





# General characteristics

Our control and signalling units are designed to ensure accuracy, reliability, high mechanical and electrical life. All pushbuttons are certified IP65 (IP66 with optional dustproof cover), while foot switches are IP54. The contact blocks are equipped with maximum 4 contacts with rating up to 10 A each. The NC contacts are made to guarantee positive opening for safety function. The terminal screws with self-raising plate are supplied in open position for an easier and quicker wiring operation.



#### Technical data

| icommodi da                     |               |      |                         |                         |                       |   |
|---------------------------------|---------------|------|-------------------------|-------------------------|-----------------------|---|
| Rated insulation voltage        |               | Ui   | IEC947-5-1              |                         | V                     | 600   |
| Rated thermal current           |               | Ithe | IEC947-5-1              |                         | А                     | 10  |
| Rated operational current       |               |      | IEC947-5-1/EN60947      | -5-1                    |                       |   |
|                                 | Category AC15 | le   |                         | 230 V                   | А                     | 6   |
|                                 |               |      |                         | 400 V                   | А                     | 4   |
|                                 |               |      |                         | 500 V                   | А                     | 3   |
|                                 | Category DC13 | le   |                         | 24 V                    | А                     | 6   |
|                                 |               |      |                         | 250 V                   | А                     | 0,4   |
| nsulation resistance            |               |      |                         | 500 V DC                | MΩ                    | 100   |
| Contact resistance              |               |      | IEC255-7 cat. 3         | Initial value           | mΩ                    | 25  |
| Dielectric insulation           |               |      |                         | 50/60 Hz for 1' *       | Vca                   | 2500  |
| Short circuit protective device | S             |      | IEC269 (IEC947-5-1)     |                         |                       |   |
| '                               |               |      | GI or gG fuse           |                         | А                     | 10  |
| Conditional short circuit curre | nt            |      | IEC947-5-1              |                         | А                     | 100   |
| Pollution degree                |               |      | IEC947-5-1              |                         |                       | 3   |
| Command protection degree       | (EN 60529)    |      | Non-illuminated/illumin | nated                   |                       | <b>I</b> P65                                  |
|                                 | ,/            |      | Dual pushbuttons        |                         |                       | IP40  |
|                                 |               |      | Joystick                |                         |                       | IP65  |
| /ibration resistance            |               |      | IEC68-2-6               |                         | mm                    | 0,35 ± 15% (10÷55 Hz ± 1 Hz)                  |
| Shock resistance                |               |      | IEC68-2-27              | 11 ms                   | g                     | 30  |
| Mechanical life                 |               |      | Mushroom and coupling   |                         | 9                     |   |
| viconamoa mo                    |               |      | pushbuttons and contr   | •                       | cycles                | 500000  |
|                                 |               |      | Selector switches       | olloro                  | cycles                | 1000000                                       |
|                                 |               |      | Illuminated pushbuttor  | IS.                     | cycles                | 3000000                                       |
| Electrical life                 |               |      | at 250 V AC 6 A with    |                         | oy oloo               | 000000  |
| Journal Inc                     |               |      | resistance load cosφ=   | .1                      | min cycles            | 500000  |
|                                 |               |      | a 250 V AC 6 A with     | · · ·                   | min oyoloo            | 000000  |
|                                 |               |      | inductive load cosφ=0   | 14                      | min cycles            | 500000  |
| Distance between contacts       |               |      | Slow action models      | 9,7                     | mm                    | 2x2   |
| ermina <b>l</b> s               |               |      | Type                    |                         | 111111                | Screw with combined notch and removable plate |
| GITIIIIais                      |               |      | Screw                   |                         |                       | M3,5  |
|                                 |               |      | Protection degree       |                         |                       | IP20  |
|                                 |               |      | Material                |                         |                       | Steel class 8.8 / 6-8 micron                  |
|                                 |               |      | Max screw tightening    | Torquo                  | cNm (kg cm)           | 120 (12,24)                                   |
|                                 |               |      |                         | rigid cable             |                       | 2x1,5   |
|                                 |               |      |                         | flexible cable          | mm²<br>mm²            | 2x1,5<br>2x1,5                                |
|                                 |               |      | With prod terminal      | HEVINIE CANIE           | mm²                   | 2X1,5<br>1x1.5                                |
|                                 |               |      |                         |                         |                       | In accordance with EN50013                    |
|                                 |               |      | Terminal numbering      |                         |                       |   |
| lir ambient ten                 |               |      | Terminal colouring      |                         | °C                    | Red for NC contacts, green for NO contacts    |
| Air ambient temperature         |               |      | operationals            |                         | Ű                     | -25 ÷ +70                                     |
| Relative humidity               |               |      | operationals            | 4                       | DIN 50044             | 95% max                                       |
| Veather resistance              |               |      |                         | ·                       | dance with DIN 50014: | 23/50   |
|                                 |               |      |                         | <u>'</u>                | dance with DIN 50015: | 23/83   |
|                                 |               |      |                         |                         | dance with DIN 50015: | 40-92   |
|                                 |               |      |                         | variable humid in accor | dance with DIN 50016: | FW24  |

<sup>\*</sup> between terminals of the same polarity; between terminals of different polarity; between live metal parts and ground; between live and unpowered metal parts.

#### **Certifications and Approvals**

|             | CULUS US | <b>(1)</b> | IEC EN 60947 |
|-------------|----------|------------|--------------|
| IPFB        | •        |            | +            |
| PFB         | •        |            | +            |
| C01B-C10B   | •        | •          | +            |
| C02-C20-C11 | •        | •          | +            |

- UL approval file E72861
- CSA approval file 026716-0-000
- Approved
- + Conforms to requirements

## Foot switches

Thermoplastic foot switches



(IP54)

Without protection

| Contact element |  |  |  |  |
|-----------------|--|--|--|--|
| 13 21<br>○-\    |  |  |  |  |

| Code     | Description  |                                       | Pack | Weight (kg) |
|----------|--|---------------------------------------|------|-------------|
| PS100M20 | Thermoplastic foot<br>switches without<br>protection | S S S S S S S S S S S S S S S S S S S | 1    | 0,749       |

standard article

(IP54)



With protection

| Contact element          |  |  |  |
|--------------------------|--|--|--|
| 13 21<br>0-\\/ <b>Zb</b> |  |  |  |

| Code       | Description   |         | Pack | Weight (kg) |
|------------|---|---------|------|-------------|
| PCI00M20   | Thermoplastic foot switches with protection w/o lock  | M20 M20 | 1    | 1,034       |
| PCIOOPIM20 | Thermoplastic foot switches with protection with lock | M20     | 1    | 1,024       |

standard article



## Foot switches

Metal foot switches



(IP54)

Without protection

| Contact element |  |  |  |  |
|-----------------|--|--|--|--|
| 13 21<br>       |  |  |  |  |

| Code     | Description  |                                       | Pack | Weight (kg) |
|----------|--|---------------------------------------|------|-------------|
| PSA00M20 | Metal foot switches w/o<br>protection and w/o lock | S S S S S S S S S S S S S S S S S S S | 1    | 1,328       |

standard article



(IP54)

With protection

| Contact element |
|-----------------|
| 13 21<br>0-\    |

| Code       | Description                                       |                                       | Pack | Weight (kg) |
|------------|---|---------------------------------------|------|-------------|
| PCA00M20   | Metal foot switches with protection and w/o lock  | N N N N N N N N N N N N N N N N N N N | 1    | 1,969       |
| PCA00PIM20 | Metal foot switches with protection and with lock | 250                                   | 1    | 1,981       |

standard article

### ■ Contact block

| Code   | Description                                       | Pack | Weight pack (kg) |
|--------|---|------|------------------|
| KIT00  | Additional contact block 00 kit for foot switches | 5    | 0,343            |
| ELEM00 | Contact block 1NO+1NC snap action                 | 5    | 0,495            |
| ELEM01 | Contact block 1NO+1NC slow action                 | 5    | 0,485            |

standard article