IDEM SCR-2H Dual Channel Two-Hand Control Safety Relays

SCR2H-180030

The IDEM Two-Hand Control Safety Relay is designed in a compact housing. Two-Hand Control monitoring protects operators and machinery during tasks that require the machine to be clear. It is intended for use in safety Circuts that are designed in accordance with EN 60204-1 for example on presses, punches, and bending tools. This safety relay is designed to achieve Type IIIc Two-Hand Control Device (THCD) per ISO 13851.

Features

- Cyclical monitoring of the output contacts
- Feedback loop for monitoring downstream contactors or expansion modules
- Short circuit and ground fault monitoring
- Compact 22.5 mm housing suitable for DIN rail mounting
- Two NC output contacts

Safety Data per EN 13849-1	
Category	4
Performance level	Ple
$MTTF_d$	High (100 years)
DC_{avg}	High (99%)
Safety Data per IEC/EN 62061	
Sil	SIL3
HFT	1
DC_{avg}	>90%
SFF	95%
PHD_{avg} (T=20a)	$>3x10^{-8}$

SCR-2H Dual Channel Safety Relays						
Part Number	*Price*	*Type*	*Voltage*	*Outputs*	*Connection*	*Drawing*
SCR2H-180030	$410.00	Two-hand control	24V AC/DC	2 NO	Fixed screw terminals	PDF

SCR21 Series Specifications	
General Specifications	
Temperature	-20° to +55°C [-4° to +131°F]
Altitude	<2000m [6562ft]
Degree Of Protection	IP20
Housing	UL94 V-0 thermoplastic
Weight	160g (5.64 oz)
Agency Approvals and Standard	cULus, CE, TUV
Terminal Designation per EN 50 005	0.15 to 2.5 mm^2 [26 to 14 AWG]
Input Specifications	
Nominal Voltage	24V AC/DC
Voltage Range	90-110%
Maximum Consumption	1.5 W (24V AC/DC)
Nominal Frequency	50Hz-60Hz
Control Voltage	24VDC
Control Current	<100mA
Short Circuit Protection	Internal PTC (Positive Temperature Coefficient) resistor
Over Voltage Protection	Internal VDR (Voltage Dependent Resistor)
Output Specifications	
Mechanical Life	10×10^6
Contact Type	2 NC positively driven contacts
Operate Delay	<20ms
Release Delay	<20ms
Maximum Switching Voltage	250V
Thermal Current (I_{th})	Max. 12A
Short Circuit Strength	Minimum Contact Fuses - 6A slow blow, 8A fast blow, or 10A gG
Switching Capacity	AC-15 230VAC, 3A; DC-13 24VDC, 3A
Switching Frequency	Max. 360 switching cycles/hr

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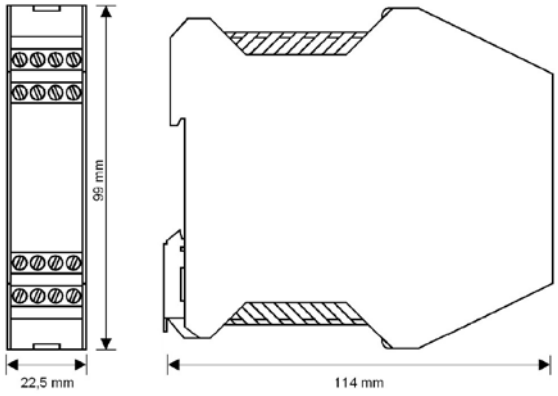
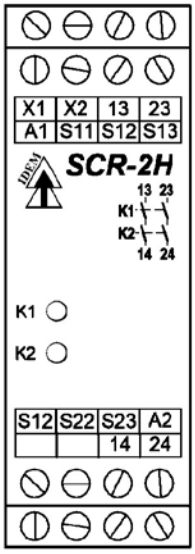
Dimensions



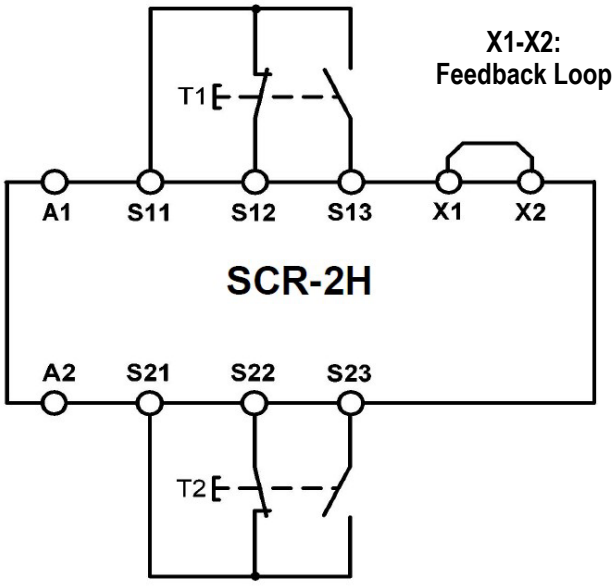
LED Diagnostics

When Safety Relay In Operation	
Power	***Power applied to device***
K1	Internal relay safety ouput contacts closed
K2	Internal relay safety output contacts closed

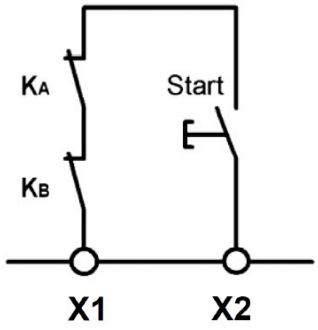


Applications

Wiring of the SCR-2H with two-hand pushbuttons



Feedback wiring



Contactor Manual Feedback

Safety Products

Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

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