

Mechanical Relays

HCR-1 Series

277 VAC • 30 A • Relay



Description

The HCR-1 Series general purpose switching relays consist of double-pole double-throw (DPDT) or double-pole single-throw normally open (DPST-NO) contact options with a rating of 30 amperes. Relays control higher-current circuits through a low-power signal. An electro-magnetic current actuates the relay, creating a closed circuit within the device. General purpose relays are used in applications including HVAC systems and standby power supplies.

HCR-1 Series relays are compliant with requirements for use in equipment employing A2L refrigerants according to UL Category Control Number (CCN) LZGH2/LZGH8 for Annex JJ of UL 60335-2-40.

Features & Benefits

FEATURES	BENEFITS
DPDT & DPST-NO switching configurations	Meets multiple application needs
.250" (6.35 mm) quick connect terminals	For easy installation
Universal mounting configuration	Helps streamline mounting installation

Applications

- HVAC/R
- Food & Beverage
- Standby Power Supplies
- Water/Wastewater

Certification & Compliance

UL 60947-4-1/CSA C22.2 No. 60947-4-1 (CCN NLDX2 / NLDX8)	File No. E227250 – cURus
UL 60335-2-40 / CSA C22.2 No. 60335-2-40 (CCN LZGH2 / LZGH8)	File No. E227250 – cURus
RoHS	Directive 2011/65/EU

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Specifications

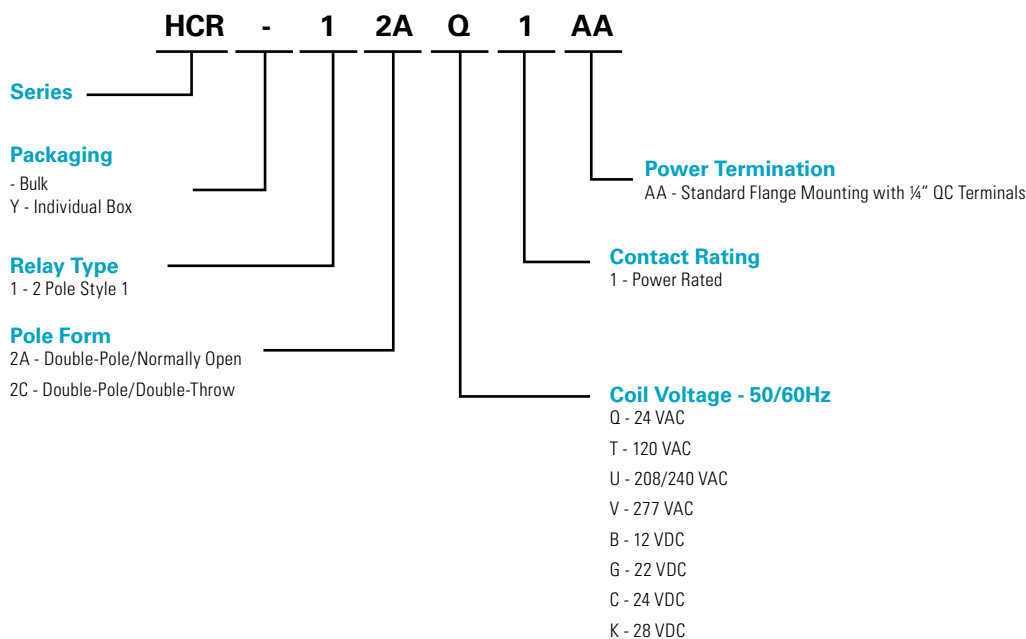
Insulation System	155 °C Class F
Unit Weight	3.04 oz
Power Pole Terminations	0.250" quick connects
Coil Terminal Connections	0.250" quick connects
Operating Temperature	-40 °C to 65 °C; -40 °F to 150 °F
Mounting Method	Chassis Mount

Coil Technical Data

NOMINAL COIL VOLTAGE (VAC)	MINIMUM PICKUP VOLTAGE (VAC)	DROP-OUT VOLTAGE (VAC)	NOMINAL COIL RESISTANCE $\pm 10\%$ (OHM @ 21 °C)	NOMINAL COIL POWER (VA)
24	18	6-15	36	4
120	96	20-70	880	4
240	192	40-140	3800	4
277	221.6	50-165	5485	4

NOMINAL COIL VOLTAGE (VDC)	MINIMUM PICKUP VOLTAGE (VDC)	DROP-OUT VOLTAGE (VDC)	NOMINAL COIL RESISTANCE $\pm 10\%$ (OHM @ 21 °C)	NOMINAL COIL POWER (W)
12	9	1.2	82	1.7
22	16.5	2.2	294	1.7
24	18	2.4	350	1.7
28	21	2.8	470	1.7

Part Numbering System



Note: Not all combinations of Part Number suffixes are listed. Contact Littelfuse for details.

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Standard Fault Short Circuit Rating

Suitable for use on a circuit capable of delivering not more than 5k rms symmetrical amperes, 277 Volts maximum at 400% of fuse and circuit breaker rating.

Ordering Information

FULL LOAD CURRENT (A)			LOCKED ROTOR CURRENT	HORSEPOWER RATING		RELAY POLE FORM	ORDERING NO.
INDUCTIVE – NO AT 240 VAC	RESISTIVE – NO AT 277 VAC	RESISTIVE – NC AT 277 VAC	NO AT 240 VAC	NO AT 120 VAC	NO AT 240 VAC		
14	30	N/A	60	1 HP	3 HP	DPNO	HCR-12A*1AA
14	30	3	60	1 HP	3 HP	DPDT	HCR-12C*1AA

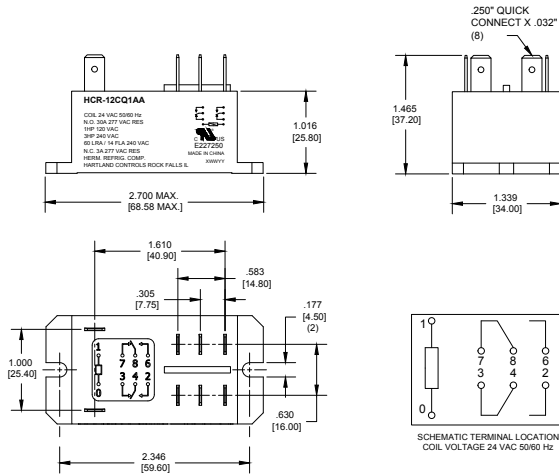
To select other coil voltages, use the Coil Voltage Selection Chart to find the appropriate coil voltage. Replace the * above with the required ordering number suffix. For example, for a 208/240 VAC coil in a double pole normally open relay, the Ordering Number would be HCR-12AU1AA.

Coil Voltage Selection Chart

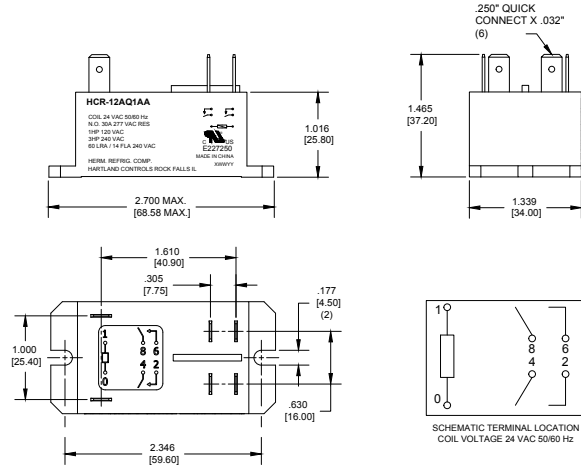
VOLTAGE	24 VAC	120 VAC	208/240 VAC	277 VAC	12 VDC	22 VDC	24 VDC	28 VDC
ORDERING NO. SUFFIX	Q	T	U	V	B	G	C	K

Dimensions inches (mm)

2C - Double-Pole/Double-Throw



2A - Double-Pole/Normally Open



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