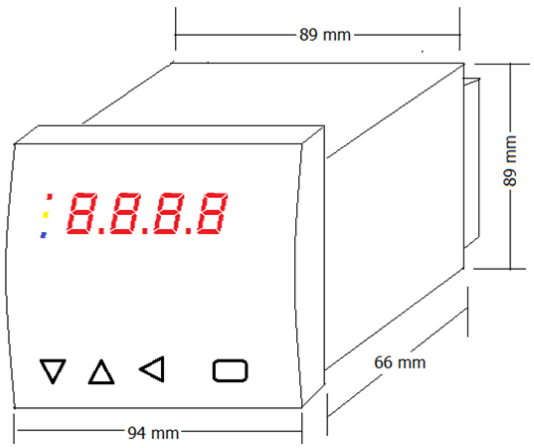
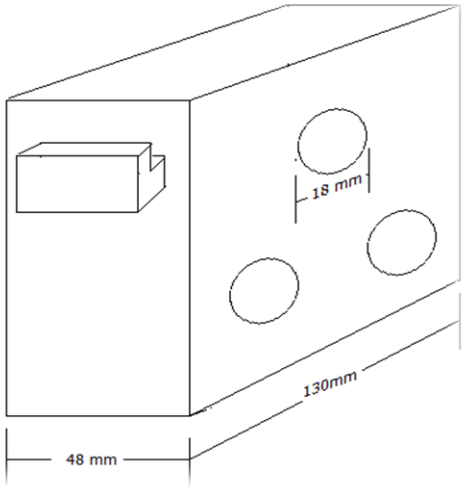
OPERATING MANUAL FOR MPD MODEL : DXC-M92 / 0.8 TO 5 A

Dimension for Controller cum MMI Unit

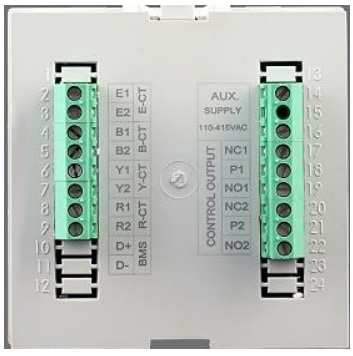


Dimension of CT Unit



Front View of DXC-M92

Back View of DXC-M92



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.

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List of Parameter for MPD Model: DXC-M92 / 0.8 – 5 Amp

Sr. No.	Parameter Name/Meaning	Settable Value	Password
01.	Set Current [S] / FLC of Motor	0.8 TO 5 Amp	Fact / Engg
02.	Under Current [U]/ No Load Current of Motor	0 TO 4.0 Amp	Fact / Engg
03.	Set Earth Fault Current [E]	0.1 TO 25.0 Amp	Fact / Engg
04.	Over Load Curve [c] *	0/5/10/15/20/2 Sec	Engineering
05.	SPP Trip Time [P]	3 TO 20 Sec.	Engineering
06.	Under Load Trip Time [L]	6 TO 30 Sec,	Engineering
07.	Calibration [C•] / OFFSET of R Phase	±1.0 Amp	Fact / Engg
08.	Calibration [C•] / OFFSET of Y Phase	±1.0 Amp	Fact / Engg
09.	Calibration [C•] / OFFSET of B Phase	±1.0 Amp	Fact / Engg
10.	Scrolling Time [t] / Time interval for scrolling	0 To 10 Second **(1)**	Fact / Engg
11.	Phase Reversal [Ph-E] [Ph-d] **(2)**	Enable/Disable	Fact / Engg
12.	Auto Reset [Ar-E] [Ar-d]**(3)**	Enable/Disable	Fact / Engg
13.	Lock Rotor Value [r]	3 TO 20 Times	Engineering
14.	Definite Time [d]	2 TO 900 Sec	Engineering

(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.

(4) * When Parameter [c] set to 0, motor trips at Overload condition as per Setting of Definite Time [d] & IT Curve will be disable

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 ∨** till desire value.

Step 5:

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

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RUN Display

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

Display	Meaning
• 1.5	Current in R Phase : 1.5 Amp
• 1.8	Current in Y Phase : 1.8 Amp
• 1.3	Current in B Phase : 1.3 Amp

TRIPPING & FAULT MESSAGE

OVERLOAD:

If any phase current (R, Y, B) > Set Current [S] then MPD will trip on Over Load & indicates [o] with indication of the phase which draws highest current & that current value. Trip time will be according to settable O/L Curve (See page- IT CHARECTERISTICS) OR Settable Definite time (See page-Definite Time).

UNBALANCE:

If difference between any two phase current > (Set Current/ 3) then MPD will trip on Unbalance & display show [b] with indication of two phase which are unbalance with value of unbalance current.

SINGLE PHASE PROTECTION:

If anyone phase, out of R, Y, B is absent or OFF then MPD will trip on Single Phase according to SPP Trip time [P] & display will shows [SPP] with indication of phase which sense '0' current.

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 < Under load Current then MPD will trip on under load according to Under Load Trip Time [L] and display will show [u] with indication of the phase which draws highest current out of three phase but lower than value of Under load set point & that current value.

LOCK ROTOR:

If anyone phase current (R, Y, B) > SET O/L CUR x Lock Rotor Value [r], 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 Lock Rotor Value + 1 count [r]+1, then MPD will trip on Short Ckt. & Display will show [S] & 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.

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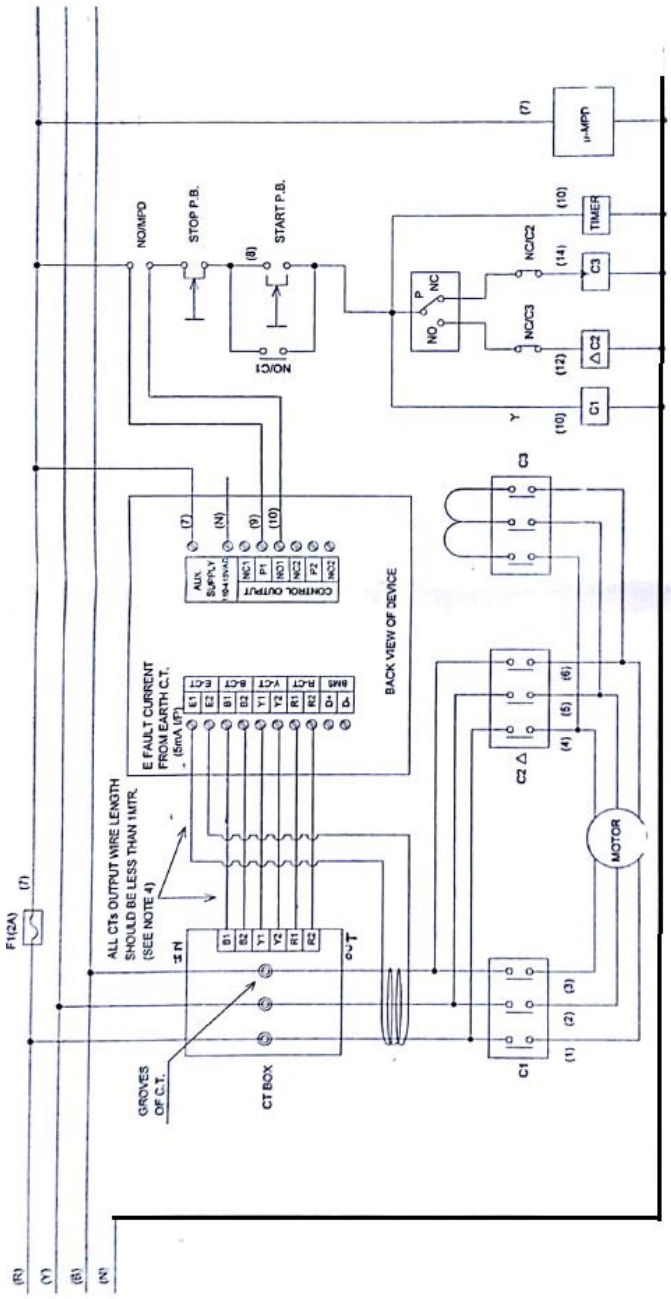
Wiring Diagram of MPD Model: DXC-M92/0.8-5 Amp



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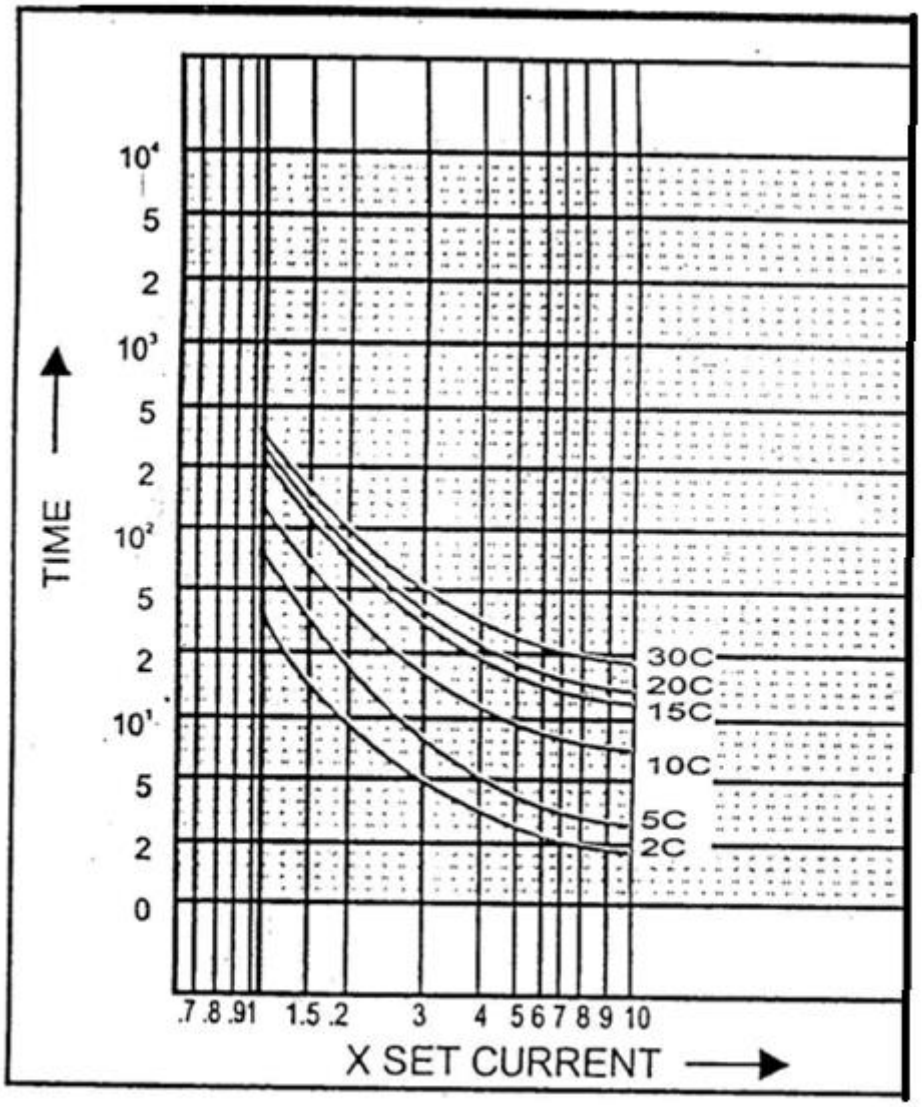
IT Characteristics for Over Load Trip Time



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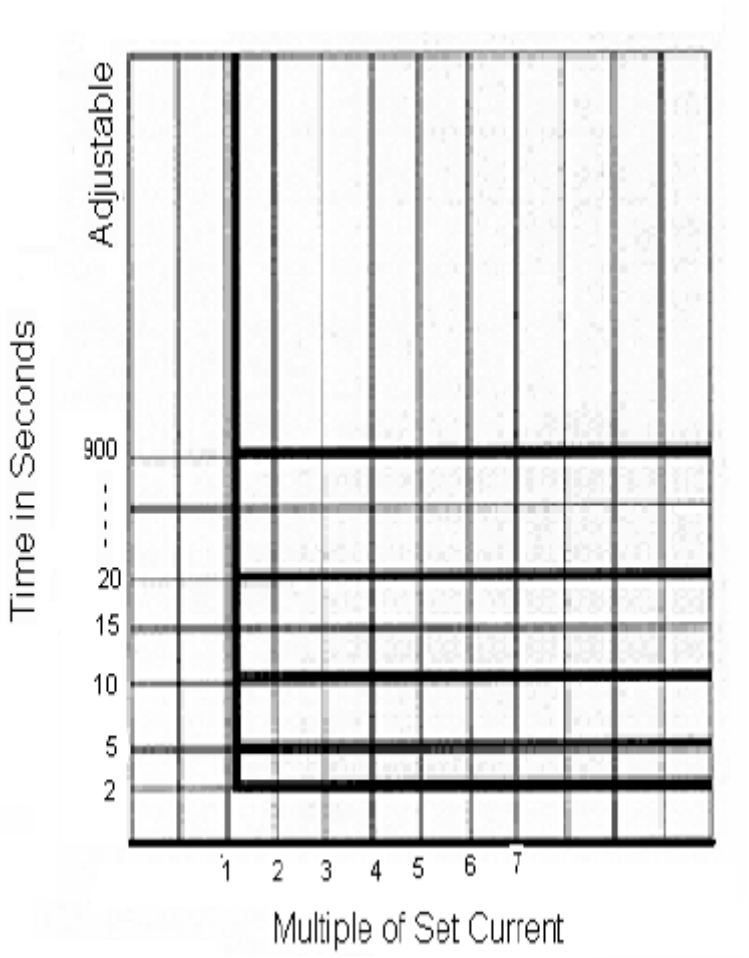
Definite Time Characteristics for Over Load Trip Time



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