

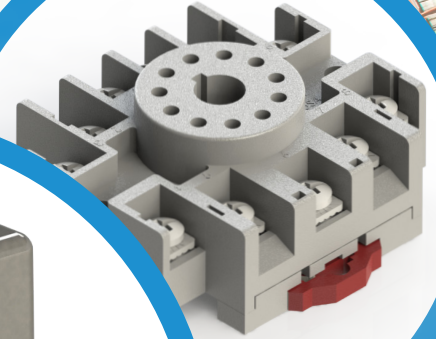


STRUTHERS-DUNN

LEADERS IN RELAYS & CONTROLS • SINCE 1923

**UL/CUL LISTED
CLASS I DIVISION 2 FOR
HAZARDOUS LOCATIONS**

**ATEX and IECEx
Certified Components**



88H Series Hermetically Sealed Relays



UL US
File E 509225



UL US
LISTED

UL Listed when
used with SD Sockets



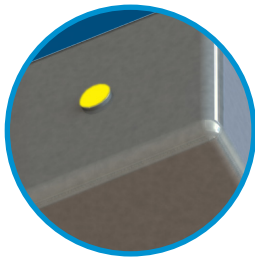
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6/17/2025, Rev. B

Product Attributes

Contact Transfer LED Indicator

LED indicator provides positive confirmation that the Contacts have transferred, not just an indication of power applied to the coil. LED circuit is universal polarity.

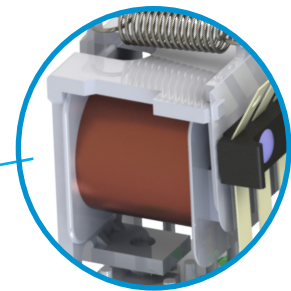
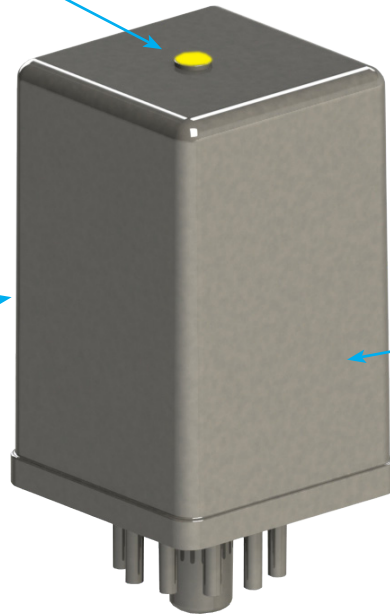


Corrosion Resistant

- Nickel Plated Brass Cover
- Salt water Resistant

Hermetically Sealed Construction

The inert, dry nitrogen environment mitigates corrosion and/or oxidation of the internal relay components including the contacts.



Coil

Coil Temperature Rating 155 °C (Class F)
Optional coil suppression diode that will protect your sensitive equipment from coil transient voltage.

Safety Certifications

UL/CUL Listed for ordinary locations (E52197) and Class I, Div 2 hazardous locations (E509225) with Approved Sockets SK-CIR8-DS or SK-CIR11-DS (E340027).

GENERAL SPECIFICATIONS (@25 °C)

Input

	<u>Nominal Input Voltage</u>	<u>Nominal Coil Resistance, Ω at 25 °C</u>	<u>Nominal Input Voltage</u>	<u>Nominal Coil Resistance, Ω at 25 °C</u>
Coil Voltage Range	6 VDC	32	6 VAC	6.4
	12 VDC	120	12 VAC	18
	24 VDC	470	24 VAC	72
	48 VDC	1800	48 VAC	300
	72 VDC	2590	120 VAC	1700
	115/125 VDC	10,000	240 VAC	7200
Drop-out Voltage	Minimum 10% of nominal VAC, 10% of nominal VDC			
Average Consumption Coil	2.1 VA (AC) 1.2 W (DC)			
Maximum Operating Voltage	110 % (AC/DC)			
Maximum Pickup Voltage	80% of nominal (VDC) 85% nominal (VAC)			

Contacts

Contact Configuration	DPDT, 3PDT / 2 Form C, 3 Form C			
Contact Type	Silver Alloy			
UL Switching Ratings	<u>Amps/Power</u>	<u>Voltage</u>	<u>Cycles</u>	<u>Load</u>
	12A	240 VAC	100k	Resistive
	1/3 HP	120 VAC	6k	Motor
	1/2 HP	240 VAC	100k	Motor
	12A	30 VDC	100k	Resistive
C300		6K	Pilot Duty	
Maximum Switching Voltage	240 VAC, 30 VDC			
Minimum Switching Requirement	25 mA @ 12 VAC, 12 VDC			
Thermal (Carrying) Current	12 Amps			

Performance

Mechanical Life	5,000,000 cycles
Electrical Life, Operations at Rated Current	100,000 cycles
Operate Time (Response Time) - On	20ms
Release Time	15ms
Release Time for DC relays incorporating Coil Suppression Diode (Suffix "V")	25ms
Dielectric Strength (Across Open Contacts)	1000 Vrms
Dielectric Strength (Between Parts of Opposite Polarity)	1500 Vrms

Environment

Ambient Temperature - Storage	-40 to +85 °C
Ambient Air Temperature around the device - Operation	AC Coils: -20 to +40 °C / DC Coils: -20 to +60°C
Temperature Code for Hazardous Locations	T4A: +40 °C (+104 °F) for AC Coils +60 °C (+ 104 °F) for DC Coils



Hazardous Locations Conformance/Approvals

Designation	Identification	Certificate/File reference
UL-USA CUL-Canada	Class I, Division 2, Groups A,B,C and D	E509225
ATEX	II 3 G Ex nC IIC Gc	UL 22 ATEX 2876U
IECEX	Ex nC IIC Gc	IECEX UL 22.0084U

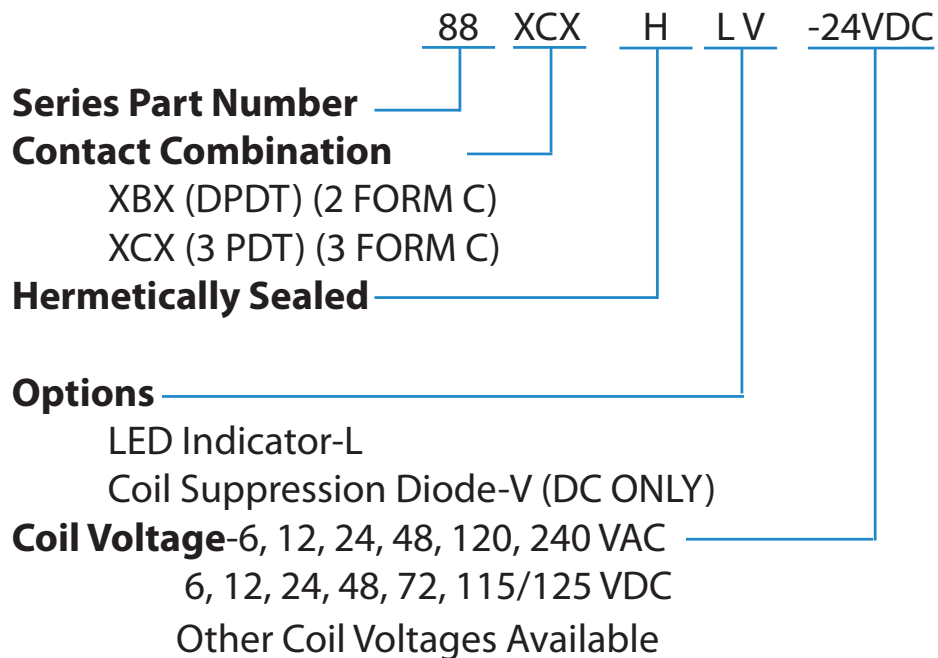
Environmental Product Compliance

REACH free of SVHC	YES
Free of PFAS	YES
EU RoHS Directive	Pro-active Compliance

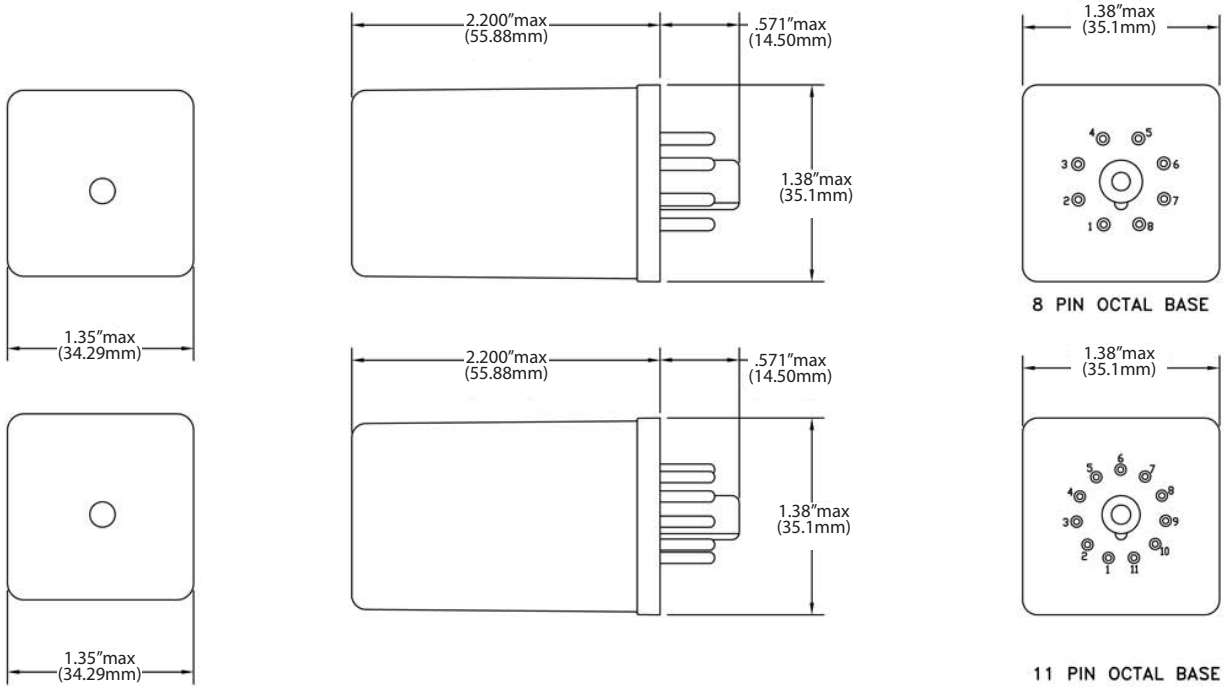
Miscellaneous

Optional Contact Transfer Indicator-Code "L"	Yellow LED
Weight	130 grams
Component Type	Hermetically Sealed Relay
Mounting Type	8 or 11 Pin Octal Socket Mount

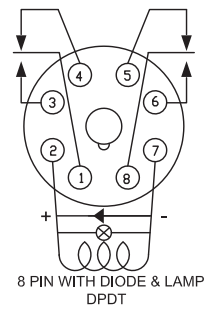
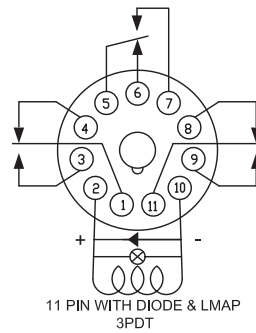
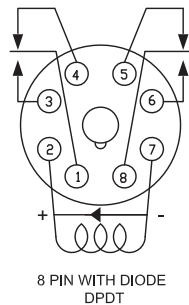
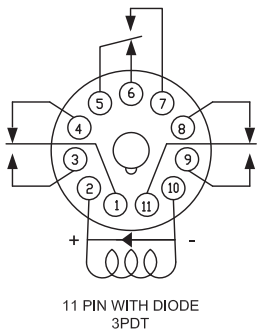
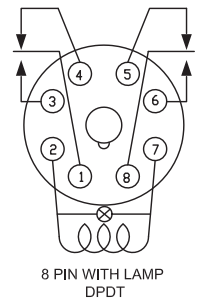
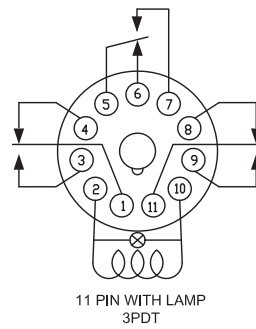
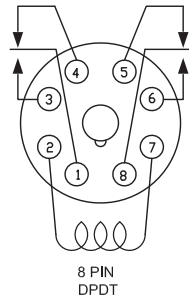
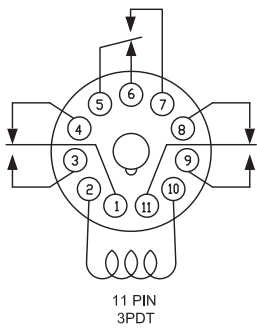
Series 88 Ordering Code



Outline Dimensions



Wiring Diagrams-Bottom View

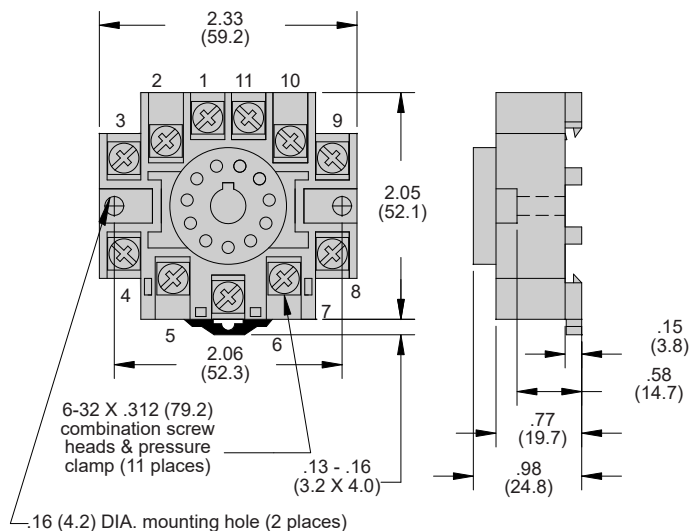
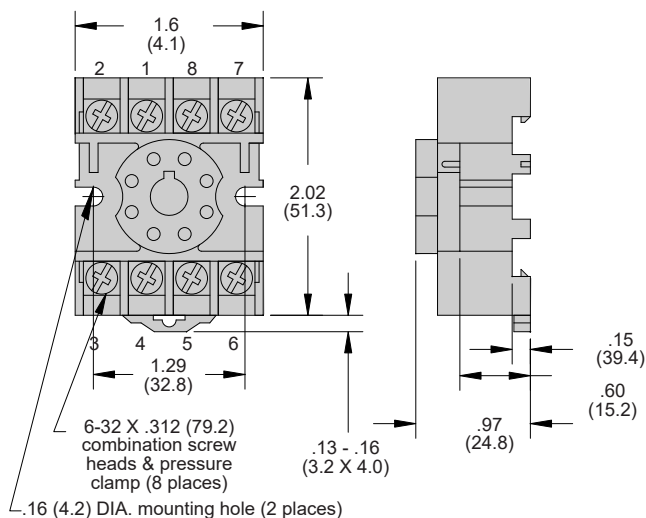


Outline Dimensions - Sockets

8 Pin Socket-SK-CIR8-DS



11 Pin Socket-SK-CIR11-DS



Retaining Clips are not required when Struthers-Dunn
Relays and Sockets are used together.



A 100% Employee Owned Company

100 Years of Engineering and Manufacturing of Electrical/Mechanical and
Solid-State Relays for various Industries Worldwide!



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