



Components and accessories

Quick overview

Components included in this section are designed for installation on panel covers or inside enclosures. The range covers various types of circuit breakers—main, isolating, safety, and emergency—as well as multi-position control switches, standard and illuminated push-buttons, and LED indicators. Additional internal devices, such as AC contactors, thermal and time relays, and miniature relays, are also included. Each of the listed components is covered by HARDO's certification.



Buttons and switches

| AC-12 | AC-15 | DC-13 | AC-3 | AC-23 | U_{imp} | I_{cw} | I_{cm} | Short-circuit protection |
|-----------|----------|----------|-----------|-----------|-----------|-----------|----------|--------------------------|
| 400 V/16A | 400V/10A | 125 V/2A | 400 V/16A | 400 V/16A | 6 kV | 0,4 kA/1s | 0,566 kA | 16A / 500V |

U_{imp} - rated impulse withstand voltage | I_{cw} - rated short-time withstand current | I_{cm} - rated short-circuit making capacity

SERIES 0201-7



| Contacts | Assembly |
|------------|----------|
| 2 + NO, NC | Cover |

SERIES 0201-6



| Contacts | Assembly |
|------------|----------|
| 2 + NO, NC | DIN rail |

SERIES 0201-7



| Contacts | Assembly |
|------------|----------|
| 4 + NO, NC | Cover |

SERIES 0201-6



| Contacts | Assembly |
|------------|----------|
| 4 + NO, NC | DIN rail |

0201-C SERIES

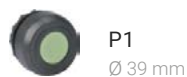


| Contacts | Assembly |
|---|----------|
| 4 + NO, NC | DIN rail |
| (with open circuit and short circuit detection) | |

SERIES 0201-H

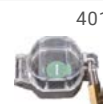


| Contacts | Assembly |
|--------------------------------------|----------|
| 4 + NO, NC | DIN rail |
| (control switch or isolation switch) | |



P1
Ø 39 mm

+

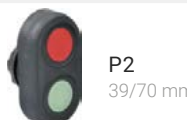


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4019/4

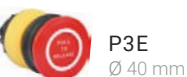


P2
39/70 mm

+



4019/5



P3E
Ø 40 mm

+



4019/1

/



4019/2

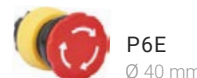


Y
Ø 39 mm



P6B
Ø 40 mm

+



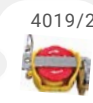
P6E
Ø 40 mm

+



4019/1

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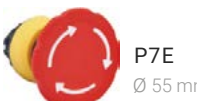


4019/2

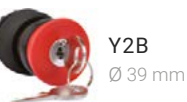


P7B
Ø 55 mm

+

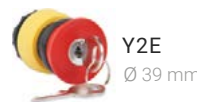


P7E
Ø 55 mm



Y2B
Ø 39 mm

+



Y2E
Ø 39 mm

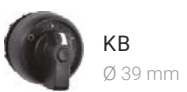


VB6
Ø 39 mm

+



VE6
Ø 39 mm



KB
Ø 39 mm

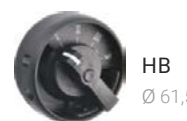
+



SE
Ø 61,5 mm




SB
Ø 61,5 mm



HB
Ø 61,5 mm



HE3
Ø 61,5 mm

 the space the component occupies in the enclosure (see section: Component layout)

Illuminated buttons

SERIES 0212-7 Ø 39 mm

Ex db eb IIC Gb

Ex ia IIC Ga



| | |
|-----------------|-----------|
| Assembly | Cover |
| Contacts | 1NO / 1NC |
| Colors | ● ● ● ● ○ |



SERIES 0212-6 Ø 39 mm

Ex db eb IIC Gb

Ex ia IIC Ga



| | |
|-----------------|-----------|
| Assembly | DIN rail |
| Contacts | 1NO / 1NC |
| Colors | ● ● ● ● ○ |



Indicator lamps

SERIES 0202-7 Ø 39 mm

Ex db eb IIC Gb

Ex ia IIC Ga



| | |
|-----------------|-----------|
| Assembly | Cover |
| Colors | ● ● ● ● ○ |



SERIES 0202-7 Ø 39 mm

Ex db eb IIC Gb

Ex ia IIC Ga



| | |
|-----------------|-----------|
| Assembly | DIN rail |
| Colors | ● ● ● ● ○ |



Potentiometers

SERIES 0203-7 Ø 39 mm



Ex db eb IIC Gb

| | |
|-------------------|---------------|
| Assembly | Cover |
| Voltage | Up to 200V DC |
| Power | Up to 0.1W |
| Resistance | 100Ω ÷ 2MΩ |
| Scope | 0 ÷ 100% |



SERIES 0203-6 Ø 39 mm



Ex db eb IIC Gb

| | |
|-------------------|---------------|
| Assembly | DIN rail |
| Voltage | Up to 200V DC |
| Power | Up to 0.1W |
| Resistance | 100Ω ÷ 2MΩ |
| Scope | 0 ÷ 100% |



Ammeters / voltmeters

Ammeters | SERIES 0205-6 and 7 70X70 mm



Ex db eb IIC Gb

| | |
|--------------------|----------------------------------|
| Assembly | DIN rail (left) Cover (right) |
| Measurement | up to 40 mA up to 3000 A |




Voltmeters | SERIES 0205-6 and 7 70X70 mm



Ex db eb IIC Gb

| | |
|--------------------|----------------------------------|
| Assembly | DIN rail (left) Cover (right) |
| Measurement | up to 500 V |



 the space the component occupies in the enclosure (see section: Component layout)

Warning devices (acoustic / acoustic-optical)

SERIES 0201-H Ø 50 mm



sound



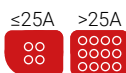
sound + light

| Sound | Assembly | Voltage Rating: | Terminals | Degree of protection |
|--------------------------------|----------|-------------------------------|-------------------------|----------------------|
| 60 dB (at a distance of 30 cm) | Cover | AC/DC 10-28V AC/DC 20-250V | 2 x 2,5 mm ² | IP 66 |



Main / isolation / control / safety switches

SERIES 0513



| | |
|--|--|
| Assembly | Mounting plate |
| Contacts | 2 to 12 + NO, NC, PE, N |
| Voltage | 230 - 690 V |
| Current | 20A / 25A / 35A / 40A / 63A / 75A / 80A (up to 250 on request) |
| Voltage U_i / U_{imp} | 800 V / 6kV |
| Category of use | AC-23, AC-3, AC-11 |
| Voltage | 0 ÷ 100% |



Motor protection circuit breaker [MPCB]

SERIES 0512



| | |
|---|------------------------|
| Assembly | Mounting plate |
| Contacts | 3 + NO, NC, PE, D1, D2 |
| Voltage | 440 V |
| Current | 25A |
| Overload trigger setting range | 0.1 ~ 25A |
| Voltage U_i / U_{imp} | 800 V / 6kV |
| Connecting capacity of the motor in AC3 category | High, up to 440V/25A |
| Voltage | 0 ÷ 100% |



the space the component occupies in the enclosure (see section: Component layout)

AC contactor module / AC reversing contactor

SERIES 0512



BDI



BDIN



BDI BDIN

| | |
|-------------------------------|---|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) / -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) / -40°C ~ +110°C (IIB) |
| Rated voltage | 690V |
| Rated current | up to 38A |
| On-off capacity | up to 18.5kW |
| Coil voltage | up to 440V |
| Rated voltage of aux. contact | 690V |
| Rated current of aux. contact | 10A |
| Terminals | main: 1 ~ 10mm ² aux.: 1 ~ 2.5mm ² |

AC contactor + thermal relay

SERIES 0512



BZCI



| | |
|-------------------------------|---|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) / -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) / -40°C ~ +110°C (IIB) |
| Rated voltage | 690V |
| Rated current | up to 38A |
| Overload trip range | up to 38A |
| On-off capacity | up to 18.5kW |
| Coil voltage | up to 440V |
| Rated voltage of aux. contact | 690V |
| Rated current of aux. contact | 95/96NC, 97/98NO: 5A 13/14NO, 21/22NC: 10A |
| Terminals | main: 1 ~ 10mm ² aux.: 1 ~ 2.5mm ² |

Thermal relay

SERIES 0512




BZC



BZC BZCI

| | |
|-------------------------------|---|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) / -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) / -40°C ~ +110°C (IIB) |
| Rated voltage | 690V |
| Rated current | up to 38A |
| Overload trip range | up to 38A |
| Rated voltage of aux. contact | 690V |
| Rated current of aux. contact | 5A |
| Terminals | main: 1 ~ 10mm ² aux.: 1 ~ 2.5mm ² |

 the space the component occupies in the enclosure (see section: Component layout)

Time relay

SERIES 0512



BH3

| | |
|------------------------------|--|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) -40°C ~ +110°C (IIB) |
| Service power supply voltage | up to 230V |
| Time relay range | 0.1s ~ 100h |
| Function | switch on and time delay |
| Rated current | AC5A |
| Terminals | 2x1 ~ 2.5mm ² |



8002/1
[139 x 271 x 30mm]



8002/2
[139 x 121 x 30mm]



Miniature relay

SERIES 0512



BMY

| | | |
|------------------------------|---|--|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) -40°C ≤ Ta ≤ +60°C (IIB) | |
| Operating temperature | -20°C ~ +110°C (IIC) -40°C ~ +110°C (IIB) | |
| Service power supply voltage | AC 220/240V AC 100/110V AC 24V | DC 12V DC 100/110V DC 24V |
| Contact capacity | 5 A @ 220 V AC 5 A @ 24 V DC | |
| Terminals | 2x1 ~ 2.5mm ² | |



Miniature circuit breaker [MCB]

SERIES 0511



BL

Size 1 Size 2 Size 3 Size 4



| | |
|-----------------------|--|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) -40°C ~ +110°C (IIB) |
| Rated voltage | AC 250V, 50/60Hz AC 400V, 50/60Hz DC 250V |
| Trip character | B, C, D |
| Aux.contact | AC 250V, 50/60Hz, 4A AC 400V, 50/60Hz, 4A DC 110V, 0,5A |
| Terminals | Main: 1 ~ 10mm ² Aux.: 1 ~ 2.5mm ² |



8002/1
[139 x 271 x 30mm]



8002/2
[139 x 121 x 30mm]

the space the component occupies in the enclosure (see section: Component layout)

Residual current protection [RCBO / RCD]

SERIES 0511



BL

Size 2 Size 4




| | |
|-------------------------------|--|
| Ambient temperature | -20°C ≤ Ta ≤ +60°C (IIC) -40°C ≤ Ta ≤ +60°C (IIB) |
| Operating temperature | -20°C ~ +110°C (IIC) -40°C ~ +110°C (IIB) |
| Rated voltage | 230 / 400V, 50Hz |
| Rated current | Up to 40A |
| Rated remained action current | 10, 30, 300mA |
| Rated on-off capacity | 6kA, 10kA |
| Trip character [RCBO] | C |
| Number of poles | 1P + N / 3P + N NO + NC as an option |
| Terminals | main: 1 ~ 10mm ² |



8002/1
[139 x 271 x 30mm]

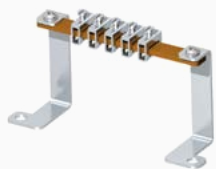


8002/2
[139 x 121 x 30mm]

 the space the component occupies in the enclosure (see section: Component layout)

Accessories

PE/PA rail for grounding / potential equalization



- ▶ Helps reduce price
- ▶ Eliminates the need for more expensive terminals mounted on a DIN rail
- ▶ Often allows the use of a smaller enclosure
- ▶ Available in grounded and insulated versions

Grounding plate made of brass for use with metal cable glands



- ▶ Provides an effective grounding connection for metal glands
- ▶ Brass construction provides very good electrical conductivity
- ▶ Available in 2 mm or 3 mm variants

Stainless steel grounding plate for metal cable glands



- ▶ Cost-effective alternative to the brass plate
- ▶ Provides an effective grounding connection for metal glands
- ▶ The brass construction provides good electrical conductivity
- ▶ Available in 2 mm or 3 mm variant

Nickel-plated brass grounding tag



- ▶ Economical alternative to grounding plate
- ▶ Used when there are up to two cable glands on the same wall of the box
- ▶ Provides an effective grounding connection for metal glands
- ▶ The brass construction provides good electrical conductivity

Mounting plate



- ▶ Allows increasing the number of DIN rails to 2 or 3 (depending on the box size)
- ▶ Allows changing the orientation of the DIN rail from horizontal to vertical
- ▶ Provides flexibility in arranging components inside the box

External grounding connection



- ▶ Dedicated earthing bolt (M6 / M10) / polyamide gland / steel gland
- ▶ Degree of protection IP66
- ▶ Ambient temperature: -55°C to +160°C (earthing bolt) / -55°C to +70°C (cable gland)

Drain / breather valve



- ▶ Effectively drains moisture from the housing and minimizes moisture accumulation
- ▶ Mounting at the lowest point of the housing with O-ring sealing, providing a high degree of IP66 protection
- ▶ Impact resistance up to 20 Nm and an operating temperature range of -50°C to +230°C