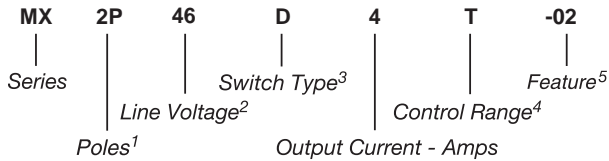


Part Number	Description
MX2P46D4T-02	4A, 460 Vac
MX3P46D4S-02	4A, 460 Vac

**Part Number Explanation**



**NOTES**

- 1) Poles: 2P = 2 pole; 3P = 3 pole
- 2) Line Voltage: 46 = 460 Vac
- 3) Switch Type: D = Zero-cross turn-on
- 4) Control Range: T = 15–40 Vdc; S = 12–35 Vdc
- 5) Options: 02 = With LED

**MECHANICAL SPECIFICATION**

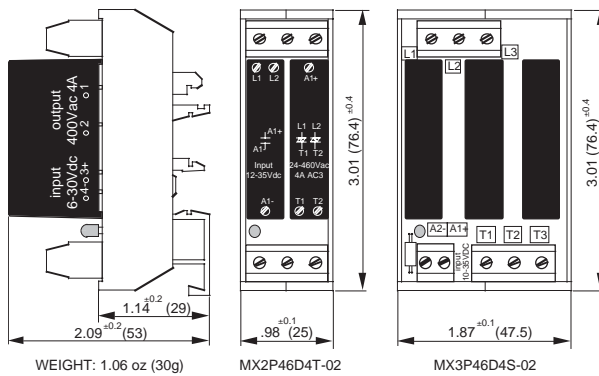


Figure 1 — MX relays; dimensions in inches (mm)

**INPUT (CONTROL) SPECIFICATION**

	Min	Max	Units
<b>Control Range</b>			
MX2P46D4T-02	15	40	V
MX3P46D4S-02	12	35	V
<b>Input Current Range</b>			
MX2P46D4T-02	4.4	17	mA
MX3P46D4S-02	7.5	30	mA
<b>Must Turn-Off Voltage</b>			
MX2P46D4T-02		8	V
MX3P46D4S-02		6	V
<b>Input Resistance (Typical)</b>			
MX2P46D4T-02		2000	Ohms
MX3P46D4S-02		1000	Ohms



**FEATURES/BENEFITS**

- New generation of solid-state relays for DIN-rail mounting
- Two- or three-pole output with single control
- Tight zero-cross window for low EMI
- Control visualization by LED
- Integrated clamping voltage
- High immunity to surges

**DESCRIPTION**

The Series MX relays are a new generation of solid-state relays for DIN-rail fixation. The MX relays are internally wired to provide a common control. The relays are placed on a single DIN-rail fixture, saving designers time and space. The Series MX relays provide a control status LED and internal output protection.

**APPLICATIONS**

- Interface applications
- Vending machines
- Light/lamp control
- Contactor driver
- Fan speed control
- HVAC controls
- Heating control

**BLOCK DIAGRAM**

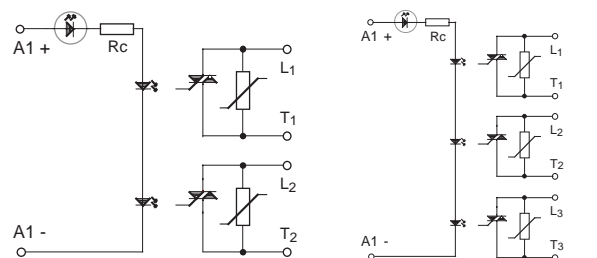


Figure 2a — MX2P relay

Figure 2b — MX3P relay

**CONTROL CHARACTERISTICS**

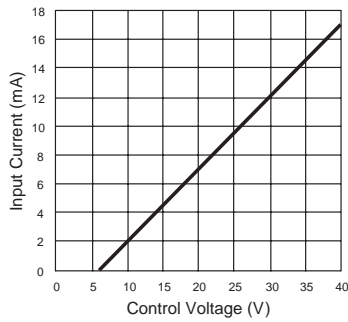


Figure 3a — MX2P relay

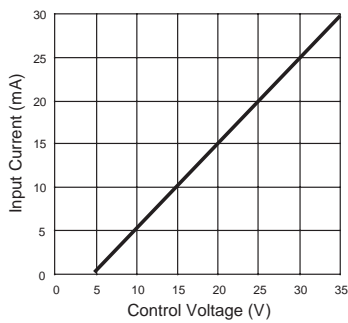


Figure 3b — MX3P relay

**TYPICAL APPLICATIONS**

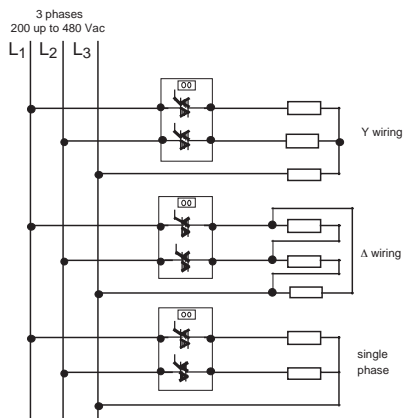


Figure 4a — MX2P relay

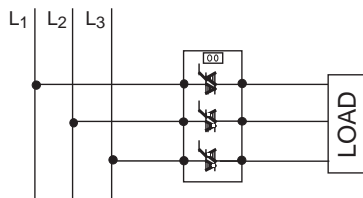


Figure 4b — MX3P relay

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Unit
Operating Range	24	460	Vrms
Peak Voltage		1200	V
Load Current			
Range (Resistive)	.005	4	Arms
Inductive Load Current		2.5	Arms
Maximum Surge Current Rating (Non-Repetitive) (See Figure 5)		120	A
On-State Voltage Drop		1.6	V
Zero-Cross Window		±12	V
Off-State Leakage Current (60Hz)		0.3	mA
Turn-On Time (60Hz)		8.3	ms
Turn-Off Time (60Hz)		8.3	ms
Off-State dv/dt		500	V/μs
Operating Frequency	10	440	Hz
I <sup>2</sup> t for match fusing (<8.3ms)		50	A <sup>2</sup> S

**ENVIRONMENTAL SPECIFICATION**

	Min	Max	Unit
Operating Temperature	-40	80	°C
Storage Temperature	-40	150	°C
Input-Output Isolation		4000	Vrms
Input-Output Capacity		3	pF

**SURGE CURRENT**

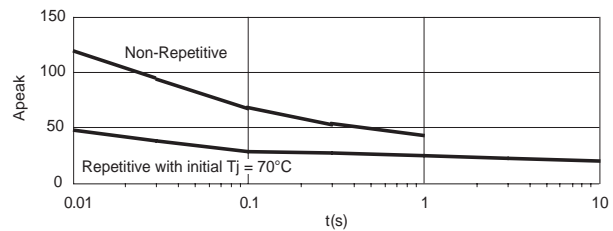


Figure 5 — MX relays

**NOTES:**

1. Electrical parameters at 25°C unless otherwise specified.
2. For 800Hz applications, contact factory.
3. For additional/custom options, contact factory.