

MX200A/180A/160A



MX200A
Under & Over Voltage Relay



MX180A
Over Voltage Relay



MX160A
Under Voltage Relay

Features

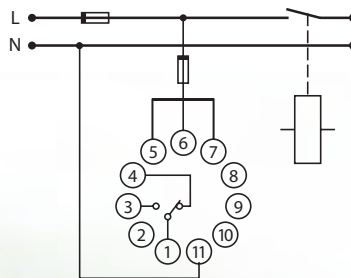
- Electronic monitoring relay
- Voltage monitoring for single / 3-phase system
- Phase failure monitoring
- Adjustable voltage limit
- Adjustable delay time
- Indicators for voltage fault
- Indicators for power and output ON

Product Description

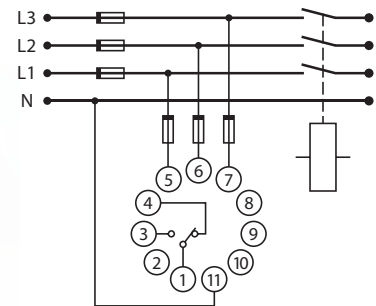
MX160A, MX180A & MX200A are single or 3-phase monitoring relays. The relays are designed for application where it required to maintain the voltage within set limits. A built-in adjustable time delay prevents nuisance tripping.

WIRING DIAGRAM

SINGLE-PHASE SYSTEM

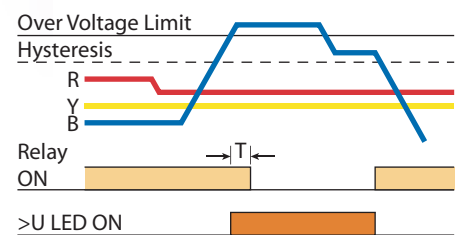


3-PHASE SYSTEM

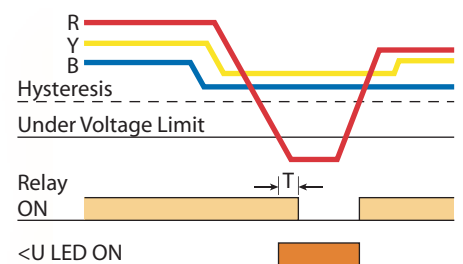


OPERATIONS DIAGRAM

i) Over Voltage Function**



ii) Under Voltage Function*



Technical Data

POWER SUPPLY INPUT

- 3-Phase / Single phase : 415 V AC \pm 20% / 240 VAC \pm 20%
400 V AC \pm 20% / 230 VAC \pm 20%
380 V AC \pm 20% / 220 VAC \pm 20%
- Frequency range : 45 to 65 Hz
- Max. power consumption : 3 VA
- Input connections
- For 3-phase model : Phase L1, L2, L3 to pin 5, 6, & 7
Neutral to pin 11
- For single-phase model : Phase L to pin 5, 6 & 7***
Neutral to pin 11

SETTING RANGES

- Lower voltage limit * : 78% - 98%
- Upper voltage limit ** : 102% - 122%
- Delay time, T : 0.1 - 10s

HYSTERESIS

1% of rms - value

CONTACT OUTPUT

- Cotact arrangement : SPDT change-over contacts.
- Contact rating : 5A, 250 V AC (cos =1)
- Contact material : Silver alloy
- Expected electrical life : 100,000 operations at rated current
- Expected mechanical life : 5 x 10⁶ operations

INDICATORS

- Power supply ON : Green indicator
- Output ON : Red indicator
- Under voltage limit (U<) * : Red indicator
- Over voltage limit (U>) ** : Red indicator

MECHANICAL

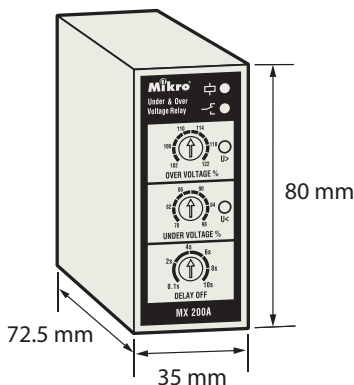
- Mounting : Circular 11-pin plug-in socket
- Approximate weight : 0.25kg

ENVIRONMENTAL CONDITIONS

- Temperature : -5 C to +55 C
- Humidity : 56 days at 93% RH and 40 C
non-condensing

* Applicable to MX160A and MX200A only
** Applicable to MX180A and MX200A only
*** For single phase connection, short pin 5,6 & 7

CASE DIMENSIONS



Ordering Information

MODEL	FUNCTION		Supply Voltage V AC
	Under Voltage Monitoring	Over Voltage Monitoring	
MX160A - 380	YES	NO	380
MX160A - 400	YES	NO	400
MX160A - 415	YES	NO	415
MX180A - 380	NO	YES	380
MX180A - 400	NO	YES	400
MX180A - 415	NO	YES	415
MX200A - 380	YES	YES	380
MX200A - 400	YES	YES	400
MX200A - 415	YES	YES	415