SAFEMASTER
Interface Module
IP 3078, SP 3078

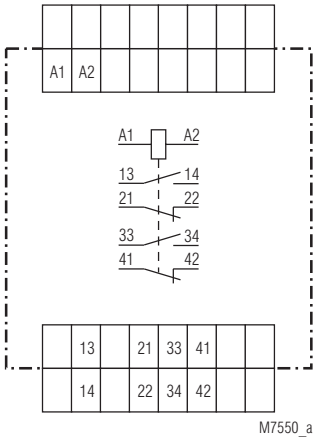
0221572

IP 3078

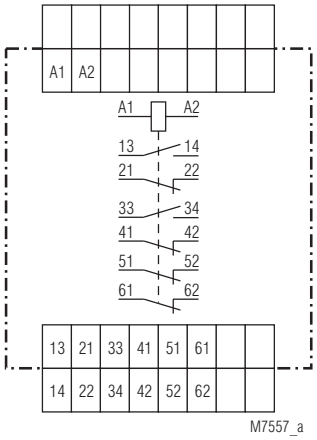
SP 3078

- According to IEC/EN 60 255, IEC/EN 61 810-1
- Forcibly guided contacts according to EN 50 205
- Max. 6 output contacts
- High thermal current I_{th} = 8 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

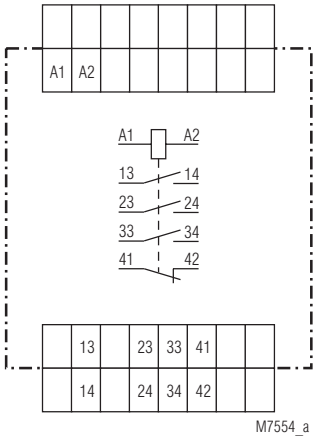
Circuit Diagrams



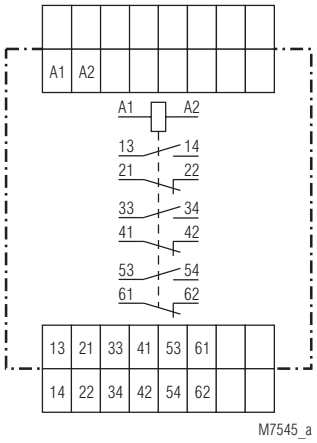
IP 3078.52, SP 3078.52



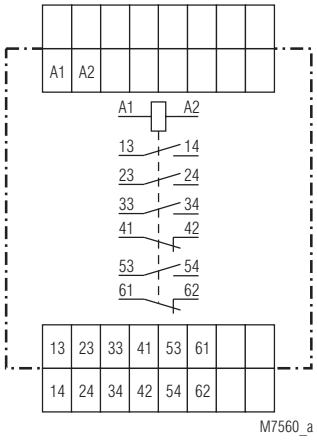
IP 3078.50, SP 3078.50



IP 3078.48, SP 3078.48



IP 3078.18, SP 3078.18



IP 3078.54, SP 3078.54

Approvals and Marking

CE

Indication

LED comes on when operating voltage present

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:	± 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. UC 10 V max. DC 250 V, AC 400 V	
Thermal current I_{th}:	4 x 8 A (see continuous current limit curve)	
Switching capacity		
to AC 15:		
NO contact:	5 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 10^5 switching cycles	
Permissible switching frequency:	max. 36 000 switching cycles / h	
Mechanical life:	≥ 30 x 10^6 switching cycles	

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60 °C	
Clearance and creepage distances		
rated impuls voltage / pollution degree:	4 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V / m	IEC/EN 61 000-4-3
Fast transients:	2 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
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 frequency 10 ... 55 Hz	IEC/EN 60 068-2-6
Climate resistance:	20 / 060 / 04	IEC/EN 60 068-1
Terminal designation:	EN 50 005	
Wire connection:	2 x 2.5 mm² solid or 2 x 1.5 mm² 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	
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

Safety Related Data

Probability of dangerous Failure per Hour (PFH_D):	$1.58 \cdot 10^{-7}$ 1/h
Safe Failure Fraction (SFF):	68.2 % (AC/DC)
Proof Test Intervall (T1):	20 Years

Info The values stated above are valid for the standard type. Safety data for other variants are available on request

Standard Type

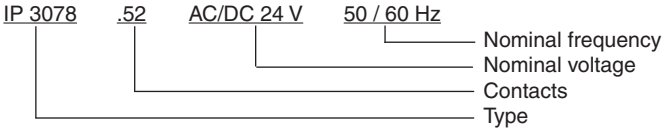
IP 3078.52 AC/DC 24 V

Article number:	0043971
• Output:	2 NO, 2 NC contacts
• Nominal voltage U_N:	AC/DC 24 V
• Width:	70 mm

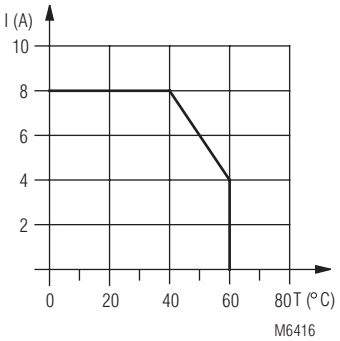
IP 3078.52 AC/DC 24 V

Article number:	0054717
• Output:	2 NO, 2 NC contacts
• Nominal voltage U_N:	AC/DC 24 V
• Width:	70 mm

Ordering example



Characteristics



Continuous current limit curve