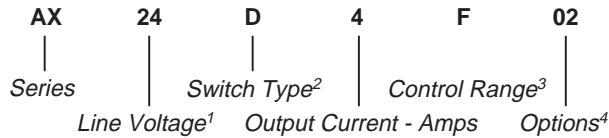


Part Number	Description
AX24D4F-02	4A, 275 Vac
AX46D4H-02	4A, 440 Vac

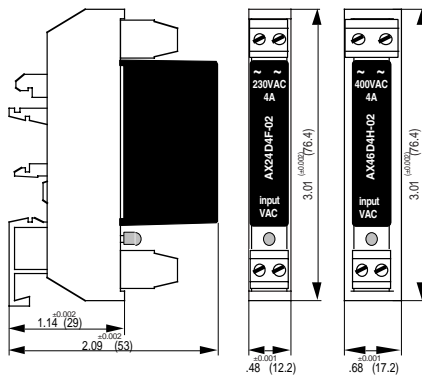
Part Number Explanation



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

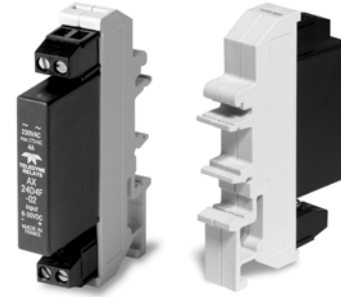
AX24D4F-02	3	30	mAdc
AX46D4H-02	6.5	14	mAdc

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
- Tight zero-cross window for low EMI

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

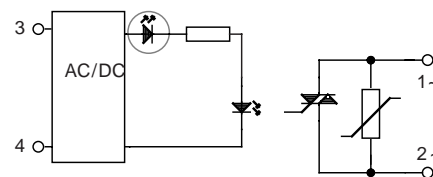


Figure 2 — AX relays

OUTPUT (LOAD) SPECIFICATION

	Min	Max	Unit
Operating Range			
AX24D4F-02	12	275	Vrms
AX46D4H-02	12	440	Vrms

Peak Voltage (Clamping Voltage @ 1mA)

AX24D4F-02	600 (450)	Vpeak
AX46D4H-02	800 (700)	Vpeak

Maximum Surge Current Rating (Non-Repetitive)

(See Figure 5)	100	Apeak	
On-State Voltage Drop	1.6	Vpeak	
Zero Cross Window (Typical)	±12	V	
Off-State Leakage Current (60Hz)	0.3	mArms	
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 ² t for match fusing (<8.3ms)	50	A ² S	

ENVIRONMENTAL SPECIFICATION

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

NOTES:

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

TYPICAL APPLICATION

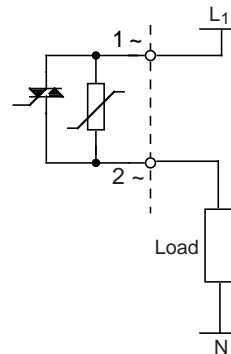


Figure 3 — AX relays

THERMAL CURVES

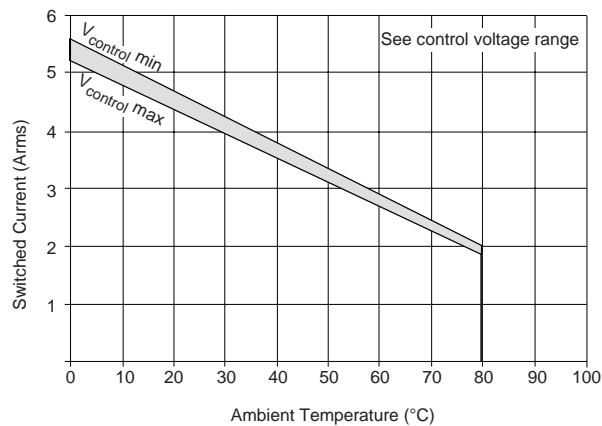


Figure 4 — AX relays

SURGE CURRENT

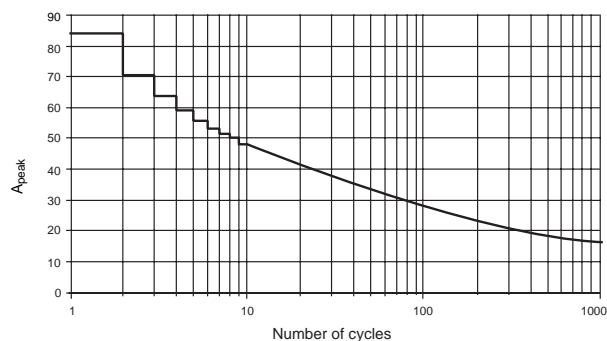


Figure 5 — AX non-repetitive surge current