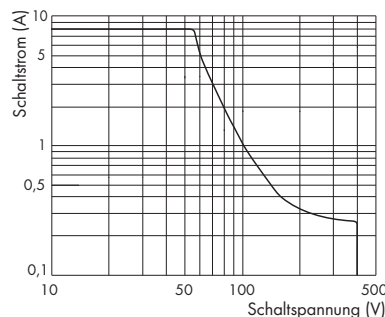


If required a ventilation hole (e) can be made in the cover, reducing the degree of protection from IP67 to IP30.	Safety relay type SDS SF4D with 4 break contacts and 4 make contacts with 1 relay with universal mounting carrier with force-guided contacts, type B	
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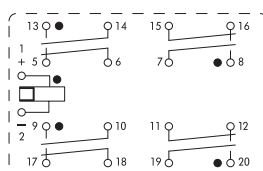


DC load limit curve

If an outer contact (20) should weld then the forced operated inner contact (12) driven by the actuator (d) remains open. The rotating armature (c) remains free to move. The unaffected contact pairs can operate normally, (i. e. their function to make or break remains unaffected).

If an inner contact should weld (12) then the movement of the rotating armature (c) is blocked via the operator (d). Open contacts of all four contact pairs remain open. This arrangement corresponds to conventional, forced contact operation.

If required a breathing hole can be made in the cover. However be aware that the degree of waterproof protection will reduce from IP 67 to IP 30!



Description	V_N	I_N	Item No.	Pack. Unit
Switching relay module	5 V DC	104 mA	288-412	1
	12 V DC	48 mA	288-413	1
	24 V AC/DC	26 mA	288-414	1
	48 V AC/DC	16.7 mA	288-415	1
	60 V AC/DC	15.7 mA	288-416	1
	230 V AC	10 mA	288-418	1

Technical Data

Coil:		
Input voltage range	$V_N - 15 \% \dots + 10 \%$	
Contacts:		
Contact material	AgSnO ₂	
Max. continuous current	6 A	
Max. make current	20 A	
Max. switching voltage	250 VAC	
Max. switching power (resistive)	150 W / 1500 VA	
Recommended minimum load	$\geq 10 \text{ V} / 10 \text{ mA}$	
Pull-in/drop-out/bounce time typ.	18ms / 21ms / 4 ms	
Mechanical life	1×10^7 switching operations	
Mechanical life at max. load (resistance)	1×10^5 switching operations	
General specifications:		
Nominal voltage to EN 60664-1	250V / 2.5kV / 2	
Dielectric strength, contact-coil (AC, 1 min)	2 kV _{rms}	
Dielectric strength contact-contact (AC, 1 min)	1.5 kV _{eff}	
Ambient operating temperature at V_N	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +80 °C	
Dimensions (mm) L x W x H	63.5 x 40 x 85	
incl. mounting carrier and relay	Height from upper-edge of DIN 35 rail	
Wire connection	CAGE CLAMP® (WAGO 256 Series)	
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 12	
Strip length	5 ... 6 mm / 0.22 in	
Standards/specifications	EN 60664-1; EN 50205; EN 61810-1	
Relay approvals	ESTI (SEV): 09.1133 UL: E120782 TÜV: 968/EZ 116.02/09	
Accessories		
WMB Multi marking system for mounting carrier	see from page 506	
Marker strips for mounting carrier	white 709-198 / transparent 709-197	