

PSR-SPP- 24UC/ESM4/3X1/1X2/B

Order No.: 2963925



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2-channel safety relay for emergency off and safety door circuits, 3 N/O contacts, 1 N/C contact, undelayed, with start button monitoring for category 4 / EN 954-1, pluggable connecting terminal blocks, width: 22.5 mm

Commercial data	
EAN	4017918904760
Pack	1 Pcs.
Customs tariff	85364900
Weight/Piece	0.251 KG
Catalog page information	Page 21 (IF-2007)

Product notes

WEEE/RoHS-compliant since:
10/25/2007



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Technical data

Input data	
Nominal input voltage U_N	24 V AC/DC
Input voltage range in reference to U_N	0.85 ... 1.1

Typical input current at U_N	140 mA AC
	65 mA DC
Voltage at input/start and feedback circuit	Approx. 24 V DC
Typical response time	45 ms
Typical release time	45 ms (Single-channel)
	20 ms (two-channel)
Concurrence input 1/2	Infinite
Recovery time	Approx. 1 s
Max. permissible overall conductor resistance	Approx. 22 Ω (Input and start circuits at U_N)

Output data

Contact type	3 enabling current paths, 1 signaling current path
Contact material	AgSnO ₂ , + 0.2 μ m Au
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	6 A
Inrush current, minimum	25 mA
Sq. Total current	$72 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + I_3^2)$
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0$ ms)
	288 W (48 V DC, $\tau = 0$ ms)
	110 W (110 V DC, $\tau = 0$ ms)
	88 W (220 V DC, $\tau = 0$ ms)
	1500 VA (250 V AC, $\tau = 0$ ms)
Maximum interrupting rating (inductive load)	42 W (24 V DC, $\tau = 40$ ms)
	42 W (48 V DC, $\tau = 40$ ms)
	42 W (110 V DC, $\tau = 40$ ms)
	42 W (220 V DC, $\tau = 40$ ms)
Switching capacity min.	0.4 W
Output fuse	6 A fast blow
	4 A circuit-breaker C

General data

Length	112 mm
Width	22.5 mm
Height	114.5 mm

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Service life mechanical	Approx. 10 ⁷ cycles
Mounting position	Any
Category in acc. with EN 954-1	4
Stop category	0
Name	Air and creepage distances between the power circuits
Standards/regulations	DIN EN 50178/VDE 0160
Rated surge voltage / insulation	4 kV / basic insulation (safe isolation, increased isolation and 6 kV between input circuit and output contact current paths.)
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Type of connection	Spring-cage conn.

Certificates / Approvals

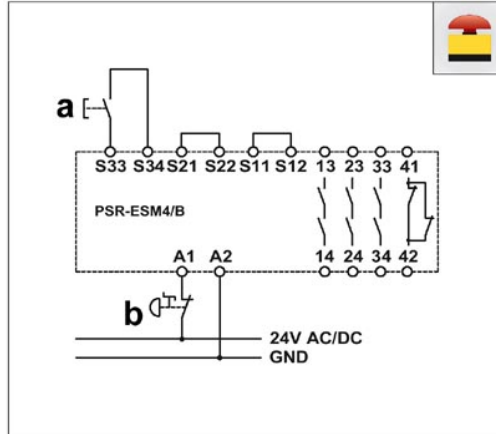
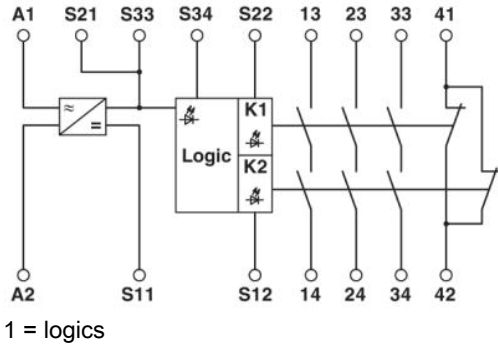


Certification CUL Listed, UL Listed

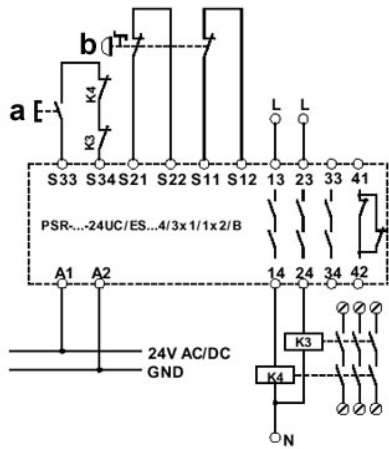
Certifications applied for: TUEV-RH

Drawings

Circuit diagram



a = RESET
 b = Emergency stop
 One-channel emergency stop circuit with manual activation, suitable up to safety category 2



a = RESET
 b = Emergency stop
 Two-channel emergency-stop circuit with manual activation and monitored contact expansion (automatic activation: Bridge on S33/S35), suitable up to safety category 3.