Extract from the online catalog

PSR-SPP- 24DC/ESD/5X1/1X2/300

Order No.: 2981431

The illustration shows the versions with screw connection

http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2981431

Safety relay with adjustable delay time 0-300 s, spring-cage version

Commercial data	
EAN	4017918975234
Pack	1 Pcs.
Customs tariff	85044090
Weight/Piece	0.47003 KG
Catalog page information	Page 24 (IF-2007)

Product notes

WEEE/RoHS-compliant since: 03/06/2007

http://www.download.phoenixcontact.com
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.85 ... 1.1
Typical input current at U_N	155 mA DC
Voltage at input/start and feedback circuit	Approx. 24 V DC

Typical response time	70 ms (Monitored/manual start)
	600 ms (automatic start)
Typical release time	20 ms (undelayed contacts)
Concurrence input 1/2	Infinite
Recovery time	1 s
Max. permissible overall conductor resistance	11 Ω (Input and start circuits at U_N)

Output data

Contact type	3 enabling current paths undelayed, 2 delayed, 1 signaling current path undelayed
Contact material	$AgSnO_2$
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC
Limiting continuous current	6 A (N/O contact)
	3 A (N/C contact)
Maximum inrush current	6 A
Inrush current, minimum	25 mA
Sq. Total current	55 A^2 ($I_{TH}^2 = I_1^2 + I_2^2 + I_3^2 + I_4^2 + I_5^2$)
Interrupting rating (ohmic load) max.	144 W (24 V DC, τ = 0 ms)
	288 W (48 V DC, τ = 0 ms)
	77 W (110 V DC, τ = 0 ms)
	88 W (220 V DC, τ = 0 ms)
	1500 VA (250 V AC, τ = 0 ms)
Maximum interrupting rating (inductive load)	42 W (24 V DC, τ = 40 ms)
	40 W (48 V DC, τ = 40 ms)
	35 W (110 V DC, τ = 40 ms)
	33 W (220 V DC, τ = 40 ms)
Switching capacity min.	0.4 W
Output fuse	6 A fast blow (undelayed)
	4 A circuit-breaker C (undelayed)
	10 A gL/gG NEOZED (delayed)

General data

Length	112 mm
Width	45 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	3 (For delayed contacts)
	4 (For non-delayed contacts)
Stop category	0 (For non-delayed contacts)
	1 (For delayed contacts)
Name	Air and creepage distances between the power circuits
Standards/regulations	DIN EN 50178/VDE 0160
Rated surge voltage / insulation	4 kV / basic isolation, (safe isolation, increased isolation and 6 kV between the output contact current paths **(13/14, 23/24, 33/34)** and the remaining current paths and the output contact current paths **(13/14, 23/24, 33/34)** themselves.)
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

Connection data

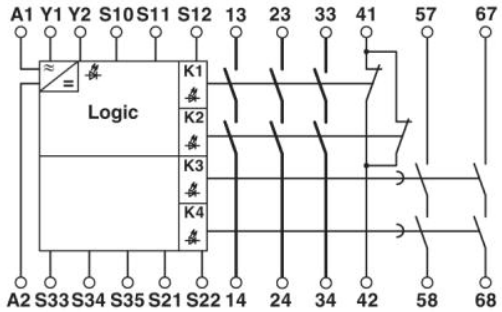
Conductor cross section solid min.	0.2 mm^2
Conductor cross section solid max.	1.5 mm^2
Conductor cross section stranded min.	0.2 mm^2
Conductor cross section stranded max.	1.5 mm^2
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Type of connection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

Certificates / Approvals

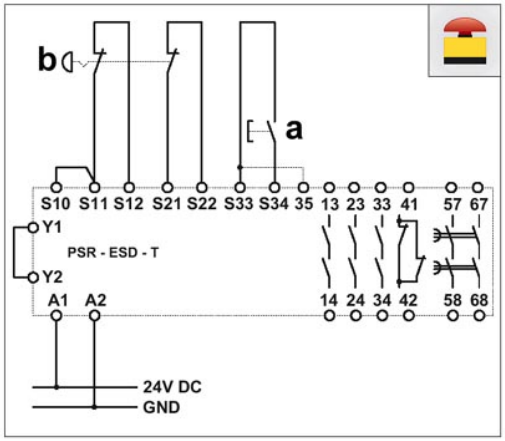
Certification	BG, CUL Listed, UL Listed

Drawings

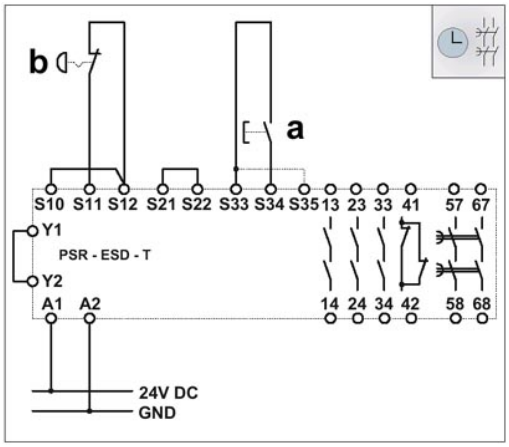
Circuit diagram



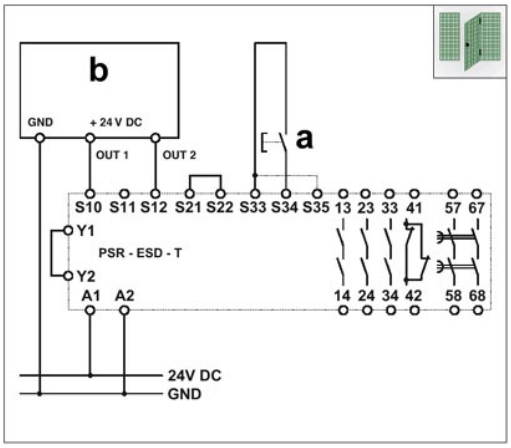
1 = logics



a = RESET
b = Emergency stop
Two-channel emergency stop circuit with cross circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation), suitable up to safety category 4.



a = RESET
b = Emergency stop
Single-channel emergency stop circuit with monitored reset button (bridge on S33/S35: Automatic activation), suitable up to safety category 2, safety category 4 only when automatically disconnecting switches are used and cables are installed in separate plastic sheaths.



a = RESET
b = semiconductor output
Two-channel limit switch monitoring with semiconductor output and monitored reset button (bridge on S33/S35: Automatic activation), suitable up to safety category 4 depending on the limit switch.