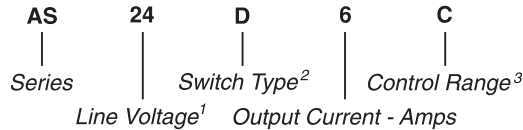


Part Number	Description
AS24D6C	6A, 280 Vac
AS60D6C	6A, 600 Vac

#### Part Number Explanation



#### NOTES

- 1) Line Voltage: 24 = 280 Vac; 60 = 600 Vac
- 2) Switch Type: D = Zero-cross turn-on
- 3) Control Range: C = 4–14 Vdc

#### MECHANICAL SPECIFICATION

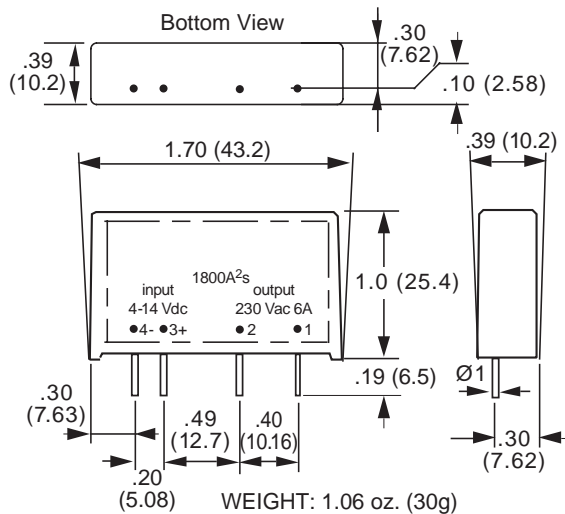


Figure 1 – AS6 relays; dimensions in inches (mm)

#### INPUT (CONTROL) SPECIFICATION

	Min	Max	Units
Control Range	4	14	Vdc
Input Current	6.5	30	mAdc
Must Turn-Off Voltage		1	Vdc
Input Resistance (Typical)		440	Ohms

#### BLOCK DIAGRAM

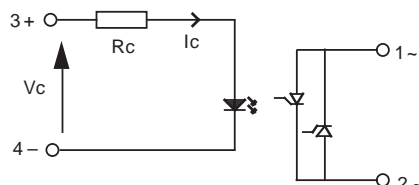


Figure 2 – AS6 relays



#### FEATURES/BENEFITS

- Industry standard package
- High in-rush capabilities
- Tight zero-cross window for low EMI
- Low input current draw
- High dv/dt capability
- High immunity to surges

#### DESCRIPTION

These solid-state single inline package (SIP) relays are designed for mounting on printed circuit boards and intended mainly for interface applications. The relays integrate 50A thyristors to switch permanent 6A currents. They can withstand very high current overloads. The relays incorporate a direct-bonded copper substrate. This technology offers outstanding thermal efficiency as well as thermal stress performance, which together significantly increase life expectancy.

#### APPLICATIONS

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

#### APPROVALS

All models are UL recognized.  
UL File Number: E128555.

#### TYPICAL APPLICATION

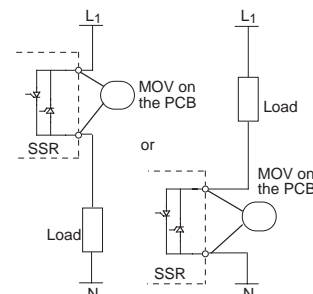


Figure 3 – AS6 relays

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Unit
Operating Range			
AS24D6C	12	280	Vrms
AS60D6C	24	600	Vrms
Peak Voltage			
AS24D6C		600	VPeak
AS60D6C		1200	VPeak
Load Current Range (See Figure 5)	.005	6	Arms
Maximum Surge Current Rating (Non-Repetitive) (See Figure 6)		600	A <sub>Peak</sub>
On-State Voltage Drop		1.6	V
Zero-Cross Window (Typical)		12	V
Off-State Leakage Current (60Hz)		1	mA
Turn-On Time (60Hz)		8.3	ms
Turn-Off Time (60Hz)		8.3	ms
Off-State dv/dt (Non-Repetitive)	500		V/μs
Operating Frequency	10	440	Hz
I <sup>2</sup> t for Match Fusing (<8.3ms)		1800	A <sup>2</sup> S

**ENVIRONMENTAL SPECIFICATION**

	Min	Max	Unit
Operating Temperature	-40	80	°C
Storage Temperature	-40	120	°C
Input-Output Isolation	4000		Vrms

**LOAD CURRENT DERATING CURVE**

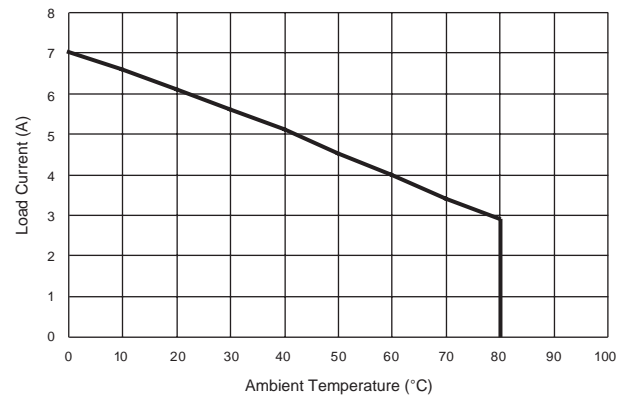


Figure 5 – AS6 relays

**CONTROL CHARACTERISTIC**

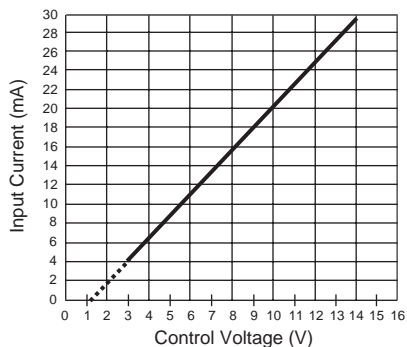


Figure 4 – AS6 relays

**SURGE CURRENT**

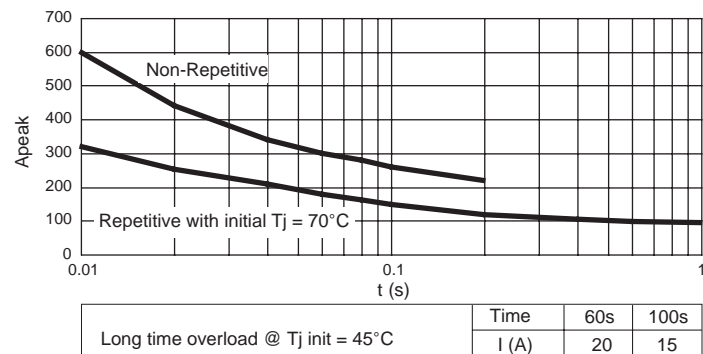


Figure 6 — AS6 Relays

**NOTES:**

1. External MOV recommended for inductive loads.
2. HS and LS Series relays available for higher current.
3. Electrical specifications at 25°C unless otherwise specified.
4. For 800Hz applications, contact factory.
5. For additional/custom options, contact factory.