

Micro Controller based Motor Protection Device

COMPOSITE PRODUCT CATALOG



Our Products

- ✚ Intelligent MPD
- ✚ MPD With Digital Display
- ✚ Delta-Star Converter for Energy Saving
- ✚ MPD Without Display
- ✚ Multi-Function Meter
- ✚ Energy Management System - EMS
- ✚ Motor Management Software - μ -MMS
- ✚ Voltage Protection Device μ -VPD

“Our constant and continuous efforts towards serving our clients in the most feasible and appropriate manner has taken us to the peak of success.”

We **Advanced Microtech** are the well-known manufacturer and supplier of a comprehensive assortment Intelligent Motor Protection Relay, Motor Protection Relay and Voltage Protection Relay. Our offered range of products is manufactured under the stern surveillance of our ingenious professionals by making use of quality tested components and pioneering technology at our well-equipped production unit in conformity with industry quality standards.

The products provided by us are known for their qualitative attributes which include sturdy construction, long operational life, accuracy, impeccable performance, excellent functionality, anti-corrosive body, maintenance free, power efficient, etc. Apart from this, we provide these products in a variety of sizes, models and technical specifications for our honourable clients to choose from. These products are sourced from the quality oriented and trustworthy vendors of the market under the strict surveillance of our ingenious procuring agents.

The Next Generation i.MWM-IO

The New i.MWM-IO is Compact, Flexible and easily integrated to the overall plant with replacing complex & expensive hardware.

Features:

- ✚ Built in MMI with 16X2 LCD supported with backlit & Keypad.
- ✚ Built in IOs to START/STOP Motor Starter through Push Buttons.
- ✚ Built in Settable Digital Timer, Restart Delay Timer & Delta-Star Converter.

Monitoring:

Parameter displays through LCD that includes,

- ✚ Line Current [R-Y-B]
- ✚ Line Voltage [RY-YB-BR]
- ✚ Phase Voltage [RN-YN-BN]
- ✚ Power Factor [Per Phase & Average],
- ✚ Running Load-KW [Per Phase & Total]
- ✚ Energy Consumption-KWh [Per Phase & Total]
- ✚ Motor Operating Hour [Total]
- ✚ Nos. of Start for Motor
- ✚ Nos. of Trip for Motor
- ✚ Phase Voltage Status at Last Fault
- ✚ Line Current Status at Last Fault

Technical Specifications:

Current Range:

- 0.25 TO 5 Amp
- 4 TO 61 Amp
- 40 TO 500 Amp
- 400 TO 1200 Amp

Power Source: Three Phase Four Wire [R-Y-B-N]

Frequency: 50 Hz \pm 10 %

Accuracy: Class 1.0 for Power

Display: Backlit LCD 16 X 2

Digital Input: 110 VAC OR 230VAC \pm 15 % [DI1 to DI4 & Neutral]

Digital Output: Potential Free Relay [DO1 TO DO6]

Control Terminal: 3 Amp / 110VAC OR 230VAC

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded Protected to IP 20

Humidity: 95% RH non Condensation

Weight: Approx. 750gms

Dimension: 90 mm X 90 mm X 96 mm [W X H X D]

Mounting: Door [Cutout: 92 mm X 92 mm]

Communication: RS-485 [Protocol : MODBUS]

“With In-built Delta-Star Converter for purpose of Energy Saving.”



Protections :

- Single Phasing Protection [Current]
- Single Phasing Protection [Voltage]
- Over Load Protection [49]
- Under Load Protection [39]
- Phase Un-balance [47]
- Phase Reversal Protection [46]
- Locked Rotor Protection [50LR]
- Short Circuit Protection [51]
- Earth Fault Protection [50G]
- Over Voltage [59]
- Under Voltage [27P]

Intelligent Motor Protection Device : i.MWM

The i.MWM is Combination of Motor Protection with Power Monitoring.

Features:

- ✚ Voltage & Current Sensing Device
- ✚ Built in MMI with 16X2 LCD supported with backlit & Keypad.

Monitoring:

Parameter displays through LCD that includes,

- ✚ Line Current [R-Y-B]
- ✚ Line Voltage [RY-YB-BR]
- ✚ Phase Voltage [RN-YN-BN]
- ✚ Power Factor [Per Phase & Average],
- ✚ Running Load-KW [Per Phase & Total]
- ✚ Energy Consumption-KWh [Per Phase & Total]
- ✚ Motor Operating Hour [Total]
- ✚ Nos. of Start for Motor
- ✚ Nos. of Trip for Motor
- ✚ Phase Voltage Status at Last Fault
- ✚ Line Current Status at Last Fault

Technical Specifications:

Current Range:

- e) 0.25 TO 5 Amp
- f) 4 TO 61 Amp
- g) 40 TO 500 Amp
- h) 400 TO 1200 Amp

Power Source: Three Phase Four Wire [R-Y-B-N]

Frequency: 50 Hz \pm 10 %

Accuracy: Class 1.0 for Power

Display: Backlit LCD 16 X 2

Digital Input: 110 VAC OR 230VAC \pm 15 % [DI1 to DI4 & Neutral]

Digital Output: Potential Free Relay [DO1 TO DO6]

Control Terminal: 3 Amp / 110VAC OR 230VAC

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded Protected to IP 20

Humidity: 95% RH non Condensation

Weight: Approx. 750gms

Dimension: 90 mm X 90 mm X 96 mm [W X H X D]

Mounting: Door [Cutout: 92 mm X 92 mm]

Mounting: Door [Cutout: 92 mm X 92 mm]

Communication: RS-485 [Protocol : MODBUS]



Protections :

- Single Phasing Protection [Current]
- Single Phasing Protection [Voltage]
- Over Load Protection [49]
- Under Load Protection [39]
- Phase Un-balance [47]
- Phase Reversal Protection [46]
- Locked Rotor Protection [50LR]
- Short Circuit Protection [51]
- Earth Fault Protection [50G]
- Over Voltage [59]
- Under Voltage [27P]

Current Range:

- a) 0.8 TO 5 Amp
- b) 4 TO 61 Amp
- c) 40 TO 500 Amp
- d) 400 TO 1200 Amp

Technical Specifications:

Aux. Supply: 110 VAC TO 415 VAC

Display: 7 Segment LED showing Current of R-Y-B phase

CT Type:

a) External CT Unit: For Current Range 0.8 TO 5 A & 4 TO 61A

b) External CT: For Current Range 40 TO 500A & 400 TO 1200 A

Output Contact: C/O Relay P-NO-NC

Control Terminal: 3 Amp / 230 VAC, Two Separate Relay Output

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded

Humidity: 95% RH non Condensation

Weight: Approx. 600gms

Dimension: 89 mm X 89 mm X 66 mm [W X H X D]

Mounting: Door [Cutout: 92 mm X 92 mm]

Standard Features:

Selectable IT Curve OR Definite Trip Time

Selectable Trip Time for Single Phase Protection & Under Load Protection

Selectable Locked Rotor Value

Optional Features:

4 TO 20mA Analog Output w.r.t. Current for 0.8 TO 5 Amp & 4 TO 61 Amp

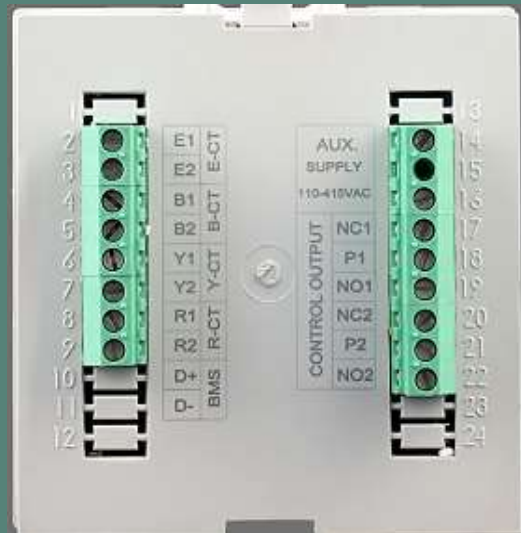
Protections	Detailed Annunciations
Single Phasing Protection	•SPP
Over Load Protection	•o350
Under Load Protection	•U130
Phase Un-balance	••b050
Phase Reversal Protection	Ph-r
Locked Rotor Protection	•L620
Short Circuit Protection	•S620
Earth Fault Protection	E002

MPD with Digital Display

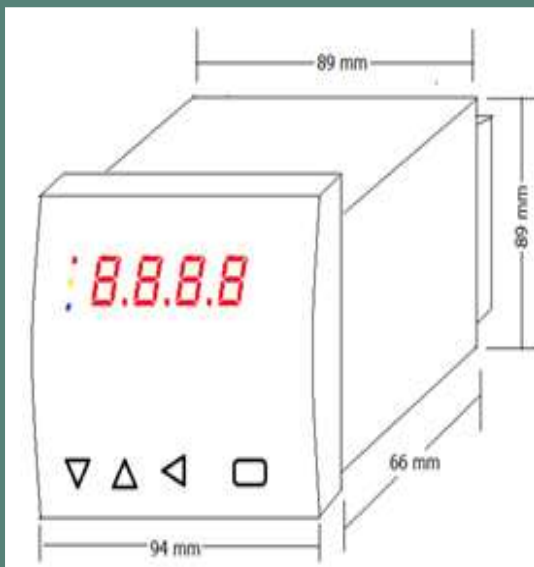
DXC-M92



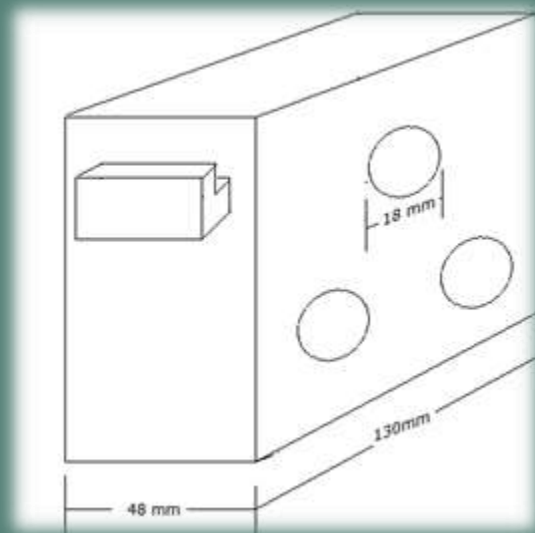
Front View



Rear View



Dimension of Device



Dimension of CT Unit [0.8-5A / 4-61A]

Current Range

0.25 TO 5 Amp

0.8 TO 5 Amp

4 TO 61 Amp

40 TO 500 Amp

400 TO 1200 Amp

Technical Specifications:

Aux. Supply: 110 VAC **OR** 230 VAC **OR** 415 VAC \pm 10%

Display: 7 Segment LED showing Current of R-Y-B phase

CT Type:

a) **In-built Phase CT:** For Current Range 0.25 TO 5 A, 0.8 TO 5 A & 4 TO 61A

b) **External Phase CTs:** For Current Range 40 TO 500A & 400 TO 1200 A

Output Contact: C/O Relay P-NO-NC

Control Terminal: 3 Amp / 230 VAC

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded

Humidity: 95% RH non Condensation

Weight: Approx. 750gms

Mounting:

Display: Door Mount [Door Cutout: 70 mm X 30 mm]

Device: DIN Rail Mount

Standard Features:

Selectable IT Curve OR Definite Trip Time

Selectable Trip Time for Single Phase Protection & Under Load Protection

Selectable Locked Rotor Value

Optional Features:

Separate Relay for Under Load Protection

4 TO 20mA Analog Output w.r.t. Current

Two Separate Relay Output

S-EXC: As per above all with RS-485 Communication

Protections

Single Phasing Protection
Over Load Protection
Under Load Protection
Phase Un-balance
Phase Reversal Protection
Locked Rotor Protection
Short Circuit Protection
Earth Fault Protection

Detailed Annunciations

•SPP
•o350
•U130
•b050
Ph-r
•L620
•S620
E002



Current Range

- 0.25 TO 5 Amp
- 0.8 TO 5 Amp
- 4 TO 61 Amp
- 40 TO 500 Amp
- 400 TO 1200 Amp



Technical Specifications:

Aux. Supply: 110 VAC **OR** 230 VAC **OR** 415 VAC \pm 10%

Display: 7 Segment LED showing Current of R-Y-B phase

CT Type:

a) In-built Phase CT: For Current Range 0.25 TO 5 A, 0.8 TO 5 A & 4 TO 61A

b) External Phase CTs: For Current Range 40 TO 500A & 400 TO 1200 A

Output Contact: C/O Relay P-NO-NC

Control Terminal: 3 Amp / 230 VAC

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded

Humidity: 95% RH non Condensation

Weight: Approx. 750gms

Mounting:

Display: Door Mount [Door Cutout: 70 mm X 30 mm]

Device: DIN Rail Mount

Optional Features:

4 TO 20mA Analog Output w.r.t. Current

Protections	Detailed Annunciations
Single Phasing Protection	•SPP
Over Load Protection	•o350
Under Load Protection	•U130
Phase Un-balance	••b050
Phase Reversal Protection	Ph-r
Locked Rotor Protection	•L620
Short Circuit Protection	•S620
Earth Fault Protection	E002

Current Range

0.25 TO 5 Amp

0.8 TO 5 Amp

4 TO 61 Amp

40 TO 500 Amp



Technical Specifications:

Aux. Supply: 110 VAC **OR** 230 VAC **OR** 415 VAC \pm 10%

Display: 7 Segment LED showing Current of R-Y-B phase

CT Type:

a) **In-built Phase CT:** For Current Range 0.25 TO 5 A, 0.8 TO 5 A & 4 TO 61A

b) **External Phase CTs:** For Current Range 40 TO 500A & 400 TO 1200 A

Output Contact: C/O Relay P-NO-NC

Control Terminal: 3 Amp / 230 VAC

Temperature: +10°C to +60°C for Operation / -20°C to +70°C for Storage.

Case material: ABS Molded

Humidity: 95% RH non Condensation

Weight: Approx. 750gms

Mounting:

Display: Door Mount [Door Cutout: 70 mm X 30 mm]

Device: DIN Rail Mount

Protections	Annunciations
Single Phasing Protection	SPP
Over Load Protection	OL
Under Load Protection	UL
Phase Un-balance	Ub
Phase Reversal Protection	Ph-r

MPD without Display

WOD & WOD-TUA

Current Range

1 TO 10 Amp
7 TO 20 Amp

Protections:

Single Phasing Protection
Over Load Protection
Phase Un-balance

Current Range

1 TO 10 Amp
7 TO 20 Amp

Protections

Single Phasing Protection
Over Load Protection
Under Load Protection
Phase Un-balance
Phase Reversal Protection

Features [WOD]

Aux.Supply: 110VAC OR 230VAC OR 415VAC
CT Type: In-built
Mounting: DIN Rail



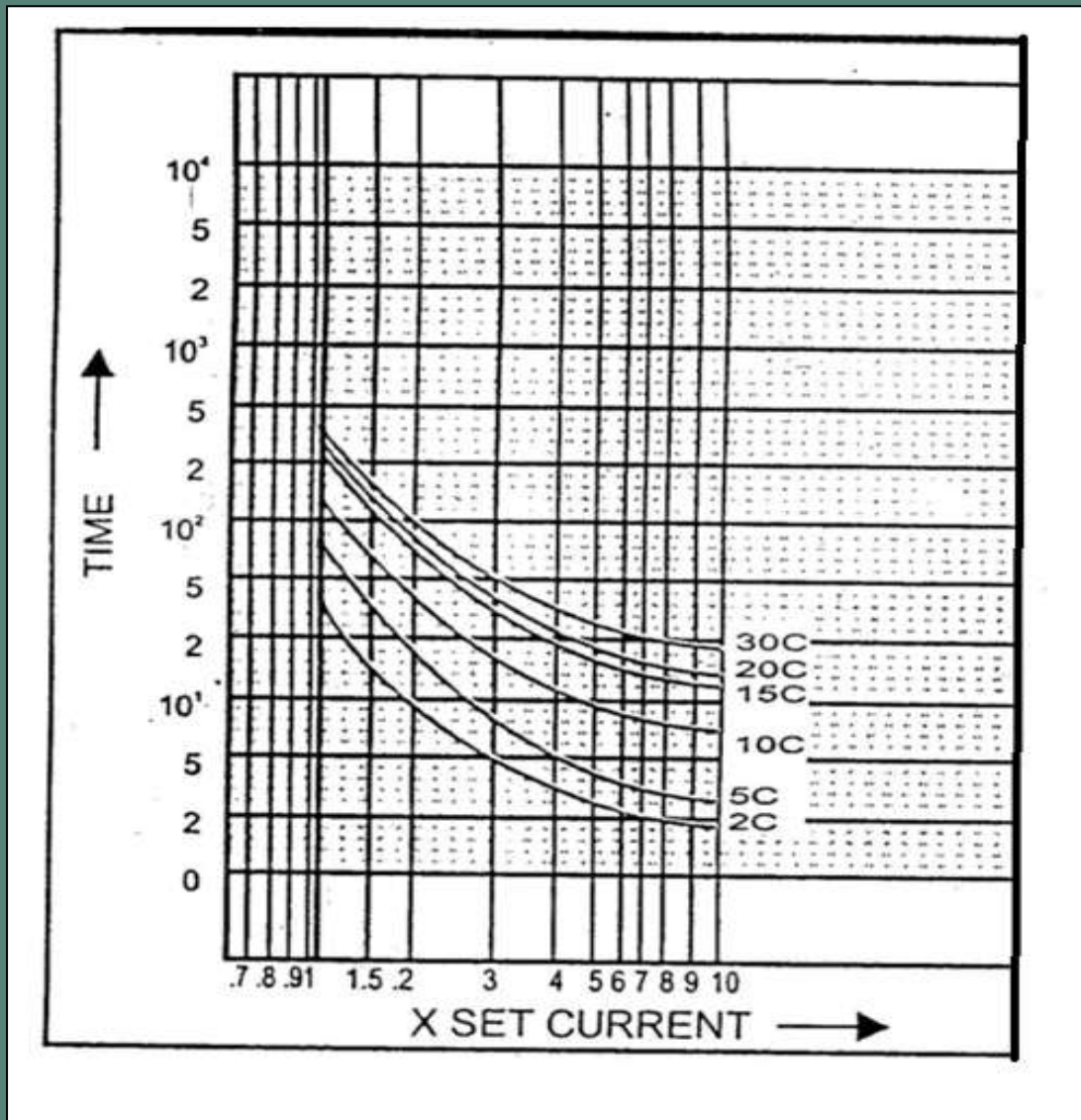
Annunciations

Individual LED for each Protection

Features [WOD-TUA]

Aux.Supply: 110VAC OR 230VAC OR 415VAC
CT Type: In-built
Mounting: DIN Rail





 **Advanced Microtech**

Address: 705 **Titanium One** Nr. Rajpath Club
S G Highway, **Ahmedabad-380054**
Gujarat INDIA

Dev Chambers 2nd Floor Nr. Vasant
Cinema, Cinema Road **Surat-395003**
Gujarat INDIA

Phone: **+91 6355 199 414** (Office/WhatsApp Business)

E-mail: amtpower@gmail.com
micrompd@gmail.com

Web: www.advancedmicrotech.in