



A Unit of Teledyne Electronics and Communications

Part Number	Description	
DX22R1E-02	1A, 220 Vdc	
DX6R3E-02	3A, 60 Vdc	
DX6R3U-02	3A, 60 Vdc	

Part Number Explanation



NOTES

- 1) Line Voltage (nominal): 6 = 60 Vdc; 22 = 220 Vdc
- 2) Switch Type: R = Random turn-on
- 3) Control Range: E = 5-30 Vdc (3-30 Vdc for DX6R3E-02); U = 90-240 Vdc
- 4) Feature: 02 = With LED

MECHANICAL SPECIFICATION

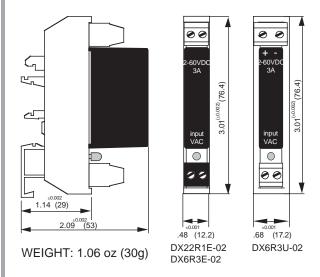


Figure 1 — DX relays, dimensions in inches (mm)

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FEATURES/BENEFITS

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

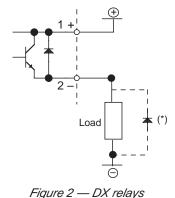
DESCRIPTION

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 zerocross 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



BLOCK DIAGRAM

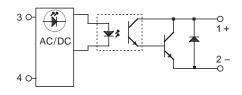


Figure 3 — DX relays





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INPUT (CONTROL) SPECIFICATION			
01 (00	Min	Max	Unit
Control Range			
DX22R1E-02	5	30	Vdc
DX6R3E-02	3	30	Vdc
DX6R3U-02	90	240	Vac/do
Input Current Range			
DX22R1E-02	1	30	mA
DX6R3E-02	1	30	mA
DX6R3U-02	2	5.7	mΑ
Must Turn-Off Voltage DX22R1E-02	1		Vdc
DX6R3E-02	1		Vdc
DX6R3U-02	15		Vac/do
Input Resistance (Typica	ıl)		
DX22R1E-02		1000	Ohms
DX6R3E-02		600	Ohms
DX6R3U-02		41,000	Ohms
OUTPUT (LOAD) SPECIFICATION			
	Min	Max	Unit
Operating Range			

Min	Max	Unit
2	220	V
2	60	V
	220	V
	60	V
.003	1	Α
.003	3	Α
.005	3	Α
	1.6	V
	.003	2 220 2 60 2 60 220 60 .003 1 .003 3 .005 3

Maximum Surge Current Rating (Non-Repetitive)

3, 3, 1, 3, 1		- /
DX22R1E-02	3	Apeak
DX6R3E-02	5	Apeak
DX6R3E-02	10	Apeak

OUTPUT (LOAD) SPECIFICATION (Continued) Off-State Leakage Current (60Hz) DX22R1E-02 0.3 mΑ 0.3 DX6R3E-02 mΑ DX6R3E-02 1 mΑ Turn-On Time 0.2 ms Turn-Off Time 8.0 ms Off-State dv/dt 200 V/µs **Switching Frequency** 500 Hz

THERMAL CURVES

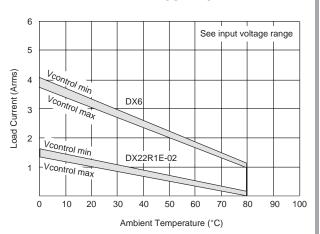


Figure 4 — DX relays

ENVIRONMENTAL SPECIFICATION

	Min	Max	Unit
Operating Temperature	-40	80	°C
Storage Temperature	-40	105	°C
Input-Output Isolation	2500		Vrms
Input-Output Capacity		8	pF

NOTES:

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