

## **REMOTE CONTROL STATION (RCS) INSTALLATION INSTRUCTIONS** **FOR CONNECTION TO IMO SD1 INVERTER**

The default settings for a new SD1 are arranged for Keypad operation i.e., using the Start/Stop buttons as well as the potentiometer for speed up / slow down.

To carry out a basic setup plus installation of the RCS proceed as follows:

- Connect a suitable motor configured to operate on 230 Volts 3-phase (DELTA connected) to terminals U-V-W & Ground.
- Connect the input single phase power 230V 50Hz to terminals L-N-Earth

**ENSURE NO CONNECTIONS ARE MADE TO THE TERMINALS MARKED “+” AND “PB”. THESE TERMINALS ARE FOR BRAKING RESISTOR CONNECTION ONLY AND WILL CAUSE MAJOR DAMAGE TO THE DRIVE.**

- Test the drive operation using the keypad
- Stop the drive
- Turn off the power and wait for the display to go blank
- Connect the seven pendant wires and earth screen as shown overleaf
- Turn on the power
- Press PRG/ESC
- P00 will be displayed
- Press DATA/ENT
- Press UP / DOWN arrow buttons until P00.01 is displayed
- Press DATA/ENT
- Default setting is 0. Press UP / DOWN arrow buttons until 01 is displayed
- Press DATA/ENT. The display will change to P00.03
- Press UP / DOWN arrow buttons until P00.06 is displayed
- Press DATA/ENT
- Default setting is 0. Press UP / DOWN arrow buttons until 01 is displayed
- Press DATA/ENT. The display will change to P00.07
- Press UP / DOWN arrow buttons until P00.09 is displayed
- Press DATA/ENT
- Default setting is 0. Press UP / DOWN arrow buttons until 1 is displayed
- Press DATA/ENT. The display will change to P00.10
- Press PRG/ESC. The display will show P00
- Press UP / DOWN arrow buttons until P05 is displayed
- Press DATA/ENT
- Press UP / DOWN arrow buttons until P05.01 is displayed
- Press DATA/ENT
- Press UP/DOWN arrow buttons until 01 is displayed

- Press **DATA/ENT**. The display will change to P05.02
- Press **DATA/ENT**
- Press **UP / DOWN** arrow buttons until 02 is displayed
- Press **DATA/ENT**. Display will change to P05.03
- Press **PRG/ESC** twice - the display is now in “running” mode
- Press the **START** button on the RCS pendant
- It is now possible to start/stop, reverse and alter the speed of the motor from the RCS remote control. The keypad will cease to function apart from changing parameters.

**PENDANT CONNECTIONS TO THE SD1 DRIVE. BEHIND FRONT COVER**

Wire Colour	Terminal Designation	Function
<b>BROWN</b>	COM (same as Green cable)	Power
<b>WHITE</b>	S1	Forward
<b>GREY</b>	S2	Reverse
<b>PINK</b>	+24V	Power
<b>BLUE</b>	10V	Potentiometer (High Side)
<b>YELLOW</b>	AI2	Potentiometer (Centre)
<b>GREEN</b>	COM (Same as Brown cable)	Potentiometer (Low Side)
<b>Green/Yellow</b>	Ground	Earth Screen



*Fig 1 - SD1 Control terminal connections*

If there is a requirement to connect limit switches or additional stop buttons, these should be connected using normally closed contact devices connected in series to interrupt the PINK +24V supply wire.

When the supply to the pendant is momentarily interrupted the drive will stop