

## Choice of sensitivity

The sensitivity of an earth leakage protection device depends mainly on the function it has to perform:

- Protection from electric shock by direct contact.
- Protection from electric shock by indirect contact.
- Protection from fire due to current leakage.

The following table gives a reminder of:

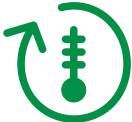
- The circuits that must be protected against these various risks (obligation or recommendation).
- The type of earth leakage protection device to be used in each case, its sensitivity, and its location in the distribution diagram.

| Type of protection                                                                              | Obligations                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                       | Recommended by Schneider Electric                                  | Sensitivity (IΔn)                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                 | National standard<br><i>To be filled in according to the country standard</i> | International standard<br>IEC 60364                                                                                                                                                                                                                                                                                                                                                                   |                                                                    | 30 mA (*)                                                                                                                                                                                                               | 100 mA to 3000 mA<br>(depending on the earthing system)                                                                                                                                                                                                                                                                                                                                                                                                                               | 300 mA (or 500 mA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protection from electric shock by direct contact                                                |                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                    |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DB123167<br>   | <i>To be filled in according to the country standard</i>                      | Power supply for <ul style="list-style-type: none"><li>■ General-purpose power sockets, up to 20 A</li><li>■ Appliances in the vicinity of a bathtub, shower, pond or swimming pool</li><li>■ Portable appliances for outdoor use, up to 32 A</li><li>■ Lighting for exhibition stands and shows</li><li>■ Outdoor lighting</li></ul> <i>To be modified according to national obligations (above)</i> | ■ Lighting in the home                                             | <b>Setup in final distribution switchboard</b> <ul style="list-style-type: none"><li>■ Residual current device protecting a circuit</li><li>■ Residual current circuit breaker protecting a group of circuits</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protection from electric shock by indirect contact                                              |                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                    |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DB123168<br>  | <i>To be filled in according to the country standard</i>                      | The entire power distribution system, except for devices: <ul style="list-style-type: none"><li>■ With class II insulation</li><li>■ Operating at Safety Extra Low Voltage (class III)</li></ul> <i>To be modified according to national obligations (above)</i>                                                                                                                                      | —                                                                  |                                                                                                                                                                                                                         | <b>Setup in final distribution switchboard</b> <ul style="list-style-type: none"><li>■ Residual current circuit breaker or device, on incoming feeder</li></ul> <b>Setup in subdistribution board or main switchboard</b> <ul style="list-style-type: none"><li>■ Residual current device protecting a circuit</li><li>■ Residual current device or circuit breaker protecting a group of circuits</li><li>■ On incoming feeder: residual current circuit breaker or device</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protection from fire due to current leakage                                                     |                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                    |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DB123169<br> | <i>To be filled in according to the country standard</i>                      | ■ High-risk premises: <ul style="list-style-type: none"><li>□ explosion (BE3)</li><li>□ fire (BE2)</li></ul> ■ Agricultural and horticultural buildings                                                                                                                                                                                                                                               | ■ Dilapidated buildings or electrical installations                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Setup in final distribution switchboard</b> <ul style="list-style-type: none"><li>■ Residual current circuit breaker or device, on incoming feeder</li></ul> <b>Setup in subdistribution board or main switchboard</b> <ul style="list-style-type: none"><li>■ Residual current device protecting each circuit to a high-risk zone</li><li>■ Residual current device or circuit breaker protecting a group of circuits</li><li>■ On incoming feeder: residual current circuit breaker or device</li></ul> |
|                                                                                                 |                                                                               | ■ Equipment for fairs, exhibitions and shows                                                                                                                                                                                                                                                                                                                                                          | ■ Humid atmospheres: agricultural buildings, public swimming pools |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                 |                                                                               | ■ Temporary outdoor recreational installations                                                                                                                                                                                                                                                                                                                                                        | ■ Presence of chemical agents                                      |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                 |                                                                               | <i>To be modified according to national obligations (above)</i>                                                                                                                                                                                                                                                                                                                                       |                                                                    |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

(\*) The 10 mA sensitivity is useful for certain very specific applications, where there is a risk that someone could sustain a non-dangerous current (10 to 30 mA) without being able to get free. Example: healthcare equipment for hospital beds. Generally, devices with this very high sensitivity are liable to cause frequent tripping, due to the natural leakage currents of the installation.

## Interference immunity

Schneider Electric provides various equipment technologies capable of overcoming the consequences of interference of all kinds.

| Operating conditions                                                                |                                                                   | Examples     | Types                                                                                     |                                                                                          |                                                                                           |                                                                                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                                                                                     |                                                                   |              | AC<br> | A<br> | SI<br> | B<br> |
| Loads                                                                               |                                                                   |              |                                                                                           |                                                                                          |                                                                                           |                                                                                          |
|    | With no special characteristics                                   |              | ■                                                                                         | ■                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | Including a rectifier                                             | Single phase | ■                                                                                         | ■                                                                                        | ■                                                                                         | —                                                                                        |
|                                                                                     |                                                                   | Three phase  | ■                                                                                         | —                                                                                        | —                                                                                         | ■                                                                                        |
|                                                                                     | Generating high-frequency interference (current peaks, harmonics) |              | ■                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | Including an anti-harmonic filter in the power supply             |              | ■                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
| Electrical environment                                                              |                                                                   |              |                                                                                           |                                                                                          |                                                                                           |                                                                                          |
|   | Vicinity of equipment generating transient overvoltages           |              | —                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | Circuits powered by an uninterruptible power supply               |              | —                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | "Isolated neutral" (IT) earthing system                           |              | —                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | Major risk of lightning strokes                                   |              | —                                                                                         | —                                                                                        | ■                                                                                         | ■                                                                                        |
| Atmosphere                                                                          |                                                                   |              |                                                                                           |                                                                                          |                                                                                           |                                                                                          |
|  | Ambient temperature which could be less than -5°C                 |              | —                                                                                         | ■                                                                                        | ■                                                                                         | ■                                                                                        |
|                                                                                     | Presence of corrosive agents (AF2 to AF4) or dust                 |              | ■                                                                                         | —                                                                                        | ■ (1)                                                                                     | —                                                                                        |

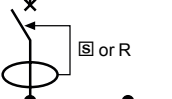
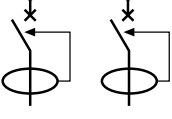
(1) SiE for C120 and NG125 circuit-breakers

## Discrimination

Residual current devices of average sensitivity (100 mA and more) are available in a selective (S) and delayed (R) version.

This option ensures that, in the event of an earth fault downstream of the installation, only the defective part is switched off.

The table below shows (in green) which upstream/downstream equipment combinations provide this discrimination.

| Sensitivity (mA) - Downstream                                                       |               | Sensitivity (mA) - Upstream |     |     |     |      |      |             |     |     |      |           |      |      |
|-------------------------------------------------------------------------------------|---------------|-----------------------------|-----|-----|-----|------|------|-------------|-----|-----|------|-----------|------|------|
|                                                                                     |               | Instantaneous               |     |     |     |      |      | Selective S |     |     |      | Delayed R |      |      |
|                                                                                     |               | 30                          | 100 | 300 | 500 | 1000 | 3000 | 100         | 300 | 500 | 1000 | 3000      | 1000 | 3000 |
|  | Instantaneous | 30                          | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 100                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 300                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 500                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 1000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 3000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|  | Selective S   | 100                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 300                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 500                         | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 1000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 3000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|                                                                                     |               | 1000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |
|  | Delayed R     | 3000                        | -   | -   | -   | -    | -    | -           | -   | -   | -    | -         | -    | -    |

## Selection guide

| Type                                                   |                       | Residual current circuit breakers                                                 |                                                                                   |                                                                                    |                                                                                     |  |
|--------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|                                                        |                       | iID K                                                                             | iID                                                                               | RCCB-ID 125 A                                                                      | RCCB-ID type B                                                                      |  |
|                                                        |                       |  |  |  |  |  |
| <b>Standards</b>                                       |                       | IEC/EN 61008                                                                      | IEC/EN 61008                                                                      | IEC/EN 61008-1 and VDE 0664                                                        | IEC/EN 61008 and VDE 0664                                                           |  |
| <b>Voltage (V)</b>                                     | U <sub>e</sub>        | 230/400                                                                           | 110/230                                                                           | 230/400                                                                            | 230/400                                                                             |  |
| <b>Number of poles</b>                                 | 1P+N                  | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | 2P                    | ■                                                                                 | ■                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | 3P                    | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | 4P                    | ■                                                                                 | ■                                                                                 | ■                                                                                  | ■                                                                                   |  |
| <b>Type</b>                                            | AC                    | ■                                                                                 | —                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | A                     | —                                                                                 | ■                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | SI                    | —                                                                                 | —                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | B                     | —                                                                                 | —                                                                                 | —                                                                                  | ■                                                                                   |  |
| <b>Impulse voltage (kV)</b>                            | U <sub>imp</sub>      | 4                                                                                 | 6                                                                                 | 6                                                                                  | 4                                                                                   |  |
| <b>Insulation voltage (V)</b>                          | U <sub>i</sub>        | 440                                                                               | 500                                                                               | 500                                                                                | 400                                                                                 |  |
| <b>Current rating (A)</b>                              | I <sub>n</sub>        | 25 - 40 - 63                                                                      | 63                                                                                | 16 to 100                                                                          | 125                                                                                 |  |
| <b>Frequency (Hz)</b>                                  |                       | 50/60                                                                             | 50                                                                                | 50                                                                                 | 50                                                                                  |  |
| <b>Rated breaking capacity (A)</b>                     | I <sub>cn</sub>       | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
| <b>Rated conditional short-circuit current</b>         | I <sub>nc</sub>       | 4500                                                                              | 10000                                                                             | 10000                                                                              | 10000                                                                               |  |
| <b>Rated residual breaking and making capacity (A)</b> | (I <sub>Δm</sub> )    | 10 I <sub>n</sub> (500 A min.)                                                    | 1500                                                                              | 1500                                                                               | 1250                                                                                |  |
| <b>Sensitivity (mA)</b>                                | (I <sub>Δn</sub> ) 10 | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | 30                    | ■                                                                                 | ■                                                                                 | ■                                                                                  | ■                                                                                   |  |
|                                                        | 100                   | —                                                                                 | —                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | 300                   | ■                                                                                 | —                                                                                 | ■                                                                                  | ■                                                                                   |  |
|                                                        | 500                   | —                                                                                 | —                                                                                 | ■                                                                                  | ■                                                                                   |  |
|                                                        | 1000                  | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | 3000                  | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | 300 S                 | —                                                                                 | —                                                                                 | ■                                                                                  | ■                                                                                   |  |
|                                                        | 500 S                 | —                                                                                 | —                                                                                 | ■                                                                                  | —                                                                                   |  |
|                                                        | 1000 S                | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
| <b>Electrical characteristics</b>                      |                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |  |
| <b>Curves</b>                                          | B                     | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | C                     | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | D                     | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | L                     | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | K                     | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
|                                                        | MA                    | —                                                                                 | —                                                                                 | —                                                                                  | —                                                                                   |  |
| <b>For more details, see module</b>                    |                       | CA902007                                                                          | CA902002                                                                          | CM902001                                                                           | CM902002                                                                            |  |
| <b>Accessories</b>                                     |                       | —                                                                                 | CA907000, CA907001                                                                | CM902001                                                                           | CM902002                                                                            |  |
| <b>Auxiliaries</b>                                     |                       | —                                                                                 | CA907000, CA907002                                                                | CM902001                                                                           | CM902002                                                                            |  |

### **I<sub>nc</sub>: rated conditional short-circuit current**

Value of the alternating component of the prospective current that a residual current circuit breaker protected by an appropriate short-circuit protective device (SCPD) mounted in series can withstand in specified conditions of use.

### **I<sub>Δc</sub>: rated residual short-circuit current**

Value of the alternating component of the prospective residual current that a residual current circuit breaker protected by an appropriate short-circuit protective device (SCPD) mounted in series can withstand in specified conditions of use.

### **I<sub>m</sub>: rated making and breaking capacity**

Value of the alternating component of the prospective current that a residual current circuit breaker is capable of establishing or interrupting in specified conditions of use.

### **I<sub>Δm</sub>: rated making and breaking capacity**

Value of the alternating component of the prospective residual current that a residual current circuit breaker is capable of establishing and withstanding during its opening time and interrupting in specified conditions of use and behaviour.

### **SCPD**

Short-circuit protective device (a fuse in the case of our markings): this is the max. fuse that can be used to resist the value I<sub>nc</sub> = I<sub>Δc</sub>.

# Overview of the earth leakage protection product range (cont.)

| Add-on residual current devices |                                                                                   |         |         |                        | Residual current devices RCBO                                                     |  |                         |                                                                                    |         |                         |                                                                                     |  |                         |                                                                                     |  |
|---------------------------------|-----------------------------------------------------------------------------------|---------|---------|------------------------|-----------------------------------------------------------------------------------|--|-------------------------|------------------------------------------------------------------------------------|---------|-------------------------|-------------------------------------------------------------------------------------|--|-------------------------|-------------------------------------------------------------------------------------|--|
| <div>PS10446-40</div>           | Vigi iC60                                                                         |         |         | <div>PS107924-40</div> | Vigi C120                                                                         |  | <div>06945N_SE-35</div> | Vigi NG125                                                                         |         | <div>PS104341B-35</div> | DPNa Vigi                                                                           |  | <div>PS104341B-35</div> | DPN N Vigi                                                                          |  |
|                                 |  |         |         |                        |  |  |                         |  |         |                         |  |  |                         |  |  |
|                                 | IEC/EN 61009                                                                      |         |         |                        | IEC/EN 61009                                                                      |  |                         | IEC/EN 61009                                                                       |         |                         | IEC/EN 61009                                                                        |  |                         | IEC/EN 61009                                                                        |  |
|                                 | 110/230                                                                           | 230/400 | 400/415 |                        | 230/400                                                                           |  |                         | 230/400                                                                            |         |                         | 230                                                                                 |  |                         | 230                                                                                 |  |
|                                 | —                                                                                 | —       | —       |                        | —                                                                                 |  |                         | —                                                                                  |         |                         | ■                                                                                   |  |                         | ■                                                                                   |  |
|                                 | ■                                                                                 | ■       | ■       |                        | ■                                                                                 |  |                         | ■                                                                                  |         |                         | —                                                                                   |  |                         | —                                                                                   |  |
|                                 | —                                                                                 | ■       | —       |                        | ■                                                                                 |  |                         | ■                                                                                  |         |                         | —                                                                                   |  |                         | —                                                                                   |  |
|                                 | —                                                                                 | ■       | —       |                        | ■                                                                                 |  |                         | ■                                                                                  |         |                         | —                                                                                   |  |                         | —                                                                                   |  |
|                                 | ■                                                                                 | ■       | —       |                        | ■                                                                                 |  |                         | ■                                                                                  |         |                         | ■                                                                                   |  |                         | ■                                                                                   |  |
|                                 | ■                                                                                 | ■       | ■       |                        | ■                                                                                 |  |                         | ■                                                                                  |         |                         | ■                                                                                   |  |                         | —                                                                                   |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | ■       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | —                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| 6                               | 6                                                                                 | 6       | 6       |                        | 8                                                                                 |  | 4                       |                                                                                    | 4       |                         |                                                                                     |  |                         |                                                                                     |  |
| 500                             | 500                                                                               | 500     | 500     |                        | 690                                                                               |  | 400                     |                                                                                    | 400     |                         |                                                                                     |  |                         |                                                                                     |  |
| 25-40-63                        | 25-40-63                                                                          | 63      | 10-125  |                        | 63-125                                                                            |  | 10-16                   |                                                                                    | 4 to 40 |                         |                                                                                     |  |                         |                                                                                     |  |
| 50/60                           | 50/60                                                                             | 50/60   | 50/60   |                        | 50/60                                                                             |  | 50/60                   |                                                                                    | 50/60   |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | —                                                                                 |  | 4500                    |                                                                                    | 6000    |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | —                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | —                                                                                 |  | 4500                    |                                                                                    | 6000    |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | —                                                                                 |  | ■                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| ■                               | ■                                                                                 | ■       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | ■       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | —       |                        | —                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| ■                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | ■       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | ■                                                                                 | —       | ■       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  | —                       |                                                                                    | —       |                         |                                                                                     |  |                         |                                                                                     |  |
| —                               | —                                                                                 | —       | —       |                        | ■                                                                                 |  |                         |                                                                                    |         |                         |                                                                                     |  |                         |                                                                                     |  |

## Selection guide

| Type                                                   | Residual current circuit breakers                                                 |                                                                                          | Add-on residual current devices                                                     |
|--------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                        | <b>xID</b>                                                                        |                                                                                          | <b>Vigi xC60</b>                                                                    |
|                                                        |  |                                                                                          |  |
| <b>Standards</b>                                       | IEC/EN 61008                                                                      |                                                                                          | IEC/EN 61009                                                                        |
| <b>Voltage (V)</b>                                     | Ue                                                                                | 230/400                                                                                  | 230/400                                                                             |
| <b>Number of poles</b>                                 | 1P+N                                                                              | —                                                                                        | —                                                                                   |
|                                                        | 2P                                                                                | ■                                                                                        | ■                                                                                   |
|                                                        | 3P                                                                                | —                                                                                        | —                                                                                   |
|                                                        | 4P                                                                                | ■                                                                                        | ■                                                                                   |
| <b>Type</b>                                            | AC                                                                                | ■                                                                                        | ■                                                                                   |
|                                                        | A                                                                                 | —                                                                                        | —                                                                                   |
|                                                        | S/I                                                                               | ■                                                                                        | —                                                                                   |
|                                                        | B                                                                                 | —                                                                                        | —                                                                                   |
| <b>Impulse voltage (kV)</b>                            | Uimp                                                                              | 6                                                                                        | 6                                                                                   |
| <b>Insulation voltage (V)</b>                          | Ui                                                                                | 440                                                                                      | 500                                                                                 |
| <b>Current rating (A)</b>                              | In                                                                                | 25 - 40 - 63 - 80                                                                        | 25 - 63                                                                             |
| <b>Frequency (Hz)</b>                                  |                                                                                   | 50/60                                                                                    | 50/60                                                                               |
| <b>Rated breaking capacity (A)</b>                     | Icn                                                                               | —                                                                                        | —                                                                                   |
| <b>Rated conditional short-circuit current</b>         | Isc                                                                               | 10,000                                                                                   | —                                                                                   |
| <b>Rated residual breaking and making capacity (A)</b> | (IΔm)                                                                             | 10 In (500 A min.)                                                                       | —                                                                                   |
| <b>Curve</b>                                           |                                                                                   | —                                                                                        | —                                                                                   |
| <b>Sensitivity (mA)</b>                                | (IΔn)                                                                             | 10                                                                                       | —                                                                                   |
|                                                        |                                                                                   | 30                                                                                       | ■                                                                                   |
|                                                        |                                                                                   | 100                                                                                      | ■                                                                                   |
|                                                        |                                                                                   | 300                                                                                      | ■                                                                                   |
|                                                        |                                                                                   | 500                                                                                      | —                                                                                   |
|                                                        |                                                                                   | 1000                                                                                     | —                                                                                   |
|                                                        |                                                                                   | 3000                                                                                     | —                                                                                   |
|                                                        |                                                                                   | 300   | —                                                                                   |
|                                                        |                                                                                   | 500   | —                                                                                   |
|                                                        |                                                                                   | 1000  | —                                                                                   |
|                                                        |                                                                                   | 3000  | —                                                                                   |
|                                                        |                                                                                   | —                                                                                        | —                                                                                   |
| <b>Electrical characteristics</b>                      |                                                                                   |                                                                                          |                                                                                     |
| <b>Curves</b>                                          | B                                                                                 | —                                                                                        | Depending on circuit breaker used                                                   |
|                                                        | C                                                                                 | —                                                                                        |                                                                                     |
|                                                        | D                                                                                 | —                                                                                        |                                                                                     |
|                                                        | L                                                                                 | —                                                                                        |                                                                                     |
|                                                        | K                                                                                 | —                                                                                        |                                                                                     |
|                                                        | MA                                                                                | —                                                                                        |                                                                                     |
| <b>For more details, see module</b>                    |                                                                                   | <b>CA902028</b>                                                                          | <b>CA902029</b>                                                                     |
| <b>Accessories</b>                                     |                                                                                   | <b>CA907012</b>                                                                          | <b>CA907012</b>                                                                     |
| <b>Auxiliaries</b>                                     |                                                                                   | <b>CA907008</b>                                                                          | <b>CA907008</b>                                                                     |