Interface relays
Input Interface Relay - Output Interface Relay
CA 3056, CB 3056, CC 3056

0255081


CA 3056


CB 3056


CC 3056

- According to IEC/EN 60 255, IEC/EN 61 810-1
- Protective separation acc. to IEC/EN 61 140, IEC/EN 60 947-1: 6 kV/2, at CA/CB
- As option goldplated contacts (10 µm Au) to switch low loads
- LED indication
- Optionally with 1 NO contact, 1 NC contact, 1 C/O contact, 2 C/O contacts, 2 NO contacts
- Optionally with MOV on input to achieve higher surge immunity
- Width: 11.5 mm

Approval and Markings

CE

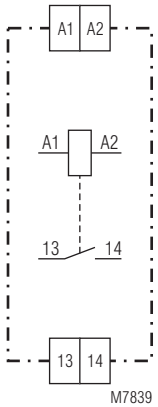
Application

- Link between the control and the power level
- For separating potentials

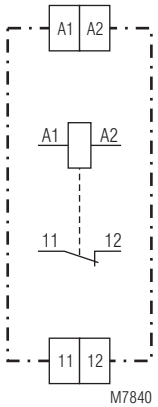
Indication

LED	on, when supply connected

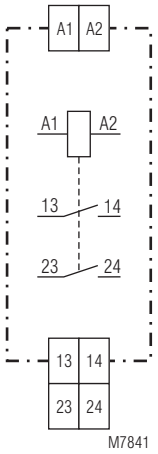
Circuit Diagrams



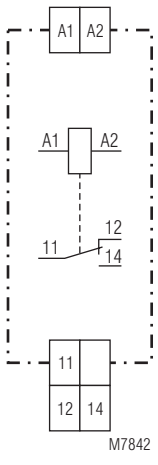
CA 3056.01



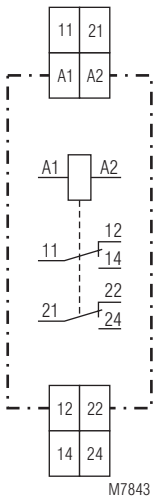
CA 3056.05



CB 3056.02



CB 3056.11



CC 3056.12

Technical Data

Input

Nominal voltage U_N	
CA 3056:	DC 24, 48* V AC 110 ... 130* V, 220 ... 240 V AC/DC 12 V
CB 3056, CC 3056:	AC/DC 24, 48* V AC 110 ... 130* V, 220 ... 240 V * on request
Voltage range	
CA 3056:	DC 90 ... 125 % U_N (residual ripple < 10 %) AC 80 ... 110 % U_N
CB 3056, CC 3056:	DC 80 ... 110 % U_N (residual ripple ≥ 10 ... 48 %)
Nominal consumption:	DC 24 V / 0.5 W AC 230 V / 0.8 VA
Nominal frequency:	50 / 60 Hz
Frequency range:	± 5 %

Output

Contacts	
CA 3056.01:	1 NO contact
CA 3056.05:	1 NC contact
CB 3056.11:	1 C/O contact
CB 3056.02:	2 NO contacts
CC 3056.12:	2 C/O contacts
Operate time:	< 10 ms
Release time:	< 20 ms
Nominal output voltage:	AC 250 V
Thermal current I_{th}:	5 A (not at CA 3056.01/100)
Switching capacity	
to AC 15	
NO contact:	3 A / AC 230 V IEC/EN 60 947-5-1
NC contact:	1 A / AC 230 V IEC/EN 60 947-5-1 (not at CA 3056.01/100) permissible contact-loading capacity at CA 3056.01/100: 0.1...60 V /1...300 mA
Electrical life	
acc. to AC 15 bei 3 A, AC 230 V:	> 8 x 10^5 cycles IEC/EN 60 947-5-1 (not at CA 3056.01/100)

Technical Data

Permissible switching frequency:	20 cycles / s	
Mechanische Lebensdauer:	> 30 x 10^6	

General Data

Nominal operating mode	continuous operation	
Temperature range:	- 20 ... + 60 °C	
Air gap and creepage distance		
rated impulse voltage / pollution degree:	4 kV / 3	IEC 60 664-1
EMC		
Electrostatic discharge (ESD):	6 kV (contact)	IEC/EN 61 000-4-2
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
interference suppression:	Limit value class B	EN 55 011
Degree of protection		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Enclosure:	thermoplastic with VO 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	4.0 mm^2 solid or 2.5 mm^2 stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
Wire fixing	box terminal with wire protection IEC/EN 60 999-1	
Mounting:	DIN rail	IEC/EN 60 715
Weight:		
CA 3056:	45 g	
CB 3056:	50 g	
CC 3056:	55 g	

Dimensions

Width x height x depth	
CA 3056:	11.5 x 60 x 62 mm
CB 3056:	11.5 x 75 x 62 mm
CC 3056:	11.5 x 90 x 62 mm

Standard Type

CA 3056.01 AC/DC 24 V 50 / 60 Hz		
Article number:	0041412	on stock
• Ausgang:	1 NO contact	
• Nominal voltage U_N:	AC/DC 24 V	
• Protective separation acc. to VDE 0106, Teil 101:	6 kV / 2	
• Width:	11.5 mm	

Variants

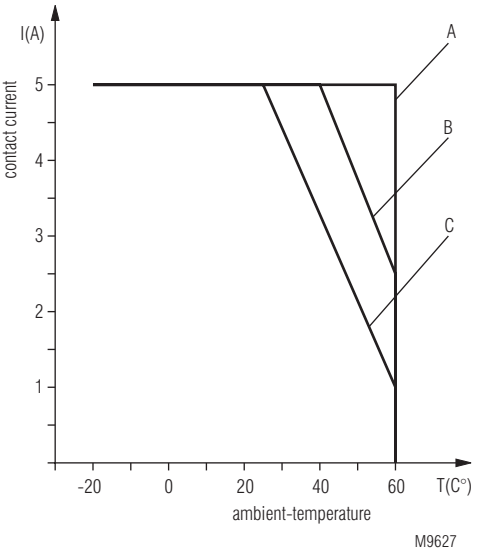
CA 3056._ _ /1_ _,	
CB 3056._ _ /1_ _ :	Contact with 10 µm Au
CC 3056._ _ /_1_:	without protective separation
CA 3056._ _ /_ _1,	
CB 3056._ _ / _ _1:	with MOV on input to achieve higher surge immunity

Ordering example for variants

C_ 3056._ _ / _ _ _ AC 220... 240 V 50/60 Hz

- Nominal frequency
- Nominal voltage
- 0 without MOV
- 1 with MOV
- 0 with protective separation
- 1 without protective separation
- 0 Contact AgNi 10
- 1 Contact AgNi 0.15 with 10 µm Au
- Contacts
- Type:
  - A 4 Terminals
  - B 6 Terminals
  - C 8 Terminals

Characteristic



A = Mounted with 2 cm distance between units
B = Mounted without distance, 1 contact leading current
C = Mounted without distance, 2 contacts leading current

Continouos current limit curve