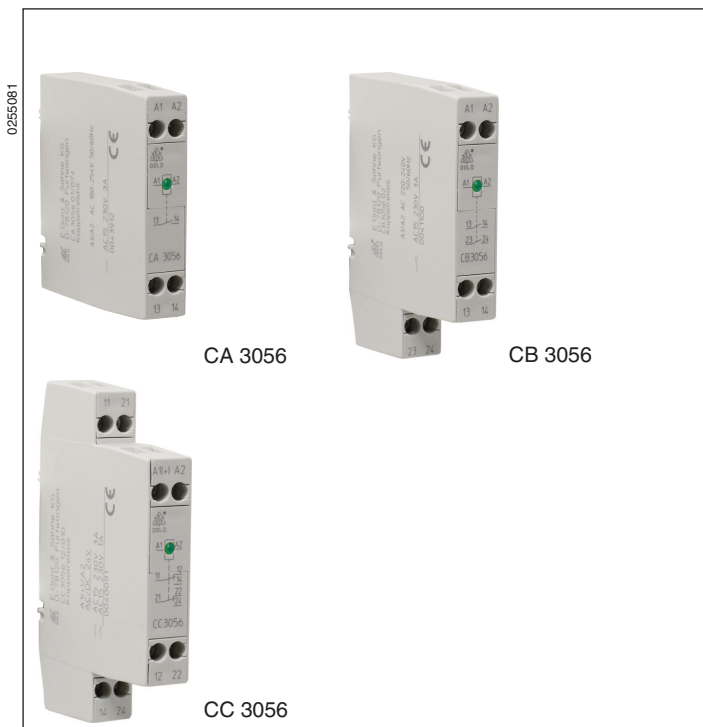


Interface Modules

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 μ m 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



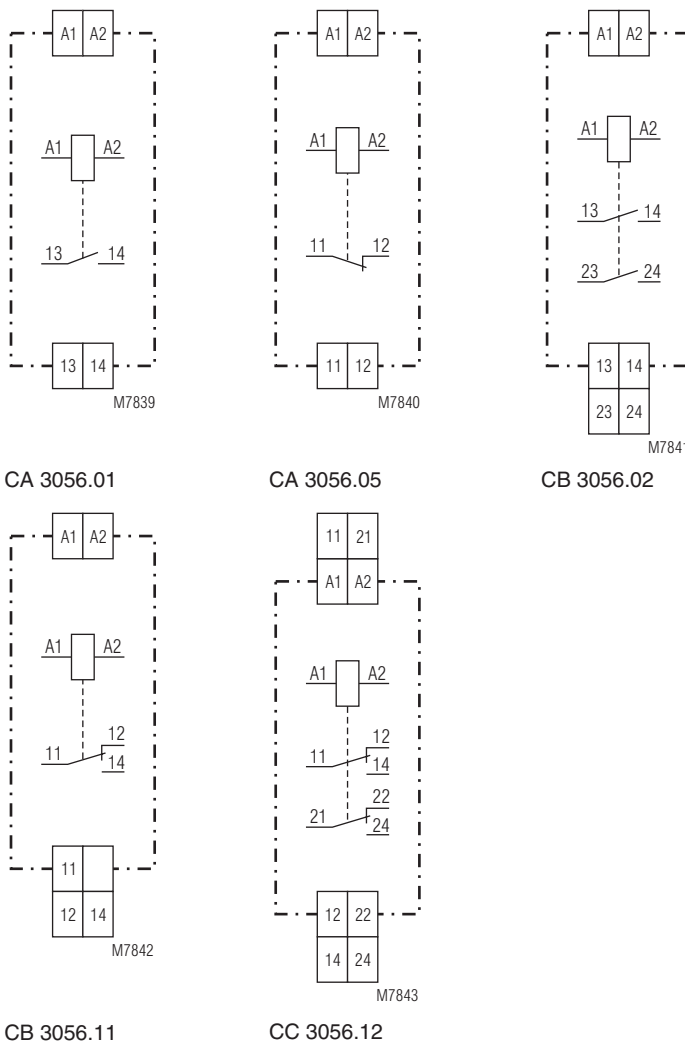
Application

- 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
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 10⁵ 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 10⁶

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

Climate resistance: 20 / 060 / 04 IEC/EN 60 068-1
EN 50 005

Terminal designation: EN 50 005
Wire connection 4.0 mm² solid or
2.5 mm² 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

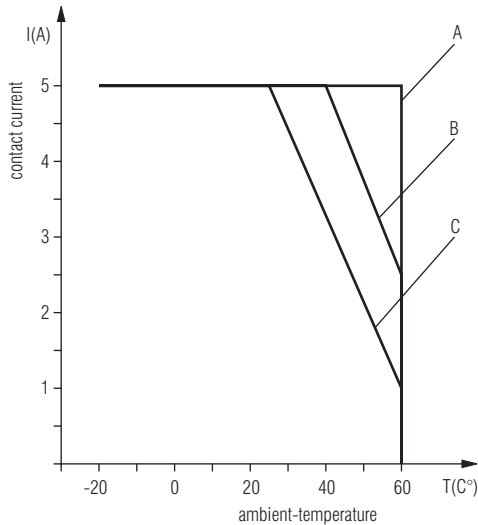
Variants

CA 3056.___ / 1 ___,
CB 3056.___ / 1 ___: Contact with 10 µm Au
without protective separation
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

Continuous current limit curve