

# GCYK-02 NON-REVERSIBLE DIESEL ENGINE MAIN PROPULSION UNIT, REMOTE-CONTROL SYSTEM CONTROL, MONITORING DISPLAY UNIT PRODUCT INSTRUCTION



## **HENAN GUANGCAI ELECTRIC CO., LTD**

**Add:** Sangqiang Industrial Park Taihang Rd.  
Anyang Henan Province, China

**Tel:**+86-0372-3159500 (office)  
+86-0372-3159512 (technical department)

**Fax:** +86-0372-3159506 (office)  
+86-0372-3159511 (technical department)

**P.C.:** 455000

**E-mail:**[gcdesign@aygcship.com](mailto:gcdesign@aygcship.com)

**Http:**[www.aygcship.com](http://www.aygcship.com)

Non-reversible diesel engine main propulsion unit remote-control system control and monitoring display unit is designed by adopting microprocessor MPU control technique, its panel adopts PVC overlay technique, possessing advantages as small in structure, convenient for installation and use, nice, reliable performance etc. It accords with relative requirements of CCS and classification society, and mainly suitable for display and control of operating condition for non-reversible diesel engine propulsion system. This unit adopts highly reliable CAN - BUS bus communication. This unit can be used for composing main engine propulsion control system controlled in multiposition .

**A: Main electric parameter**

- a, Working Voltage:DC24V( $\pm 20\%$ -30%)1A;
- b, Ambient Temperature:-10℃~+55℃;
- c, Relative Humidity: $\leq$ RH95%(+40℃);
- d, Electro magnetic compatibility: the equipment comprises rigorous anti-jamming measures, and satisfies with relative specifications and requirements.
- e, The equipment possesses measures as anti-vibration, moisture proof, anti-salt mist and anti-fungus.
- f, Alarm output type:dry contact;
- g, Maximum capacity of contact:DC36V/1A;
- h, Protection Degree:IP22

The product conforms with IEC-92-230 standard and " steel sea-going ship classification construction rules "which is current in our country, besides accords with SOLAS.

**B:Main function and use:**

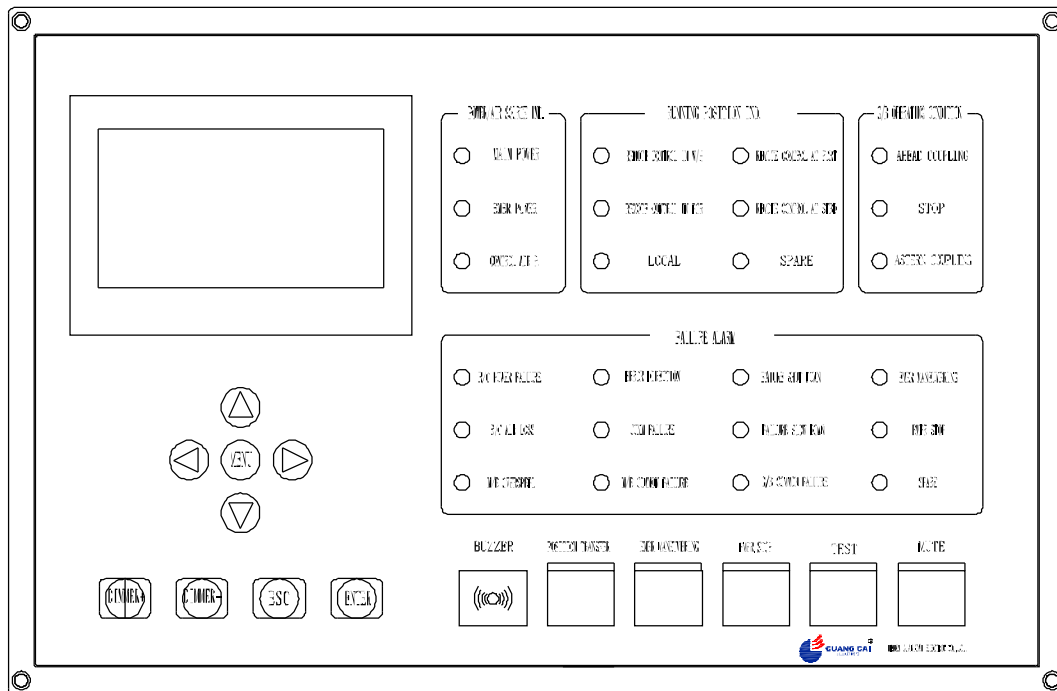
GCK-02 non-reversible diesel engine main propulsion unit remote-control system control and monitoring display unit is mainly used for status display and control of main propulsion system, and may set all kinds of controlling parameter via key-press, status display unit may display each parameter of current propulsion system. Alarm display unit may display whether there is over limit alarm for current propulsion system, push button of main engine safety system control unit may realize safety protection towards propulsion system,"Test" push button may realize test for indicating lamp and buzzer on panel. "Mute"push button may cancel audible signal for alarm. Dimmer system may regulate the brightness of status indicating lamp so as to convenient for night navigation.

**C:Main functions and composition:**

- a, Diesel engine LCD unit
- b,Parameter setting key-press;
- c, Diesel engine status display unit;
- d, Main engine safety over limit alarm indication unit
- e,Main engine safety control unit;

- f, Mute;
- g, Test;
- h, Dimmer system

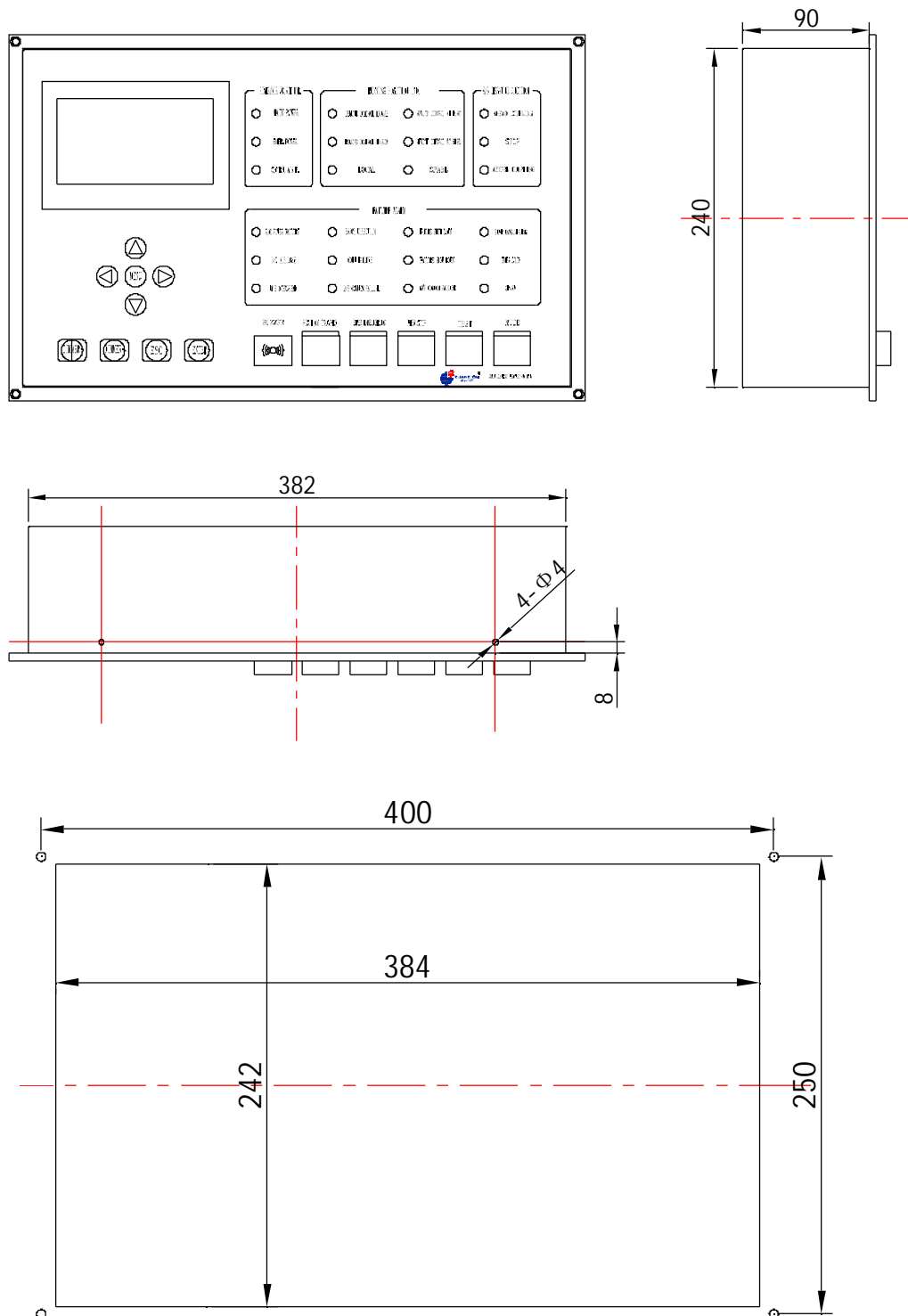
#### D:Panel schematic diagram



#### E:Operating instruction

- a,Dimmer: Used for regulating the brightness of display panel.
- b,Emergency stop: Used for stopping the diesel engine under emergency situations.
- c,Emergency maneuvering: used for Cancelling functions as automatic slow down and automatic shut down etc. under emergency situations.
- d,Test: Used for testing the indicating lamp and buzzer on the panel.
- e, "Mute" key: Used for cancelling audible signal for parameter over limit alarm.
- f, "left shift" and "right shift", "up" and "down" page turn key, "menu" key, "confirm" key, "Cancel" key :  
Used for controlling setting of parameter.

#### F:Outline and perforation dimension drawing:



These documentations are compiled by technical department of Henan Guangcai Co.,Ltd

Compiler: Mayu  
Checker: Zhao Lijun  
Approver: Zhang Songlin