


SHANGHAI JIANGNAN CHANGXING HEAVY INDUSTRY CO., LTD

Hull No.: H2431/2432/2433

5100 TEU CONTAINER VESSEL

EMERGENCY SWITCHBOARD OPERATION MANUAL

DESIGNED BY		PAGE	1+2
APPROVED BY		DATE	2010-3-24
 TERASAKI <i>Ensuring Service, Maintaining Quality</i>		TERASAKI (CHINA) ELECTRIC CO., LTD	

1. Configuration brief

EMERGENCY SWITCHBOARD is made of three parts: EG panel, 440V Feeder Panel, 220V Feeder Panel.

2. Function and introduction of operation

Manual mode、 auto mode and operation process:

① Manual mode:

First place select switch “COS-A” in the position “MANU”. When the power supply of MSB is black out, please start the engine beside Emergency Generator. Check the voltage meter after the voltage is established, and press the pushbutton “ST” in the “ESB” panel to close main switch of Emergency Generator after voltage is established. When power supply of MSB is restored, press the pushbutton “SP” in the “ESB” panel to open main switch of Emergency Generator. The bus tie breaker only work in the auto mode. Place mode select switch “COS-A” in the position “AUTO”, the bus tie breaker will close automatically. The ESB bus power supplied from MSB.

When stopping Emergency Generator, please manual operation beside Emergency Generator.

② Auto mode :

First Place select switch “COS-A” in the position “AUTO”. When MSB power is black out, the bus tie breaker with MSB will open immediately, Emergency Generator will start automatically. After the voltage is established, main switch of Emergency Generator will close automatically. When the power supply of MSB restored, main switch of Emergency Generator will open automatically. The bus tie breaker with MSB will close automatically. 10 minute later, the engine stop signal will send to the idling Emergency Generator automatically.

3.Test :

First Place select switch “COS-A” in the position “AUTO”. When the power is supplied from MSB, the bus tie breaker with MSB is closed. Press the “EG

SEQUENCE TEST” pushbutton that is beside main breaker into the “ESB” panel, the bus tie breaker with MSB is open immediately, then Emergency Generator will start automatically and main switch of Emergency Generator will close automatically .When need the power supply of MSB, please break main switch of Emergency Generator manual (by press the pushbutton “SP” in the ESB panel), the bus tie breaker with MSB will close automatically. When stopping Emergency Generator, please manual operation beside Emergency Generator.

4. Mount and maintain

There is pedestal of angle iron at the bottom of ESB. When customer mount ESB, please weld pedestal of angle iron and common pedestal of shipboard. External wires from top or back bottom join the terminal or pedestal MCCB directly.

Maintain:

① Change of fuse

When fuse is ruin, please pull out the bad fuse with clamp of fuse and put new fuse into pedestal directly.

② Change of relay and contact:

If relay is ruin, please pull out the ruin relay and put relay of same type into pedestal .If contact is ruin, please unload the ruin contact with screwdriver and select contact of same type to change .

③ Change of MCCB

When MCCB is ruin, please select the switch “COS-A” in the position “MANU” and press the “EG SEQUENCE TEST” to turn off the bus tie breaker, then unload the MCCB with screwdriver, and install the new one in the ESB.

④ Reset the thermal relay

If the relay has tripped, press the button “RESET” in operation again.