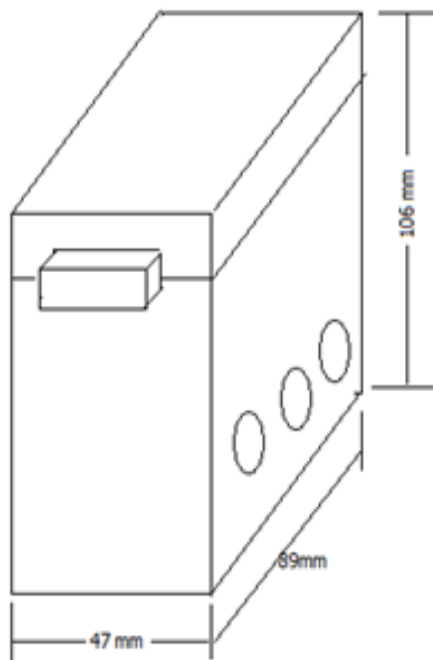


# OPERATING MANUAL FOR MPD MODEL : S-DXA / 4 TO 61 A

## Dimension for Controller cum CT Unit

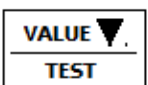

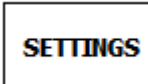



## Dimension for Display cum Keypad Unit



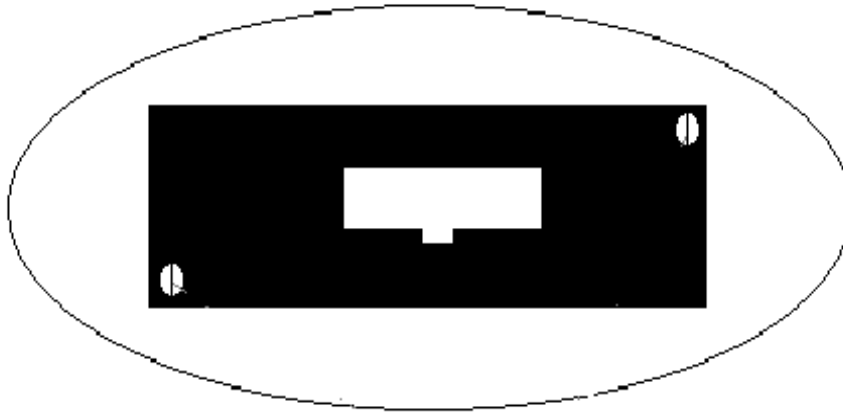
**Note: Length of FRC Available is 1 meter OR 2 meter.**

## **Functions of Keys :**

	To reduce values during setting of parameters & to TEST the RELAY contact when no current is passing through device.
	To increase values during setting of parameter.
	To enter in setting of paramters
	To reset the device after trip during falult occur.

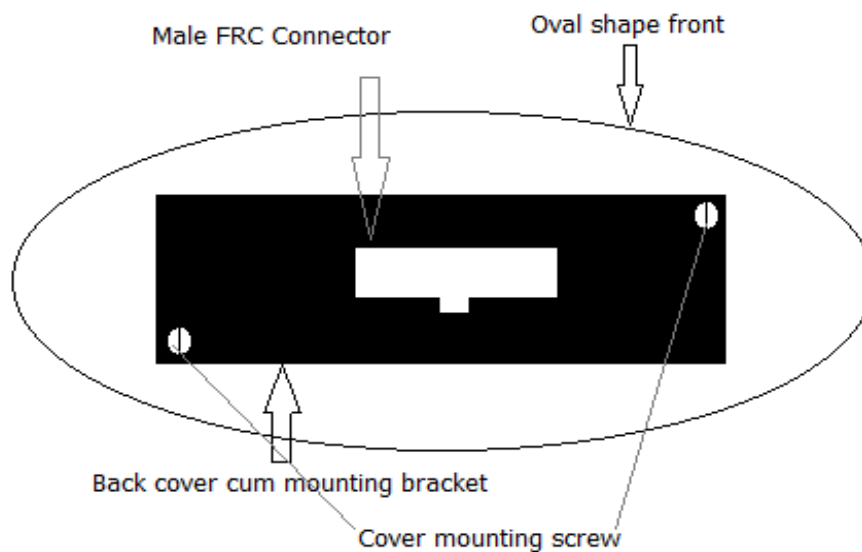
## **Mounting of Display on Panel Door (Door Cutout : 70 X 30 mm)**

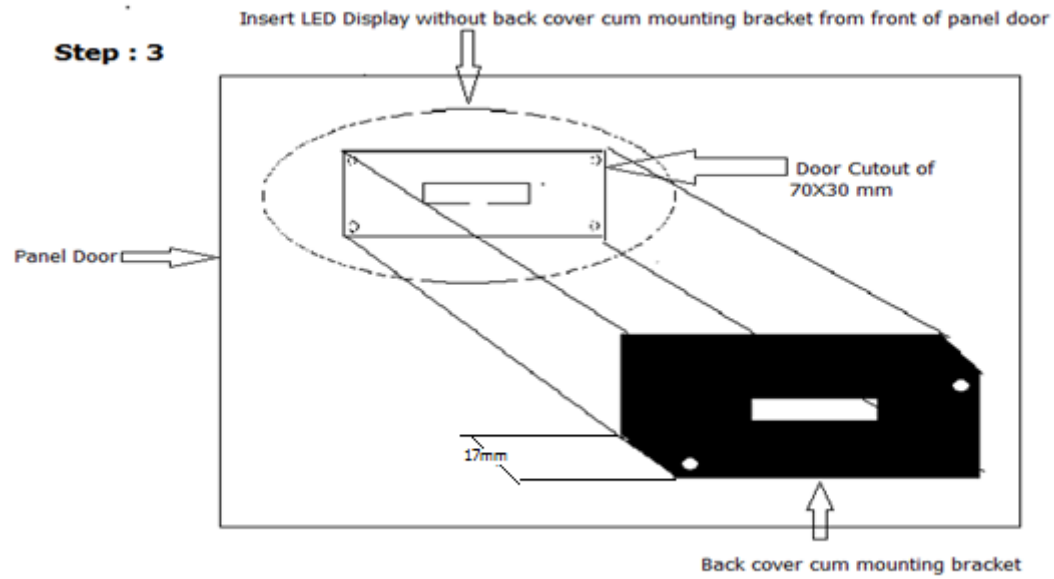
### **Step : 1**



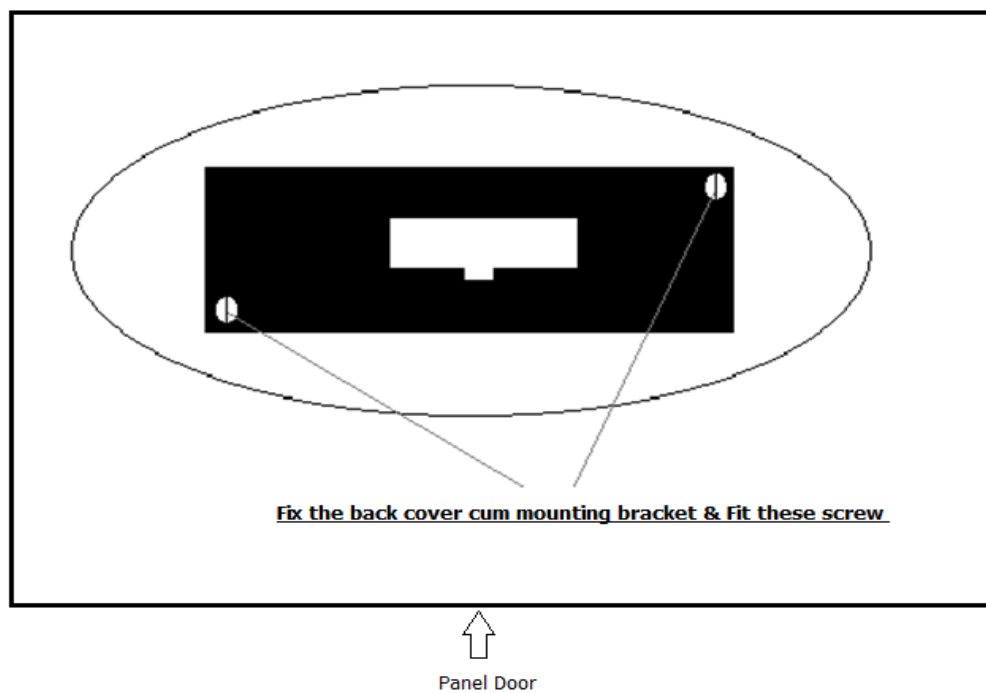
### **Step : 2**

#### Rear view of LED Display





**Step : 4** Mounting of Display on door



### **List of Parameter for MPD Model: S-DXA / 4 – 61 Amp**

<b>Sr. No.</b>	<b>Parameter Name/Meaning</b>	<b>Settable Value</b>	<b>Password</b>
01.	Set Current [ <b>5</b> ] / FLC of Motor	4 TO 61 Amp	Factory
02.	Under Current [ <b>U</b> ]/ No Load Current of Motor	0 TO 55 Amp	Factory
03.	Set Earth Fault Current [ <b>E</b> ]	0.1 TO 25.0 Amp	Factory
04.	Calibration [ <b>E</b> •] / OFFSET of R Phase	±1.0 Amp	Factory
05.	Calibration [ <b>E</b> •] / OFFSET of Y Phase	±1.0 Amp	Factory
06.	Calibration [ <b>E</b> •] / OFFSET of B Phase	±1.0 Amp	Factory
07.	Scrolling Time [ <b>t</b> ] / Time interval for scrolling	0 To 10 Second ( <b>1</b> )	Factory
08.	Phase Reversal [ <b>Ph-E</b> ] [ <b>Ph-d</b> ] (2)	Enable/Disable	Factory
09.	Auto Reset [ <b>Ar-E</b> ] [ <b>Ar-d</b> ](3)	Enable/Disable	Factory

- (1) Scroll Time 0 : Only one Phase Current indication & Selected Phase by [VALUE ^] Key  
(2) If **Ph-r** fault is present & if Phase Reversal is Enable (**Ph-E**) then MPD trip on **Ph-r** automatically. If it is Disable (**Ph-d**) then MPD will not trip on **Ph-r**.  
(3) If Auto Reset is 'Enable' [**Ar-E**] then MPD Reset automatically after 10 minutes. If it is Disable [**Ar-d**] then MPD Reset manually by pressing **RESET** key.

#### **Password:**

There are two PASSWORDS to protect parameters from authorized changes.

- A) Factory Password – Set **P 106** & then Press **PARA** key  
B) Engineering. Password – Set **P 147** & then Press **PARA** key

#### **Setting of Parameter:**

Step: 1

Press **SETTING** button on Keypad, Display will show **P 100**

Step: 2

Press **VALUE** ^ till **P 106**

Step: 3

Press **SETTING** button, then display will show Parameter as per above Table.

Step 4:

Change required value for particular para by Key **VALUE** ^ OR **VALUE** v till desire value.

Step 5:

Press **SETTING** button to go to next para OR leave the key pad. Last data changed will save automatically.

## **RUN Display**

In Normal Running condition Display will show Three Phase Current in Scrolling manner as Scroll Time has been set.

<b>Display</b>	<b>Meaning</b>
●41.5	Current in R Phase : 41.5 Amp
●40.5	Current in Y Phase : 40.5 Amp
●42.3	Current in B Phase : 42.3 Amp

## **TRIPPING & FAULT MESSAGE**

### **OVERLOAD:**

If any phase current (R, Y, B) > Set Current [**5**] then MPD will trip on Over Load & indicates [**OL**]. Trip time will be according to settable O/L Curve (see page- IT CHARECTERISTICS).

### **UNBALANCE:**

If difference between any two phase current > (Set Current/ 3) then MPD will trip on Unbalance & display show [**Ub**].

### **SINGLE PHASE PROTECTION:**

If anyone phase, out of R, Y, B is absent or OFF then MPD will trip on Single Phase & display will shows [**SPP**].

### **PHASE REVERSE:**

If any two phase (R, Y & B) are interchanged then MPD will trip on phase reversal and display will show [**Ph-r**]

### **UNDERLOAD:**

If all 3 phases values (R, Y, B) are < Underload Current then MPD will trip on under load and display will show [**UL**].

### **LOCK ROTOR:**

If anyone phase current (R, Y, B) > SET O/L CUR x 7 times, then MPD will trip on Lock Rotor. Display will show [**L**] & shows maximum current and the phase in which maximum current flows also indicate with the help of 'LED indication'.

### **SHORT CKT:**

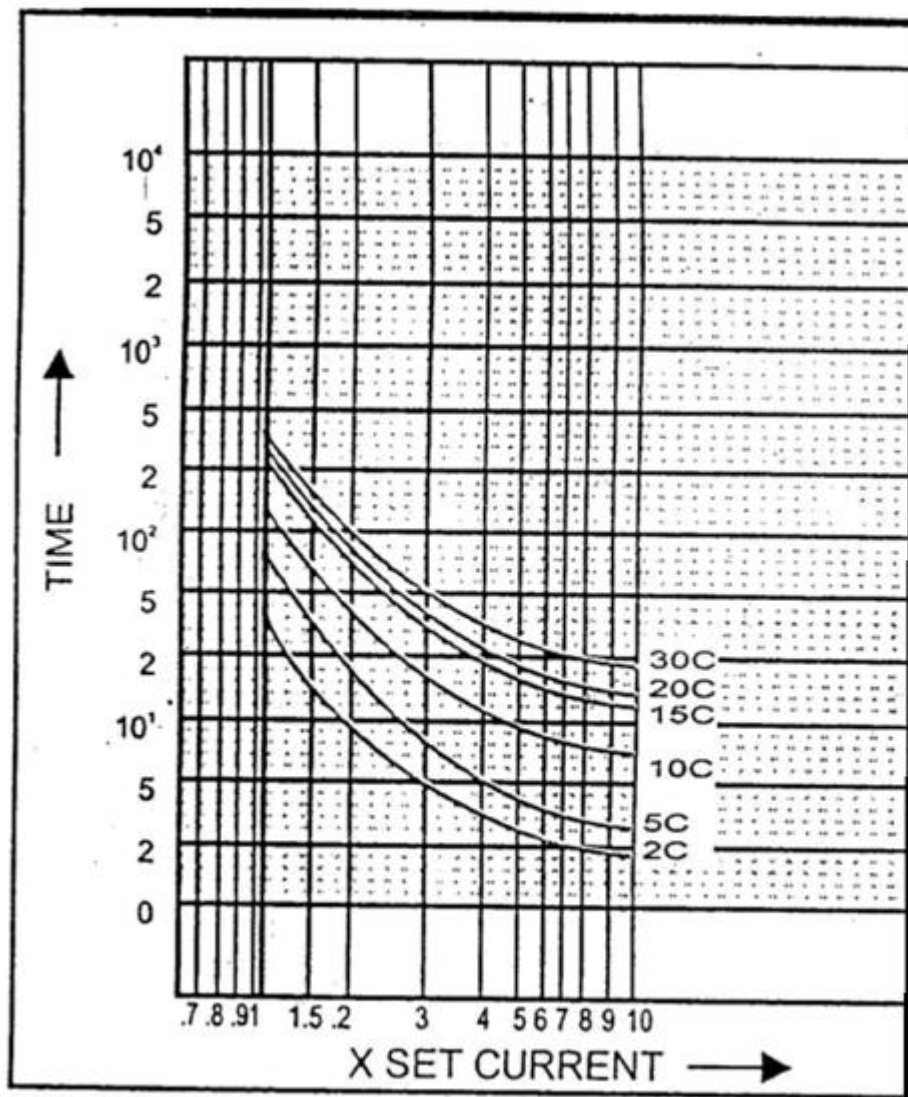
If anyone phase current (R, Y, B) > SET OL CUR x 8 times, then MPD will trip on Short Ckt. & Display will blink for [**5**] & shows maximum current and the phase in which maximum current flows also indicate with the help of 'LED indication' .

### **EARTH FAULT:**

If Earth current [**E**] > SET EARTH CURRENT [**E**] then MPD will trip on Earth Fault & display will show [**E**] & shows recent earth leakage current.

[illegible]

## IT Characteristics for Over Load Trip Time



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