the well-tested and reliable Guard Evolution controller, equipped with a very efficient software that has no equal in the market in terms of accuracy and number of functions.

The POWERFULL "U" range is equipped with a particularly strong modular base frame.

All POWERFULL "U" models are equipped with fuel and lubricant-resistant rubber anti vibration mountings.

The control panel area hosts wide openings suitable for the passage of electrical cables.

Lifting eye bolts allow the genset to be easily handled in complete safety.



On request, the genset can be provided with an integrated fuel tank.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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Mail: visa@visa.it Web: www.visa.it SAP 109000000023-001-00 28-09-2015

MAIN FEATURES

The standardisation of large size generating sets led to the creation of a new baseframe named ST60. The features required by the project were: solidity, easy access to the technical connections (electrical and fuel), modularity for application with different coupling and canopy models. The new ST60 baseframe is available in two categories:
1- open: distinguished by its reduced size and usually not closed on the bottom;
2- silenceable: distinguished by its larger size and fitted with accessories for canopy application. This version is originally welded shut on the bottom with sheet metal, which is also useful to collect any liquid that may accidentally leak out from the engine.

DESCRIPTION

PAINTING
Each component has a powder-coated thermoset paint containing a polyester resin base highly resistant to atmospheric agents; the pigments are stable against light and heat. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Two coats of paint are applied to the component: zinc primer + paint finish. During each phase, the component is kept in the oven until polymerisation is complete. Minimum paint thickness is 140 micron. Durability class is C3-M secondo UNI EN ISO 12944 -2. RAL 9005 (black) is the standard colour. Other colours are available on request.

PICTURE

Plugs to empty out the drip pan (if included) and sleeves for fuel pipe connection.

Hole for the electrical cables.

Bell anti-vibration mounts.

STANDARD EQUIPMENT

ST60 frames are built with welded and adequately sized extruded UNP steel profiles. The following housings are installed:
1- engine stand;
2- radiator stand;
3- alternator stand;
4- start-up accumulator stand (on both sides);
5- electrical panel stand;
6- fuel tank stand (when included the position varies according to the genset capacity and model);
7- joints for counter-frame connection (when there is a canopy);
8- attachment points for lifting hooks (when there is a canopy).

LIMITS

The ST60 project was developed considering the large sizes of the heavy weights, therefore there are a number of limitations of use:
1- the ST60 baseframe does not have lifting pockets;
2- the unit is designed to be lifted on 4 side points rather than from a central point.

POWERFULL - P 805 U

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**844.0**	(kVA)
Continuous power (PRP)	**675.2**	(kW)
Stand-by power (LTP)	**938.0**	(kVA)
Stand-by power (LTP)	**750.4**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4006-23TAG3A	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	22.92	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	2200	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	759.0	kW
Flywheel Stand-by Power	839.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	224.0	l/h
Fuel Cons. at 100% (P.R.P)	200.0	l/h
Fuel Cons. at 75% (P.R.P.)	144.0	l/h
Fuel Cons. at 50% (P.R.P.)	96.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	122.7	l
Engine Antifreeze capacity	51.0	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	290.0	kW
Heat from exhaust	595.0	kW
Heat from radiation	58.0	kW

Exhaust data

Exhaust temperature	500	°C
Cooling air flow	0.00	m³/min
Combustion air flow	76.00	m³/min
Exhaust gas flow	209.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI6H	
P.R.P. Power	910.0	kVA
L.T.P. Power	1000.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX321	
Precision	0.5	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 1050 U

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**995.0**	(kVA)
Continuous power (PRP)	**796.0**	(kW)
Stand-by power (LTP)	**1097.0**	(kVA)
Stand-by power (LTP)	**877.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	4008TAG2	
Cylinders	8	nr.
Speed	1800	r.p.m.
Cubic capacity	30.56	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	1920	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	894.0	kW
Flywheel Stand-by Power	980.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	249.0	l/h
Fuel Cons. at 100% (P.R.P)	224.0	l/h
Fuel Cons. at 75% (P.R.P.)	162.0	l/h
Fuel Cons. at 50% (P.R.P.)	108.0	l/h
Fuel Cons. at 25% (P.R.P.)	55.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	A1	

Engine dimensions and liquids

Oil quantity	165.6	l
Engine Antifreeze capacity	48.0	l
Radiator standard	?	

POWERFULL - P 1050 U

Heat from engine

Heat from radiator	336.0	kW
Heat from exhaust	725.0	kW
Heat from radiation	85.0	kW

Exhaust data

Exhaust temperature	505	°C
Cooling air flow	1290.00	m³/min
Combustion air flow	72.00	m³/min
Exhaust gas flow	202.00	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	Not available	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI6J	
P.R.P. Power	1000.0	kVA
L.T.P. Power	1100.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX321	
Precision	0.5	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 35	
Silencer outlet diameter	168.0	mm

Available control panels

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Options

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POWERFULL - P 1260 U

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1225.0**	(kVA)
Continuous power (PRP)	**980.0**	(kW)
Stand-by power (LTP)	**1310.0**	(kVA)
Stand-by power (LTP)	**1048.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	0	mm
Length	0	mm
Height	0	mm
Weight	11450	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	4012-46TWG2A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	1608	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1106.0	kW
Flywheel Stand-by Power	1217.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	298.0	l/h
Fuel Cons. at 100% (P.R.P)	266.0	l/h
Fuel Cons. at 75% (P.R.P.)	0.0	l/h
Fuel Cons. at 50% (P.R.P.)	0.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TW2	

POWERFULL - P 1260 U

Heat from engine

Heat from radiator	387.0	kW
Heat from exhaust	914.0	kW
Heat from radiation	81.0	kW

Exhaust data

Exhaust temperature	430	°C
Cooling air flow	1104.00	m³/min
Combustion air flow	0.00	m³/min
Exhaust gas flow	235.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734A	
P.R.P. Power	1225.0	kVA
L.T.P. Power	1310.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	6	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 45	
Silencer outlet diameter	219.0	mm

Available control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 1500 U

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1505.0**	(kVA)
Continuous power (PRP)	**1204.0**	(kW)
Stand-by power (LTP)	**1656.0**	(kVA)
Stand-by power (LTP)	**1324.8**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	0	mm
Length	0	mm
Height	0	mm
Weight	12000	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	4012-46TAG2A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	1936	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1272.0	kW
Flywheel Stand-by Power	1399.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	344.0	l/h
Fuel Cons. at 100% (P.R.P)	315.0	l/h
Fuel Cons. at 75% (P.R.P.)	251.0	l/h
Fuel Cons. at 50% (P.R.P.)	246.0	l/h
Fuel Cons. at 25% (P.R.P.)	169.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TAG1-2	

POWERFULL - P 1500 U

Heat from engine

Heat from radiator	758.0	kW
Heat from exhaust	1015.0	kW
Heat from radiation	96.0	kW

Exhaust data

Exhaust temperature	403	°C
Cooling air flow	1608.00	m³/min
Combustion air flow	125.00	m³/min
Exhaust gas flow	287.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734B	
P.R.P. Power	1560.0	kVA
L.T.P. Power	1670.0	kVA

Alternator wirings

Connection	Star
Phases	Trifase + Neutro
Winding	6 terminals winding 13
Terminal Number	6 nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 45	
Silencer outlet diameter	219.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

Guard Touch MANUAL OR AUTOMATIC is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy the myriad of requests from the end-user, from manual function to totally automatic management.

The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 1700 U

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1710.0**	(kVA)
Continuous power (PRP)	**1368.0**	(kW)
Stand-by power (LTP)	**1880.0**	(kVA)
Stand-by power (LTP)	**1504.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	0	mm
Length	0	mm
Height	0	mm
Weight	10670	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4012-46TAG3A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	0	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1440.0	kW
Flywheel Stand-by Power	1583.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	0.0	l/h
Fuel Cons. at 100% (P.R.P)	0.0	l/h
Fuel Cons. at 75% (P.R.P.)	0.0	l/h
Fuel Cons. at 50% (P.R.P.)	0.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TAG3	

Heat from engine

Heat from radiator	0.0	kW
Heat from exhaust	0.0	kW
Heat from radiation	0.0	kW

Exhaust data

Exhaust temperature	0	°C
Cooling air flow	0.00	m³/min
Combustion air flow	0.00	m³/min
Exhaust gas flow	0.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734C	
P.R.P. Power	1770.0	kVA
L.T.P. Power	1895.0	kVA

Alternator wirings

Connection	Star
Phases	Trifase + Neutro
Winding	6 terminals winding 13
Terminal Number	6 nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	SENZA COFANO	
Silencer model	MS 50	
Silencer outlet diameter	273.0	mm

Available control panels

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Optional control panels

Guard Touch MANUAL OR AUTOMATIC is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy the myriad of requests from the end-user, from manual function to totally automatic management.

The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

MAIN FEATURES

The FOX generating set range offers a very large application target with powers ranging from 9.00 to 24.00 kVA at 50 and 60Hz. The new compact and sturdy design and maximum noise reduction make it suitable for all work site and civil uses, both mobile and stationary. Well-supplied equipment and a large range of accessories are available for customisation. The new FOX includes the standard tested and reliable Manual Guard Evolution control panel and is equipped with a large display screen, emergency button, ignition barrel and circuit breaker. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

Mod. P 21 FOX

DESCRIPTION

Three large, protected, sound attenuated openings, guarantee good cooling air flow. The air intake is located in the back, avoiding the recirculation of hot air that is expelled from the front top part of the canopy.

The unit is specifically designed for mobile use. It has strong support feet; reinforced door key locks; slots that allow condensation to be drained from the cooling ducts.

Total access to the main components from the side doors making control and maintenance operations easy to carry out.

Access to the engine and alternator has been improved due to the possibility of opening the doors or completely removing the back panel.

The Fox includes, as standard, the well-tested and reliable Guard Evolution controller, equipped with a very efficient software that has no equal in the market in terms of accuracy and number of functions.

The FOX generating set has been studied in minimal detail; a removable lid allows easy access for radiator inspection.

PICTURE

PAINTING

Galvanized sheet steel is used to manufacture the canopy: minimum zinc thickness is 20 micron. The powder-coated thermoset paint has a polyester resin base highly resistant to atmospheric agents. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Minimum paint thickness is 70 micron. After the power-coated paint is applied, the component is kept in the oven until polymerisation is complete. Durability class is C3-M according to UNI EN ISO 12944 -2. Further details about base-frames in document **109000000038**.

STANDARD EQUIPMENT

-Industrial engine, complete with cooling system, injection system with automatic speed regulator, electrical ignition system and battery charger - Industrial, brushless alternator with electronic voltage control system - Control and governing panel box with Manual Guard Evolution device, 2 or 4 pole circuit breaker, differential (standard on units with Man. Guard Evo. device in the CE market) - Load bearing baseframe with liquid retention basin - High damping anti-vibration mounts placed between the engine/alternator and baseframe - 50 l fuel tank with electronic level sensor, plugs. Loading and unloading - Engine oil extraction pump - Fuel decanter filter - Sound-insulated canopy made with galvanised and painted sheet metal - Key-locks on the doors -Fire-reaction Euroclass Bs2D0 fireproof polyester sound-proofing - Highly-insulating pad on the internal exhaust pipe - Automobile-type gasket with steel core (non adhesive) - High sound insulating exhaust silencer - Rain cap -Lifting points on all 4 sides (and overlapping for delivery) - Set-up for quick fuel release fittings (auxiliary, external tank connection) - Battery cut-off switch (only in the CE version).

OPTIONAL EQUIPMENT

-External sockets –Additional air intake panels on the P14 and P21 models – Oversize fuel tank – Retention basin for oversize fuel tank -AMF automatic panel and auto start -ATS changeover switch panel -Radiator liquid level sensor -220v electric pre-heater -PW005 terminal board for separate electrical panel -Canopy colour can be requested if different from RAL yellow 1007 or RAL white 9010 -Slow moving trailer

PHOTO OF EXTERNAL THREE-PHASE SOCKETS AND AIR INTAKE ON THE P14 AND P21

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

FOX - P 9 FOX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**11.2**	(kVA)
Continuous power (PRP)	**9.0**	(kW)
Stand-by power (LTP)	**12.4**	(kVA)
Stand-by power (LTP)	**9.9**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	770	mm
Length	1470	mm
Height	1330	mm
Weight	524	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	403D-11G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	1.13	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	5-6½	
BMEP	0	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	10.7	kW
Flywheel Stand-by Power	11.8	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	3.8	l/h
Fuel Cons. at 100% (P.R.P)	3.1	l/h
Fuel Cons. at 75% (P.R.P.)	2.4	l/h
Fuel Cons. at 50% (P.R.P.)	1.8	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	4.9	l
Engine Antifreeze capacity	3.3	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	10.2	kW
Heat from exhaust	8.9	kW
Heat from radiation	2.6	kW

Exhaust data

Exhaust temperature	437	°C
Cooling air flow	35.40	m³/min
Combustion air flow	0.90	m³/min
Exhaust gas flow	2.21	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	On request
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI044F	
P.R.P. Power	12.5	kVA
L.T.P. Power	13.8	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	FOX	
Standard tank	50	l
Optional tank	600	l
Oversized tank*		l

Canopy & Silencer

Canopy model	FOX	
Silencer model	MSR/a 35	
Silencer outlet diameter	45.0	mm

Available control panels

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Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

FOX - P 14 FOX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**15.0**	(kVA)
Continuous power (PRP)	**12.0**	(kW)
Stand-by power (LTP)	**16.5**	(kVA)
Stand-by power (LTP)	**13.2**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	403D-15G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	1.50	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	4-7½	
BMEP	650	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	14.7	kW
Flywheel Stand-by Power	16.2	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	4.8	l/h
Fuel Cons. at 100% (P.R.P)	4.3	l/h
Fuel Cons. at 75% (P.R.P.)	3.3	l/h
Fuel Cons. at 50% (P.R.P.)	2.4	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	6.0	l
Engine Antifreeze capacity	2.6	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	13.6	kW
Heat from exhaust	10.3	kW
Heat from radiation	4.0	kW

Exhaust data

Exhaust temperature	455	°C
Cooling air flow	34.80	m³/min
Combustion air flow	1.23	m³/min
Exhaust gas flow	3.14	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	On request	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	PI044G	
P.R.P. Power	15.0	kVA
L.T.P. Power	16.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	FOX	
Standard tank	50	l
Optional tank	600	l
Oversized tank*		l

Canopy & Silencer

Canopy model	FOX	
Silencer model	MSR/a 35	
Silencer outlet diameter	45.0	mm

Available control panels

Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

FOX - P 21 FOX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**24.0**	(kVA)
Continuous power (PRP)	**19.2**	(kW)
Stand-by power (LTP)	**26.6**	(kVA)
Stand-by power (LTP)	**21.3**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	770	mm
Length	1660	mm
Height	1330	mm
Weight	705	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	404D-22G	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	2.22	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	4-7½	
BMEP	658	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	22.0	kW
Flywheel Stand-by Power	24.3	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	7.3	l/h
Fuel Cons. at 100% (P.R.P)	6.4	l/h
Fuel Cons. at 75% (P.R.P.)	4.8	l/h
Fuel Cons. at 50% (P.R.P.)	3.5	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Not available	
Precision class		

Engine dimensions and liquids

Oil quantity	10.6	l
Engine Antifreeze capacity	3.6	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	19.9	kW
Heat from exhaust	16.6	kW
Heat from radiation	3.8	kW

Exhaust data

Exhaust temperature	440	°C
Cooling air flow	39.60	m³/min
Combustion air flow	1.74	m³/min
Exhaust gas flow	4.34	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	On request
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI144E	
P.R.P. Power	25.0	kVA
L.T.P. Power	27.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	FOX	
Standard tank	50	l
Optional tank	600	l
Oversized tank*		l

Canopy & Silencer

Canopy model	FOX	
Silencer model	MSR/a 35	
Silencer outlet diameter	45.0	mm

Available control panels

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Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

BiG - FOX the Bright Soul of the Power

FOX serie gensets' family gets Bigger. Thanks to the new born BIG FOX, Visa's smartest range expands its own power up to 60.0 kVA, while always maintaining the specific features: compact and sturdy, low noise level and extremely versatile!

Available from 20.0 to 60.0 kVA, the BIG FOX can fully satisfy everyone's needs.

Suitable for continuous or emergency service, both for mobile and stationary applications, for civil or industrial use, BIG FOX represents a reliable solution for all those projects where power as well as compact size are required.

A wide choice of optional accessories is available to fully customize your BIG FOX version.

BiG - FOX the Bright Soul of the Power

1- The engine alternator coupling represents the heart of an Onis Visa genset.
Visa has always cooperated with the most qualified manufacturers to provide the perfect coupling and offer a product that aims at the highest quality standards.

2- BiG FOX has **4 wide doors** with robust hinges that open completely to allow complete access to all components.

3- The easily removable **front panel** facilitates access to the exhaust line and radiator, for cleaning and maintenance tasks

4- The easily removable **back panel** gives full access to the alternator.

5- BiG FOX is stackable and allows space to **be optimised for transport.** A 40' HC container contains up to 24 stacked units ("Stackable" function is standard for gensets assembled with Deutz engines and optional for versions with Perkins and Lovol engines).

6- The **exhaust line and cooling air** are on top of the canopy. The exhaust gas line is complete with a rain cap.

7- **The canopy roof** is fitted with a central anti-vibration reinforcement.

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BiG - FOX the Bright Soul of the Power

8- High temperature vulnerable parts are **heat shielded**.

9- Four **robust support** feet keep the BIG FOX baseframe elevated 90mm above ground, which facilitates forklift handling.

10- The BIG FOX baseframe has a **large connection cable** opening on the back side as well as on the bottom.

11- The fuel filling point is in an **easily accessible and raised position**. The fuel tank is equipped with an electronic level sensor and additional sleeves to accommodate any auxiliary fuel connections.

12- The BIG FOX baseframe is equipped with a **retention basin**. A convenient external plug allows any liquid collected to be emptied easily.

13- The BIG FOX is equipped with four **strong lifting eyes** for moving the genset safely.

14- Starting battery is **easily accessible and removable**.

15- The BIG FOX is equipped with the **Guard Evolution manual control panel** (other options are available).

BIG FOX - P 30 FOX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**34.9**	(kVA)
Continuous power (PRP)	**27.9**	(kW)
Stand-by power (LTP)	**38.2**	(kVA)
Stand-by power (LTP)	**30.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	945	mm
Length	2030	mm
Height	1470	mm
Weight	1020	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	669	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	33.2	kW
Flywheel Stand-by Power	36.4	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	9.5	l/h
Fuel Cons. at 100% (P.R.P)	8.6	l/h
Fuel Cons. at 75% (P.R.P.)	6.6	l/h
Fuel Cons. at 50% (P.R.P.)	4.9	l/h
Fuel Cons. at 25% (P.R.P.)	3.1	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	18.0	kW
Heat from exhaust	27.0	kW
Heat from radiation	5.0	kW

Exhaust data

Exhaust temperature	520	°C
Cooling air flow	70.00	m³/min
Combustion air flow	2.60	m³/min
Exhaust gas flow	6.40	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI144H	
P.R.P. Power	35.0	kVA
L.T.P. Power	38.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	FOX	
Standard tank	90	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	FOX	
Silencer model	F60/00	
Silencer outlet diameter	60.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

BIG FOX - P 41 FOX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**50.0**	(kVA)
Continuous power (PRP)	**40.0**	(kW)
Stand-by power (LTP)	**55.0**	(kVA)
Stand-by power (LTP)	**44.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	0	mm
Length	0	mm
Height	1470	mm
Weight	1160	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33TG1	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1020	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	50.5	kW
Flywheel Stand-by Power	55.6	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	14.3	l/h
Fuel Cons. at 100% (P.R.P)	12.9	l/h
Fuel Cons. at 75% (P.R.P.)	9.9	l/h
Fuel Cons. at 50% (P.R.P.)	7.1	l/h
Fuel Cons. at 25% (P.R.P.)	4.3	l/h

Speed regulation

Electronic regulator	On request
Precision class	G2

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	31.0	kW
Heat from exhaust	39.0	kW
Heat from radiation	8.0	kW

Exhaust data

Exhaust temperature	510	°C
Cooling air flow	70.00	m³/min
Combustion air flow	3.70	m³/min
Exhaust gas flow	8.80	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224D	
P.R.P. Power	50.0	kVA
L.T.P. Power	55.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	FOX	
Standard tank	90	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	FOX	
Silencer model	F60/00	
Silencer outlet diameter	60.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

MAIN FEATURES

The GX version GALAXY generating set range offers a large choice of engines with powers ranging from 9 to 650kVA at 50 or 60Hz. The main features of the GX range are: GV-type baseframe that acts as a watertight basin for any leaking liquid from the genset (a feature which is essential for today's strictest standards); modular canopies that represent a concentrate of high technology in terms of compact and accessible design, incorporating all the parts that comprise the genset in a sleek and harmonious line; very elevated modularity allowing for customisation through the most diverse solutions, which is very important in the rationalisation of the connected systems. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

Mod. P 105 GX

EQUIPMENT

STANDARD EQUIPMENT

- Industrial engine, complete with cooling system, injection system with automatic speed regulator, electrical ignition system and battery charger - Industrial, brushless alternator with electronic voltage control system - Control and governing panel box with the Guard Evo. device - 3 or 4 pole circuit breaker - Differential (standard on units with Manual Guard Evolution for the CE market) - GV-series modular baseframe - Fuel tank with electronic level sensor, plugs, loading and unloading (see model data sheet for capacity) - - High damping anti-vibration mounts placed between the engine/alternator and baseframe - Engine oil extraction pump - Fuel decanter filter - Highly-insulating pad on the internal exhaust pipe - Exhaust silencer installed inside the conveyor - Exhaust line expander - Rain cap - thermosetting powder coated paint - battery cut-off switch (only in the CE version) - diesel leak retention basin - accumulator - key-lock - Fire-reaction Euroclass Bs2D0 fireproof polyester sound-proofing
- Lifting hooks
- Automobile-type door gaskets with steel core (non adhesive)

OPTIONAL EQUIPMENT

- Central lifting points (standard on GV150 and GV200 baseframes, not available with oversize tanks) - set-up for quick release fittings (auxiliary, external tank connection) - Racor or similar fuel pre-filters – canopy colour can be requested if different from RAL yellow 1007 or RAL white 9010 - external sockets - oversize tank - AMF automatic panel and auto start - ATS panel - radiator liquid level sensor - 220V electric pre-heater - PW005 terminal board for external electrical control panel - Electronic speed regulator (if not provided as standard) - IN SYNC parallel panel - remote management and control software.

VERSIONS

MODEL GV020

MODEL GV030

MODEL GV060

MODEL GV100

MODEL GV150

MODEL GV200

DESCRIPTION

PICTURE

The range has always offered the best compromise between compactness and usability. Wide doors allow total access to all internal components making checks and regular maintenance very easy.

The Galaxy range includes, as standard, the well-tested and reliable Guard Evolution controller, equipped with a very efficient software that has no equal in the market in terms of accuracy and number of functions.

The diesel engine exhaust pipes and the radiator's hot air outtake are located on top of the canopy. This solution is the best compromise between efficiency and user safety.

GALAXY GX is not only distinguished by its unique frame (very high from the ground and equipped with support feet that adapt to every kind of terrain), but also by its wide air intakes for cooling.

The internal sound attenuation consists of polyester fibre panels that are particularly resistant to heat, deterioration and humidity.

All doors are properly sealed with high quality stripping gaskets, the same used in the automotive industry.

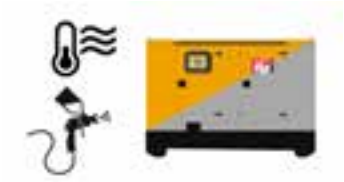
Further details about canopies in document **109000000042**,
Further details about base-frames in document **109000000039**.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

GALAXY "GV" FRAMES
FOR "GO" and "GX" VERSIONS

MAIN FEATURES

The baseframes of the new Galaxy GO –GX series are divided into 6 sizes with uniform dimensions, named GV020 - GV030 - GV060 - GV100 – GV 150 - GV200. Each size is designed to house multiple genset models based on the power, and the brand of the engine and alternator, for example frame model GV030 can house 8 different engines.
In the bottom part of the baseframe there is fuel tank with different capacities, according to the model and to the current regulations; all baseframes are equipped with retention basin.
In case a bigger fuel tank capacity is needed, a wide range of oversize tanks is available on request.

DESCRIPTION	PICTURE
CONSTRUCTION FEATURES The main feature of the baseframe is a steel sheet metal panel folded lengthwise so as to form a retention basin for any fluid that may leak from the unit, for example oil or fuel during maintenance; all the joints between the parts are made so as to prevent this liquid from leaking onto the ground.	
SOLUTIONS All parts are made from top quality S235JR steel in accordance with UNI EN 10025-95. The tank is housed inside the basin created by the baseframe under the engine; made with steel sheet metal, it is subject to strict seal tests before assembly.	
PAINTING Each component has a powder-coated thermoset paint containing a polyester resin base highly resistant to atmospheric agents; the pigments are stable against light and heat. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Minimum paint thickness is 70 micron. After the powder-coated paint is applied, the component is kept in the oven until polymerisation is complete. RAL 9005 (black) is the standard colour. Other colours are available on request.	
INSTALLATION Crossbeams fitted with fuel and lubricant-resistant vulcanised rubber anti-vibration mounts are bolted onto the baseframe.	
EQUIPMENT GV-series frames that equip versions GO and GX are all fitted with the following accessories: - electric fuel level sensor - filler cap - sleeves for the automatic loading system connection - connecting sleeves for the engine power supply circuit - bottom plugs to empty and clean the tank - Hole to pass the genset electric power and control cables through; central lifting (standard on GV150 and GV200 frames, not available for oversize tanks).	

OPTIONAL ACCESSORIES

-Colours and oversize tank capacities on request.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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Mail: visa@visa.it Web: www.visa.it SAP 109000000039-001-01 28-09-2015

MAIN FEATURES

Visa developed the GALAXY canopy series to satisfy the request for generating sets that combine operation and reduced sound emissions with a compact parallelepiped line that is also suitable for outdoor installation, and is easy to insert in the context of technological systems that are used today in civil, industrial and commercial businesses. The canopies are available in 6 sizes, named GV020 - GV030 - GV060 - GV100 -GV150 - GV200, and house the various engines and powers. The structure is built in press-formed, hot-galvanised steel sheet metal. This treatment provides the steel with cathodic protection against possible rust. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

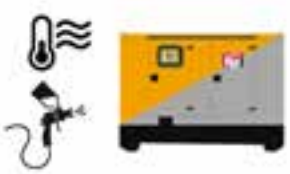
Mod. P 105 GX

ACCESS AND DETAILS

CONSTRUCTION TECHNIQUE

The canopies are built from modular elements that are assembled together using special structural rivets; this technique has eliminated the need for welding and allows each part to be fully coated with paint prior to assembly, so as to exclude the possible formation of oxide on the attachment points of the various parts, in addition to providing absolute rigidity of the structure.

PAINTING



Galvanized sheet steel is used to manufacture the canopy: minimum zinc thickness is 20 micron. The powder-coated thermoset paint has a polyester resin base highly resistant to atmospheric agents. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Minimum paint thickness is 70 micron. After the power-coated paint is applied, the component is kept in the oven until polymerisation is complete. Durability class is C3-M according to UNI EN ISO 12944 -2. Further details about base-frames in document **109000000039**.

INSULATION

The sound-absorbing insulation is made using specific materials obtained from adequately roughed, layered and thermally-bound Polyester fibres. All sound absorbing materials are fire-reaction Euroclass Bs2D0.

EXHAUST PIPES

The exhaust pipes inside the canopy are insulated with special padding made with insulating mineral fibre material that resists temperatures exceeding 500°C and minimises the amount of heat inside the canopy.

OPTIONAL AIR INTAKES

Additional side air intakes can be provided for special climatic or installation requirements.

SPECIAL FEATURES OF THESE CANOPIES

The silencer built inside the canopy is located at its front. Convenient access to this compartment allows the radiator to be easily cleaned.

Access to the rear part is enough to allow easy access for maintenance and to clean the alternator.

Side access always allows total access to one of the sides, and is enough to carry out checks and scheduled maintenance on the engine and alternator.

Side access always includes full access to the control panel and connection terminal blocks. It is possible to monitor the operating status of the generating set through a Plexiglas sight glass.

To improve sound insulation the standard supply includes a sheet metal base, which is divided into three sections, integrated into the frame closing it off; the central part is a sealed basin, fitted with a draining plug, designed to collect any leaks occurring during operation and maintenance of the genset.

DETAILS REGARDING QUALITY

Key-locks; Automobile-type gaskets with steel core; Rain cap on the discharge terminal; Drain pipes above the doors.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

GALAXY - P 30 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**34.9**	(kVA)
Continuous power (PRP)	**27.9**	(kW)
Stand-by power (LTP)	**38.2**	(kVA)
Stand-by power (LTP)	**30.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1040	mm
Length	2260	mm
Height	1820	mm
Weight	1190	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33G	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	669	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	33.2	kW
Flywheel Stand-by Power	36.4	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	9.5	l/h
Fuel Cons. at 100% (P.R.P)	8.6	l/h
Fuel Cons. at 75% (P.R.P.)	6.6	l/h
Fuel Cons. at 50% (P.R.P.)	4.9	l/h
Fuel Cons. at 25% (P.R.P.)	3.1	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	18.0	kW
Heat from exhaust	27.0	kW
Heat from radiation	5.0	kW

Exhaust data

Exhaust temperature	520	°C
Cooling air flow	70.00	m³/min
Combustion air flow	2.60	m³/min
Exhaust gas flow	6.40	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI144H	
P.R.P. Power	35.0	kVA
L.T.P. Power	38.5	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	AS480	
Precision	1.0	± %

Baseframe

Model	GV030HD	
Standard tank	70	l
Optional tank	160	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV030	
Silencer model	MSR/a 50	
Silencer outlet diameter	60.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

Guard Touch MANUAL OR AUTOMATIC is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy the myriad of requests from the end-user, from manual function to totally automatic management.

The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

GALAXY - P 41 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**50.0**	(kVA)
Continuous power (PRP)	**40.0**	(kW)
Stand-by power (LTP)	**55.0**	(kVA)
Stand-by power (LTP)	**44.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1040	mm
Length	2260	mm
Height	1820	mm
Weight	1470	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33TG1	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1020	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	50.5	kW
Flywheel Stand-by Power	55.6	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	14.3	l/h
Fuel Cons. at 100% (P.R.P)	12.9	l/h
Fuel Cons. at 75% (P.R.P.)	9.9	l/h
Fuel Cons. at 50% (P.R.P.)	7.1	l/h
Fuel Cons. at 25% (P.R.P.)	4.3	l/h

Speed regulation

Electronic regulator	On request
Precision class	G2

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	31.0	kW
Heat from exhaust	39.0	kW
Heat from radiation	8.0	kW

Exhaust data

Exhaust temperature	510	°C
Cooling air flow	70.00	m³/min
Combustion air flow	3.70	m³/min
Exhaust gas flow	8.80	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224D	
P.R.P. Power	50.0	kVA
L.T.P. Power	55.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV030HD	
Standard tank	70	l
Optional tank	160	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV030	
Silencer model	MSR/a 50	
Silencer outlet diameter	60.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

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ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

GALAXY - P 65 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**68.1**	(kVA)
Continuous power (PRP)	**54.5**	(kW)
Stand-by power (LTP)	**75.1**	(kVA)
Stand-by power (LTP)	**60.1**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1040	mm
Length	2260	mm
Height	1820	mm
Weight	1320	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1103A-33TG2	
Cylinders	3	nr.
Speed	1800	r.p.m.
Cubic capacity	3.30	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1279	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	63.3	kW
Flywheel Stand-by Power	69.6	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	18.2	l/h
Fuel Cons. at 100% (P.R.P)	16.6	l/h
Fuel Cons. at 75% (P.R.P.)	12.5	l/h
Fuel Cons. at 50% (P.R.P.)	8.8	l/h
Fuel Cons. at 25% (P.R.P.)	5.1	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.3	l
Engine Antifreeze capacity	4.4	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	41.0	kW
Heat from exhaust	52.0	kW
Heat from radiation	11.0	kW

Exhaust data

Exhaust temperature	534	°C
Cooling air flow	111.00	m³/min
Combustion air flow	4.70	m³/min
Exhaust gas flow	11.80	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224F	
P.R.P. Power	72.5	kVA
L.T.P. Power	80.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV030HD	
Standard tank	70	l
Optional tank	160	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV030	
Silencer model	MSR/a 50	
Silencer outlet diameter	60.0	mm

Available control panels

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Optional control panels

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ATS is a new line of changeover switch panels developed and manufactured by Visa S.P.A. in accordance with CEI EN 61439-2 (construction standard). Specifically used for generating sets, the changeover switch panel allows the changeover between mains/genset or genset/genset. The main part of the panel contains two interlocking contactors or a motorised circuit breaker. All of the parts are installed inside a sturdy powder-coated metal box (RAL7035) and equipped with a lock to close the access door.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

GALAXY - P 80 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**85.0**	(kVA)
Continuous power (PRP)	**68.0**	(kW)
Stand-by power (LTP)	**90.8**	(kVA)
Stand-by power (LTP)	**72.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1040	mm
Length	2260	mm
Height	1820	mm
Weight	1500	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1104A-44TG2	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	4.40	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1280	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	84.5	kW
Flywheel Stand-by Power	92.7	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	24.4	l/h
Fuel Cons. at 100% (P.R.P)	22.3	l/h
Fuel Cons. at 75% (P.R.P.)	16.9	l/h
Fuel Cons. at 50% (P.R.P.)	11.9	l/h
Fuel Cons. at 25% (P.R.P.)	6.5	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	8.0	l
Engine Antifreeze capacity	7.0	l
Radiator standard	IM50	

GALAXY - P 80 GX

Heat from engine

Heat from radiator	53.0	kW
Heat from exhaust	68.0	kW
Heat from radiation	14.0	kW

Exhaust data

Exhaust temperature	535	°C
Cooling air flow	111.00	m³/min
Combustion air flow	6.20	m³/min
Exhaust gas flow	15.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI224G	
P.R.P. Power	85.0	kVA
L.T.P. Power	90.8	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV030HD	
Standard tank	70	l
Optional tank	160	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV030	
Silencer model	MSR/a 50	
Silencer outlet diameter	60.0	mm

Available control panels

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Optional control panels

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Options

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GALAXY - P 105 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**114.0**	(kVA)
Continuous power (PRP)	**91.2**	(kW)
Stand-by power (LTP)	**125.0**	(kVA)
Stand-by power (LTP)	**100.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1040	mm
Length	2560	mm
Height	1805	mm
Weight	1670	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1104C-44TAG2	
Cylinders	4	nr.
Speed	1800	r.p.m.
Cubic capacity	4.40	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1618	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	106.8	kW
Flywheel Stand-by Power	116.9	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	29.7	l/h
Fuel Cons. at 100% (P.R.P)	26.9	l/h
Fuel Cons. at 75% (P.R.P.)	20.2	l/h
Fuel Cons. at 50% (P.R.P.)	14.1	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	8.0	l
Engine Antifreeze capacity	7.0	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	57.7	kW
Heat from exhaust	89.8	kW
Heat from radiation	8.5	kW

Exhaust data

Exhaust temperature	517	°C
Cooling air flow	225.60	m³/min
Combustion air flow	7.75	m³/min
Exhaust gas flow	18.40	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274D	
P.R.P. Power	114.0	kVA
L.T.P. Power	125.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV060HD	
Standard tank	70	l
Optional tank	160	l
Oversized tank*	800	l

Canopy & Silencer

Canopy model	GV060	
Silencer model	MSR/a 65	
Silencer outlet diameter	76.0	mm

Available control panels

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Optional control panels

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Options

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GALAXY - P 151 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**160.0**	(kVA)
Continuous power (PRP)	**128.0**	(kW)
Stand-by power (LTP)	**175.0**	(kVA)
Stand-by power (LTP)	**140.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1140	mm
Length	3060	mm
Height	2230	mm
Weight	2320	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1106A-70TAG2	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	7.01	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	3-11½	
BMEP	1478	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	155.4	kW
Flywheel Stand-by Power	171.8	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	41.7	l/h
Fuel Cons. at 100% (P.R.P)	38.2	l/h
Fuel Cons. at 75% (P.R.P.)	29.1	l/h
Fuel Cons. at 50% (P.R.P.)	19.1	l/h
Fuel Cons. at 25% (P.R.P.)	11.0	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	16.5	l
Engine Antifreeze capacity	9.5	l
Radiator standard	IM50	

Heat from engine

Heat from radiator	112.7	kW
Heat from exhaust	120.6	kW
Heat from radiation	12.3	kW

Exhaust data

Exhaust temperature	407	°C
Cooling air flow	245.00	m³/min
Combustion air flow	14.97	m³/min
Exhaust gas flow	32.29	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274F	
P.R.P. Power	160.0	kVA
L.T.P. Power	175.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV100HD	
Standard tank	120	l
Optional tank	360	l
Oversized tank*	800	l

Canopy & Silencer

Canopy model	GV100	
Silencer model	MSR/a 80	
Silencer outlet diameter	89.0	mm

Available control panels

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Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

GALAXY - P 181 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**200.0**	(kVA)
Continuous power (PRP)	**160.0**	(kW)
Stand-by power (LTP)	**218.0**	(kVA)
Stand-by power (LTP)	**174.4**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1140	mm
Length	3060	mm
Height	2230	mm
Weight	2370	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1106A-70TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	7.01	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	2-11½	
BMEP	1717	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	180.5	kW
Flywheel Stand-by Power	199.7	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	51.0	l/h
Fuel Cons. at 100% (P.R.P)	46.4	l/h
Fuel Cons. at 75% (P.R.P.)	35.3	l/h
Fuel Cons. at 50% (P.R.P.)	22.7	l/h
Fuel Cons. at 25% (P.R.P.)	12.4	l/h

Speed regulation

Electronic regulator	On request	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	16.5	l
Engine Antifreeze capacity	9.5	l
Radiator standard	IM50	

GALAXY - P 181 GX

Heat from engine

Heat from radiator	131.1	kW
Heat from exhaust	159.9	kW
Heat from radiation	19.5	kW

Exhaust data

Exhaust temperature	485	°C
Cooling air flow	230.00	m³/min
Combustion air flow	16.37	m³/min
Exhaust gas flow	38.35	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	UCI274H	
P.R.P. Power	200.0	kVA
L.T.P. Power	220.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX460	
Precision	1.5	± %

Baseframe

Model	GV100HD	
Standard tank	120	l
Optional tank	360	l
Oversized tank*	800	l

Canopy & Silencer

Canopy model	GV100	
Silencer model	MSR/a 80	
Silencer outlet diameter	89.0	mm

Available control panels

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Optional control panels

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Options

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POWERFULL - P 251 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**280.0**	(kVA)
Continuous power (PRP)	**224.0**	(kW)
Stand-by power (LTP)	**310.0**	(kVA)
Stand-by power (LTP)	**248.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60 Hz
Voltage (V)	380 V

Dimensions and noise level

Width	N.D. mm
Length	N.D. mm
Height	N.D. mm
Weight	N.D. kg
Sound pressure 7 m.	0.0 dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS
Engine model	1506A-E88TAG3
Cylinders	6 nr.
Speed	1800 r.p.m.
Cubic capacity	8.8 l
Air intake	Turbocharged
Standard voltage	24 Vdc
Optional voltage	Vdc
Sae	N.D.
BMEP	2250 kPa
Cooling	Water

Engine power

Flywheel P.R.P. Power	257.0 kW
Flywheel Stand-by Power	284.0 kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	69.8 l/h
Fuel Cons. at 100% (P.R.P)	63.1 l/h
Fuel Cons. at 75% (P.R.P.)	47.5 l/h
Fuel Cons. at 50% (P.R.P.)	33.1 l/h
Fuel Cons. at 25% (P.R.P.)	N.D. l/h

Speed regulation

Electronic regulator	Standard
Precision class	G2

Engine dimensions and liquids

Oil quantity	41.0 l
Engine Antifreeze capacity	13.9 l
Radiator standard	IM50

POWERFULL - P 251 GX

Heat from engine

Heat from radiator	120.0	kW
Heat from exhaust	204.0	kW
Heat from radiation	12.0	kW

Exhaust data

Exhaust temperature	496	°C
Cooling air flow	482.00	m³/min
Combustion air flow	19.80	m³/min
Exhaust gas flow	48.9	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4D	
P.R.P. Power	300.0	kVA
L.T.P. Power	330.0	kVA

Alternator wirings

Connection	Series star
Phases	Three phases with neutral
Winding	12 terminals Winding 311
Terminal Number	12 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV100HD	
Capacity	120	l

Canopy & Silencer

Canopy model	GV100	
Silencer model	MSR/a 80	
Silencer outlet diameter	89.0	mm

Available control panel

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

GALAXY - P 301 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**340.0**	(kVA)
Continuous power (PRP)	**272.0**	(kW)
Stand-by power (LTP)	**375.0**	(kVA)
Stand-by power (LTP)	**300.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	1506A-E88TAG5	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	8.80	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	1-14	
BMEP	2462	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	325.0	kW
Flywheel Stand-by Power	358.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	85.7	l/h
Fuel Cons. at 100% (P.R.P)	77.1	l/h
Fuel Cons. at 75% (P.R.P.)	56.8	l/h
Fuel Cons. at 50% (P.R.P.)	38.9	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	41.0	l
Engine Antifreeze capacity	13.9	l
Radiator standard	IM50	

GALAXY - P 301 GX

Heat from engine

Heat from radiator	224.0	kW
Heat from exhaust	259.0	kW
Heat from radiation	16.0	kW

Exhaust data

Exhaust temperature	512	°C
Cooling air flow	482.00	m³/min
Combustion air flow	23.60	m³/min
Exhaust gas flow	59.60	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4E	
P.R.P. Power	350.0	kVA
L.T.P. Power	380.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV150	
Standard tank	120	l
Optional tank	400	l
Oversized tank*	800	l

Canopy & Silencer

Canopy model	GV150	
Silencer model	MSR/a 125	
Silencer outlet diameter	140.0	mm

Available control panels

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Optional control panels

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Options

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GALAXY - P 350 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**400.0**	(kVA)
Continuous power (PRP)	**320.0**	(kW)
Stand-by power (LTP)	**425.0**	(kVA)
Stand-by power (LTP)	**340.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1300	mm
Length	4000	mm
Height	2564	mm
Weight	4870	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2206C-E13TAG2	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	12.50	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	1-14	
BMEP	1984	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	367.8	kW
Flywheel Stand-by Power	400.4	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	90.0	l/h
Fuel Cons. at 100% (P.R.P)	84.0	l/h
Fuel Cons. at 75% (P.R.P.)	65.0	l/h
Fuel Cons. at 50% (P.R.P.)	46.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	40.0	l
Engine Antifreeze capacity	51.4	l
Radiator standard	IM50	

GALAXY - P 350 GX

Heat from engine

Heat from radiator	127.5	kW
Heat from exhaust	250.6	kW
Heat from radiation	36.5	kW

Exhaust data

Exhaust temperature	680	°C
Cooling air flow	716.00	m³/min
Combustion air flow	28.10	m³/min
Exhaust gas flow	68.30	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI4F	
P.R.P. Power	400.0	kVA
L.T.P. Power	425.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV150	
Standard tank	120	l
Optional tank	400	l
Oversized tank*	800	l

Canopy & Silencer

Canopy model	GV150	
Silencer model	MSR/a 125	
Silencer outlet diameter	140.0	mm

Available control panels

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Optional control panels

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Options

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GALAXY - P 450 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**500.0**	(kVA)
Continuous power (PRP)	**400.0**	(kW)
Stand-by power (LTP)	**530.0**	(kVA)
Stand-by power (LTP)	**424.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1840	mm
Length	4500	mm
Height	2540	mm
Weight	5440	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2506C-E15TAG1	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	15.20	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	½-14	
BMEP	2036	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	450.5	kW
Flywheel Stand-by Power	505.5	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	114.0	l/h
Fuel Cons. at 100% (P.R.P)	100.0	l/h
Fuel Cons. at 75% (P.R.P.)	77.0	l/h
Fuel Cons. at 50% (P.R.P.)	57.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	58.0	l
Radiator standard	IM50	

GALAXY - P 450 GX

Heat from engine

Heat from radiator	150.0	kW
Heat from exhaust	299.0	kW
Heat from radiation	29.5	kW

Exhaust data

Exhaust temperature	550	°C
Cooling air flow	866.00	m³/min
Combustion air flow	34.30	m³/min
Exhaust gas flow	96.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5D	
P.R.P. Power	500.0	kVA
L.T.P. Power	530.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV200	
Standard tank	120	l
Optional tank	950	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV200	
Silencer model	MSR/a 150	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 570 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**569.0**	(kVA)
Continuous power (PRP)	**455.0**	(kW)
Stand-by power (LTP)	**625.0**	(kVA)
Stand-by power (LTP)	**500.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2506C-E15TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	15.20	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	½-14	
BMEP	N.D.	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	495.0	kW
Flywheel Stand-by Power	543.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	132.0	l/h
Fuel Cons. at 100% (P.R.P)	121.0	l/h
Fuel Cons. at 75% (P.R.P.)	96.0	l/h
Fuel Cons. at 50% (P.R.P.)	77.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard
Precision class	G3

Engine dimensions and liquids

Oil quantity	60.0	l
Engine Antifreeze capacity	58.0	l
Radiator standard	IM50	

POWERFULL - P 570 GX

Heat from engine

Heat from radiator	N.D.	kW
Heat from exhaust	N.D.	kW
Heat from radiation	N.D.	kW

Exhaust data

Exhaust temperature	N.D.	°C
Cooling air flow	N.D.	m³min
Combustion air flow	N.D.	m³/min
Exhaust gas flow	N.D.	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5E	
P.R.P. Power	600.0	kVA
L.T.P. Power	660.0	kVA

Alternator wirings

Connection	Series star
Phases	Three phases with neutral
Winding	12 terminals Winding 311
Terminal Number	12 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV200	
Capacity	120 l	

Canopy & Silencer

Canopy model	GV200	
Silencer model	MSR/a 150	
Silencer outlet diameter	168.0 mm	

Available control panels

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Options

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GALAXY - P 600 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Internal exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**625.0**	(kVA)
Continuous power (PRP)	**500.0**	(kW)
Stand-by power (LTP)	**687.0**	(kVA)
Stand-by power (LTP)	**549.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	1840	mm
Length	4500	mm
Height	2540	mm
Weight	5840	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.

P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.

L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	2806C-E18TAG1A	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	18.13	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	2087	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	558.0	kW
Flywheel Stand-by Power	613.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	144.0	l/h
Fuel Cons. at 100% (P.R.P)	130.0	l/h
Fuel Cons. at 75% (P.R.P.)	100.0	l/h
Fuel Cons. at 50% (P.R.P.)	71.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G3	

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	61.0	l
Radiator standard	IM50	

GALAXY - P 600 GX

Heat from engine

Heat from radiator	162.0	kW
Heat from exhaust	457.0	kW
Heat from radiation	43.0	kW

Exhaust data

Exhaust temperature	487	°C
Cooling air flow	857.00	m³/min
Combustion air flow	45.00	m³/min
Exhaust gas flow	114.00	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	Standard	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5F	
P.R.P. Power	673.0	kVA
L.T.P. Power	738.0	kVA

Alternator wirings

Connection	Series star	
Phases	Trifase + Neutro	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV200	
Standard tank	120	l
Optional tank	950	l
Oversized tank*		l

Canopy & Silencer

Canopy model	GV200	
Silencer model	MSR/a 150	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 680 GX

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Large capacity steel baseframe-fuel tank with level sensor
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**673.0**(kVA)
Continuous power (PRP)	**538.0**(kW)
Stand-by power (LTP)	**738.0**(kVA)
Stand-by power (LTP)	**590.0**(kW)
Power factor	**0.8**

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
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Engine

Engine brand	PERKINS	
Engine model	2806C-E18TAG3	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	18.13	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	N.D.	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	592.0	kW
Flywheel Stand-by Power	652.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	158.0	l/h
Fuel Cons. at 100% (P.R.P)	145.0	l/h
Fuel Cons. at 75% (P.R.P.)	112.0	l/h
Fuel Cons. at 50% (P.R.P.)	79.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard
Precision class	G3

Engine dimensions and liquids

Oil quantity	62.0	l
Engine Antifreeze capacity	61.0	l
Radiator standard	IM50	

POWERFULL - P 680 GX

Heat from engine

Heat from radiator	N.D.	kW
Heat from exhaust	N.D.	kW
Heat from radiation	N.D.	kW

Exhaust data

Exhaust temperature	N.D.	°C
Cooling air flow	N.D.	³/min
Combustion air flow	N.D.	m³/min
Exhaust gas flow	N.D.	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Standard
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI5F	
P.R.P. Power	673.0	kVA
L.T.P. Power	738.0	kVA

Alternator wirings

Connection	Series star
Phases	Three phases with neutral
Winding	12 terminals Winding 311
Terminal Number	12 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	SX440	
Precision	1.0	± %

Baseframe

Model	GV200
Capacity	120 l

Canopy & Silencer

Canopy model	GV200
Silencer model	MSR/a 150
Silencer outlet diameter	168.0 mm

Available control panels

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Options

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MAIN FEATURES

The C60, C65 and C70 canopies are built to sound-proof the high power POWERFULL range. They are built using modular elements that are assembled together using special structural rivets; this technique allows welding to be eliminated and to fully coat every part before assembly, thereby increasing duration. Each part is painted with thermosetting powders that are specifically selected for their high resistance to atmospheric agents. The sound attenuation insulation consists of polyester fibre materials in fire-reaction Euroclass Bs2D0. The material used on the doors has a film that makes it impermeable and easy to clean. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

Mod. P 1260 S

DESCRIPTION

The POWERFULL C60-65-70 is built with a strong modular base frame with integrated lifting system as well as air intake and exhaust attenuators for engine cooling. Further details about base-frames in document **109000000040**.

The range includes, as standard, the well-tested and reliable Guard Touch controller, equipped with a very efficient software that has no equal in the market in terms of accuracy and number of functions.

The strong base frame on POWERFULL C60-65-70 is also load bearing so the canopy and lifting system can be attached to it.

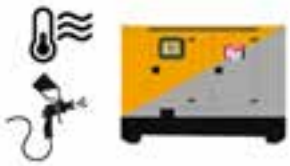
At the rear of the genset, large cool air intakes have been set up to.

The hot air is expelled from the top of the genset.

The front and rear sound attenuators can be removed to reach the alternator and radiator for scheduled maintenance.

PICTURE

PAINTING



Galvanized sheet steel is used to manufacture the canopy: minimum zinc thickness is 20 micron. The powder-coated thermoset paint has a polyester resin base highly resistant to atmospheric agents. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Minimum paint thickness is 70 micron. After the power-coated paint is applied, the component is kept in the oven until polymerisation is complete. Durability class is C3-M according to UNI EN ISO 12944 -2.

STANDARD EQUIPMENT (in addition to the standard equipment of the open version)

- Engine oil extraction pump - Fuel decanter filter -Highly-insulating pad on the internal exhaust pipe with key - Fire-reaction Euroclass Bs2D0 fireproof polyester sound-proofing - Automobile-type door gaskets with steel core (non adhesive)

THANKS TO THEIR COMPACT SIZE THE C60, C65 and C70 CANOPIES CAN BE LOADED ONTO 40-FOOT HIGH CUBE CONTAINERS WITHOUT DISASSEMBLING ANY PARTS EXCEPT FOR THE EXHAUST SILENCERS. THEY CAN ALSO BE TRANSPORTED ON NORMAL LOW TRAILERS WITHOUT EXTENDING OUT FROM THE SIDES. THIS FEATURE TENDS TO REDUCE THE LOGISTICAL PROBLEMS RELATED TO HANDLING LARGE GENERATING SETS AND CONSEQUENTLY THE TRANSPORTATION COSTS.

OPTIONAL ACCESSORIES (in addition to those already available in the open version)

-Canopy colour can be requested if different from RAL yellow 1007 - External sockets

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

POWERFULL "ST60" FRAMES

MAIN FEATURES

The standardisation of large size generating sets led to the creation of a new baseframe named ST60. The features required by the project were: solidity, easy access to the technical connections (electrical and fuel), modularity for application with different coupling and canopy models. The new ST60 baseframe is available in two categories:
1- open: distinguished by its reduced size and usually not closed on the bottom;
2- silenceable: distinguished by its larger size and fitted with accessories for canopy application. This version is originally welded shut on the bottom with sheet metal, which is also useful to collect any liquid that may accidentally leak out from the engine.

DESCRIPTION

PAINTING
Each component has a powder-coated thermoset paint containing a polyester resin base highly resistant to atmospheric agents; the pigments are stable against light and heat. The painting process is preceded by a phospho-degreasing cycle with a demineralised water rinse and then dried. Two coats of paint are applied to the component: zinc primer + paint finish. During each phase, the component is kept in the oven until polymerisation is complete. Minimum paint thickness is 140 micron. Durability class is C3-M secondo UNI EN ISO 12944 -2. RAL 9005 (black) is the standard colour. Other colours are available on request.

PICTURE

Plugs to empty out the drip pan (if included) and sleeves for fuel pipe connection.

Hole for the electrical cables.

Bell anti-vibration mounts.

STANDARD EQUIPMENT

ST60 frames are built with welded and adequately sized extruded UNP steel profiles. The following housings are installed:
1- engine stand;
2- radiator stand;
3- alternator stand;
4- start-up accumulator stand (on both sides);
5- electrical panel stand;
6- fuel tank stand (when included the position varies according to the genset capacity and model);
7- joints for counter-frame connection (when there is a canopy);
8- attachment points for lifting hooks (when there is a canopy).

LIMITS

The ST60 project was developed considering the large sizes of the heavy weights, therefore there are a number of limitations of use:
1- the ST60 baseframe does not have lifting pockets;
2- the unit is designed to be lifted on 4 side points rather than from a central point.

POWERFULL - P 805 S

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**844.0**	(kVA)
Continuous power (PRP)	**675.2**	(kW)
Stand-by power (LTP)	**938.0**	(kVA)
Stand-by power (LTP)	**750.4**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4006-23TAG3A	
Cylinders	6	nr.
Speed	1800	r.p.m.
Cubic capacity	22.92	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	2200	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	759.0	kW
Flywheel Stand-by Power	839.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	224.0	l/h
Fuel Cons. at 100% (P.R.P)	200.0	l/h
Fuel Cons. at 75% (P.R.P.)	144.0	l/h
Fuel Cons. at 50% (P.R.P.)	96.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	122.7	l
Engine Antifreeze capacity	51.0	l
Radiator standard	IM50	

POWERFULL - P 805 S

Heat from engine

Heat from radiator	290.0	kW
Heat from exhaust	595.0	kW
Heat from radiation	58.0	kW

Exhaust data

Exhaust temperature	500	°C
Cooling air flow	0.00	m³/min
Combustion air flow	76.00	m³/min
Exhaust gas flow	209.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI6H	
P.R.P. Power	910.0	kVA
L.T.P. Power	1000.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX321	
Precision	0.5	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	C60	
Silencer model	MSR/a 150	
Silencer outlet diameter	168.0	mm

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 1050 S

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**995.0**	(kVA)
Continuous power (PRP)	**796.0**	(kW)
Stand-by power (LTP)	**1097.0**	(kVA)
Stand-by power (LTP)	**877.6**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N/D	mm
Length	N/D	mm
Height	N/D	mm
Weight	0	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4008TAG2	
Cylinders	8	nr.
Speed	1800	r.p.m.
Cubic capacity	30.56	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	0-18	
BMEP	1920	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	894.0	kW
Flywheel Stand-by Power	980.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	249.0	l/h
Fuel Cons. at 100% (P.R.P)	224.0	l/h
Fuel Cons. at 75% (P.R.P.)	162.0	l/h
Fuel Cons. at 50% (P.R.P.)	108.0	l/h
Fuel Cons. at 25% (P.R.P.)	55.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	A1	

Engine dimensions and liquids

Oil quantity	165.6	l
Engine Antifreeze capacity	48.0	l
Radiator standard	?	

POWERFULL - P 1050 S

Heat from engine

Heat from radiator	336.0	kW
Heat from exhaust	725.0	kW
Heat from radiation	85.0	kW

Exhaust data

Exhaust temperature	505	°C
Cooling air flow	1290.00	m³/min
Combustion air flow	72.00	m³/min
Exhaust gas flow	202.00	m³/min

Emissions

TA Luft	Not available	
TA Luft/2	Not available	
EPA	Not available	
Stage	Not available	

Alternator

Alternator brand	STAMFORD	
Alternator model	HCI6J	
P.R.P. Power	1000.0	kVA
L.T.P. Power	1100.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	12	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX321	
Precision	0.5	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	C60	
Silencer model	MSR/a 150	
Silencer outlet diameter	168.0	mm

Available control panels

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Optional control panels

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The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 1260 S

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Steel baseframe with retention basin, fuel tank with level sensor
4- Soundproof canopy in galvanised, power coated sheet steel
5- Soundproofing material made of high attenuation polyester fibre
6- Exhaust silencer with insulated manifold
7- Electrical panel mounted on board the unit with digital control device installed in metal box
8- Compact for easy handling and use
9- Test report, manuals and electrical drawings supplied
10- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1225.0**	(kVA)
Continuous power (PRP)	**980.0**	(kW)
Stand-by power (LTP)	**1310.0**	(kVA)
Stand-by power (LTP)	**1048.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	2200	mm
Length	8600	mm
Height	3400	mm
Weight	14100	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4012-46TWG2A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	1608	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1106.0	kW
Flywheel Stand-by Power	1217.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	298.0	l/h
Fuel Cons. at 100% (P.R.P)	266.0	l/h
Fuel Cons. at 75% (P.R.P.)	0.0	l/h
Fuel Cons. at 50% (P.R.P.)	0.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TW2	

POWERFULL - P 1260 S

Heat from engine

Heat from radiator	387.0	kW
Heat from exhaust	914.0	kW
Heat from radiation	81.0	kW

Exhaust data

Exhaust temperature	430	°C
Cooling air flow	1104.00	m³/min
Combustion air flow	0.00	m³/min
Exhaust gas flow	235.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734A	
P.R.P. Power	1225.0	kVA
L.T.P. Power	1310.0	kVA

Alternator wirings

Connection	Star	
Phases	Trifase + Neutro	
Winding	6 terminals winding 312	
Terminal Number	6	nr.

Alternator protection

IP Protection	23	

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Standard tank	0	l
Optional tank	0	l
Oversized tank*		l

Canopy & Silencer

Canopy model	C60	
Silencer model	MSR/a 200	
Silencer outlet diameter	219.0	mm

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

MAIN FEATURES

This document aims at defining the features of VISA sound-proof containers intended for the installation of generating sets complete with any accessories (e.g. electrical panel, tank, etc.). Thanks to the structural features that make them particularly sturdy, the containers from the HD series represent the right choice for demanding applications that require frequent handling of the units and/or are located in particularly hostile climatic conditions.\nNB: These containers do not have the same structural specifications and certifications as transportation containers, such as: Rina and stackability tests (these two features must be agreed upon beforehand, when placing an order, and generate an extra cost in addition to that of the container itself).

DESCRIPTION	PICTURE
STRONG POINTS: Among the many advantages that this solution has to offer, the following are of utmost relevance: - extreme solidity; -easy to handle thanks to the twist lock corner castings and the removable flanged silencers; -easy access to the unit thanks to the presence of large doors at the sides and on both ends; -ample possibility of customising the internal technical installations such as: sand filters, large capacity fuel tanks, customised control panels; -possibility of installing combined systems on the exhaust to reduce polluting emissions thanks to its large internal space and the sturdiness of the structure; -possibility of being equipped with board radiator installed on the roof.	
BASEFRAME AND FLOOR: The base is built with cold-pressed steel sheet metal profiles and stands on a perimeter of longitudinal beams plus a series of crossbeams and reinforcing bars. The floor is made with sheet metal that is welded above the structure, along the edge of the perimetral longitudinal beams and in some sections, on the crossbeams. The floor set up in this way contains the generating set, complete with its base, plus all the required accessories. Near the corners of the baseframe there are 4 corner castings that allow the container to be used on a lorry equipped with a standard twist-lock fastening system. **ROOF AND SUPPORTING STRUCTURES:**The external profile of the roof is comprised of a main cold-pressed steel sheet metal beam with castings on its 4 corners. The roofing is made with corrugated sheet metal.	
WALLS: The walls are comprised of the assembly of corrugated steel sheet metal panels. The four corner joints (corners) are made with pressed sheet metal, welded on the corner castings as well as along the longitudinal beams. **DOORS:**The number and position of the doors depends on the container model and/or specific customer requirements. In any case, standard VISA containers are equipped with: -double doors on the sides when work must be carried out on the unit (unless agreed otherwise with the customer, when the available space allows for it, at least one panel is fitted with a panic bar; the remaining doors close with a rod); - a service door positioned at the end of the container; a double door for access to the silencer compartment. The doors are secured to the walls of the container with bolted hinges, in galvanised steel, which allow them to be opened outwards. Impermeability and acoustic tightness are guaranteed by the application of suitable gaskets.	
RADIATOR SIDE END: In standard models, a space for the cooling air outlet is made here. In some versions the exhaust silencers can be housed in this compartment, or alternatively, above the roof of the container. The exhaust gas silencer housing. In applications where exhaust silencers are housed in the cooling compartment, they can be accessed from the outside by a double door. In non-standard containers the position of the exhaust gas silencers is designed according to the required overall dimensions. In any case, whenever it is possible, maintaining the position of the silencers inside the container and on the radiator end is deemed to be the preferable solution. **ALTERNATOR SIDE END:**Usually space is made on this end to house the electrical panel, if included. If necessary, the panel can be segregated from the rest of the container by applying an insulated separating wall between the alternator and the panel. This solution is defined as a box for the electrical panel. When no separating wall is envisioned, it is simply referred to as space for the electrical panel. It is possible to access the panel from outside the container through a door with a sight glass.	

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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MEASUREMENTS

The external measurements of ISO series 1 containers:
20" standard: width 2438mm length.6058mm hgt.2591mm
25" standard: width 2438mm length.7620mm hgt.2591mm
30" standard: width 2438mm length.9125mm hgt.2591mm
40" standard: width 2438mm length.12192mm hgt.2591mm
NB: the HC containers are the most common, varying in height between 2591 in the standard version and 2896 (without silencers).

DESCRIPTION

PICTURE

WALL AND ROOF INSULATION:the walls and roof are insulated through the application of: -rock wool; -fibrous and metal protections (stretched galvanised sheet metal). The thicknesses are defined according to the required residual noise level, the materials used are fire-reaction Euroclass A1.
SOUND INSULATION: the sound insulation is able to satisfy the residual noise threshold defined by our standards according to the generating set type and model that is housed in the container. The standard sound pressure values that VISA refers to range from 65 dBA = at 7 m up to 75 dBA at 7 m (the measurements are carried out on request, in compliance with ISO 3744 and using a class 1 sound level meter. The measurements are carried out in open field - 3 dBA tolerance. The results of the readings are recorded on a specific form, also indicating the environmental conditions at the time that the measurements are taken. Versions with sound pressure levels defined by the Customer can be built on request.
PAINTING:on the internal and exposed external surfaces: -Thorough degreasing -Application of an epoxy base layer, 50-60 micron thick -Application of polyurethane glaze (RAL to be defined), 60 micron thick.

COOLING SYSTEM:the generating sets are cooled by a silent system of air intakes/outlets which is set up according to the type of engine that will be installed, the residual noise level that the customer wishes to achieve or other variables. In simple cases the units are cooled through the following air ventilation system: - cool air is drawn in through openings made on one or more doors per side, equipped with relative silencers and protected by grilles with fixed fins; - air is extracted upwards through a hole made in the roof of the container. In complex cases, when the useful space inside the container does not allow for the afore-mentioned air ventilation system, or the required noise reduction level cannot be achieved by adopting this system, and in agreement with the Customer, different solutions are assessed, which usually involve the use of silencing panels positioned and sized according to the various requirements.

OPTIONAL ACCESSORIES:internal lighting system, fire prevention system, gas detection system, ventilation system, conditioning system, sand and/or dust filters, motorised dampers. The following documentation can be supplied upon specific request made when placing the order: documentation from the suppliers of product accessory parts, RINA, UIC, CSC certification, other certificates, phonometric tests.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

POWERFULL - P 1500 CONT

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1505.0**	(kVA)
Continuous power (PRP)	**1204.0**	(kW)
Stand-by power (LTP)	**1656.0**	(kVA)
Stand-by power (LTP)	**1324.8**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4012-46TAG2A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	1936	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1272.0	kW
Flywheel Stand-by Power	1399.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	344.0	l/h
Fuel Cons. at 100% (P.R.P)	315.0	l/h
Fuel Cons. at 75% (P.R.P.)	251.0	l/h
Fuel Cons. at 50% (P.R.P.)	246.0	l/h
Fuel Cons. at 25% (P.R.P.)	169.0	l/h

Speed regulation

Electronic regulator	Standard
Precision class	G2

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TAG1-2	

POWERFULL - P 1500 CONT

Heat from engine

Heat from radiator	758.0	kW
Heat from exhaust	1015.0	kW
Heat from radiation	96.0	kW

Exhaust data

Exhaust temperature	403	°C
Cooling air flow	1608.00	m³/min
Combustion air flow	125.00	m³/min
Exhaust gas flow	287.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734B	
P.R.P. Power	1560.0	kVA
L.T.P. Power	1670.0	kVA

Alternator wirings

Connection	Star
Phases	Three phases with neutral
Winding	6 terminals winding 13
Terminal Number	6 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Capacity	0	l

Canopy & Silencer

Canopy model	CONTAINER 40"
Silencer model	N.D.
Silencer outlet diameter	N.D.

Available control panels

The **GUARD EVOLUTION** device, in MANUAL or AUTOMATIC version, is designed and manufactured by Visa S.p.A. for the command, control and protection of the generating set. Main characteristics are: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

Optional control panels

Guard Touch MANUAL OR AUTOMATIC is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy the myriad of requests from the end-user. From manual to automatic (AMF), up to complete synchronisation in parallel.

The **In-Sync** device is equipped in the Visa generating sets needed to operate the most complex systems. In Sync is the best solution available in the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains); these functions are available in a single device and differentiated through programming and possible implementation. The reliability and very high degree of customisation makes Visa gensets equipped with the In-Sync device very versatile and capable of satisfying the most complex requirements. In Sync allows the customer to build multiple generating set Power Stations providing fuel economy while maintaining maximum safety and extending the life of the system.

Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

POWERFULL - P 1700 CONT

For illustrative purposes only

Strong points

1- Industrial diesel engine in genset version with certificate of origin
2- Industrial brushless alternator with AVR
3- Compact steel baseframe and fuel tank (retention basin optional)
4- Industrial silencer and coupling flange
5- Electrical panel mounted on board the unit with digital control device installed in metal box
6- Compact for easy handling and use
7- Test report, manuals and electrical drawings supplied
8- World wide after sales service and technical support
Further details on the technical data sheet

Performance

Continuous power (PRP)	**1710.0**	(kVA)
Continuous power (PRP)	**1368.0**	(kW)
Stand-by power (LTP)	**1880.0**	(kVA)
Stand-by power (LTP)	**1504.0**	(kW)
Power factor	**0.8**	

Voltage

Frequency (Hz)	60	Hz
Voltage (V)	380	V

Dimensions and noise level

Width	N.D.	mm
Length	N.D.	mm
Height	N.D.	mm
Weight	N.D.	kg
Sound pressure 7 m.	0.0	dBA

Data references

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.
P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.
L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.

Engine

Engine brand	PERKINS	
Engine model	4012-46TAG3A	
Cylinders	12	nr.
Speed	1800	r.p.m.
Cubic capacity	45.84	l
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage		Vdc
Sae	00-18	
BMEP	0	kPa
Cooling	Water	

Engine power

Flywheel P.R.P. Power	1440.0	kW
Flywheel Stand-by Power	1583.0	kW

Fuel consumption

Fuel Cons. at 100% (L.T.P.)	0.0	l/h
Fuel Cons. at 100% (P.R.P)	0.0	l/h
Fuel Cons. at 75% (P.R.P.)	0.0	l/h
Fuel Cons. at 50% (P.R.P.)	0.0	l/h
Fuel Cons. at 25% (P.R.P.)	0.0	l/h

Speed regulation

Electronic regulator	Standard	
Precision class	G2	

Engine dimensions and liquids

Oil quantity	177.0	l
Engine Antifreeze capacity	73.0	l
Radiator standard	PTE4012TAG3	

POWERFULL - P 1700 CONT

Heat from engine

Heat from radiator	0.0	kW
Heat from exhaust	0.0	kW
Heat from radiation	0.0	kW

Exhaust data

Exhaust temperature	0	°C
Cooling air flow	0.00	m³/min
Combustion air flow	0.00	m³/min
Exhaust gas flow	0.00	m³/min

Emissions

TA Luft	Not available
TA Luft/2	Not available
EPA	Not available
Stage	Not available

Alternator

Alternator brand	STAMFORD	
Alternator model	PI734C	
P.R.P. Power	1770.0	kVA
L.T.P. Power	1895.0	kVA

Alternator wirings

Connection	Star
Phases	Three phases with neutral
Winding	6 terminals winding 13
Terminal Number	6 nr.

Alternator protection

IP Protection	23

Voltage regulator

Electronic regulator	MX341	
Precision	1.0	± %

Baseframe

Model	ST60	
Capacity	0	l

Canopy & Silencer

Canopy model	CONTAINER 40"
Silencer model	N.D.
Silencer outlet diameter	N.D.

Available control panels

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Optional control panels

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Options

Each genset model has a wide range of accessories and customised equipment choices; standard equipment and optional accessories are described in the technical data sheet. Contact our sales office for further information and details.

Visa generating sets can mount one of the following control panels:

- Guard Touch
- Guard Evolution
- In-Sync
- Deep Sea 7320

CONTROL PANELS COMPARISON TABLE:

	 GUARD EVOLUTION	 GUARD TOUCH	 In Sync	 DSE 7320
AMF	●	●	●	●
ATS conrtrol	●	●	●	●
PARALLEL	x	planned	●	x
Ethernet comm.	●	●	●	●
GSM telemetry	●	●	●	●
Email telemetry	x	●	●	x
CAN interface to engine	x	●	●	●
Reverse power protection	x	●	●	●
Trend diagram up to 30 params	x	●	x	x
Alternator capability curve	x	●	x	x
Max. wordking mode conf.	1	4	1	1
Fuel theft alarm function	x	●	x	x
Manage 2° battery charger	x	●	x	x
On-line HELP	x	●	x	x
Progr. maintenance warnings	1	16	4	3
BLACK-BOX recordable events	4096	2560	<= 1000	250

GUARD EVOLUTION "AUTO"

MAIN FEATURES

The GUARD EVOLUTION automatic device allows automated management of a Mains failure. When the Mains fail GEVO starts the genset according to a pre-set logic, it switches from mains/genset and feeds the User system. When the Mains come back on GEVO switches from genset/mains and proceeds with cooling down the genset and ultimately shutting it down. Main characteristics: clear communication via a large backlit display screen; generating set event analysis through sophisticated algorithms; complete engine and electrical parameters; ; possibility of integrating additional modules and programme extensions; customisation for dealers (optional).

DESCRIPTION

PICTURE

The large size screen offers a lot of information on the generating set. Every time it is switched on a screen page appears with all the data required to identify the model and numbers to contact if the customer requires assistance.

Relays and fuses are placed next to the control panel making them very visible and accessible.

The emergency stop button is found on the control panel; in case of emergency, it immediately shuts the unit down.

Fully configurable inputs and outputs are available guaranteeing good data communication with the PLC or BMS. Serial connections and Ethernet are also available to control the unit remotely.

Besides the many parameters available, there are also additional modules and programme extensions that increase G.EVO's applications.

The automaitc version has all of the parts that interface with the changeover switch panel or the user system installed on board.

FUNCTIONS

The automatic version has the following standard functions:
-Language selection (Italian, English, French, German, Spanish)
-Stop active function
-Crank engine speed function
-Password-protected user menu via password to change parameters
-Programmable maintenance countdown
-LED signal status of: genset operating normally, genset pre-alarm, genset alarm, genset alarm/block
-Display selected operating mode
-Acoustic alarm
-PC communication with standard RS 485 serial port
-Last 16 alarms memorised in the archives
-Programmable analogue and digital outputs upon request: fuel reserve, engine maintenance required, system blocked, stop engine activated, engine overspeed, engine underspeed, high engine temperature, low oil pressure, low oil level, low water level, isolated oil pressure sensor wire, failed start, failed engine stop, mechanical arrest, alternator not energised, D+ wire isolated, low battery voltage, high battery voltage, emergency stop button pressed, low generating set voltage, high generating set voltage, genset voltage asymmetry, general system error, electro-ventilator blocked, high generating set current, high oil temperature, high alternator temperature, memory corrupted, low fuel level, high fuel level, genset not in automatic mode.

STANDARD MEASUREMENTS

-T-Voltage (R-S, S-T, T-R, R-N, S-N, T-N)
-Current on all 3 phases
Frequency
-Engine speed indicator
-Engine cooling temperature
-Engine oil pressure
-Battery voltage
-Alternator battery charger pick up voltage
-Operating hour counter
-Starting attempts counter
-Maintenance countdown (selectable)

EXTENSIONS

-Device A.SRA20 (20-alarm board) allows the customer to signal from remote: alarm signals, pre-alarm signals and operating status signals of the generating set. Through the contacts of the 20 relays, with suitable cabling and system, the lights and sounds can be controlled or the customer can interface with supervision systems such as a PLC, depending on the requirements of the final user.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

"GUARD TOUCH" CONTROL PANEL

MAIN FEATURES

Guard Touch is the new revolutionary controller with touch screen, researched and developed by Visa S.p.A., which will be standard supply on our gensets. From a technical and operational viewpoint, the new device is different from its predecessors, but still maintains Visa's main characteristic: MODULARITY! Guard Touch is a versatile controller able to satisfy all the requests of the end-user. From manual to automatic (AMF), up to complete synchronisation in parallel. GUARD TOUCH is much more then a simple controller, it's the evolution of perfection.

FUNCTIONS

COMMANDS AND FUNCTIONS:
-Genset status: OFF, MAN, AUTO, TEST;
-Fuel refilling pump status: OFF, MAN, AUTO;
-Start;
-Stop;
-Remote start;
-Manual command opening / closing GCB and MCB;
-Manual command START ON;
-Manual command STOP ON;
-16 programmable time-out (or countdown) for maintenance (per hour and months);
-Monitoring output of coil relay continuity outputs;
-GCB and MCB feedback monitoring;
-CANbus SAE J1939 communication monitoring
-BLACK BOX: 2500 events;
-4 graphic TREND (choose among 40 measurements);
-HELP with descriptions and solutions for recorded problems;
-Acoustic alarm ;
-Date and clock with battery.
APPLICATIONS:
-SPM: single prime mover;
-SSB: single stand-by.
COMMUNICATION with external hardware:
-1 CANbus for SAE J1939 opto-isolated for engine communication;
-1 proprietary CANbus opto-isolated for Guard Touch communications;
-1 RS485 for GSM communications, PC monitoring, MODbus, Ethernet connection;
-1 RS485 for external connection, battery charger, remote alarm card, expansion board I/O.

DISPLAY

- Display black and white with 16 grey tones
-Touch screen
-320 (W) x 240 (H) pixels
-Range of operation -20°C +70°C

MEASUREMENTS AND PROTECTION

MAINS measurements:
Voltage VAC mains: L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N; Lx-N <= 300V (RMS); Lx-N <= 300V (RMS).
GENSET measurements:
Voltage VAC genset: L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N; Lx-N <= 300V (RMS); Lx-N <= 300V (RMS); Currents: L1, L2, L3, - L4 (RMS); Active power: sum and per each phase; Apparent power: sum and per each phase; Reactive power: sum and per each phase; Power factor: average and per each phase; Active energy produced: sum and per each phase; Battery voltage VDC; Battery charger current (up to max 2 bc); Speed; Working hours; Rental hours (for rent applications); Starting attempts counter; Successful starts in % ; ACB MCB manoeuvres counter ; Coolant liquid temperature ; Oil pressure; Oil temperature; Engine exhaust temperature main bearings 1; Engine exhaust temperature main bearings 2; Fuel level in % ; Engine power used in %; Air turbo pressure ; Air turbo temperature ; Immediate fuel consumption; Fuel consumption from the last start up; Total fuel consumption (calculated on engine lifespan); Alternator windings temperature.
ALTERNATOR protections:
Max voltage (59); Min voltage (27); Max frequency (81U); Min frequency (81O); Phase sequence error; Voltage asymmetry; Currents asymmetry ; Energy reversal (32); Short circuit (50); Max temperature alternator windings; Alternator capability: Max kW (51), Max kVAr inductive and capacitive.
MAINS protection:
Max voltage (59); Min voltage (27); Max frequency (81U); Min frequency (81O); Phase sequence error ; Voltage asymmetry.
ENGINE protections:
Coolant liquid temperature; Oil pressure; Oil temperature; Oil level; Low fuel level; Max power; Over-speed (12); Broken belt; Missed start; Missed stop; Min coolant level; Visualisation of engine error codes via CANbus SAE J1939.

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Mail: visa@visa.it Web: www.visa.it SAP 109000000041-001-00 28-09-2015

MAIN FEATURES

The In-Sync device equips the Visa generating sets to satisfy the operating requirements of the most complex systems. In Sync is the best solution available on the market as it offers the most varied configuration and management options. There are two main configurations: PGE & PRE (parallel between gensets and parallel with the mains), obtained using a single device through programming and possible implementation of hardware. The reliability and very high degree of customisation make Visa gensets equipped with the In-Sync device, units that are able to satisfy the most complex requirements. In Sync allows the customer to build multi-generating set Power Stations that can rationalise fuel consumption while maintaining maximum safety and extending the life of the systems. As with all Visa products, all the unit's parts are subject to a strict operating test involving over 30 checks prior to delivery.

CONFIGURATION EXAMPLES

PGE910 LOAD SHARING CONFIGURATION

This allows the load to be powered simultaneously by two or more units connected in parallel with no synchronisation with the mains.

PGE 9620 LOAD MANAGEMENT CONFIGURATION

The load management function allows automatic start-up and shutdown limits of the units to be set according to the load variation. The power usually required by the master generating set is optimised at 75% of the rated power, and when there are broad and slow variations the slave gensets (one or more sets) are automatically switched off when the load is low.

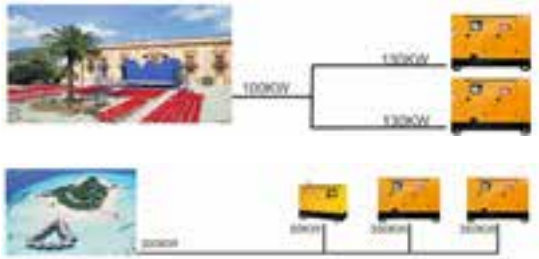
PRE910S "IMPORT" PARALLEL WITH THE MAINS CONFIGURATION

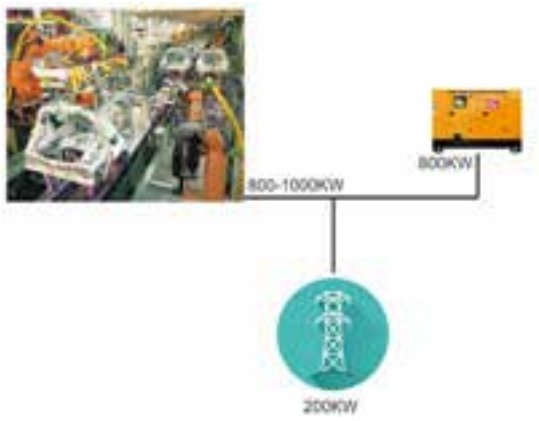
With this option the customer's load can be connected to the mains, setting a maximum power absorption threshold. Once this value is exceeded the generating set operates in parallel with the mains, thereby supplying the excess load. This prevents sanctions or disconnections from the mains due to overloads.

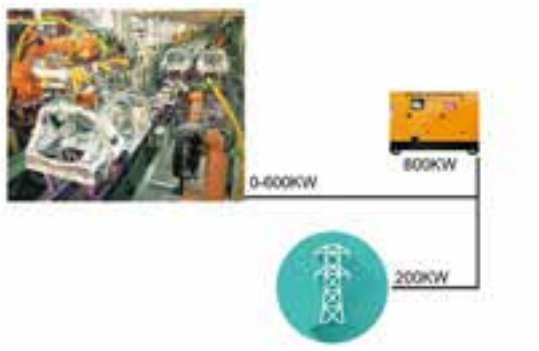
PRE930S "BASE LOAD" PARALLEL WITH THE MAINS CONFIGURATION

This option allows the genset to run for the main supply of the load. As long as the load is less than the set power, it is entirely supplied by the generator; the excess will be supplied by the mains.

EXAMPLE PICTURE







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MAIN FEATURES

Considering the complexity of the plants and the wide range of programming, it is always recommended to contact Visa technical department in advance.

CONFIGURATION EXAMPLES

PRE930S "BASE LOAD" PARALLEL WITH THE MAINS CONFIGURATION

This option allows the genset to run for the main supply of the load. As long as the load is less than the set power, it is entirely supplied by the generator; the excess will be supplied by the mains.

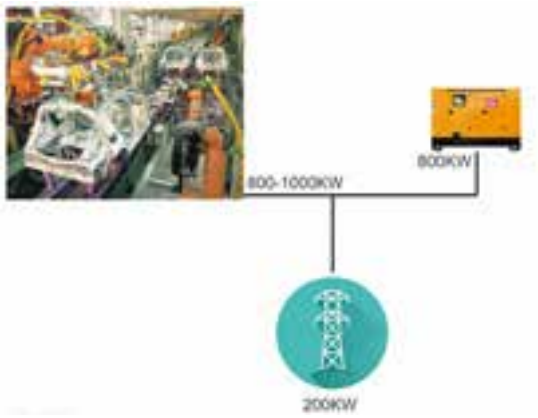
"AUTOMATIC FROM REMOTE CONTROL" CONFIGURATION

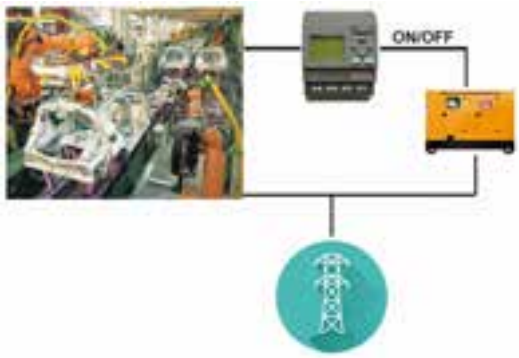
The basic version of the In-Sync device has an input for a potential free contact called SYS Start/Stop. Close the contact for the In-Sync device (in AUTO mode) to automatically start-up and shutdown the genset, thereby controlling the start-up times and circuit breaker on board the unit, whilst also turning the engine off automatically if a fault occurs. The genset start-up can be controlled if a suitable device is connected to this input, which activates the opening and closure of the contact (e.g. clock, manual selector, power presence sensor, radio control, etc.).

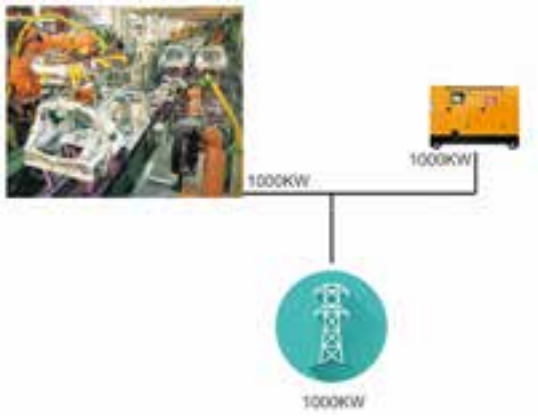
PRE940S CONFIGURATION: "AUTOMATIC" FOR SPTM EMERGENCY

The automatic In-Sync device version for a mains emergency (and short parallel with it when it is restored), allows a system to be controlled automatically according to a pre-set cycle, thereby causing the genset to start-up in the event of a power failure, the user system to be powered and the genset to be shutdown once normal conditions are restored. The main advantage of using In-Sync is that synchronisation can be implemented once the power is restored and the load can be gradually shifted from the unit to the mains without the typical voltage dip in changeover panels.

EXAMPLE PICTURE







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Mail: visa@visa.it Web: www.visa.it SAP 109000000029-001-00 28-09-2015

MAIN FEATURES

Considering the complexity of the plants and the wide range of programming, it is always recommended to contact Visa technical department in advance.

PRACTICAL AND COMPACT

A convenient display allows access to all main configurations as well as monitor the system's operating parameters.

The main feature of the device is its compactness. All necessary components are conveniently installed in the genset's standard control panel without needing to add further panels.

PROTECTIONS ALARMS INTERFACE

-Temperature -Oil pressure -Fuel level -Radiator level -Oil level -Engine speed -Mains and generator voltage -Voltage asymmetry -Phase inversion -Synchronoscope and indicator slip during synchronising -Current supplied displayed -Active, reactive and apparent power for each phase and total -Power factor -Gen set frequency -Hours counter for energy -Power inversion -In case of more than one genset in parallel, active genset's power sum and reserve available power -Missed parallel alarm -Battery voltage -Emergency push button -Starting attempts counter -History of functions and alarms. COMMUNICATIONS: Inputs and outputs with settable volt free contacts are available upon request. The device is equipped with a RS232 serial port with MODBUS protocol support; monitoring, programming and controlling the generating set directly from a local PC or remotely through special software via serial port, LAN, internet or SMS.

EXTENSIONS

The In Sync's modular structure allows it to be upgraded for more complex operations in order to provide better solutions for the various client applications. Depending on the features, the system can be equipped with: -engine preheater kit and battery charger kit -automatic fuel refilling system (FUEL TUTOR)on board -Fiscal measurement system -Motorized automatic transfer switch panels (ATS).

REMOTE MANAGEMENT

A SINGLE CONNECTION WITH USB OR RS232 SERIAL PORT, requires: -IN SYNC software -USB or RS232 cable (not provided).

A MULTIPLE CONNECTION WITH USB OR RS232 SERIAL PORT, requires: -IN SYNC software -USB or RS232 cable (not provided) -iG-MU module.

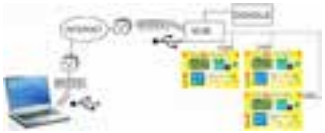
A MULTIPLE CONNECTION WITH USB OR RS232 SERIAL PORT AND GSM MODEM, requires: -IN SYNC software -USB or RS232 cable (not provided) -GSM modem (not provided).

A SINGLE CONNECTION WITH LAN, requires: -IN SYNC software -USB or RS232 cable (not provided) -Ethernet LAN connection.

A MULTIPLE CONNECTION WITH LAN, requires: -IN SYNC software -Ethernet LAN connection -iG-IB module -DONGLE module.

A SINGLE CONNECTION VIA INTERNET, requires: -IN SYNC software -USB or RS232 cable (not provided) -Analog, digital or GSM modem (not provided) -iG-IB module -internet connection.

A MULTIPLE CONNECTION VIA INTERNET, requires: -IN SYNC software -USB or RS232 cable (not provided) -internet connection -iG-IB module -DONGLE module -Analog, digital or GSM modem (not provided).



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"DSE 7320"

DESCRIPTION

The DSE7320 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single gen-set applications powered by either diesel or gas engines.

SPECIFICATIONS

DC SUPPLY	
CONTINUOUS VOLTAGE RATING	8 V to 35 V Continuous
CRANKING DROPOUTS	Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V.
MAXIMUM OPERATING CURRENT	340 mA at 12 V, 160 mA at 24 V
MAXIMUM STANDBY CURRENT	160 mA at 12 V, 80 mA at 24 V
CHARGE FAIL/EXCITATION RANGE	0 V to 35 V
MAINS (UTILITY)	
VOLTAGE RANGE	15 V - 333 V AC (L-N)
FREQUENCY RANGE	3.5 Hz to 75 Hz
OUTPUTS	
OUTPUT A (FUEL)	15 A DC at supply voltage
OUTPUT B (START)	15 A DC at supply voltage
OUTPUTS C & D	8 A 250 V (Volt free)
AUXILIARY OUTPUTS E,F,G,H	2 A DC at supply voltage
GENERATOR	
VOLTAGE RANGE	15 V - 333 V AC (L-N)
FREQUENCY RANGE	3.5 Hz to 75 Hz
MAGNETIC PICK-UP	
VOLTAGE RANGE	+/- 0.5 V to 70 V
FREQUENCY RANGE	10,000 Hz (max)
DIMENSIONS	
OVERALL	240 mm x 181 mm x 42 mm 9.4” x 7.1” x 1.6”
PANEL CUT-OUT	220 mm x 160 mm 8.7” x 6.3”
MAXIMUM PANEL THICKNESS	8 mm 0.3”

KEY FEATURES

• 4-Line back-lit LCD text display • Five key menu navigation • Front panel editing with PIN protection • Customisable status screens • Power save mode • Support for up to three remote display units • 9 configurable inputs • 8 configurable outputs • Flexible sender inputs • Configurable timers and alarms • 3 configurable maintenance alarms • Multiple date and time scheduler • Configurable event log (250) • Tier 4 CAN engine support • Integral PLC editor • Easy access diagnostic page • CAN and Magnetic Pick-up/Alt. sensing • Fuel usage monitor and low fuel alarms • Charge alternator failure alarm • Manual speed control (on compatible CAN engines) • Manual fuel pump control • Engine exerciser • “Protections disabled” feature • kW & kV Ar protection • Reverse power (kW & kV Ar) protection3 • LED and LCD alarm indication • Power monitoring (kW h, kV Ar, kV A h, kV Ar h) • Load switching (load shedding and dummy load outputs) • Automatic load transfer • Unbalanced load protection • Independent Earth Fault trip • USB connectivity • Backed up real time clock • Fully configurable via DSE Configuration Suite PC software • Configurable display languages • Remote SCADA monitoring via DSE Configuration Suite PC software • User selectable RS232 and RS485 communications • Configurable Gencomm pages • Advanced SMS messaging (additional external modem required) • Start & stop capability via SMS messaging • Additional display screens to help with modem diagnostics • Idle control for starting & stopping. • DSENet® expansion compatible

KEY BENEFITS

• 132 x 64 pixel ratio display for clarity • Real-time clock provides accurate event logging • Multiple date and time scheduler • Set maintenance periods can be configured to maintain optimum engine performance • Ethernet communications (via DSE860/865 modules), provides advanced remote monitoring at low cost • Modules can be integrated into building management systems (BMS) • Increased input and output expansion capability via DSENet® • Licence-free PC software • IP65 rating (with supplied gasket) offers increased resistance to water ingress • PLC editor allows user configurable functions to meet specific application requirements

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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"ATS-C" CHANGEOVER SWITCH PANELS

MAIN FEATURES

ATS-C is a new line of changeover switch panels developed and produced by Visa S.P.A. in accordance with IEC standards EN 61439-2 (construction standard) for powers up to 125°. In their specific use with generating sets the changeover switch panels allow the changeover between mains/genset or genset/genset. The main part of the panel is represented by two interlocking contactors. All of the parts are installed inside a sturdy powder-coated (RAL7035) metal box and equipped with a lock to close the access door. IP65 protection guarantees the protection of the parts from external agents.

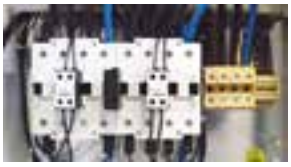
DESCRIPTION

PICTURE

All the components are installed inside a powder coated metal case (RAL 7035), complete with lock on the access door.

All auxiliary controls are available and clearly identified on a large terminal board; appropriate fuses protect the whole system.

Interlocking pair of contactors and terminal blocks to connect the mains and genset. All of the ATS-C panels are equipped with sturdy terminal blocks to connect mains and genset power cables.



All Ats-C panels are equipped with sturdy key-locks to close the front panel.

The change-over between the Mains and genset or amongst gensets occurs through the activation of automatic functions on the standard control panel (Guard Evolution). The interface on the ATS panel activates or deactivates the switch gear and sends all the necessary information to the Guard Evolution about the operating status.

SAFETY EQUIPMENT

The following safety devices are provided as standard:
- Mechanical interlock between the two contactors;
- electrical interlock between the two contactors by means of a state contact;
- protection fuses on the mains presence line;
- protection fuses on the pre-heating power supply line;
- the state of the changeover switch is displayed by a light on the panel door;
- connection terminal block with suitable sizes for the currents in use.

STRENGHTS

-Sturdy epoxy powder-coated metal box with foamed gasket offering IP65 protection
- Contained overall dimensions

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"ATS-M" CHANGEOVER SWITCH PANELS

MAIN FEATURES

ATS-M is a new line of changeover switch panels for generating sets developed and produced by Visa S.p.a. in accordance with IEC standards EN 61439-2 (construction standard) for powers up to and exceeding 125°. Distinguished by a sturdy and reliable motorised or contact-powered control, the ATS panels allow the customer to carry out remote mains-genset or genset-genset switching operations.

DESCRIPTION	PICTURE
All the components are installed inside a powder coated metal case (RAL 7035), complete with lock on the access door.	
All auxiliary controls are available and clearly identified on a large terminal board; appropriate fuses protect the whole system.	
All of the ATS-M panels are equipped with sturdy terminal blocks to connect mains and genset power cables.	
All ATS-M panels are equipped with a handle for manual switching.	
All ATS-M panels are equipped with sturdy key-locks to close the front panel.	
The change-over between the Mains and genset or amongst gensets occurs through the activation of automatic functions on the standard control panel (Guard Evolution).he interface on the ATS panel activates or deactivates the switch gear and sends all the necessary information to the Guard Evolution about the operating status.	

SAFETY EQUIPMENT

-Mechanical switching interlock
-Electronic switching interlock
-Protection fuses
-Terminal blocks for control connections
-Terminal blocks or bars for mains-genset connections
-Switching state displayed externally
-Steel panel coated with thermo-setting powder, with key

STRENGHTS

-Sturdy epoxy powder-coated metal box with foamed gasket offering IP65 protection
-Contained overall dimensions.

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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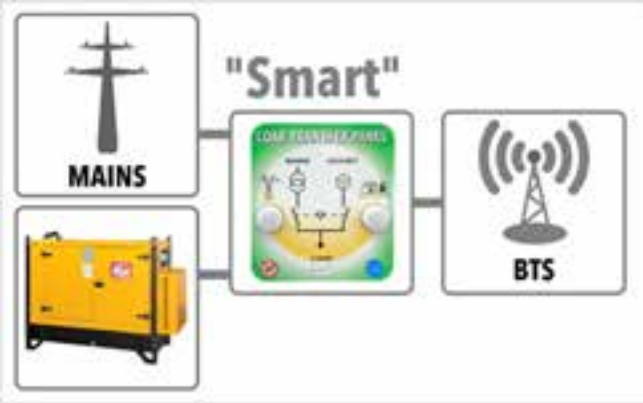
SPECIAL ATSs

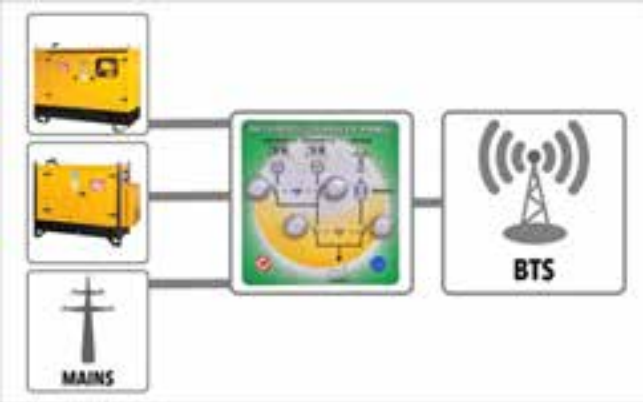
Visa can count with multiple ATS configurations. Usually ATSs are enclosed in a dedicated cabinet but on demand special solutions may be developed where the ATS is included in the genset electrical cabinet in order to save space and to have a more compact and complete solution. Below the typical scenarios are described.

ATS 1+0 (genset+Mains)
This is the standard configuration with the Mains and a standby genset. When the genset detects a Mains failure, it starts, gives to the ATS the command to switch and takes the load.



ATS 1+0 (genset+Mains) Smart ATS
This scenario requires a manual genset with a remote start. Smart ATSs can detect the Mains failure and start a genset. When the genset is ready to take the load the Smart ATS switches.

ATS 1+1 (genset1+ genset2)
This ATS with mutual standby. This scenario includes 1 ATS and 2 gensets one in emergency to the other. This ATS can also include, as an option, a timer to equalize the working hours.



3 ways ATS
For very critical applications where a redundant emergency power source is requested. 3 ways ATS can accept power from 3 sources (tipically the Mains and 2 gensets with different priorities). In case of Mains failure the genset 1 starts and take the load. In case also genset 1 fails the genset 2 starts and take the load.

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N/S 3-source inverters

DESCRIPTION:
The N/S 3-source inverters have been designed by Visa S.p.A. in accordance with EN 61439 standards.
This model is available either with contactors or with motorised switches. Namely, this inverter has been designed for telecoms applications in order to meet the following configurations:
- Telecoms site with 2 unit and one network;
- Telecoms site with just one unit and one network;
- Telecoms site with two power units. The cabinet can be locked with a key and its IP65 protection rating provides protection against the weather.

COMPOSITION:
. Voltage and frequency control relay for EDG network failure detection;
. Clock that can be programmed by a priority GE selection and permutation;
. Two contactor inverters (GE1/GE2 – GE's/EDG) or motorised switches;
. LEDs on each source and mounted on the front with the display panel;
. Two switches for multiple operating choices;
. Information reports:
- Potential-free contacts: GE1 presence, GE2 presence, EDG network presence, GE1 not available, GE2 not available;
. Battery maintenance charger protections;
. Motor pre-heating protections.

OPERATING PRINCIPLE:

AUTOMATIC MODE:
The network is the primary power source. A relay constantly controls the voltage and frequency values; if the values go beyond or below the threshold, the relay triggers the start-up of the unit selected as the priority unit by the clock. In the event the network failure, the clock will switch the priority from one unit to another according to its programming. If a unit is unavailable (due to a failure or if the equipment is in non automatic mode), the second power unit starts automatically.
MANUAL MODE:
The cabinet is equipped with two switches allowing for:
- Manual engagement of the mains contactor or GE's (in case of engagement of the GE's contactor, the start-up command is given to the units and is directed via the clock);
- GE1 / GE2 manual start-up by bypassing the clock selection.
STOP MODE:
By setting the two switches to off, the site is not powered by any source.
HYBRID CONTACT:
It is possible to control the units' start-up by keeping an open external contact. In case of network failure, the priority unit will start only when the hybrid contact is closed (low charge level of the battery pack).

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PANEL WITH SOCKET KIT

MAIN FEATURES

Four socket kits were designed to be installed on the rear silencer of canopies GV020 to GV200. The external measurements of the panel expressed in mm: 550 width, 435 height, 200 depth. The panel installation will extend the generating set by 200 mm Colour black RAL9005.

DESCRIPTION

PICTURE

VERSIONS

NI-00

5-pole 63A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 32A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 16A 3F+N+E socket protected by a 4-pole circuit breaker, 3-pole 16A 1F+E socket protected by a 2-pole circuit breaker, 16A schuko socket protected by a 2-pole circuit breaker, main switch for 125A sockets with calibrated differential protection;

NI-01

5-pole 32A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 16A 3F+N+E socket protected by a 4-pole circuit breaker, 3-pole 16A 1F+E socket protected by a 2-pole circuit breaker, 16A schuko socket protected by a 2-pole circuit breaker, main switch for 63A sockets with 30mA differential protection;

NI-02

5-pole 63A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 32A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 16A 3F+N+E socket protected by a 4-pole circuit breaker, 3-pole 16A 1F+E socket protected by a 2-pole circuit breaker, 16A schuko socket protected by a 2-pole circuit breaker;

NI-03

5-pole 32A 3F+N+E socket protected by a 4-pole circuit breaker, 5-pole 16A 3F+N+E socket protected by a 4-pole circuit breaker, 3-pole 16A 1F+E socket protected by a 2-pole circuit breaker, 16A schuko socket protected by a 2-pole circuit breaker;

The NI-02 and NI-03 panels correspond to NI-00 and NI-01 by socket supply, but they do not have a general differential circuit breaker. In case of earth leakage of the utilities the main differential circuit breaker is triggered (which is compulsory in this case), thereby disconnecting the entire charge. The advantage of the NI-00 and 0 is that one discharge on the sockets will not trigger the main switch on the machine.

DETAILS

The panel is equipped with a top-hinged door to close the switch compartment and a lock with removable key when the door is closed. The total degree of protection is IP44. The socket kit is an integrated accessory to the generating set and cannot be supplied separately.

CONNECTIONS WITH EXTENDED BARS

This is a very useful accessory in cases where the power cables need to be frequently connected or disconnected from the generating set. It allows you to avoid using the screws on the switch (not suitable for frequent use) and connect to the copper bars instead. With the extended connections the cable heads are always attached to the bar leaving the holes free for the cables.

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"4 ALARMS" CARD

DESCRIPTION

The "4 ALARMS" device is an expansion module designed for use with the "Guard Evolution". When connected to the “Guard Evolution” it allows to remotely signal alarms, warnings or the status of the generating set by mean of its 4 relays. With a proper cabling it can be used to control lamps, buzzers or as an interface to supervision systems such as PLCs.

STANDARD CONFIGURATION

RELAY	FUNCTION
Relay 1	Cumulative Warnings
Relay 2	Low fuel level
Relay 3	Engine running
Relay 4	Cumulative Alarms

FEATURES

The device is provided with 4 relays with voltage free changeover contacts (2A. AC1 max 48 V) cabled to dedicated terminals. Each relay is associated to a LED which highlights the status of the contact. The board includes the terminals for the power supply and a RS485 port for connection to the "Guard Evolution". The "4 ALARMS" card was designed to be installed close to supervision equipment. The connection to the "Guard Evolution" is realized via 2 wires connected to the RS485 port. This allows to optimize the wiring and to reduce costs.

ADVANTAGES

Each relay is associated to a different function as shown in the nearby table. Compact size: 120 x 105 x 22 mm.

NOTES ON CONNECTION

The module will work up to 1 KM from the "Guard Evolution" controller. The "4 ALARMS" card can be power supplied with 12 or 24 VDC from the battery of a generating set (if the power consumption is compatible with the battery charger capacity) or from an alternative power source. The power supply must be continuous in order to avoid loss of communication. The maximum power consumption of the device is of 3 VA.

"20 ALARMS" BOARD

MAIN FEATURES

The A.SRA20 device connected to Guard Evo. allows the customer to remotely set off alarm, pre-alarm or operating mode signals for the generating set through the contacts of the 20 relays equipped with suitable cabling and system. It is possible to control lights and sounds or interface with supervision systems, such as a PLC for example, based on the requirements of the final user.

STANDARD CONFIGURATION

RELAY	FUNCTION
Relay 1	Mains contactor control on (System status)
Relay 2	Genset contactor control on (System status)
Relay 3	Engine running (System status)
Relay 4	Cumulative general fault (Alarm)
Relay 5	Emergency button pressed (Alarm)
Relay 6	Generator tension not correct (Alarm)
Relay 7	Mains tension not correct (Alarm)
Relay 8	Engine running at low rpm (Alarm)
Relay 9	No ignition (Alarm)
Relay 10	Battery charger alternator not energised (Alarm)
Relay 11	Mechanical engine stop (Alarm)
Relay 12	Minimum engine oil pressure (Alarm)
Relay 13	Maximum engine temperature (Alarm)
Relay 14	Minimum radiator liquid level (Alarm or Pre-alarm)
Relay 15	Minimum fuel level (Alarm or Pre-alarm)
Relay 16	Cumulative general pre-alarm (Pre-alarm)
Relay 17	Minimum battery tension (Pre-alarm)
Relay 18	Maximum battery tension (Pre-alarm)
Relay 19	Maintenance request (Pre-alarm)
Relay 20	Generating set not in AUTOMATIC (System status)

EQUIPMENT

The device is equipped with 20 relays, all with volt-free contact (2A- AC1 max 50Vdc), cabled in a PCB to dedicated terminal blocks, with a led associated to each relay highlighting the status of the contact. On the circuit, in addition to the power supply terminals, there is an RS485 port for the connection with Guard Evo. and an RS232 port for the connection to a PC, the acquisition and processing the signals from Guard Evo. and the management of the relays is carried out through a dedicated microprocessor. The A.SRA20 device was designed to be installed near the equipment where the customer wishes to carry out supervision, while the connection with the Gen. set is carried out through two conductors that are connected to the RS485 port. This allows the cables to be set up in the best possible manner and to contain costs.
NOTES ON THE CONNECTION
The connection between Guar Evolution and the A.SRA20 device through RS485 is 1 km at most. The A.SR20 device can be powered at 12 or 24 Vacñdc regardless. The power supply can be connected to the battery on the generating set. In this case it is necessary to make sure that the consumption is acceptable by the load maintenance systems, or by a different source that is always on (the power supply must be constant, otherwise communication will be lost in case of momentary power shortage). The maximum absorption of the device is 15 VA. All of the relays have volt-free contacts (2A- AC1 max 50Vdc).

STRENGHTS

-Each relay is associated to a function corresponding to the standard configuration (20 ALL 00 - '20 ALARMS 00') reported below. On request different functions from those envisioned can be associated with the relays, for a maximum of 20;
-the minimum overall dimensions are only 235mm x 125 mm;

"5IN-4OUT CARD"

DESCRIPTION

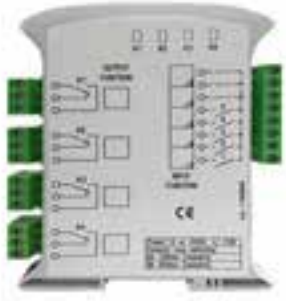
The "5IN-4OUT" card is an expansion module designed for use with the Guard Touch. The card has 5 inputs and 4 outputs. The outputs are relays with voltage free changeover contacts. Each relay is associated to a LED which indicates the status of the output. Each input can have one out of more than 30 command functions, while each output can have one out of more than 100 functions. The functions associated to each input and output can be programmed directly from the Guard Touch display or through the Guard Touch Software. This device is needed every time a generating set with a Guard Touch and a remote start is required.

TECHNICAL DATA

Power supply	12 or 24VDC +/-15% Max 245mA
Outputs	4 voltage free changeover contacts
Max steady-state current on contacts	8 Amps
Max current on contacts during changeover	8A @ 125VDC, 8A @ 250VAC
Max contacts insulation voltage	250 VAC, 125 VDC
Fastening mode	On "C" shaped DIN guide
Size	109x119x22 mm
Weight	170 gr
Optical outputs	4 relay status LEDs

FEATURES

The device is provided with 4 relays with voltage free changeover contacts. Each relay is associated to a LED which indicates the status of the output. The “5IN-4OUT” was designed to be installed onboard the genset. This board is an expansion module of the static outputs present on the Guard Touch controller.



ADVANTAGES

A large number of configurations is possible. Each relay may have one out of more than 100 possible functions for remote monitoring of signals, warnings and alarms. Each of the 5 inputs can have one out of more than 30 command functions. This device allow the remote starting of Manual machines. Compact layout: 109x119x22 mm.

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"8OUT CARD"

DESCRIPTION

The "8OUT" card is an expansion module designed for use with the Guard Touch. When connected to the "Guard Touch" via the RS485 MODBus interface it allows to remotely signal alarms and warnings by mean of its 8 relays with voltage free changeover contacts. Each output can have one out of more than 100 different functions including warnings, alarms and commands. Up to four "8 OUT" cards (each with a dedicated address) can be connected on the bus. This device can be used to control lamps, buzzers or as an interface to supervision systems such as a PLC. The functions associated to each output can be programmed directly from the Guard Touch display or through the Guard Touch Software.

TECHNICAL DATA

Power supply	12 or 24VDC +/-15% Max 245mA
Outputs	8 voltage free changeover contacts
Max steady-state current on contacts	2 Amps
Max current on contacts during changeover	0.15A @ 30Vac, 0.15A @ 48VDC
Max contacts insulation voltage	30 VAC, 48 VDC
Fastening mode	On "C" shaped DIN guide
Address configuration mode	Via 2 deep-switches
Interface to Guard Touch	RS485 MODBus
Size	109x119x22 mm
Weight	195 gr
Optical outputs	8 relay status LEDs, 1 RS485 MODBus communication status LED, 1 Power supply status LED

FEATURES

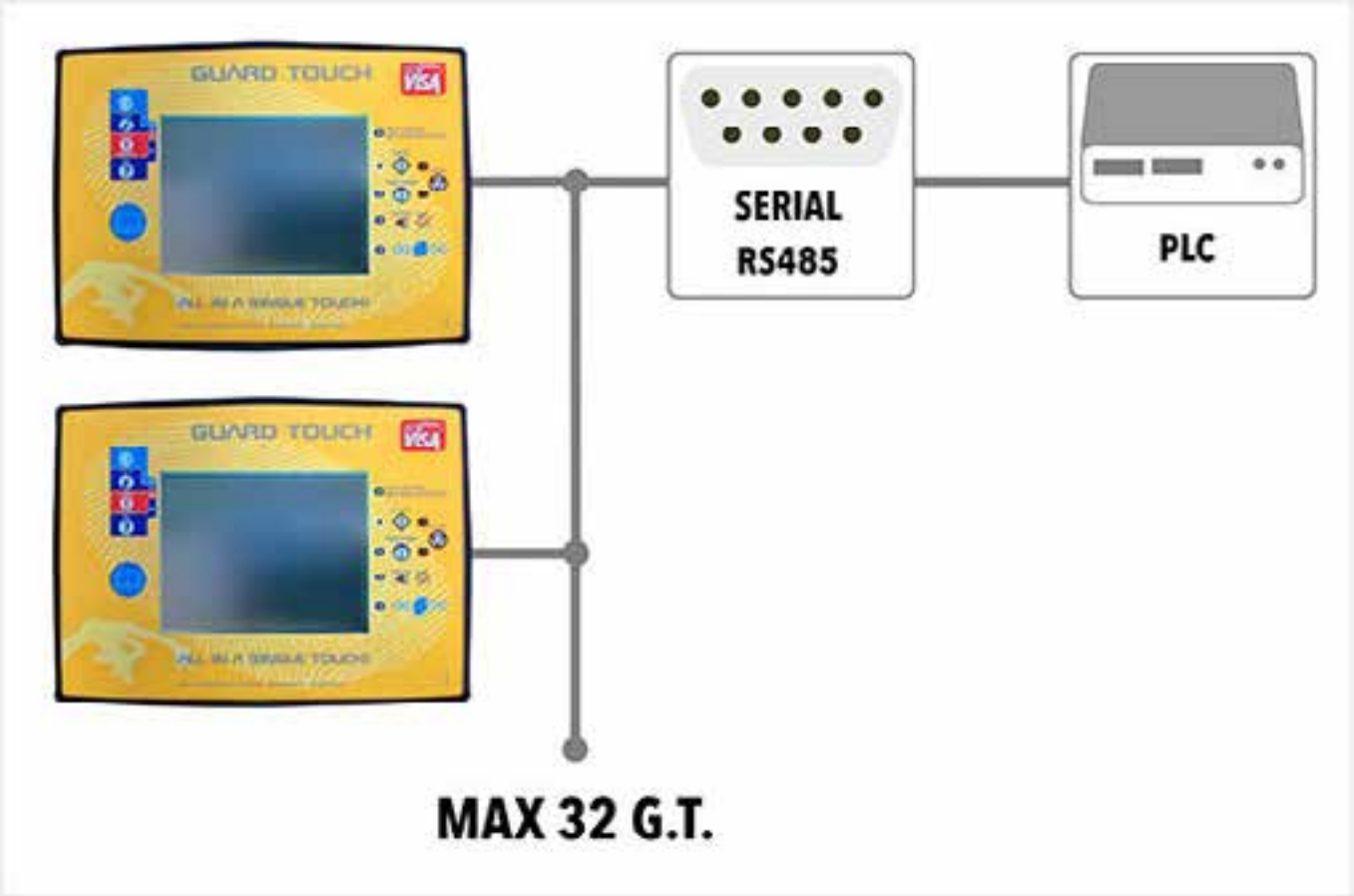
The device is provided with 8 relays with voltage free changeover contacts. Each relay is associated to a LED which indicates the status of the output. The device has a RS485 MODBus interface for connection to the "Guard Touch". The "8 OUT card" was designed to be installed close to devices monitoring the generating sets. The connection between the "8OUT card" and the "Guard Touch" is done with 2 wires allowing to reduce cabling and installation costs.

ADVANTAGES

A large number of configurations is possible. Each relay may have one out of more than 100 possible functions. Compact layout: 109x119x22 mm.

NOTES ON CONNECTION

The maximum distance between the "Guard Touch" and the "8 OUT" is of 1 km. The "8 OUT" can be power supplied with 12 or 24 V DC. The power supply can be connected to a generating set battery. In this case it is necessary to verify that the power absorption may be sustained by the generating set battery charger. In order to avoid loss of communication the power supply must be constant.



GUARD TOUCH COMMUNICATION VIA MODBUS

GUARD TOUCH COMMUNICATION VIA MODBUS
The Guard Touch can be connected to a MODBus RTU RS485 network. The card is always a Slave, it can never be a Master. The interface used is a RS485 two-wire. Up to 32 generating sets can be monitored on a single RS485 bus. Through MODBus connections the following functions are available:

- Monitoring of electrical measurements of the engine, of the alternator and of the mains;
- Monitoring of Warnings and Alarms;
- Possibility to start and stop both the genset and the ATS.

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"J-NET ADAPTER"

DESCRIPTION

The J-NET ADAPTER is a converter which allows to connect one or more GUARD TOUCH boards to a PC based monitoring system. The J-NET has a USB (type B) and LAN (Ethernet) interface for the monitoring systems and a RS485 port for connection to the GUARD TOUCH. When using the USB interface, the J-NET enables a single PC to monitor and control up to 32 generating sets connected to a RS485 bus. When using the LAN interface, the J-NET enables a PC connected to the Ethernet network or to the web to monitor and control up to 32 generating sets connected to a RS485 bus. The device allows also to monitor UP to 12 generating sets via SNMP protocol.

TECHNICAL DATA

Power supply: Self powered when using USB connection; 9-48VDC (max 200 mA) via Jack connector when using LAN connection

Interface to PC: One USB 1.1 type B connector; One LAN RJ45 connector

Interface to Guard Touch: RS485 proprietary protocol

Weight: 190 gr

Max number of generating sets controllable via LAN/Internet: 32

Max number of generating sets controllable via SNMP: 12

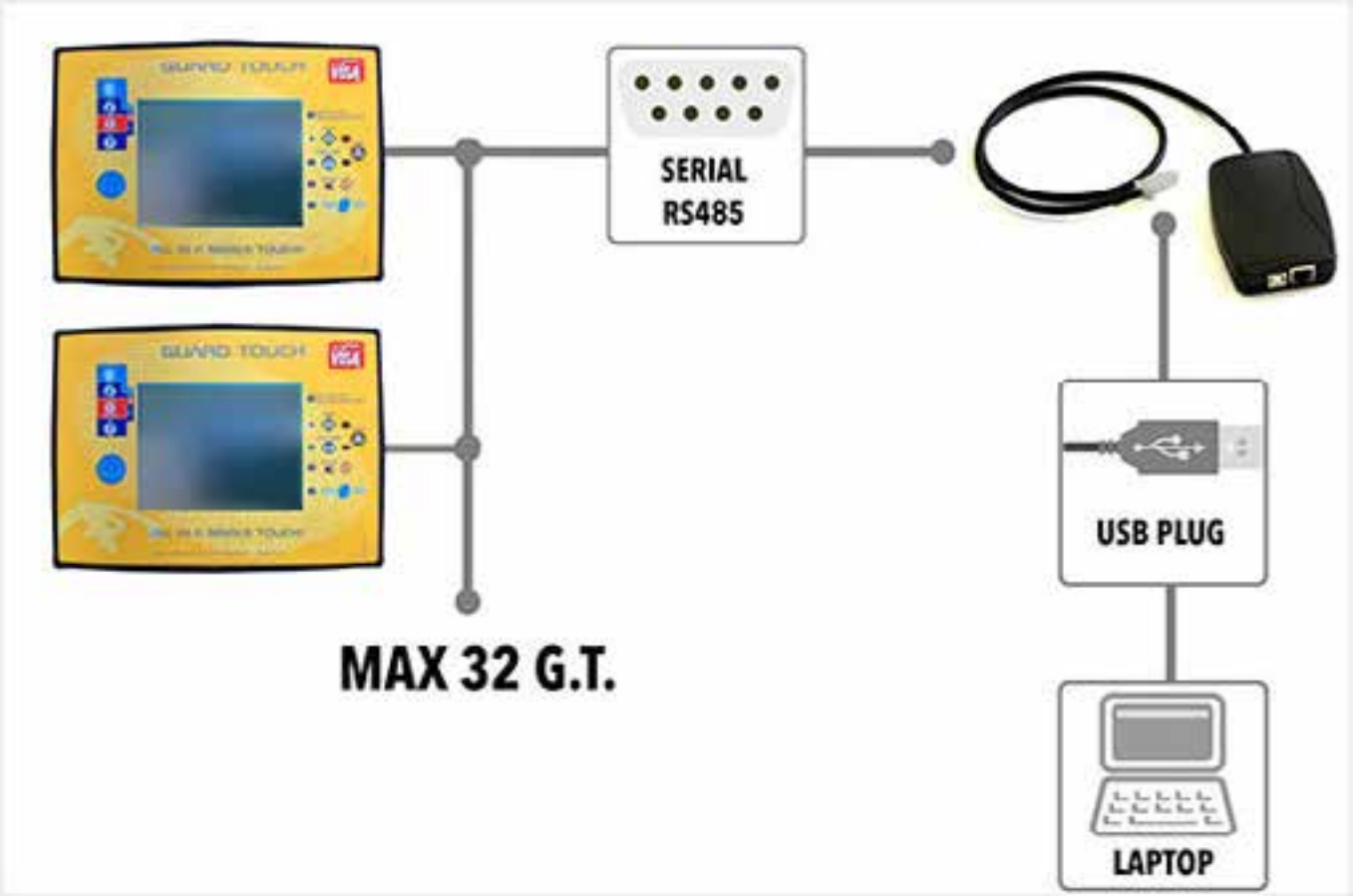
Max number of generating sets controllable via USB: 32

FEATURES

The J-NET Adapter is used in conjunction with Guard Touch controllers to provide monitoring and communications data via USB or Ethernet/Internet network.The module will work up to 1 KM from the 'Guard Touch' controller.

ADVANTAGES

The J-NET Allows users from different locations to view generator status at low cost. The remote control and monitoring can provide vital information prior to a service call, or for making remote changes to parameter settings allowing to schedule and reduce site visits and maintenance costs.



DIRECT CONNECTION TO A GENERATING SET WITH THE GUARD TOUCH SOFTWARE (GTS) VIA USB

- J-NET USB Connection

- Up to 32 Gensets connected to the converter

The GTS software allows to send commands to the generating set, to change its working mode and to receive information on its status including warnings and alarms.

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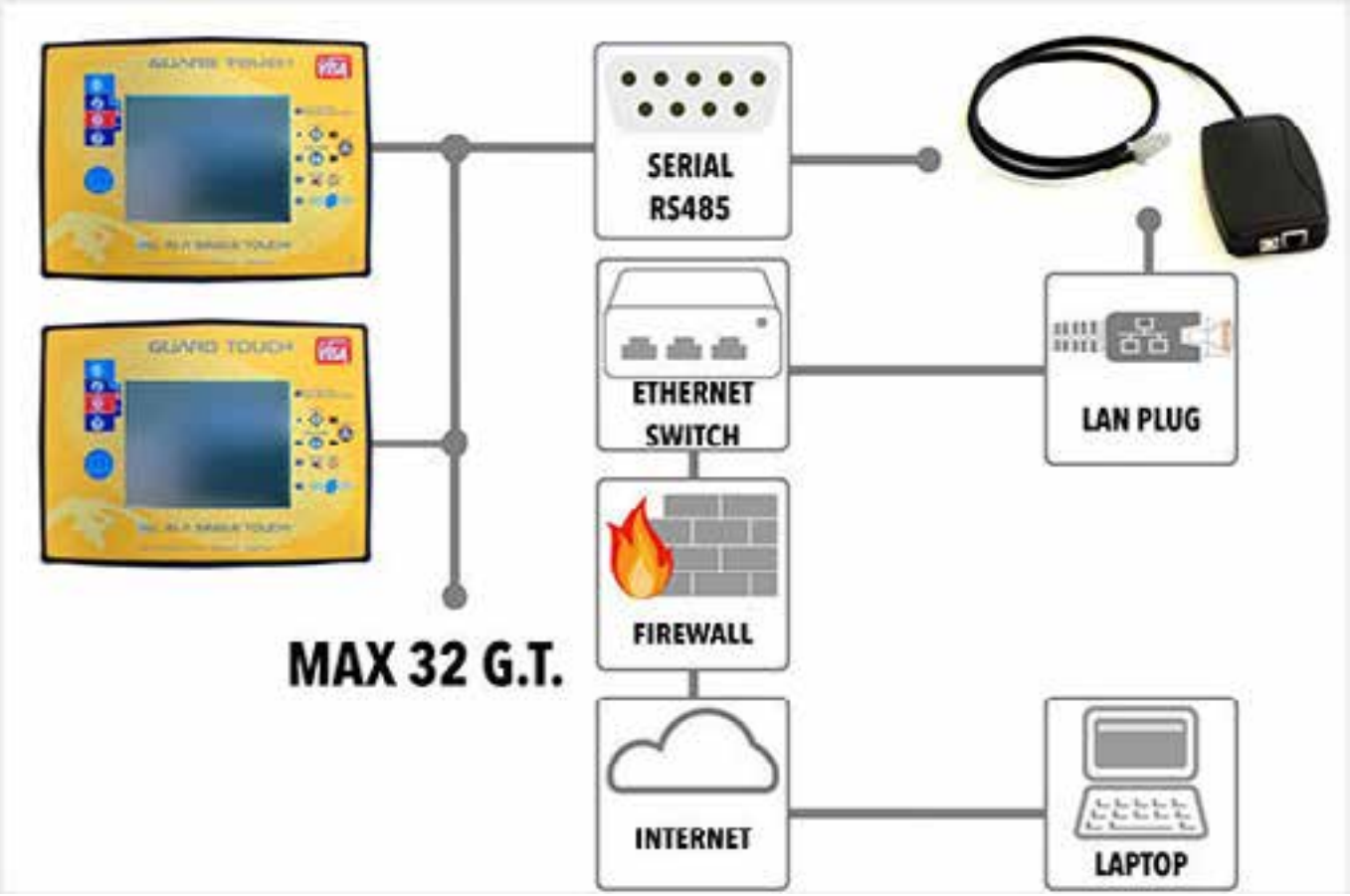


DIRECT CONNECTION TO A GENERATING SET WITH THE GUARD TOUCH SOFTWARE (GTS) VIA LAN

- J-NET LAN Connection

- Up to 32 Gensets connected to the converter

- SNMP Protocol

Possibility to monitor the genset from a Local Area Network or from the Web. The GTS software allows to send commands to the generating set, to change its working mode and to receive information on its status including warnings and alarms.

GSM-GPRS Modem

DESCRIPTION

Provides a web-based control and monitoring solution. Flexible means of data transmission through USB, Ethernet or GSM-GPRS. The module will work up to 1 KM from the "Guard Touch" controller.

TECHNICAL DATA

Power supply: 9-48 VDC 150mApere

Interface to PC: One USB 1.1 type B connector

Interface to Guard Touch: RS485 proprietary protocol

SMS and e-mail connections for each modem

Max number of generating sets connected to a modem for GPRS monitoring 12

Max number of generating sets connected to a modem for SMS monitoring: 12

Frequency bands: GSM 850/900/1800/1900MHZ

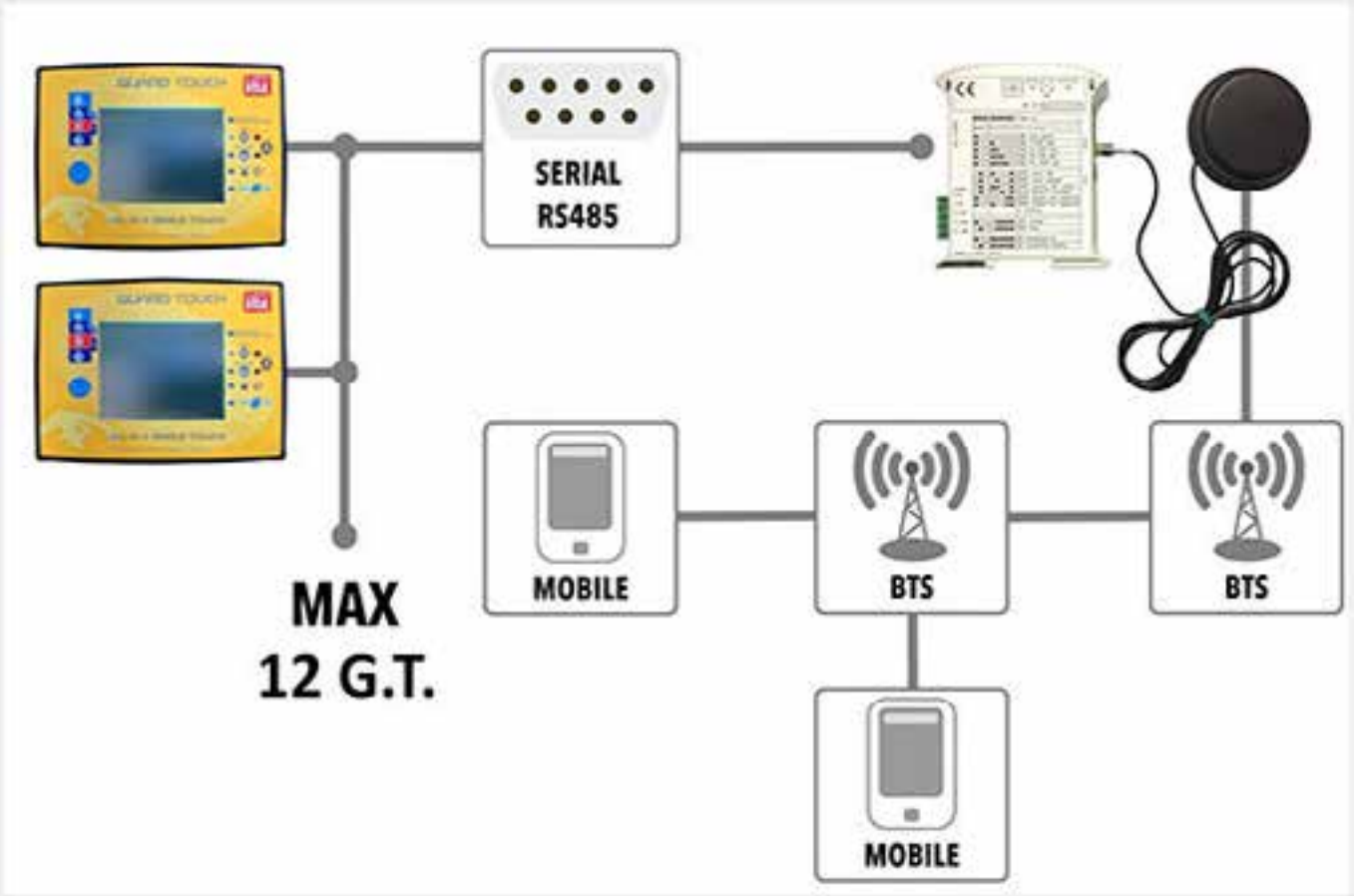
Size: 109x119x22 mm

FUNCTIONS

The 'GSM-GPRS modem' is a flexible tool designed for the remote management of the generating sets and allows to control them via multiple channels. The GSM-GPRS modem has a GPRS, USB (type B) and LAN (RJ45) interface to external monitoring systems and a RS485 port for connection to the GUARD TOUCH. Thanks to GPRS technology it is possible to have a real time monitoring of the generating sets from a remote location at relatively low costs. When using the GPRS connection it is possible to store all generating set information (including warnings, alarms, mechanical and electrical measurements) in a Visa server. The user can access the server via internet for the remote monitoring and control of the generating set. Accessing to the server it is possible to send commands to the generating set, to change its working mode and to receive information on its status including also the GPS position (when this option is provided). The access to all the data is password protected. The modem allows to send SMS and e-mails. The information sent via SMS and email include warnings, alarms, electrical and mechanical measurements and as an option also the GPS position of the generating set. Via SMS it is also possible to start and stop a generating set, to change its working mode, to command an ATS and to request information on the status of the generating set. More than 120 status messages are available.

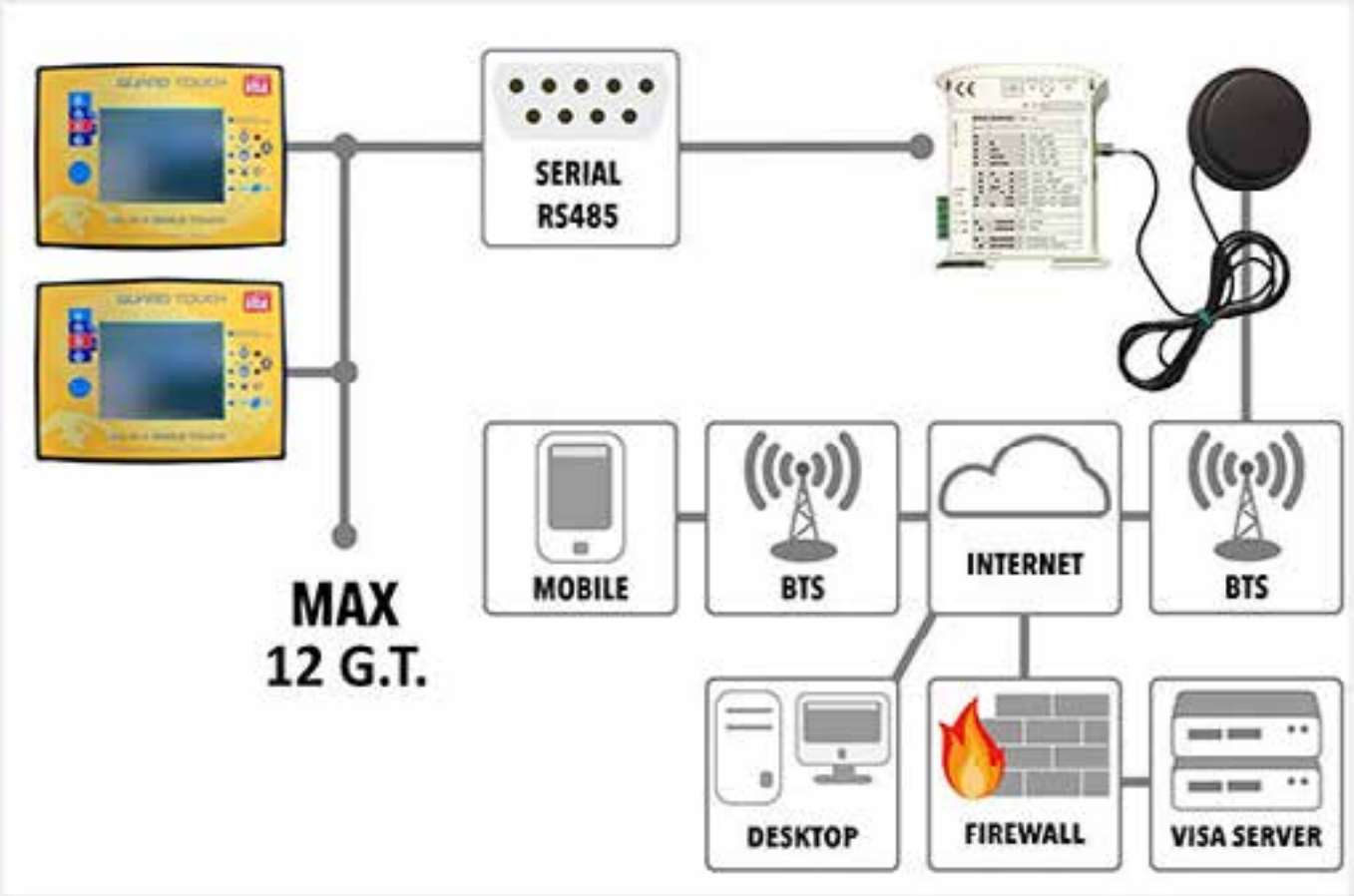
ADVANTAGES

The 'GSM-GPRS modem' Allows users from different locations to view generator status at low cost. A statistical analysis of generating set parameters can be carried out on the data stored in the VISA server. The remote control and monitoring allows an efficient genset maintenance and fleet management. It allows to schedule and reduce site visits and maintenance costs.



DIRECT CONNECTION VIA GSM

- Up to 12 gensets monitored via SMS with a single GSM module
- Up to 5 phone numbers can be enabled to monitor the gensets via SMS
- Different level of SMS enabled for each enabled phone number
- More than 120 different SMS communicating Warnings, Alarms, status changes and INFO
- Periodic SMS with INFO
- Repeated SMS in case of Warnings and Alarms
- Possibility to control gensets and ATS via SMS
- SMS with acknowledgement of the received commands
- Up to 5 different commands in a single SMS
- Protection Password to enable commands
- No need of configuration software, phone numbers and functions can be enabled directly from the Guard Touch.



DIRECT CONNECTION VIA GPRS

Same functions as with the GSM (SMS messages are replaced by email messages) with in addition:

- Up to 12 genset monitored via internet with a single GPRS module
- low connection costs since the internet network is used
- status information sent to different e-mail addresses
- SNMP
- Possibility to store genset information in a server
- A statistical analysis of generating set measures can be carried out on the data stored in the server;
- Tailor made solutions available.

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FILTERS WITH "RACOR" SEPARATOR

MAIN FEATURES

Visa offers a solution with no compromises if a fuel pre-filtering system must be used due to low quality or the presence of contaminants. This consists of the Parker Racor Turbine series; which is a top of the range product of the leading Californian manufacturer in the fuel treatment sector. The Turbine filters are designed specifically for their application in industrial diesel motors; thanks to their special technology they can intercept solid contaminants such as dirt, rust, algae, tarry residues and paints, and can separate, stop and signal any traces of water in the diesel.

DESCRIPTION

ALL FILTERS USE A 3-STAGE SEPARATION FILTERING SYSTEM

SEPARATION:

As the diesel enters the filter it passes through a helical structure, creating a centrifugal effect; the heavier solid bodies and the drops of water will fall directly onto the collecting base without clogging the filtering cartridge. The transparent walls of the collection cup allow quick visual inspection; if there is any water, the relief valve located at the bottom allows this to be removed quickly without having to disassemble the filter.

COALESCENCE

The small drops of water that stop on the tapered surface of the container tend to group together with other water particles in the diesel, which is also found on the surface; when the drops become big enough, they fall into the collecting base.

FILTRATION

The last stage is composed of interchangeable cartridge filters, which are available in different mesh sizes, manufactured using patented technology that can contain water and solids that are up to 2 microns in size. 10 micron filtering cartridges are provided as standard; this choice prevents the Turbine filter (used as a pre-filtering system in Visa units) and the engine filter from getting clogged prematurely. It is also possible to choose the 30 or 2 micron cartridge option.

STANDARD INSTALLATION

The standard installation for the Visa pre-filtering system is designed specifically to simplify filtering cartridge inspection and replacement operations, without causing unnecessary engine downtime. The key element of the system is the manual by-pass comprised of a 6-way valve; a single manoeuvre allows the operator to exclude the filter without the danger of error, making cartridge replacement quick and easy. The standard kit includes:

-Brackets to attach the filtering body to the baseframe of the unit in a position that is easily accessed and inspected;

-Hydraulic connection with the engine, tank and by-pass valve through a flexible pipe that is suitable for use with fuels;

-Cabling of any optional electrical parts (water presence signal or filter pre-heat);

-6-way manual by-pass valve.

OPTIONAL ACCESSORIES

On request, the Racor pre-filter can be supplied with the following accessories:

-Water presence sensor. This signal is normally managed by the unit control logic with the purpose of generating a fault signal.

-12/24Vdc fuel pre-heat. This accessory is particularly useful in low temperatures, in order to prevent the fuel from becoming dense and consequently clogging the filter. The heater is equipped with a non-adjustable internal thermostat;

-Spare cartridges with 30, 10 or 2 micron mesh.

PICTURE

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

MAIN FEATURES

To guarantee elevated operating autonomy Visa can provide various fuel storage solutions. Based on the type of installation it is possible to choose between a vast range of below and above ground cisterns. In all cases these products are manufactured entirely in Italy, with top quality materials and equipped with safety devices as required by the regulations in force.

EXAMPLES OF CISTERNS

BELOW GROUND, DOUBLE-WALL CISTERNS

BENEFITS

-No visual structure
-Possibility of installation under driveways
-Less thermal stress on the fuel; it avoids long term deterioration due to the proliferation of algae, fungus and yeast

PICTURE OF EXAMPLE

EQUIPMENT

They are available in various volumes, from 1000 to 15000 litres, made with top quality steel and inclusive of:
-External tar coating
-Crawl space complete with loading nozzle and approved relief valve, sleeves for relief pipe, supply line with pick-up and foot valve, return line, double wall filling and control, earthing connection
-Welded metal trap or cradle for installation under driveways
-Metric rod
-Lifting eyebolts
-Double wall leak detection control unit
-Scaling tables and VVFF standard inspection certification

DETAILS

OPTIONAL ACCESSORIES

-External endoprene coating treatment, a material that is very resistant to corrosion and particularly suitable for saline terrain -Automatic diesel loading kit to supply the tank built into the machine -Continuous tank level monitoring system with continuous level display and alarm output with settable threshold -Special operations inside the container for mobile use

RANGE OF ABOVE-GROUND CISTERNS WITH BASIN AND SHELTER ROOF

BENEFITS

-Possibility of handling
-Does not require excavation works

PICTURE OF EXAMPLE

EQUIPMENT

Horizontal axis tanks, available in various volumes from 1000 to 20000 litres, made with top quality steel, equipped with:
-Lifting eye bolts (with empty cistern)
-Earthing connection
-Drainage with closing plug
-Metal leak collection basin
-Shelter roof designed to be secured to the collection basin
-Crawl space complete with loading nozzle and approved relief valve, sleeves for relief pipe, supply line with pick-up and foot valve, return line. Relief pipe with flame trap terminal
-Metric rod

DETAILS

OPTIONAL ACCESSORIES

-Automatic diesel loading kit to supply the tank built into the machine
-Continuous tank level monitoring system with continuous level display and alarm output with settable threshold -Special operations inside the container for mobile use

N.A.= not available; O.R. = on request. Reference conditions standard ISO8528-1: temperature 25 °C, altitude 1-1000 m. A.M.S.L., 30% relative humidity, 100 kPa atmospheric pressure (1 bar), 0.8 delayed power factor, load applied balanced not distorting. The data provided is subject to variation without prior notice.

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TRAILERS
FOR GENERATING SETS

MAIN FEATURES

For applications that require the generating set to be moved quickly and frequently Visa proposes installation on trailers; various technical solutions will satisfy the most differing conditions of use. The range of trailers includes certifiable low speed tow trailer models for road use.

STRENGHTS:

-the machine can be easily handled without specific lifting systems
-the machine can be easily stocked during non-use periods and/or for maintenance operations
-possibility to assemble specific accessories to the trailer

EXAMPLES OF TRAILERS

HIGH SPEED TRAILERS

FEATURES

These allow the transportation of generating sets on the road up to a maximum speed of 80 KM/h and are supplied with their relative conformity documents for certification.

Standard equipment

-Structure in welded, galvanised and painted steel
-Single- or double-axle with road tyres fitted with mudguards installed on torsion bar suspensions
-Fixed steering wheel complete with inertia control device and hydraulic shock absorber
-Stabilising height adjustable pivoting wheel
-Hand park brake that acts on all wheels
-Mechanical drum brakes with expanding shoes and automatic release in reverse
-Lighting and visual signalling devices in compliance with EC directive with 7-pole ISO socket
-Documentation required for road worthiness certification (unless agreed otherwise the fees and process are under the responsibility of the buyer)

OPTIONAL ACCESSORIES

-Pneumatic brakes with ABS
-Protections along the perimeter to avoid wedging effect -Wheel chocks - Spare tyre -Back rail with PVC cover.

PICTURE OF EXAMPLE

Single axis version

Double axis version

Details of steering wheel

Details of light bar

LOW SPEED TRAILERS

FEATURES

These represent the simplest and most economical solution for cases where the generating set needs to be moved inside the work site or private areas; these trailers cannot circulate on public roads as they do not have tail lights, brakes or certification.

Standard equipment

-Structure in welded and painted steel
-Single or double axle
-Fixed steering wheel
-Stabilising height adjustable pivoting wheel

PICTURE OF EXAMPLE

OPTIONAL ACCESSORIES

These accessories can further improve and speed up the use of generating sets installed on trailers.

Electrical sockets kit, allows for quick connection to the user system

Quick diesel connections with 6-way by-pass valve, to improve the operating autonomy guaranteed by the integrated tank, can be quickly connected to external storage cisterns

Radio control or GSM control kits in temporary installations allows the remote control of the generator without additional interfacing with the external supervision systems

Changeover switch panels or special panels on board the machine

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DEALER

SAP 109000000135-001-00