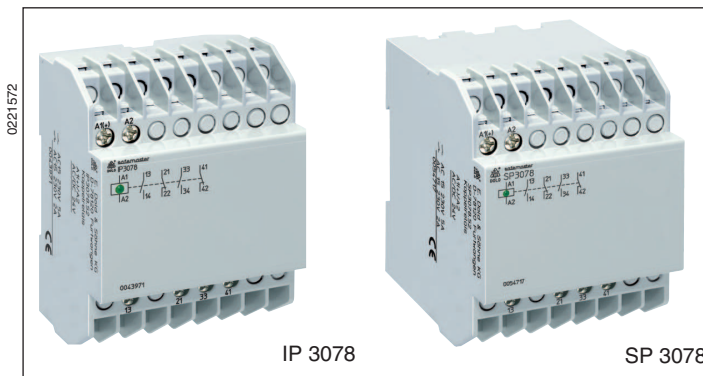
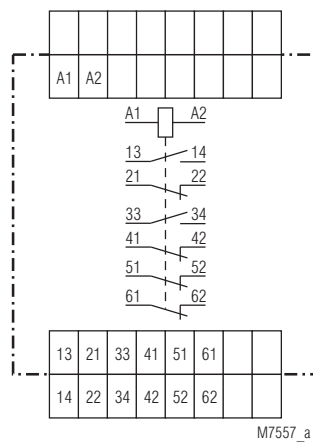
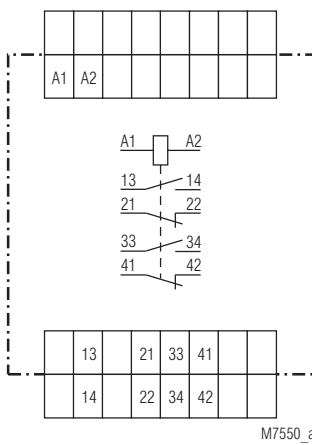


SAFEMASTER Interface Module IP 3078, SP 3078



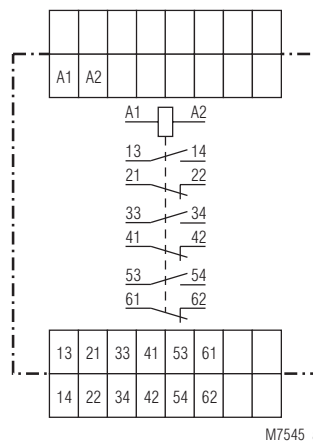
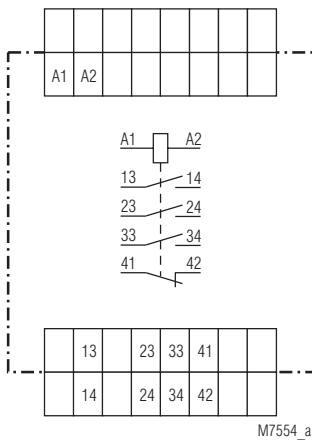
- According to IEC/EN 60 947-5-1, IEC/EN 61 810-1
- Forcibly guided contacts according to IEC 61810-3
- Max. 6 output contacts
- High thermal current $I_{th} = 8 \text{ A}$
- LED for operating state
- Devices available in 2 enclosure versions:
 - IP 3078: depth 61 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - SP 3078: depth 100 mm, with terminals at the top
- Width 70 mm

Circuit Diagrams



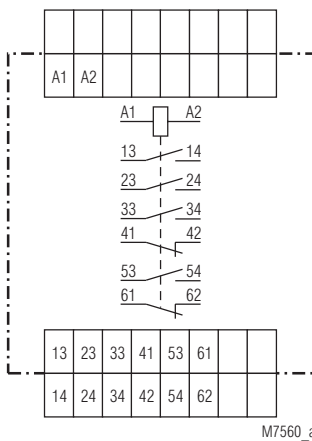
IP 3078.52, SP 3078.52

IP 3078.50, SP 3078.50



IP 3078.48, SP 3078.48

IP 3078.18, SP 3078.18



IP 3078.54, SP 3078.54

Approvals and Markings



Indicators

green LED: on, when supply connected

Connection Terminals

Terminal designation	Signal designation
A1	+ / L
A2	- / N
13, 14; 23, 24; 33, 34; 53, 54	Forcibly guided NO contacts for release circuit
21, 22; 41, 42; 51, 52; 61, 62	Forcibly guided NC contacts for release circuit

Technical Data

Input

Nominal voltage U_N : AC/DC 24 V
AC 220 ... 240 V

Voltage range: 0.8 ... 1.1 U_N

Nominal consumption:
IP 3078.52, SP 3078.52: 1 W / 2 VA
IP 3078.18, SP 3078.18: 1.5 W / 4 VA

Nominal frequency: 50 / 60 Hz

Frequency range: $\pm 5 \%$ of nominal frequency

Output

Contacts

IP 3078.52, SP 3078.52: 2 NO and 2 NC contacts
IP 3078.50, SP 3078.50: 2 NO and 4 NC contacts
IP 3078.48, SP 3078.48: 3 NO and 1 NC contacts
IP 3078.18, SP 3078.18: 3 NO and 3 NC contacts
IP 3078.54, SP 3078.54: 4 NO and 2 NC contacts

Response time: typ. 25 ms
Release time: typ. 20 ms
Contact type: Spring contact
Nominal output voltage: min. AC/DC 10 V
max. DC 250 V, AC 230 / 400 V

Thermal current I_{th} : 8 A
(see continuous current limit curve)

Switching capacity

to AC 15:
NO contact: 3 A / AC 230 V IEC/EN 60 947-5-1
NC contact: 2 A / AC 230 V IEC/EN 60 947-5-1

Electrical life IEC/EN 60 947-5-1
to AC 15 at 2 A, AC 230 V: 2.5 x 10⁵ switching cycles

Permissible switching frequency: max. 36 000 switching cycles / h

Mechanical life: $\geq 30 \times 10^6$ switching cycles

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 60 °C	
Altitude:	< 2,000 m	
Clearance and creepage distances		
rated impulse voltage / pollution degree:	4 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation		
80 MHz ... 6,0 GHz:	20 V / m	IEC/EN 61 000-4-3
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltages between		
wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
HF-wire guided:	20 V	IEC/EN 61 000-4-6
Interference suppression:	Limit value class B EN 55011	
Degree of protection		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm IEC/EN 60 068-2-6 frequency 10 ... 55 Hz	
Climate resistance:	20 / 060 / 04	IEC/EN 60 068-1
Terminal designation:	EN 50 005	
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46 228-1/-2/-3/-4	
Wire fixing:	Captive terminal screw M3.5 clamping piece as per IEC 60 664-1 / IEC/EN 60 999-1	
Fixing torque:	0.8 Nm	
Mounting:	DIN rail	IEC/EN 60 715
Weight		
IP 3078:	225 g	
SP 3078:	274 g	

Dimensions

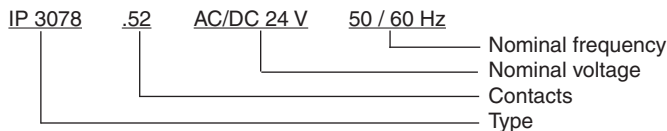
Width x height x depth

IP 3078:	70 x 90 x 61 mm
SP 3078:	70 x 90 x 100 mm

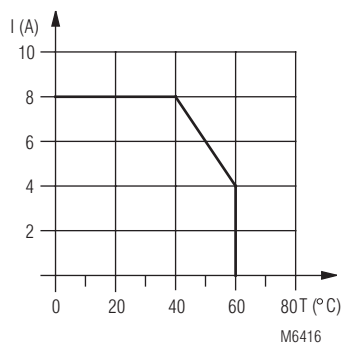
Standard Type

IP 3078.52 AC/DC 24 V	
Article number:	0043971
• Output:	2 NO, 2 NC contacts
• Nominal voltage U _N :	AC/DC 24 V
• Width:	70 mm
IP 3078.52 AC/DC 24 V	
Article number:	0054717
• Output:	2 NO, 2 NC contacts
• Nominal voltage U _N :	AC/DC 24 V
• Width:	70 mm

Ordering Example



Characteristic



Continuous current limit curve