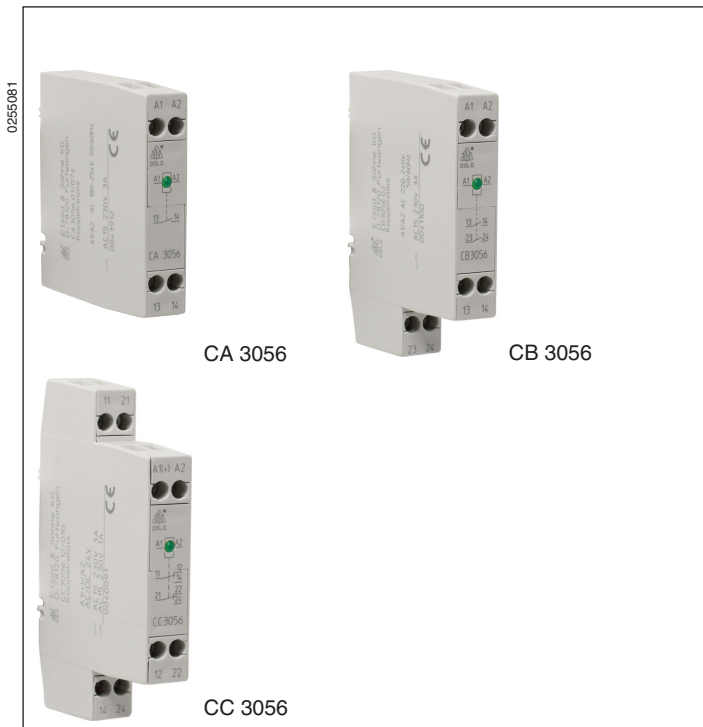


## Interface Modules

### Input Interface Relay - Output Interface Relay 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 Marking



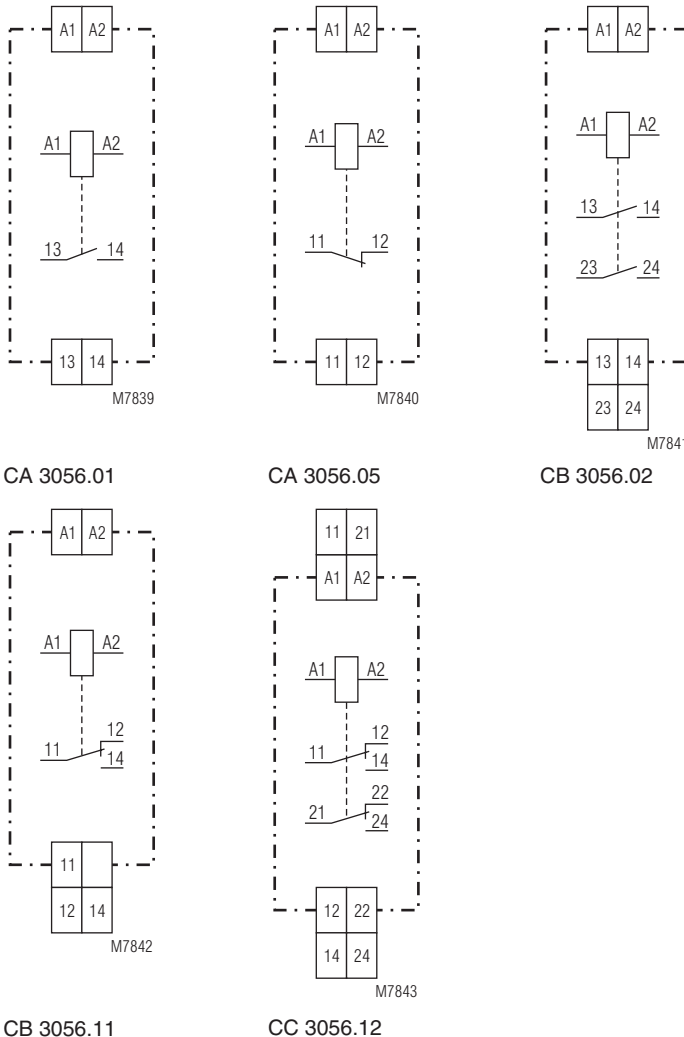
#### Application

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

#### Indication

LED on, when supply connected

#### Circuit Diagrams



#### 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  $\geq$  10 ... 48 %)

##### Nominal consumption:

DC 24 V / 0.5 W  
AC 230 V / 0.8 VA

##### Nominal frequency:

50 / 60 Hz

##### Frequency range:

$\pm$  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<sup>5</sup> 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<sup>6</sup>

### General Data

**Nominal operating mode** continuous operation  
**Temperature range:** - 20 ... + 60 °C

### Air gap and creepage distance

rated impuls 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  
 20 / 060 / 04 IEC/EN 60 068-1

**Climate resistance:** EN 50 005

### Terminal designation:

**Wire connection** 4.0 mm<sup>2</sup> solid or  
 2.5 mm<sup>2</sup> 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<sub>N</sub>: AC/DC 24 V
- Protective separation acc. to VDE 0106, Teil 101: 6 kV / 2
- Width: 11.5 mm

## Variants

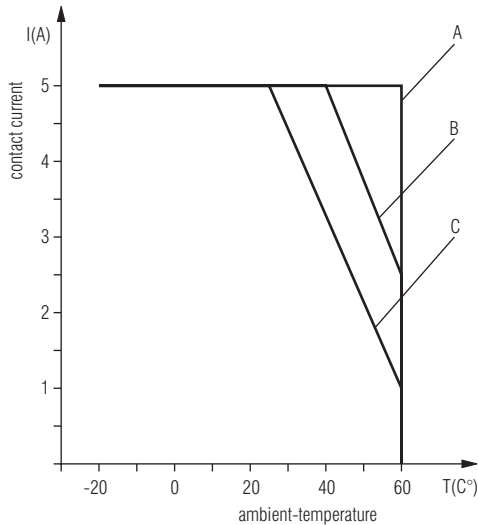
CA 3056.\_\_\_ / 1 \_\_\_,  
 CB 3056.\_\_\_ / 1 \_\_\_: Contact with 10 µm Au  
 without protective separation  
 CC 3056.\_\_\_ / 1 \_\_\_: Contact with 10 µm Au  
 without protective separation  
 CA 3056.\_\_\_ / \_\_\_ 1,  
 CB 3056.\_\_\_ / \_\_\_ 1:  
 with MOV on input to achieve higher  
 surge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



M9627

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

## Continuous current limit curve