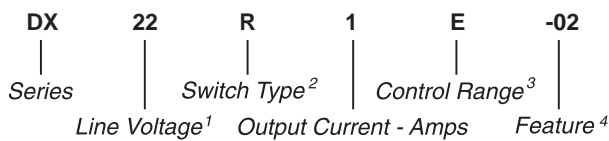


Part Number	Description
DX22R1E-02	1A, 220 Vdc
DX6R3E-02	3A, 60 Vdc
DX6R3U-02	3A, 60 Vdc

**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**

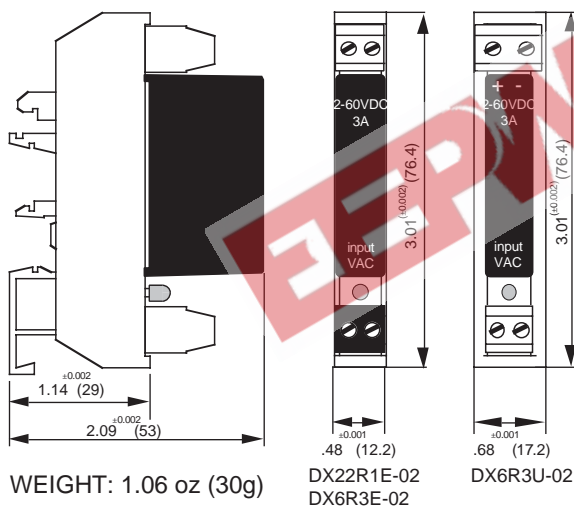


Figure 1 — DX relays, dimensions in inches (mm)

**TYPICAL APPLICATION**

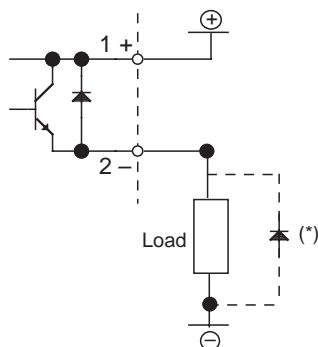


Figure 2 — DX relays

**BLOCK DIAGRAM**

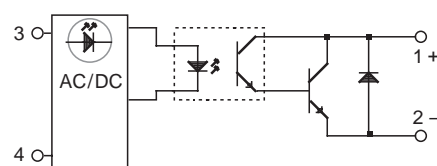


Figure 3 — DX relays

**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

**INPUT (CONTROL) SPECIFICATION**

	Min	Max	Unit
Control Range			
DX22R1E-02	5	30	Vdc
DX6R3E-02	3	30	Vdc
DX6R3U-02	90	240	Vac/dc

Input Current Range

DX22R1E-02	1	30	mA
DX6R3E-02	1	30	mA
DX6R3U-02	2	5.7	mA

Must Turn-Off Voltage

DX22R1E-02	1		Vdc
DX6R3E-02	1		Vdc
DX6R3U-02	15		Vac/dc

Input Resistance (Typical)

DX22R1E-02		1000	Ohms
DX6R3E-02		600	Ohms
DX6R3U-02		41,000	Ohms

**OUTPUT (LOAD) SPECIFICATION**

	Min	Max	Unit
Operating Range			
DX22R1E-02	2	220	V
DX6	2	60	V

Peak Voltage

DX22R1E-02		220	V
DX6		60	V

Load Current Range

DX22R1E-02	.003	1	A
DX6R3E-02	.003	3	A
DX6R3U-02	.005	3	A

On-State Voltage Drop

1.6 V

Maximum Surge Current Rating (Non-Repetitive)

DX22R1E-02		3	A <sub>peak</sub>
DX6R3E-02		5	A <sub>peak</sub>
DX6R3E-02		10	A <sub>peak</sub>

**OUTPUT (LOAD) SPECIFICATION (Continued)**

	Min	Max	Unit
Off-State Leakage Current (60Hz)			
DX22R1E-02		0.3	mA
DX6R3E-02		0.3	mA
DX6R3E-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**

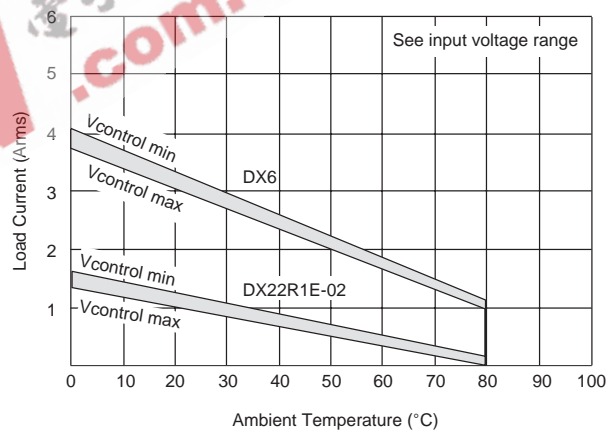


Figure 4 — DX relays

**ENVIRONMENTAL SPECIFICATION**

	Min	Max	Unit
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.