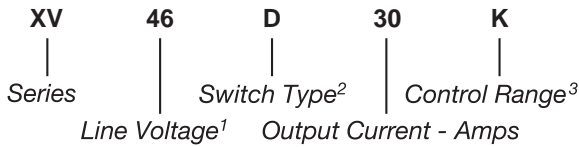


Part Number	Description
XV46D30K	30A, 420 Vac

**Part Number Explanation**



**NOTES**

- 1) Line Voltage (nominal): 46 = 420 Vac
- 2) Switch Type: D = Zero-cross turn-on
- 3) Control Range: K = 20–30 Vdc, \*C = 12 Vdc also available

**MECHANICAL SPECIFICATION**

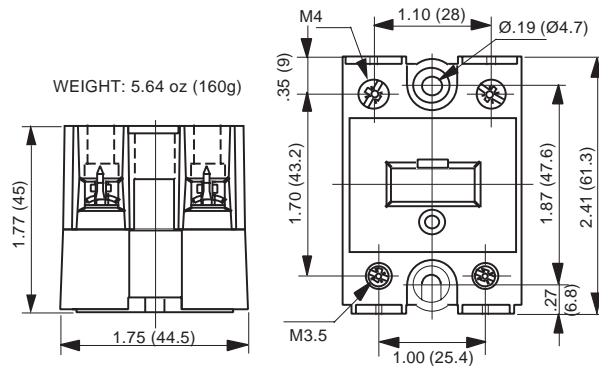


Figure 1 – XV relay; dimensions in inches (mm)

**INPUT (CONTROL) SPECIFICATION**

	Min	Max	Units
Control Range*	20	30	Vdc
Input Current Range	31	41	mAdc
Must Turn-Off Voltage		10	Vdc
Input Resistance (Typical)		640	Ohms
Reverse Voltage Protection		30	Vdc
Control Frequency		1	Hz

**TYPICAL APPLICATION**

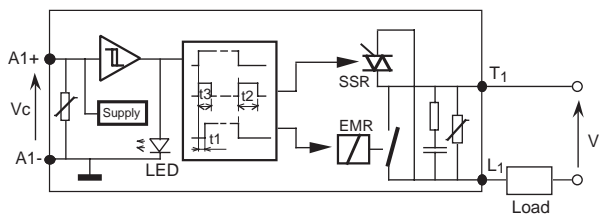


Figure 2 – XV relay



**FEATURES/BENEFITS**

- Industry standard package
- Combines the best of solid-state and electromechanical relays
- Tight zero-cross window for low EMI
- Control LED
- Internal output protection
- High immunity to surges

**DESCRIPTION**

The Series XV relay combines the best of solid-state and electromechanical technology. The relay is designed in a touch-proof hockey-puck package. The XV relay switches current up to 30A without a heat sink. Visual control status is provided as a standard. Elimination of the heat sink conserves space and makes the XV ideal for numerous applications.

**APPLICATIONS**

- Interface applications
- Heating Control
- Light/Lamp control
- Contactor driver
- Fan speed control
- HVAC controls

**APPROVALS**

Model XV46D30K is UL recognized.  
UL File Number: E128555.

**CONTROL CHARACTERISTIC**

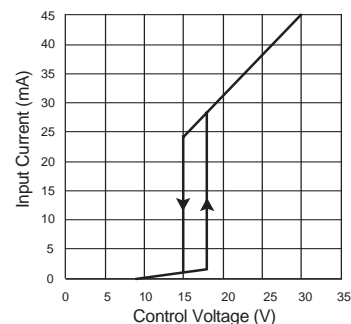


Figure 3 – XV relay

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Unit
Operating Range	12	420	Vrms
Peak Voltage		800	Vpeak
Load Current Range	0.1	30	Arms
Motor Load Current		7.5	Arms
Maximum Surge Current Rating (Non-Repetitive) (See Figure 4)	240	Apeak	
On-State Voltage Drop		0.3	V
Zero-Cross Window (Typical)		±12	V
Off-State Leakage Current (60Hz)		2	mA
Turn-On Time (60Hz)		12	ms
Turn-Off Time (60Hz)		20	ms
Off-State dv/dt		500	V/μs
Maximum di/dt (Non-repetitive)		50	A/μs
Operating Frequency	40	440	Hz
I <sup>2</sup> t for fuse matching (<8.3ms)		288	A <sup>2</sup> S

**ENVIRONMENTAL SPECIFICATION**

	Min	Max	Unit
Operating Temperature	-40	90	°C
Storage Temperature	-40	100	°C
Input-Output Isolation		4000	Vrms
Output-Case Isolation		4000	V
Life Expectancy		See Figure 5	

**SURGE CURRENT**

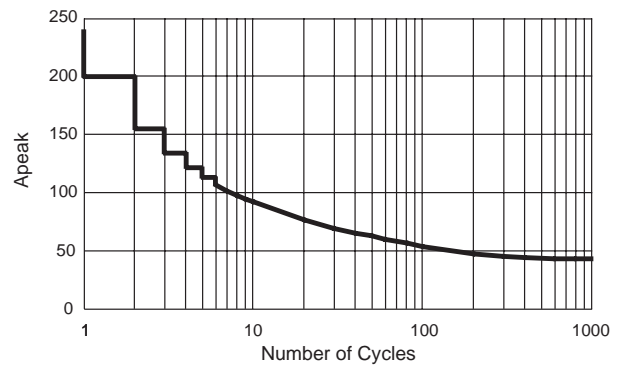


Figure 4 – XV relay

**LIFETIME EXPECTANCY**

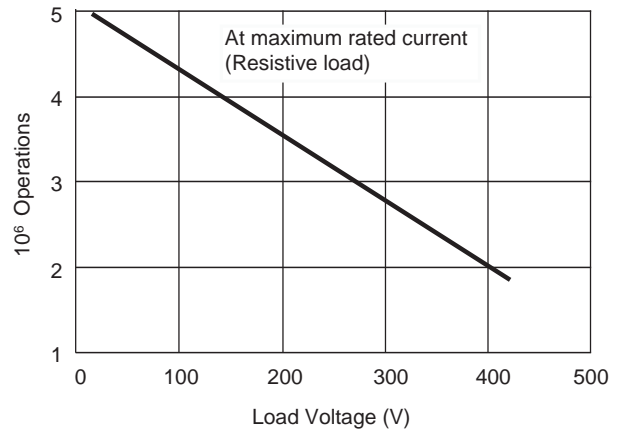


Figure 5 – XV relay

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