

Part Number	Description
DX6R3E-02	3A, 60 Vdc

**Part Number Explanation**



**NOTES**

- 1) Line Voltage (nominal) 6 = 60 Vdc
- 2) Switch Type: R = Random turn-on
- 3) Control Range: E = 5-30 Vdc (3-30 Vdc for DX6R3E-02);  
U = 90-240 Vac
- 4) Feature: 02 = With LED

**MECHANICAL SPECIFICATION**

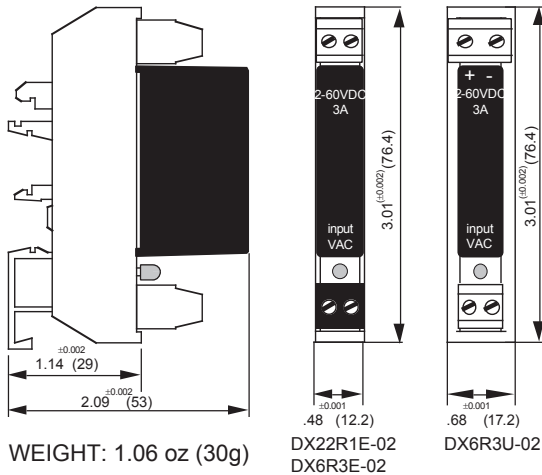


Figure 1 — DX relays, dimensions in inches (mm)

**BLOCK DIAGRAM**

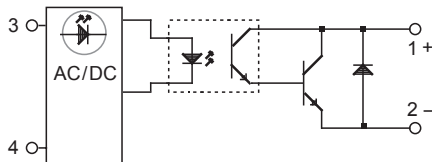


Figure 3 — DX relays



**FEATURES/BENEFITS**

- New generation of solid-state relays for DIN rail mounting
- Control visualization by LED
- AC/DC control
- High immunity to surges

**DESCRIPTION**

The Series DX relays are designed for DIN-rail mounting. These solid-state relays include a control LED that provides visual control status. The tight zero-cross window significantly reduces EMI. Its compact size and user friendly package make the Series DX relay an excellent choice for designers.

**APPLICATIONS**

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

**TYPICAL APPLICATION**

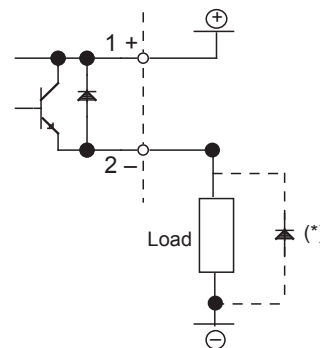


Figure 2 — DX relays

**INPUT (CONTROL) SPECIFICATION**

	Min	Max	Units
<b>Control Range</b>			
DX6R3E-02	3	30	Vdc
DX6R3U-02	90	240	Vac/dc
<b>Input Current Range</b>			
DX6R3E-02	1	30	mA
DX6R3U-02	2	5.7	mA
<b>Must Turn-Off Voltage</b>			
DX6R3E-02	1		Vdc
DX6R3U-02	15		Vac/dc

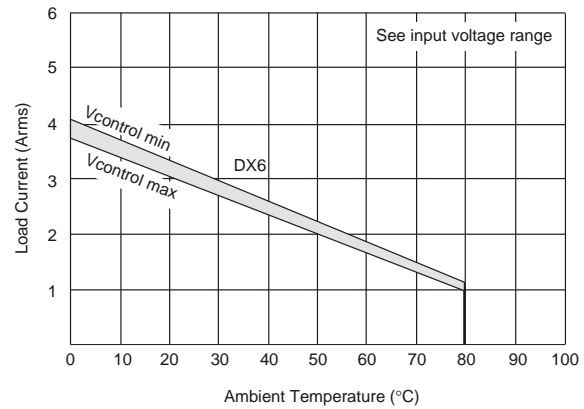
**Input Resistance (Typical)**

DX6R3E-02	600	Ohms
DX6R3U-02	41,000	Ohms

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Units
Operating Range	2	60	V
Peak Voltage		60	V
Load Current Range	.003	3	A
On-State Voltage Drop		1.6	V
<b>Maximum Surge Current Rating (Non-Repetitive)</b>			
DX6R3E-02		5	A <sub>peak</sub>
DX6R3U-02		10	A <sub>peak</sub>
<b>Off-State Leakage Current (60Hz)</b>			
DX6R3E-02		0.3	mA
DX6R3U-02		1	mA
Turn-On Time		0.2	ms
Turn-Off Time		0.8	ms
Off-State dv/dt	200		V/μs
Switching Frequency		500	Hz

**THERMAL CURVES**



**ENVIRONMENTAL SPECIFICATION**

	Min	Max	Units
Operating Temperature	-40	80	°C
Storage Temperature	-40	105	°C
Input-Output Isolation	2500		V <sub>rms</sub>
Input-Output Capacity		8	pF

**NOTES**

- 1) Electrical specifications at 25°C unless otherwise specified
- 2) On inductive loads, a free-wheeling diode (or clamp) is recommended
- 3) For additional/custom options, contact factory.

# Mouser Electronics

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