

技术要求

- 一、柴油机油压监控仪
1. 基本功能及要求
- 产品的技术性能和质量要求符合国际电工委员会IEC标准和船级社CCS有关要求;
  - 监控仪可实现对柴油机的转速、机油压力、机油温度、冷却水温度等参数进行自动测量、数字显示、多参数自动监控和超限保护,并发生声光报警信号;
  - 保护功能:当柴油机工作超限,即发出声光报警,当柴油机工况恢复正常后,报警信号自动消失,报警信号面板上的“消音”按钮消除,同时闪光信号转为平光,报警精度不低于仪表的测量精度;
  - 具有压力零点自动调零功能;
  - 具有柴油机运转时间累计功能;
  - 具有远传显示功能,远传数值与仪表一致,带远传接口;
  - 具有启动、消音、复位等操作功能,带停车按钮;
  - 具有启动(黄色),报警(红色),充电指示(黄色),电源(绿色)等指示功能;
  - 带有机油压力、机油温度、冷却水温度、柴油机转速等显示功能;
  - 柴油机在运转期间锁闭启动功能;
  - 11 仪表传感器具有互换性而不影响测量精度;
  - 12 各接插件及传感器应有明显的永久性标识,在监控仪明显位置标出监控仪外部接线图,监控仪上的标识应符合ISO8999的要求,而且在整个寿命期内应是清晰可见的,各接插件不能互换;
  - 13 具有抗电磁干扰的能力;
  - 14 在海上船舶潮湿、盐气、烟雾、油污、霉菌环境下能长期可靠工作;
  - 15 铭牌上有明显的船级社标志,铭牌打印按Q/WDG019<<WD615、WD618系列柴油机用零部件标识>>执行;
  - 16 监控仪说明书附有监控仪工作原理介绍,详细的使用说明及故障检修说明,监控仪上的文字说明及其保养说明书等随机资料均应为中英文对照;
  - 17 监控仪应有自检功能,以检验它的报警功能是否正常,所有报警功能应在发动机停机时进行检查;
  - 18 监控仪要求有急停按钮,应具有手动复位功能;
2. 主要参数
- 使用环境:工作环境温度:-10℃~+55℃,相对湿度:≤98%;
  - 测量范围及精度
    - 2.1 温度测量:精度等级:1.5级,测量范围:0~125℃, 配用传感器:EDWD-2-M14×1.5铜电阻温度传感器, 漆架图号:13023397(油温);13023398(水温)
    - 2.2 压力测量:精度等级:1.5级,测量范围:0~1.00MPa, 配用传感器:Z1/8(0~1MPa),压力传感器, 漆架图号:13023396
    - 2.3 转速测量:显示范围:0~9999r/min,精度误差:±2r/min, 配用传感器:EDSD-2-M18×1.5磁电式转速传感器, 漆架图号:13023399;
  - 2.4 显示方式:四位LED显示
  - 2.5 供电电源:DC18~32V
  - 2.6 监控仪测速常数:常数115
3. 柴油机油压监控仪型号(测速齿圈模数3)见表3,柴油机油压监控仪型号(测速齿圈模数3.5)见表4,辅线规格及要求见表1;

二、包装要求

- 仪表应分别单独包装;
- 相应仪表用塑料密封袋封装后放入同一包装箱内;
- 包装箱应防震、防潮、防水,箱内零件应固定牢固,可靠包装箱可重复使用;
- 在包装箱表面适当位置应标出相应零件图号等信息;

三、关于渔船专用件

柴油机油压监控仪,船检专用件在件号后加“Z”;渔检专用件在件号后加“Y”见表3及表4

注:其余要求见Q/WDG127.4<<柴油机油压监控仪交货验收技术条件>>

附表1: 副线规格及要求 (LIST1: CABLE TYPE AND REQUIREMENTS)

名称 NAME	长度 LENGTH	线径 TYPE	接头头 (I) COLLECT	又片 (II) COLLET	线头编号 PIN NO.	备注 REMARK
电源+ POWER+	1600mm	2.5mm <sup>2</sup>	φ12	φ4	2.2	1.从仪表背面及右侧用黑色绞型导线将所有的线分成两路,发电机电源线与停机电线接一路,转速线、油压线、水温线、油温线、电源线、起励线接成另一路;
电源- POWER-	1600mm	2.5mm <sup>2</sup>	φ12	φ4	1.1	2.一收电源线与停机电线接成一路;
启动 START	1000mm	2.5mm <sup>2</sup>	φ6	φ4	3.3	3.另一路电源线与停机电线接成一路,起励线中95cm处将转速和油压线分出,继续将其余导线接至125cm处将电源线与起励线分出,最后将油温线接至油温传感器;
起励 EXCITATION	1000mm	1.5mm <sup>2</sup>	φ4	φ4	4.4	1. Be divided into two roads: all lines to tie up to round with the black ripples tube from the gauge back and the right side. The generator refreshes line and shuts down to link line to tie up to round all the way. Turn soon line, hydraulic-pneumatic line, water temperature line, oil temperature line, power cable, start line to tie up to round another all the way.
停机 (-) STOP	900mm	1.5mm <sup>2</sup>	镀锌	φ4	6.6	2. All the way generator line with shut down line to tie up to round into the 60 cm punishment fork.
停机 (-) STOP	900mm	1.5mm <sup>2</sup>	镀锌	φ4	7.7	3. Is all the way another line to tie up to round into a 60 cm to divide water temperature line. Continuing to tie up to round into a 56 cm will turn to soon divide with hydraulic-pneumatic line. Continue to tie up to rest line to round into a 125 cm power cable and start line to divide. The end ties up oil temperature line to round into an oil temperature to spread a feeling machine.

附表2: 柴油机油压报警参数 (LIST2: ENGINE ALARM PARAMETER)

参数 PARAMETER	报警值 ALARM VALUE	停止值 STOP VALUE	功能 FUNCTION	备注 REMARK
转速 SPEED	≥1120r/min	≥1150r/min	发出声光报警并停机 SOUND AND LIGHT ALARM STOP	1:当转速≥650r/min时, 低油压报警和停机有效;
油压 L.O. PRESS.	≤0.12MPa	≤0.08MPa	发出声光报警并停机 SOUND AND LIGHT ALARM STOP	2:转速高、水温高、油温高、油压报警信号必须持续5S以上, 监控仪才输出报警信号;
水温 C.F.W. TEMP.	≥95℃	≥98℃	发出声光报警并停机 SOUND AND LIGHT ALARM STOP	3:水温高、油压过低报警信号必须持续5S以上, 监控仪才输出报警信号;
油温 L.O. TEMP.	≥120℃		发出声光报警 SOUND AND LIGHT ALARM	4:当转速过高时监控仪立即由停机信号;

1: While turning soon the ≥ 650 r/min, low fast report to the police and shut down effectively;  
2: become soon high, the motor temperature too, oil temperature is high, low signal have to keep on a 5 s time to just output is homologous as signal.  
3: instrument load low shut down time and control an instrument to mall.  
4: instrument immediately output shut.

SPECIFICATIONS

- Monitor of Diesel engine
1. Basic Function and Requirements
- 1.1 Product's technical performance and quality in accordance with IEC standard and corresponding rules of BV.
  - 1.2 Monitor has the function of parameters' automatic measuring and indication, for example engine speed, L.O pressure and temperature, cooling water temperature, F.W pressure, F.O pressure, intake air pressure after inter cooling, intake air temperature before inter cooling, exhaust temperature and many parameters' monitoring & protection, then sending out aural and visual alarm signal.
  - 1.3 Protection Function: When diesel engine's working condition exceeds the limit, it will send out desultory alarm; when it returns normal, the alarm signal will disappear automatically, and aural alarm will be stopped by the "mute" button on the panel, at the same time flashing signals change to normal light. The alarm accuracy is not lower than instrument's measuring accuracy.
  - 1.4 Pressure can adjust to zero point automatically.
  - 1.5 It has the function of diesel engine's running time accumulation.
  - 1.6 It has the function of remote display function, and the value is same as the instrument, also equipped with remote display interface.
  - 1.7 It has the operation function of starting, muting, reposition etc. and with shut down button.
  - 1.8 It has the indication function of starting (yellow), alarm (red), running (green), and power (green).
  - 1.9 It has the display function of L.O pressure, L.O temperature, cooling water temperature, engine speed, F.O pressure, F.W pressure, intake air pressure after inter cooling, intake air temperature before and after inter cooling, exhaust temperature etc.
  - 1.10 During diesel engine's running, the starting function should be locked. Instrument's sensors can be exchangeable and measuring accuracy won't be affected.
  - 1.12 Every connector and sensor has obvious and permanent mark. Exterior wiring diagram will be indicated in the obvious position of the monitor. The marks should meet the requirements of ISO8999 and they are can be easily seen during its whole life. Every connector can't be changeable.
  - 1.13 It has the ability of anti-magnetism.
  - 1.14 In the environment of wet, salty air, mist, oily mist, mold on the sea, it can work for a long time and very reliable.
  - 1.15 There are obvious ship check or fishing on it. 1.15 Ming cards checking sign, the Ming card prints to press the Q WCG 01<<the WD615. WD618 series the diesel engine is used zero parts markings>>performance;
  - 1.16 Monitor specification attached with the introduction of working principium, detailed instruction manual and trouble shooting specification. Description on the monitor, maintaining specification etc. to be with Chinese English version.
  - 1.17 The monitor has self-checking measures, and check its' alarm function normal or not. All alarm units can do the check when the motor stops.
  - 1.18 The monitor has the button of shutting down, and can be reset manually.
2. Main parameter
- 2.1 Working Environment: temperature: -10℃~+55℃, Relative Humidity: ≤98%
  - 2.2 Measuring Range and Accuracy
    - 2.21 Temperature Measuring: Accuracy Level: 1.5 Measuring Range: 0~125℃
    - 2.22 Pressure Measuring: Accuracy Level: 1.5 Measuring Range: 0~1.00MPa
  - 2.3 Protection Level: Sensor: IP56, Instrumenter: IP44
  - 2.4 Display Method: Four LED Display
  - 2.5 Power Supply: DC18~32V
  - 2.6 Monitor's speed measuring gear rings/number: 115
4. Monitor type (module 3) list 3 monitor type (module 3.5) list 4
- Package Requirements
- The instruments will be put for the same packages after enclosing in the plastic bags.
  - Package box should be shockproof, moisture proof, waterproof. Parts inside the box should be fixed hard and the package box can be used repeatedly.
  - Corresponding part drawing no. etc should be marked in the suitable position of the surface of the package box.
- Note: Other requirements please see Q/WDG127.4<<Diesel Engine Monitor Delivery & Inspection Technical Requirements>>
- About CCS And ZY productions
- CCS productions print at part no. "Z", ZY productions print at part no. "Y"
- NOTE: Other productions check with Q/WDG127.4<<MONITOR FOR DIESEL ENGINE TECHNOLOGY STANDARD>>

附表3 (LIST3)

件号 PART NO.	名称 NAME	数量 QUANTITY	件号 PART NO.	名称 NAME	数量 QUANTITY
13024594	仪表附件 (带指主) METER GROUP/PAIR	1500	13024595	仪表附件 (带指主) METER GROUP/PAIR	1500
13020645	仪表附件 (带指主) METER GROUP/PAIR	1800	13020646	仪表附件 (带指主) METER GROUP/PAIR	1800
13020646	仪表附件 (带指主) METER GROUP/PAIR	2100	13020647	仪表附件 (带指主) METER GROUP/PAIR	2500
13020647	仪表附件 (带指主) METER GROUP/PAIR	2500	13020648	仪表附件 (带指主) METER GROUP/PAIR	2500

附表4 (LIST4)

件号 PART NO.	名称 NAME	数量 QUANTITY	件号 PART NO.	名称 NAME	数量 QUANTITY
13020703	仪表附件 (带指主) METER GROUP/PAIR	1500	13020704	仪表附件 (带指主) METER GROUP/PAIR	1800
13020704	仪表附件 (带指主) METER GROUP/PAIR	1800	13020705	仪表附件 (带指主) METER GROUP/PAIR	2000
13020705	仪表附件 (带指主) METER GROUP/PAIR	2000	13020706	仪表附件 (带指主) METER GROUP/PAIR	2100
13020706	仪表附件 (带指主) METER GROUP/PAIR	2100	13020707	仪表附件 (带指主) METER GROUP/PAIR	2200
13020707	仪表附件 (带指主) METER GROUP/PAIR	2200	13020708	仪表附件 (带指主) METER GROUP/PAIR	2400
13020708	仪表附件 (带指主) METER GROUP/PAIR	2400	13020709	仪表附件 (带指主) METER GROUP/PAIR	2500

附表5 (LIST5)

件号 PART NO.	名称 NAME	数量 QUANTITY	件号 PART NO.	名称 NAME	数量 QUANTITY
13021854	仪表附件 (带指主) METER GROUP/PAIR	1500	13021855	仪表附件 (带指主) METER GROUP/PAIR	1800
13021855	仪表附件 (带指主) METER GROUP/PAIR	1800	13021856	仪表附件 (带指主) METER GROUP/PAIR	2100
13021856	仪表附件 (带指主) METER GROUP/PAIR	2100	13021857	仪表附件 (带指主) METER GROUP/PAIR	2500

会签 侯正珍  
校对 蔡志勇  
标准 刘世斌  
审核 侯正珍  
日期 2011.2.22

序号 No.	名称 Name	数量 Quantity	图号 Drawing No.	备注 Remarks
14	油温传感器连接 L.O. TEMP. SENSOR CABLE	1	RVVP	
13	停机电磁阀连接 STOP VALVE CABLE	1	RVVP	
12	启动电磁阀连接 START VALVE CABLE	1	RVVP	
11	充电线连接 CHARGE CABLE	1	RVVP	
10	电源线连接 POWER CABLE	1	RVVP	
9	起励电磁阀连接 EXCITATION VALVE CABLE	1	RVVP	
8	油压传感器连接 L.O. PRESS. SENSOR CABLE	1	RVVP	
7	水温传感器连接 C.F.W. TEMP. SENSOR CABLE	1	RVVP	
6	转速传感器连接 SPEED SENSOR CABLE	1	RVVP	
5	油压传感器 L.O. PRESS. SENSOR	13023396	1	进口芯体
4	油温传感器 C.F.W. TEMP. SENSOR	13023397	1	Cu50
3	水温传感器 C.F.W. TEMP. SENSOR	13023398	1	Cu50
2	速度传感器 SPEED SENSOR	13023399	1	磁电脉冲式
1	监控仪主机电源	13024594	1	

名称 Name	数量 Quantity	图号 Drawing No.
柴油机油压监控仪	1	13024594

# 通电通油熄火电磁铁（612600180175 柳工）使用说明书

## Electromagnet power through blowout (612600180175 liuGong) Manual

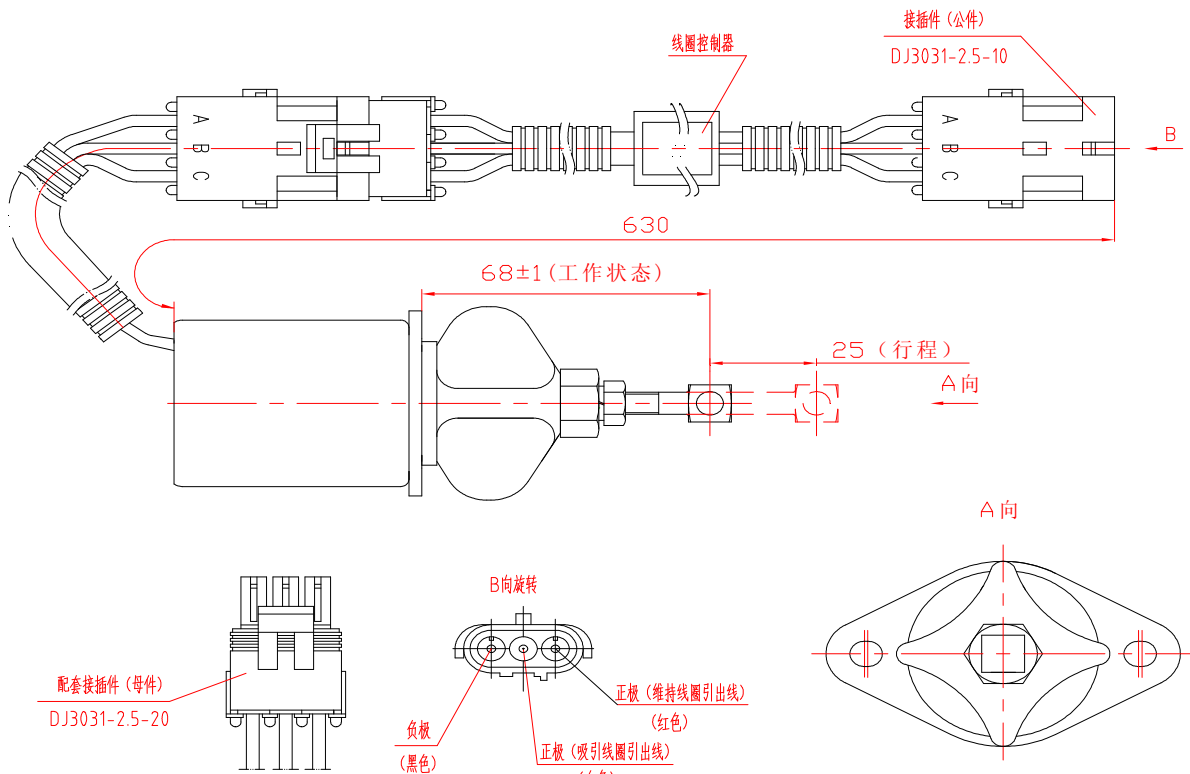
### 一 概述

#### I. Overview

熄火电磁铁是用于发动机熄火。

Electromagnet is used for engine flameout

通电通油熄火电磁铁（612600180175）是在断电时使发动机熄火的电磁铁。也就是说在断电的时候，发动机的油路是被切断的，而在通电的时候，发动机的油路是接通的  
 Power through blowout magnet (612600180175) is solenoid when the engine stalling out of power. That is, when the engine oil circuit is cut off, and in power when the engine oil line is connected to.



电磁铁的外形图  
the electromagnet outline

线圈控制器: coil winding controller

接插件: socket connector

工作状态: working state

行程: stroke

配套接插件: socket connector assembly

B向旋转: B to the rotation