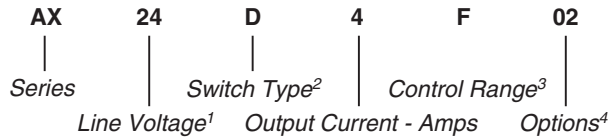


Part Number	Description
AX24D4F-02	4A, 275 Vac
AX46D4H-02	4A, 440 Vac

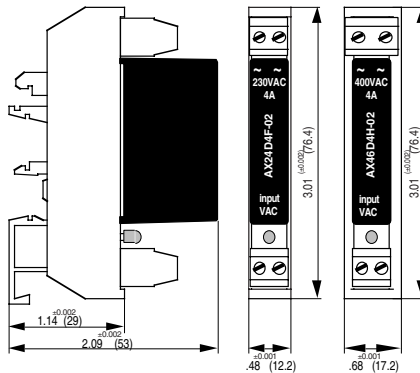
**Part Number Explanation**



**NOTES**

- 1) Line Voltage: 24 = 240 Vac; 46 = 440 Vac
- 2) Switch Type: D = Zero cross turn-on
- 3) Control Range: F = 6-30 Vdc, H = 15-30 Vdc
- 4) Options: 02 = With LED

**MECHANICAL SPECIFICATION**



WEIGHT: 1.06 oz (30g)

Figure 1 — AX relays, dimensions in inches (mm)

**INPUT (CONTROL) SPECIFICATION**

	Min	Max	Unit
Control Range			
AX24D4F-02	6	30	Vdc
AX46D4H-02	15	30	Vdc

**Input Current Range**

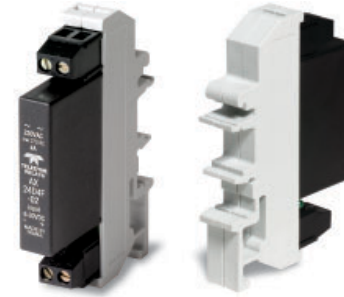
AX24D4F-02	3	30	mAdc
AX46D4H-02	6.5	14	mAdc

**Must Turn-Off Voltage**

AX24D4F-02	0.8	Vdc
AX46D4H-02	2	Vdc

**Input Resistance (Typical)**

AX24D4F-02	1000	Ohms
AX46D4H-02	1800	Ohms



**FEATURES/BENEFITS**

- New generation of solid-state relays for DIN rail mounting
- Control LED
- Integrated clamping voltage
- High immunity to surges
- Low zero cross level

**DESCRIPTION**

The Series AX relays are designed for DIN rail mounting. A control LED provides visual control status. The Series AX relays provide an internal MOV to limit the voltage spikes on the output. The tight zero cross window significantly reduces EMI. Its compact size and user-friendly package make the Series AX relay an excellent choice for designers.

**APPLICATIONS**

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

**APPROVALS**

Series AX relays are pending UL recognition.

**BLOCK DIAGRAM**

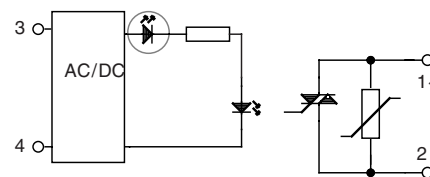


Figure 2 — AX relays

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Unit
<b>Operating Range</b>			
AX24D4F-02	12	275	Vrms
AX46D4H-02	12	440	Vrms
<b>Peak Voltage (Clamping Voltage @ 1mA)</b>			
AX24D4F-02		600 (450)	Vpeak
AX46D4H-02		800 (700)	Vpeak
<b>Zero Cross Window (Typical)</b>			
		±12	V
<b>Maximum Surge Current Rating (Non-repetitive)</b> (See Figure 5)			
		100	Apeak
<b>Off-State Leakage Current</b>			
at rated voltage, 60Hz		0.3	mArms
<b>On-State Voltage Drop</b>			
		1.6	Vpeak
<b>Operating Range</b>			
	.005	4	Arms
<b>Turn-On Time (60Hz)</b>			
		8.3	ms
<b>Turn-Off Time (60Hz)</b>			
		8.3	ms
<b>Operating Frequency</b>			
	10	440	Hz
<b>Off-State dv/dt</b>			
	500		V/μs
<b>I<sup>2</sup>t for match fusing (&lt;8.3ms)</b>			
	50		A <sup>2</sup> S

**ENVIRONMENTAL SPECIFICATION**

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

**NOTES:**

1. Electrical specifications at 25°C unless otherwise specified.

**TYPICAL APPLICATION**

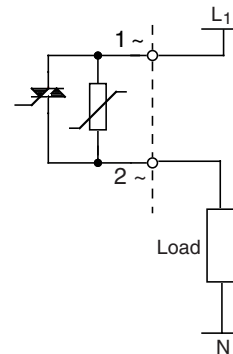


Figure 3 — AX relays

**THERMAL CURVES**

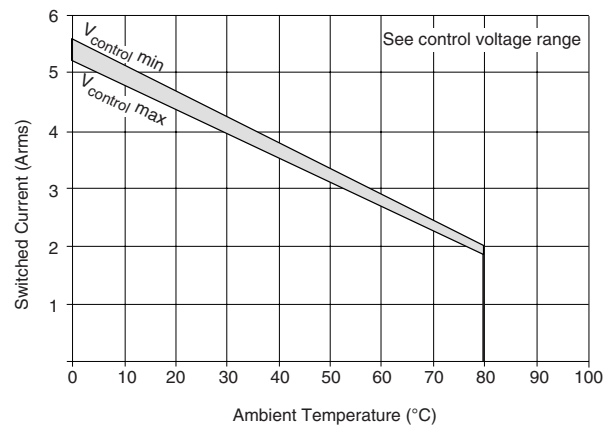


Figure 4 — AX relays

**SURGE CURRENT**

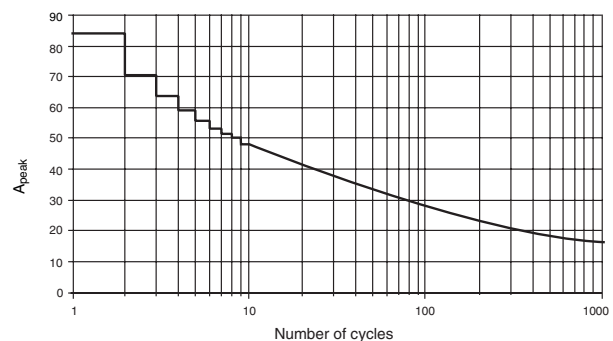


Figure 5 — AX non-repetitive surge current