

# GCYK-03 REVERSIBLE DIESEL ENGINE REMOTE-CONTROL SYSTEM CONTROL UNIT PRODUCT INSTRUCTION



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

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Reversible diesel engine remote control system control 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. This unit accords with relative requirements of CCS and classification society, and mainly suitable for main propulsion system composed by ample power reversible diesel engine.

## A. Main parameter

- 1. Working Voltage: DC24V ( ±20%-30% ) 1A;
- 2. Ambient Temperature: -10°C ~+55°C;
- 3. Relative Humidity: ≤RH95%(+40°C);
- 4. Electro magnetic compatibility: the equipment comprises rigorous anti-jamming measures, and satisfies with relative specifications and requirements.
- 5. The equipment possesses measures as anti-vibration, moisture proof, anti-salt mist and anti-fungus.
- 6. Alarm output type: dry contact;
- 7. Maximum capacity of contact: DC36V/1A;
- 8. Protecton Degree: IP22

#### B. Main function and use

Reversible diesel engine remote-control system control unit is mainly used for ample power diesel engine propulsion system, it is composed by diesel engine remote manipulation analogue display unit, diesel engine main parameter display, alarm display unit and diesel engine security protection unit; This unit may display actual working status as starting and running, analogically display rotational speed and turning of main engine as well as each parameter of remote-control system etc.; Alarm display unit may monitor current state of main engine parameter, main engine safety protection unit may realize the safety protection towards diesel engine main 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.

#### C. Main functions and composition

- 1. Diesel engine starting and running status analogue display unit;
- 2. Diesel engine rotational speed and turning display unit;
- 3. Diesel engine status display unit;
- 4. Main engine safety over limit alarm indication unit;
- 5. Main engine safety control unit;
- 6. Mute;
- 7. Test;
- 9. Dimmer system

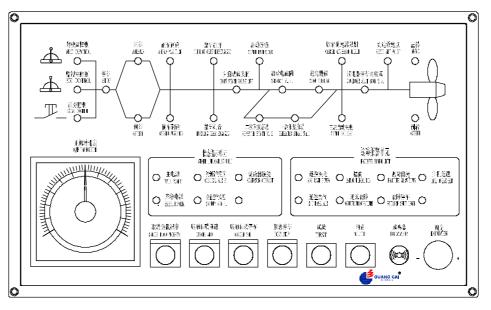
#### **D. Controlled object**

Suitable for main propulsion system composed of reversible diesel engines with



different power which are produced by B & W Company and SULZER Company.

## E. Panel schematic diagram



#### F. Operating instruction

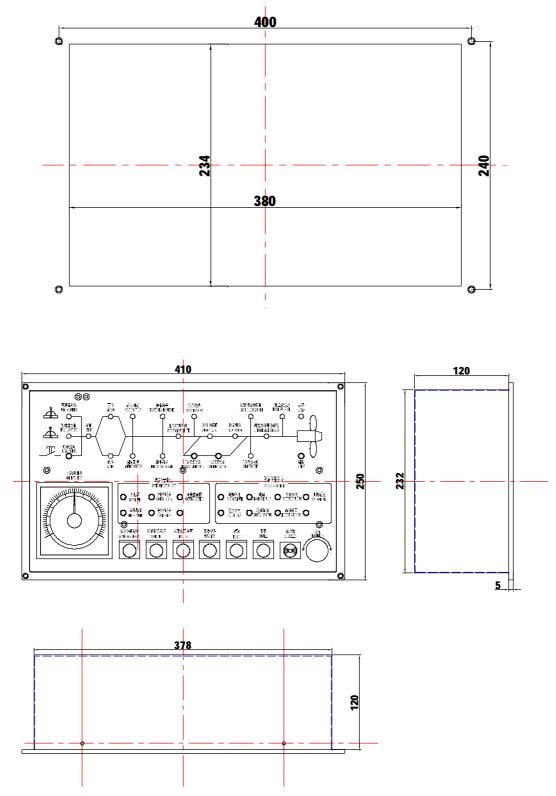
- 1. Dimmer: Used for regulating the brightness of display panel.
- 2. Emergency stop: Used for stopping the diesel engine under emergency situations.
- 3. Emergency maneuvering: used for Cancelling functions as automatic slow down and automatic shut down etc. under emergency situations.
- 4. Test: Used for testing the indicating lamp and buzzer on the panel.

#### G. Wiring diagram

		J03-1	J02-1	(1) (1)	J01-1	
		J03-2	J02-2		J01-2	
	(12) (2)	J03-3		12 2	J01-3	
	13 3	J03-3	<u></u>	- 13 3	J01-3	
	15 5	J03-5	J02-5	15 5	J01-5	
	(16) (6)	J03-6	_J02-6	(16) (6)	J01-6	
DC+	$\overline{\mathbf{n}}$	J03-7	J02-7	$\overline{\mathfrak{m}}$	<u>J01-7</u>	
GND	18 8	J03-8	J02-8	(18) (8)	J01-8	
	19 9			(19) (9)	<b> </b>	
	20 10			20 (10)	1	
A1				A2		
J05-4		J04-1	FM2+	11 1	OXFZCX	
<u>J05-4</u> J05-3		J04-1 J04-2			OXFZCX J07-8	
	12 2		FMD+ Jjtc	12 2		
J05-3	12 2	J04-2		12 2	J07-8	
J05-3 J05-2	12 2 13 3 14 4	J04-2 J04-3	JTLL	12 2 13 3 14 4	J07-8 QXZDJS	
J05-3 J05-2	12 13 14 15 5	J04-2 J04-3 J04-4	JJTC 	12 2 13 3 14 4 15 5	J07-8 0xzdjs J07-7 0xzdtc	
J05-3 J05-2	12 13 14 15 5 16 6	J04-2 J04-3 J04-4 J04-5 J04-6	JJTC _J07-5 	12 2 13 3 14 4 15 5 16 6	J07-8 0xzdjs J07-7	
J05-3 J05-2	12 2 13 3 14 4 15 5 16 6 7	J04-2 J04-3 J04-4 J04-5 J04-6 J04-7	JJTC 	12 2 13 3 14 4 15 5 16 6 10 7	J07-8 0XZDJS J07-7 0XZDTC J07-6 ZSB+	
J05-3 J05-2	12 2 13 3 14 4 15 5 16 6 17 7 18 8	J04-2 J04-3 J04-4 J04-5 J04-6	JJTC _J07-5 	12 2 13 3 14 4 15 5 16 6 17 7 18 8	J07-8 0XZDJS J07-7 0XZDTC J07-6	
J05-3 J05-2	12 2 13 3 14 4 15 5 16 6 1	J04-2 J04-3 J04-4 J04-5 J04-6 J04-7	JJTC _J07-5 	12 2 13 3 14 4 15 5 16 6 17 7 18 8 19 9	J07-8 0XZDJS J07-7 0XZDTC J07-6 ZSB+	
J05-3 J05-2	12 2 13 3 14 4 15 5 16 6 17 7 18 8	J04-2 J04-3 J04-4 J04-5 J04-6 J04-7	JJTC _J07-5 	12 2   13 3   14 4   15 5   16 6   17 7   18 8	J07-8 0XZDJS J07-7 0XZDTC J07-6 ZSB+	



#### H. Outline and perforation dimension drawing



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

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