

WSR-ES1-301C-S

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



General ordering data

Order No.	2825510000
Type	WSR-ES1-301C-S
GTIN (EAN)	4064675359746
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	114 mm	Depth (inches)	4.488 inch
Height	100 mm	Height (inches)	3.937 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	168 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-20 °C...60 °C
Operating temperature, min.	-20 °C	Operating temperature, max.	60 °C
Humidity	10...90 %, no condensation		

Probability of failure

SIL in compliance with IEC 61508	3	SFF	99 %
PFH in $1 \cdot 10^{-9}$ per hour	0.309		

Input (power supply)

Connection designation	A1, A2	Rated control voltage	24V AC/DC -15% +10%
Current consumption	≤ 90 mA at 24 V DC, ≤ 240 mA at 24 V AC	Response time	≤ 100 ms

Starting circuit

Anschlussbezeichnung	S12, S34	Function	ON
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Monitoring circuit

Connection designation	S11, S12, S21, S22		
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Output (release circuit)

Connection designation	13, 14, 23, 24, 33, 34	Contact design	3 NO contacts
Contact base material	AgSnO ₂ 0.2µm Au	Max. permissible switching current	5 A
Max. switching capacity	AC-15, 5 A/230 V, DC-13, 5 A/24 V	Turn-on time	≤ 300 ms
Turn-off time	≤ 30 ms		

Feedback output

Connection designation	41, 42	Contact design	1 NC contact
Max. switching current.	5 A		

Safety-related basic specifications

Hardware fault tolerance (HFT)	1	Safety category	SIL 3
Safety standard	EN 60947-5-1, EN ISO 13849, IEC 61508, IEC 62061, EN 60204-1	Safe Failure Fraction (SFF)	99 %

General data

Operating altitude	≤ 2000 m, above sea level	Rail	TS 35
Colour	black, yellow		

Creation date March 16, 2023 9:06:42 AM CET

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Insulation coordination

Insulation coordination according to	EN 60947-5-1	Rated voltage	250 V
Pollution severity	2	Surge voltage category	III
Dielectric strength, Input/Output	1.5 kV _{eff} / 1 min.	Impulse withstand voltage	input/output: 6 KV(1.2/50 us), output/output: 4 KV(1.2/50 us)
Protection degree	IP20		

Connection data

Wire connection method	Screw connection	Stripping length, rated connection	7 mm
Wire cross-section, solid, min.	0.2 mm ²	Wire cross-section, solid, max.	4 mm ²
Wire connection cross section, finely stranded, min.	0.2 mm ²	Wire connection cross section, finely stranded, max.	4 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	4 mm ²

Classifications

ETIM 6.0	EC001449	ETIM 7.0	EC001449
ETIM 8.0	EC001449	ECLASS 9.0	27-37-18-19
ECLASS 9.1	27-37-18-19	ECLASS 10.0	27-37-18-19
ECLASS 11.0	27-37-18-19	ECLASS 12.0	27-37-18-19