

# DPX<sup>3</sup> 160 thermal magnetic

MCCBs from 16 to 160 A



Electrical characteristics **see e-catalogue**  
Dimensions **see e-catalogue**

Can be mounted on rail or on plate in XL<sup>3</sup> cabinets and enclosures  
MCCBs for switching, control isolation and protection of low voltage electrical lines  
Supplied with fixing screws cage terminals 70 mm<sup>2</sup> max. (flexible cable) or 95 mm<sup>2</sup> max. rigid cable with accessories  
Can be fitted with DPX<sup>3</sup> 160 and 250 common auxiliaires and accessories (p. 134)  
Conform to IEC 60947-2

| Pack | Cat.Nos  |          |  |
|------|----------|----------|--|
|      |          |          | <b>MCCBs - fixed version</b>   |
|      |          |          | Thermal adjustable from 0,8 to 1 In<br>Magnetic fixed at 10 In (fixed at 400 A for In 16 A and 25 A) |
|      |          |          | <b>Breaking capacity Icu 16 kA (400 V~)</b>  |
|      | 3P       | 4P       | In (A)   |
| 1    | 4 200 00 | 4 200 10 | 16   |
| 1    | 4 200 01 | 4 200 11 | 25   |
| 1    | 4 200 02 | 4 200 12 | 40   |
| 1    | 4 200 03 | 4 200 13 | 63   |
| 1    | 4 200 04 | 4 200 14 | 80   |
| 1    | 4 200 05 | 4 200 15 | 100  |
| 1    | 4 200 06 | 4 200 16 | 125  |
| 1    | 4 200 07 | 4 200 17 | 160  |
|      |          |          | <b>Breaking capacity Icu 25 kA (400 V~)</b>  |
| 1    | 4 200 40 | 4 200 50 | 16   |
| 1    | 4 200 41 | 4 200 51 | 25   |
| 1    | 4 200 42 | 4 200 52 | 40   |
| 1    | 4 200 43 | 4 200 53 | 63   |
| 1    | 4 200 44 | 4 200 54 | 80   |
| 1    | 4 200 45 | 4 200 55 | 100  |
| 1    | 4 200 46 | 4 200 56 | 125  |
| 1    | 4 200 47 | 4 200 57 | 160  |
|      |          |          | <b>Breaking capacity Icu 36 kA (400 V~)</b>  |
| 1    | 4 200 80 | 4 200 90 | 16   |
| 1    | 4 200 81 | 4 200 91 | 25   |
| 1    | 4 200 82 | 4 200 92 | 40   |
| 1    | 4 200 83 | 4 200 93 | 63   |
| 1    | 4 200 84 | 4 200 94 | 80   |
| 1    | 4 200 85 | 4 200 95 | 100  |
| 1    | 4 200 86 | 4 200 96 | 125  |
| 1    | 4 200 87 | 4 200 97 | 160  |
|      |          |          | <b>Breaking capacity Icu 50 kA (400 V~)</b>  |
| 1    | 4 201 20 | 4 201 30 | 16   |
| 1    | 4 201 21 | 4 201 31 | 25   |
| 1    | 4 201 22 | 4 201 32 | 40   |
| 1    | 4 201 23 | 4 201 33 | 63   |
| 1    | 4 201 24 | 4 201 34 | 80   |
| 1    | 4 201 25 | 4 201 35 | 100  |
| 1    | 4 201 26 | 4 201 36 | 125  |
| 1    | 4 201 27 | 4 201 37 | 160  |












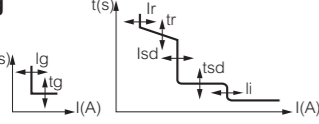
| Pack | Cat.Nos  |  |  |
|------|----------|--|--|
|      |          |  | <b>MCCBs with electronic earth leakage module - fixed version</b>                                    |
|      |          |  | Thermal adjustable from 0,8 to 1 In<br>Magnetic fixed at 10 In (fixed at 400 A for In 16 A and 25 A) |
|      |          |  | Equipped with earth leakage module with LCD screen   |
|      |          |  | Adjustable sensitivity: 0.03 - 0.3 - 1 - 3 A   |
|      |          |  | Adjustable tripping: 0 - 0.3 - 1 - 3s (with 0.03 A possible only 0 s)                                |
|      |          |  | <b>Breaking capacity Icu 16 kA (400 V~)</b>  |
|      |          |  | In (A)   |
|      | 4P       |  |  |
| 1    | 4 200 30 |  | 16   |
| 1    | 4 200 31 |  | 25   |
| 1    | 4 200 32 |  | 40   |
| 1    | 4 200 33 |  | 63   |
| 1    | 4 200 34 |  | 80   |
| 1    | 4 200 35 |  | 100  |
| 1    | 4 200 36 |  | 125  |
| 1    | 4 200 37 |  | 160  |
|      |          |  | <b>Breaking capacity Icu 25 kA (400 V~)</b>  |
| 1    | 4 200 70 |  | 16   |
| 1    | 4 200 71 |  | 25   |
| 1    | 4 200 72 |  | 40   |
| 1    | 4 200 73 |  | 63   |
| 1    | 4 200 74 |  | 80   |
| 1    | 4 200 75 |  | 100  |
| 1    | 4 200 76 |  | 125  |
| 1    | 4 200 77 |  | 160  |
|      |          |  | <b>Breaking capacity Icu 36 kA (400 V~)</b>  |
| 1    | 4 201 10 |  | 16   |
| 1    | 4 201 11 |  | 25   |
| 1    | 4 201 12 |  | 40   |
| 1    | 4 201 13 |  | 63   |
| 1    | 4 201 14 |  | 80   |
| 1    | 4 201 15 |  | 100  |
| 1    | 4 201 16 |  | 125  |
| 1    | 4 201 17 |  | 160  |
|      |          |  | <b>Breaking capacity Icu 50 kA (400 V~)</b>  |
| 1    | 4 201 50 |  | 16   |
| 1    | 4 201 51 |  | 25   |
| 1    | 4 201 52 |  | 40   |
| 1    | 4 201 53 |  | 63   |
| 1    | 4 201 54 |  | 80   |
| 1    | 4 201 55 |  | 100  |
| 1    | 4 201 56 |  | 125  |
| 1    | 4 201 57 |  | 160  |

See the video



DPX<sup>3</sup>

electrical characteristics

|   |                      |  |  |  |                    |  |  |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
|---|---|--|---|---|---|---|---|-------|---|---------|---------|----------|--|-------|-------|--------|--|-----------|-----------|-----------|--|-------------------------------|-------|--------|--|-----------|-----------|-------------------|------------|------------|-------------------------------|-----|-----|-------------------------------|------|------|----------------------|---|---|----------------------|---|---|-------------------------------|---|---|----------------------------|---|---|----------------------|--|--|--|--|--|--|--|--|--|--|--|-----------------------|--|--|--|--|--|--|--|--|--|--|--|----------------------------|--|--|--|--|--|--|--|--|--|--|--|
| DEVICES   | DPX <sup>3</sup> 160 thermal magnetic   |  |   |   | DPX <sup>3</sup> 250 thermal magnetic   |   |   |       | DPX <sup>3</sup> 250 electronic release   |         |         |          | DPX <sup>3</sup> 630 thermal magnetic  |       |       |        | DPX <sup>3</sup> 630 electronic release        |           |           |           | DPX <sup>3</sup> 1600 thermal magnetic |                               |       |        | DPX <sup>3</sup> 1600 electronic release |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Mounting  | On rail  or on plate |  |   |   | On rail  or on plate |   |   |       | On rail  or on plate |         |         |          | On plate   |       |       |        | On plate                                       |           |           |           | On plate                               |                               |       |        | On plate                                 |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Breaking capacity (kA) (EN 60947-2 and IEC 60947-2)                             | 16 kA   | 25 kA  | 36 kA   | 50 kA   | 25 kA   | 36 kA   | 50 kA   | 70 kA | 25 kA   | 36 kA   | 50 kA   | 70 kA    | 36 kA  | 50 kA | 70 kA | 100 kA | 36 kA  | 50 kA     | 70 kA     | 100 kA    | 36 kA                                  | 50 kA                         | 70 kA | 100 kA | 36 kA                                    | 50 kA     | 70 kA     | 100 kA            |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| 380/415 V~  | 16  | 25   | 36  | 50  | 25  | 36  | 50  | 70    | 25  | 36      | 50      | 70       |  |       |       |        | 36   | 50        | 70        | 100       | 36                                     | 50                            | 70    | 100    | 36                                       | 50        | 70        | 100               |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| 220/240 V~  | 25  | 35   | 50  | 65  | 40  | 60  | 100   | 100   | 40  | 60      | 100     | 100      |  |       |       |        | 70   | 100       | 120       | 170       | 70                                     | 100                           | 120   | 170    | 70                                       | 100       | 120       | 170               |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Breaking capacity (% Icu)   | 100   | 100  | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100     | 100     | 100      | 100  | 100   | 100   | 100    | 100  | 100       | 100       | 100       | 100                                    | 100                           | 100   | 100    | 100                                      | 100       | 100       | 100               |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Characteristic of use   | 50/60 Hz  |  |   |   |   |   |   |       |   |         |         |          | 50/60 Hz   |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Nominal frequency   | 50/60 Hz  |  |   |   |   |   |   |       |   |         |         |          | 50/60 Hz   |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Maximum rated operating voltage Ue  | 690 V (500 V with integrated e.l.c.bs)  |  |   |   | 690 V (500 V with integrated e.l.c.bs)  |   |   |       | 690 V (500 V with integrated e.l.c.bs)  |         |         |          | 690 V~   |       |       |        | 690 V~   |           |           |           | 690 V~                                 |                               |       |        | 690 V~                                   |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Category of use   | A   |  |   |   | A   |   |   |       | A   |         |         |          | A  |       |       |        | A: In 630 A - B: In 200 to 400 A               |           |           |           | A                                      |                               |       |        | B  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Thermal magnetic adjustment   | 0,8 to 1 In   |  |   |   |   |   |   |       |   |         |         |          | 0,8 to 1 In  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Thermal   | 0,8 to 1 In   |  |   |   | 0,8 to 1 In   |   |   |       | -   |         |         |          | 0,8 to 1 In  |       |       |        | -  |           |           |           | 0,8 to 1 In                            |                               |       |        | -  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Magnetic  | 10 In (400 A for 16 A and 25 A sizes)   |  |   |   | 5 to 10 In  |   |   |       | -   |         |         |          | 5 to 10 In   |       |       |        | -  |           |           |           | 5 to 10 In                             |                               |       |        | -  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Electronic protection adjustment  | -   |  |   |   |   |   |   |       |   |         |         |          | -  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| S2  |                    |  |   |   |   |   |   |       |   |         |         |          | -  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Sg  |                    |  |   |   |   |   |   |       |   |         |         |          | -  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
|   |   |  |   |   |   |   |   |       |   |         |         |          | Ir : 0,4 to 1 In<br>I <sub>sd</sub> : 1,5 to 10 Ir   |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
|   |   |  |   |   |   |   |   |       |   |         |         |          | <table border="1"> <thead> <tr> <th></th> <th>S2</th> <th>Sg</th> </tr> </thead> <tbody> <tr> <td>Ir = 0,4 - 1 x In</td> <td>•</td> <td>•</td> </tr> <tr> <td>Ir = 3-30 s</td> <td>•</td> <td>•</td> </tr> <tr> <td>I<sub>sd</sub> = 1,5 - 10 Ir</td> <td>•</td> <td>•</td> </tr> <tr> <td>tsd (I=K) = 0-500 ms</td> <td>•</td> <td>•</td> </tr> <tr> <td>tsd (I≠K) = 0-500 ms</td> <td>•</td> <td>•</td> </tr> <tr> <td>I<sub>g</sub> = 0,2 - 1 x In</td> <td>•</td> <td>•</td> </tr> <tr> <td>I<sub>g</sub> = 0,1 - 1 s</td> <td>•</td> <td>•</td> </tr> </tbody> </table> |       |       |        |  |           |           |           |  |                               |       |        |  | S2        | Sg        | Ir = 0,4 - 1 x In | •          | •          | Ir = 3-30 s                   | •   | •   | I <sub>sd</sub> = 1,5 - 10 Ir | •    | •    | tsd (I=K) = 0-500 ms | • | • | tsd (I≠K) = 0-500 ms | • | • | I <sub>g</sub> = 0,2 - 1 x In | • | • | I <sub>g</sub> = 0,1 - 1 s | • | • |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
|   | S2  | Sg   |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Ir = 0,4 - 1 x In   | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Ir = 3-30 s   | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| I <sub>sd</sub> = 1,5 - 10 Ir   | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| tsd (I=K) = 0-500 ms  | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| tsd (I≠K) = 0-500 ms  | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| I <sub>g</sub> = 0,2 - 1 x In   | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| I <sub>g</sub> = 0,1 - 1 s  | •   | •  |   |   |   |   |   |       |   |         |         |          |  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Maximum cable cross-section   | 150 mm <sup>2</sup>   |  |   |   |   |   |   |       |   |         |         |          | 150 mm <sup>2</sup>  |       |       |        |  |           |           |           |  |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Rigid cable   | 150 mm <sup>2</sup>   |  |   |   | 150 mm <sup>2</sup>   |   |   |       | 150 mm <sup>2</sup>   |         |         |          | 300 mm <sup>2</sup> or 2 x 240 mm <sup>2</sup>   |       |       |        | 300 mm <sup>2</sup> or 2 x 240 mm <sup>2</sup> |           |           |           | 2 or 4 x 240 mm <sup>2</sup>           |                               |       |        | 2 or 4 x 240 mm <sup>2</sup>             |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Flexible cable  | 120 mm <sup>2</sup>   |  |   |   | 120 mm <sup>2</sup>   |   |   |       | 120 mm <sup>2</sup>   |         |         |          | 240 mm <sup>2</sup> or 2 x 185 mm <sup>2</sup>   |       |       |        | 240 mm <sup>2</sup> or 2 x 185 mm <sup>2</sup> |           |           |           | 2 or 4 x 185 mm <sup>2</sup>           |                               |       |        | 2 or 4 x 185 mm <sup>2</sup>             |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Copper bar and lug width  | 18 mm   |  |   |   | 28.5 mm <sup>(1)</sup>  |   |   |       | 28.5 mm <sup>(1)</sup>  |         |         |          | 32 mm  |       |       |        | 32 mm  |           |           |           | 50 mm                                  |                               |       |        | 50 mm                                    |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Tightening torque   | 8 Nm  |  |   |   | 10 Nm   |   |   |       | 10 Nm   |         |         |          | 15 Nm  |       |       |        | 15 Nm  |           |           |           | 20 Nm                                  |                               |       |        | 20 Nm                                    |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Nominal current (In) at 40 °C (A)   | 16 25 40 63 80 100 125 160  |  |   |   |   |   |   |       |   |         |         |          | 100 160 200 250  |       |       |        |  |           |           |           |  |                               |       |        | 40 100 160 250                           |           |           |                   |            |            |                               |     |     |                               |      |      | 250 320 400 500 630  |   |   |                      |   |   |                               |   |   |                            |   |   | 250 320 400 500 630  |  |  |  |  |  |  |  |  |  |  |  | 500 630 800 1000 1250 |  |  |  |  |  |  |  |  |  |  |  | 500 630 800 1000 1250 1600 |  |  |  |  |  |  |  |  |  |  |  |
| In (A)  | 16  | 25   | 40  | 63  | 80  | 100   | 125   | 160   | 100   | 160     | 200     | 250      | 40   | 100   | 160   | 250    | 250  | 320       | 400       | 500       | 630                                    | 250                           | 320   | 400    | 500                                      | 630       | 500       | 630               | 800        | 1000       | 1250                          | 500 | 630 | 800                           | 1000 | 1250 | 1600                 |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Phase   | 16  | 25   | 40  | 63  | 80  | 100   | 125   | 160   | 100   | 160     | 200     | 250      | 40   | 100   | 160   | 250    | 250  | 320       | 400       | 500       | 630                                    | 250                           | 320   | 400    | 500                                      | 630       | 500       | 630               | 800        | 1000       | 1250                          | 500 | 630 | 800                           | 1000 | 1250 | 1600                 |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| N   | 16  | 25   | 40  | 63  | 80  | 100   | 125   | 160   | 100   | 160     | 200     | 250      | 40   | 100   | 160   | 250    | 250  | 320       | 400       | 500       | 630                                    | 0 - 50 - 100 % of phase value |       |        |  | 500       | 630       | 800               | 1000       | 1250       | 0 - 50 - 100 % of phase value |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| N/2   | -   | -  | -   | -   | -   | -   | -   | -     | -   | -       | -       | -        | -  | -     | -     | -      | -  | 250       | 250       | 250       | 320                                    | -                             |       |        |  | -         | -         | -                 | 500        | 630        | -                             |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Magnetic threshold (Im) (A) <sup>(2)</sup> of DPX <sup>3</sup> thermal magnetic | Fixed   |  |   |   |   |   |   |       |   |         |         |          | Adjustable   |       |       |        | Adjustable                                     |           |           |           | Adjustable                             |                               |       |        |  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| In (A)  | 16  | 25   | 40  | 63  | 80  | 100   | 125   | 160   | 100   | 160     | 200     | 250      | -  |       |       |        | 250  | 320       | 400       | 500       | 630                                    | -                             |       |        |  | 500       | 630       | 800               | 1000       | 1250       | -                             |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Phase   | 400   | 400  | 400   | 630   | 800   | 1000  | 1250  | 1600  | 125-250   | 200-400 | 315-630 | 500-1000 | -  |       |       |        | 1250-2500                                      | 1600-3200 | 2000-4000 | 2500-5000 | 3150-6300                              | -                             |       |        |  | 2500-5000 | 3150-6300 | 4000-8000         | 5000-10000 | 6250-12500 | -                             |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| N   | 400   | 400  | 400   | 630   | 800   | 1000  | 1250  | 1600  | 125-250   | 200-400 | 315-630 | 500-1000 | -  |       |       |        | 1250-2500                                      | 1600-3200 | 2000-4000 | 2500-5000 | 3150-6300                              | -                             |       |        |  | 2500-5000 | 3150-6300 | 4000-8000         | 5000-10000 | 6250-12500 | -                             |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| N/2   | -   | -  | -   | -   | -   | -   | -   | -     | -   | -       | -       | -        | -  |       |       |        | -  | 1000-2000 | 1250-2500 | 1600-2500 | 2000-4000                              | -                             |       |        |  | -         | -         | -                 | 2500-5000  | 3150-6000  | -                             |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Endurance (cycles)  | 8000  |  |   |   |   |   |   |       |   |         |         |          | 8000   |       |       |        |  |           |           |           |  |                               |       |        | 8000                                     |           |           |                   |            |            |                               |     |     |                               |      |      | 5000                 |   |   |                      |   |   |                               |   |   |                            |   |   | 5000                 |  |  |  |  |  |  |  |  |  |  |  | 4000                  |  |  |  |  |  |  |  |  |  |  |  | 4000                       |  |  |  |  |  |  |  |  |  |  |  |
| Electrical  | 8000  |  |   |   | 8000  |   |   |       | 8000  |         |         |          | 5000   |       |       |        | 5000   |           |           |           | 4000                                   |                               |       |        | 4000                                     |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Mechanical  | 25000   |  |   |   | 20000   |   |   |       | 20000   |         |         |          | 10000  |       |       |        | 20000  |           |           |           | 10000                                  |                               |       |        | 10000                                    |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |
| Electronic earth leakage module   | without or integrated   |  |   |   |   |   |   |       |   |         |         |          | without or integrated  |       |       |        |  |           |           |           |  |                               |       |        | without or integrated                    |           |           |                   |            |            |                               |     |     |                               |      |      | downstream e.l.c.bs. |   |   |                      |   |   |                               |   |   |                            |   |   | downstream e.l.c.bs. |  |  |  |  |  |  |  |  |  |  |  | -                     |  |  |  |  |  |  |  |  |  |  |  | -                          |  |  |  |  |  |  |  |  |  |  |  |
| Type  | without or integrated   |  |   |   | without or integrated   |   |   |       | without or integrated   |         |         |          | downstream e.l.c.bs.   |       |       |        | downstream e.l.c.bs.                           |           |           |           | -                                      |                               |       |        | -  |           |           |                   |            |            |                               |     |     |                               |      |      |                      |   |   |                      |   |   |                               |   |   |                            |   |   |                      |  |  |  |  |  |  |  |  |  |  |  |                       |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |

1: Copper bars only  
2: Trip current for 50/60 Hz. For direct current, multiply by 1.5

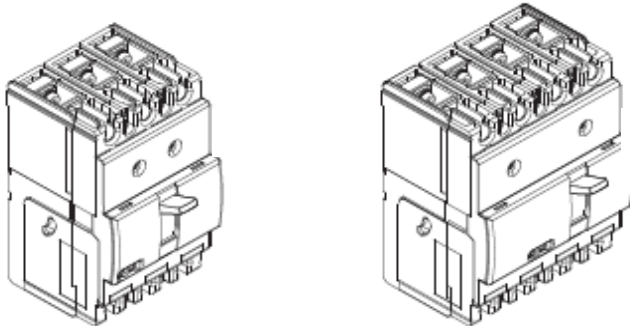
 For DPX<sup>3</sup> magnetic release only, Please, consult us

# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/ 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/ 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/ 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199



| CONTENTS                                     | PAGES |
|--|-------|
| 1. USE                                       | 1     |
| 2. RANGE                                     | 1     |
| 3. DIMENSIONS                                | 1     |
| 3. DIMENSIONS (NEXT)                         | 2     |
| 4. ELECTRICAL AND MECHANICAL CHARACTERISTICS | 3     |
| 5. CONFORMITY                                | 4     |
| 6. MARKING                                   | 4     |
| 7. EQUIPMENTS AND ACCESSORIES                | 4     |
| 8. CURVES                                    | 6     |

### 1. USE

DPX<sup>3</sup> "moulded case" offers optimal solutions to answer protection requirements of tertiary and industrial installations.

### 2. RANGE

DPX<sup>3</sup>

| In (A) | 16 kA  |        | 25 kA  |        | 36 kA  |        | 50 kA  |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|        | 3P     | 4P     | 3P     | 4P     | 3P     | 4P     | 3P     | 4P     |
| 16     | 420000 | 420010 | 420040 | 420050 | 420080 | 420090 | 420120 | 420130 |
| 25     | 420001 | 420011 | 420041 | 420051 | 420081 | 420091 | 420121 | 420131 |
| 40     | 420002 | 420012 | 420042 | 420052 | 420082 | 420092 | 420122 | 420132 |
| 63     | 420003 | 420013 | 420043 | 420053 | 420083 | 420093 | 420123 | 420133 |
| 80     | 420004 | 420014 | 420044 | 420054 | 420084 | 420094 | 420124 | 420134 |
| 100    | 420005 | 420015 | 420045 | 420055 | 420085 | 420095 | 420125 | 420135 |
| 125    | 420006 | 420016 | 420046 | 420056 | 420086 | 420096 | 420126 | 420136 |
| 160    | 420007 | 420017 | 420047 | 420057 | 420087 | 420097 | 420127 | 420137 |

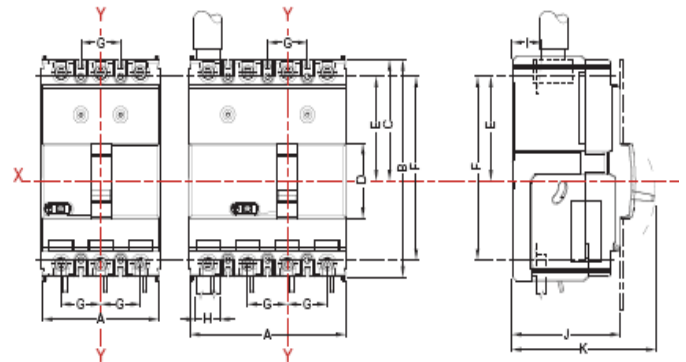
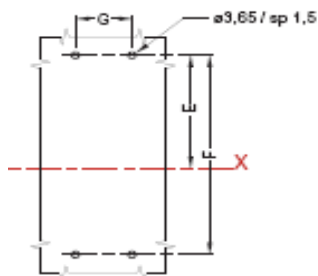
DPX<sup>3</sup>-I

|     | 3P      | 4P      |
|-----|---------|---------|
| 160 | 420 198 | 420 199 |

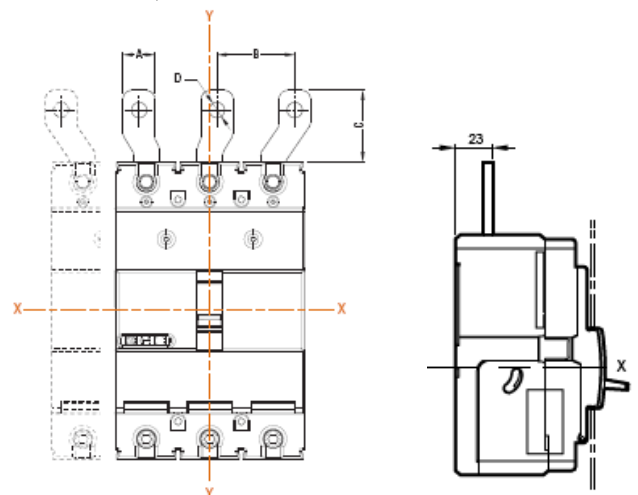
### 3. DIMENSIONS

#### 3.1 Fixed version

|        | A   | B   | C    | D  | E    | F   | G  | H  | I  | J  | K  |
|--------|-----|-----|------|----|------|-----|----|----|----|----|----|
| 160 3P | 81  | 130 | 72,5 | 45 | 62,5 | 110 | 27 | 19 | 18 | 74 | 97 |
| 160 4P | 108 | 130 | 72,5 | 45 | 62,5 | 110 | 27 | 19 | 18 | 74 | 97 |



#### 3.2 Fixed version, front terminals



|     | A    | B  | C  | D   |
|-----|------|----|----|-----|
| 160 | 17,5 | 35 | 41 | 8,5 |



# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/ 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/ 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/ 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### 4. ELECTRICAL AND MECHANICAL CHARACTERISTICS

##### 4.1 Breaker technical characteristics

| Circuit breaker   | DPX <sup>3</sup> 160     |
|---|--------------------------|
| Rated current I <sub>n</sub> (A)                          | 16-160                   |
| Rated insulation voltage U <sub>i</sub> (V)               | 800                      |
| Rated operational voltage U <sub>e</sub> (V)              | 690 V (ac)<br>500 V (dc) |
| Rated impulse withstand voltage U <sub>imp</sub> (kV)     | 8                        |
| Ambient temperature (°C)                                  | 40                       |
| Endurance electrical / mechanical                         | 8000/25000               |
| Utilization category                                      | A                        |
| Releases type   | thermal-mag              |
| Nominal frequency (Hz)                                    | 50-60                    |
| Thermal adjustment  | 0,8 ÷ 1 I <sub>n</sub>   |
| Magnetic threshold (for 16 and 25A I <sub>m</sub> = 400A) | 10 x I <sub>n</sub>      |

##### 4.2 Switches technical characteristics

| Switches  | DPX <sup>3</sup> -I 160  |
|---|--------------------------|
| Rated current I <sub>n</sub> (A)                              | 160                      |
| Rated insulation voltage U <sub>i</sub> (V)                   | 800                      |
| Rated operational voltage U <sub>e</sub> (V)                  | 690 V (ac)<br>500 V (dc) |
| Rated impulse withstand voltage U <sub>imp</sub> (kV)         | 8                        |
| Ambient temperature (°C)                                      | 40                       |
| Endurance electrical / mechanical                             | 8000/25000               |
| Nominal frequency (Hz)  | 50-60                    |
| Rated short-time withstand current I <sub>sw</sub> (1 s) (kA) | 1,7                      |
| Rated short-circuit making capacity I <sub>cm</sub> (kA)      | 2,4                      |
| AC 22, AC 23, DC 22, DC 23 (A)                                | 160                      |

##### 4.3 Breaking capacity (kA)

| Breaking capacity I <sub>cu</sub> and I <sub>cs</sub> in AC (KA) |                |       |       |       |       |
|--|----------------|-------|-------|-------|-------|
|  | U <sub>e</sub> | 16 kA | 25 kA | 36 kA | 50 kA |
| I <sub>cu</sub> (kA)   | 220/240V       | 25    | 36    | 50    | 65    |
|  | 380/415V       | 16    | 25    | 36    | 50    |
|  | 440V           | 10    | 18    | 25    | 30    |
|  | 460V           | 10    | 18    | 25    | 30    |
|  | 480/500V       | 8     | 10    | 12    | 15    |
| 690V   | 5              | 5     | 8     | 10    |       |
| I <sub>cs</sub> (%I <sub>cu</sub> )                              | -              | 100   | 100   | 100   | 100   |
| Rated short-circuit making capacity I <sub>cm</sub> (KA)         |                |       |       |       |       |
|  | U <sub>e</sub> | 16 kA | 25 kA | 36 kA | 50 kA |
| I <sub>cm</sub> (kA)   | 415 V          | 32    | 52.5  | 75.6  | 105   |

##### 4.4 Derating temperature Ta (°C)

| Influence of ambient temperature Ta(°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| In (A)                                  | -25 | -20 | -10 | -5  | 0   | 10  | 20  | 30  | 40  | 50  | 60  | 70  |
| 16                                      | 23  | 22  | 21  | 21  | 20  | 19  | 18  | 17  | 16  | 15  | 15  | 14  |
| 25                                      | 37  | 35  | 34  | 33  | 32  | 30  | 28  | 26  | 25  | 23  | 22  | 21  |
| 40                                      | 55  | 54  | 52  | 51  | 50  | 47  | 43  | 42  | 40  | 38  | 36  | 34  |
| 63                                      | 88  | 87  | 84  | 83  | 81  | 76  | 69  | 66  | 63  | 60  | 57  | 55  |
| 80                                      | 115 | 113 | 111 | 109 | 107 | 97  | 87  | 84  | 80  | 78  | 75  | 72  |
| 100                                     | 135 | 133 | 130 | 123 | 115 | 108 | 104 | 102 | 100 | 95  | 90  | 85  |
| 125                                     | 160 | 158 | 155 | 153 | 150 | 138 | 130 | 127 | 125 | 118 | 112 | 105 |
| 160                                     | 224 | 221 | 214 | 210 | 205 | 192 | 176 | 168 | 160 | 152 | 145 | 139 |

##### 4.5 Power loss (W)

###### 4.5.1 Breaker power loss (W)

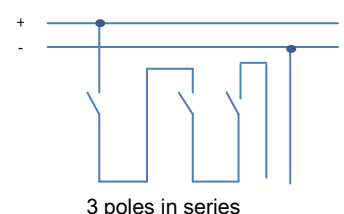
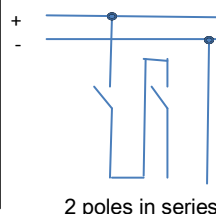
| Power loss DPX <sup>3</sup> 160 (W) |     |     |     |     |     |      |      |      |
|-------------------------------------|-----|-----|-----|-----|-----|------|------|------|
| In (A) ---->                        | 16  | 25  | 40  | 63  | 80  | 100  | 125  | 160  |
| Cage terminals                      | 2,8 | 5,0 | 5,1 | 6,7 | 7,0 | 11,0 | 12,5 | 15,4 |
| Lugs                                | 2,8 | 5,0 | 5,1 | 6,7 | 7,0 | 11,0 | 12,5 | 15,4 |
| External terminals                  | 2,8 | 5,0 | 5,1 | 6,7 | 7,0 | 11,0 | 12,5 | 15,4 |
| Spreaders                           | 2,8 | 5,0 | 5,1 | 6,7 | 7,0 | 11,0 | 12,5 | 15,4 |
| Rear terminals                      | 2,8 | 5,0 | 5,1 | 6,7 | 7,0 | 11,0 | 12,5 | 15,4 |
| Plugin version                      | 2,9 | 5,1 | 5,4 | 7,5 | 8,3 | 13,0 | 15,6 | 20,5 |

###### 4.5.2 Switches power loss (W)

| Power loss DPX <sup>3</sup> -I 160 (W) |      |
|--|------|
| In (A) ---->                           | 160  |
| Cage terminals                         | 9,2  |
| Lugs                                   | 9,2  |
| External terminals                     | 9,2  |
| Spreaders                              | 9,2  |
| Rear terminals                         | 9,2  |
| Plugin version                         | 14,3 |

##### 4.6 Short-circuit breaking capacity in D.C. current

| Short-circuit breaking capacity in D.C. current |              |              |              |              |
|---|--------------|--------------|--------------|--------------|
| Breaking capacity I <sub>cu</sub> (kA)          |              |              |              |              |
|   | 2 p. in ser. | 2 p. in ser. | 3 p. in ser. | 3 p. in ser. |
|   | 110-125V     | 250V         | 400V         | 500V         |
| 160 16 kA                                       | 32           | 16           | 16           | 10           |
| 160 25 kA                                       | 50           | 25           | 25           | 20           |
| 160 36 kA                                       | 60           | 30           | 30           | 25           |
| 160 50 kA                                       | 80           | 40           | 40           | 35           |



# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/ 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/ 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/ 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### 4.7 Protection in DC

| Protection in D.C. current |         |           |
|----------------------------|---------|-----------|
|                            | thermal | magnetic  |
| 160 16 kA                  | like AC | 1,5 Im AC |
| 160 25 kA                  | like AC | 1,5 Im AC |
| 160 36 kA                  | like AC | 1,5 Im AC |
| 160 50 kA                  | like AC | 1,5 Im AC |

#### 4.8 Altitude

| Altitude (m)            |                   |        |           |           |
|-------------------------|-------------------|--------|-----------|-----------|
|                         | Altitude (m)      | ≤2000  | 3000      | 4000      |
| DPX <sup>3</sup> 160    | Rated current (A) | 1 x In | 0,96 x In | 0,93 x In |
|                         | Rated voltage (V) | 690    | 690       | 550       |
| DPX <sup>3</sup> -I 160 | Rated current (A) | 1 x In | 0,96 x In | 0,93 x In |
|                         | Rated voltage (V) | 500    | 500       | 400       |

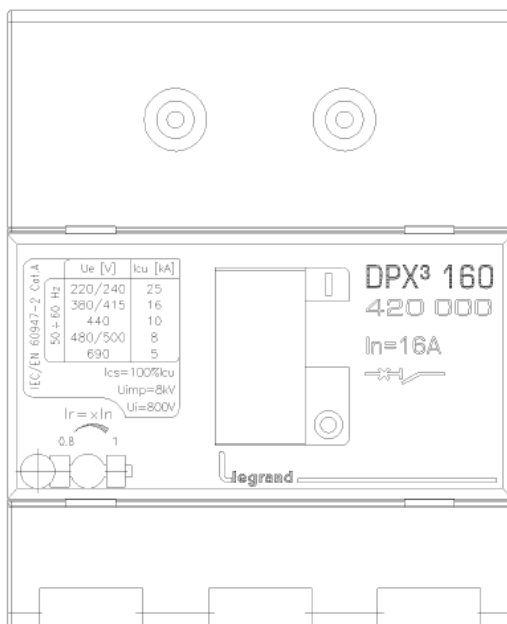
#### 4.9 Loads operation

| Loads operation   |        |
|-------------------|--------|
| Rated current (A) | In=160 |
| Opening (N)       | 45     |
| Closing (N)       | 78     |
| Reset (N)         | 75     |

#### 5. CONFORMITY

IEC 60947-2  
(for switches IEC 60947-3)  
EN 60947-2  
(for switches EN 60947-3)

#### 6. MARKING



#### 7. EQUIPMENTS AND ACCESSORIES

##### 7.1 Releases

- Shunt releases with voltage:
  - 12 Vac/dc ref. 421 012
  - 24 Vac/dc ref. 421 013
  - 48 Vac/dc ref. 421 014
  - 110-130 Vac ref. 421 015
  - 200-277 Vac ref. 421 016
  - 380-480 Vac ref. 421 017
- undervoltage releases with voltage:
  - 12 Vac/dc ref. 421 018
  - 24 Vac/dc ref. 421 019
  - 48 Vac/dc ref. 421 020
  - 110 Vac ref. 421 021
  - 200-240 Vac ref. 421 022
  - 277 Vac ref. 421 023
  - 380-415 Vac ref. 421 024
  - 440-480 Vac ref. 421 025
- auxiliary contact:
  - set of connectors for aux contacts ref. 421 044
  - aux contacts and fault signal ref. 421 011
  - aux contacts (1NC and 1 NO) for all rotary handles ref. 421 010
  - inserted device signal ref. 421 048

##### 7.2 Rotary handles :

- Direct:
- DPX<sup>3</sup> direct rotary handle ref. 421 000
  - DPX<sup>3</sup> emergency direct rotary handle ref. 421 002
- Vari-depth:
- DPX<sup>3</sup> vari depth rotary handle ref. 421 004
  - DPX<sup>3</sup> emergency vari depth rotary handle ref. 421 005

##### Locking accessories

- locking acc. for direct rotary handle - ronis ref. 421 006
- locking acc. for direct rotary handle - profalux ref. 421 007
- locking acc. for vari depth rotary handle - ronis ref. 421 008
- locking acc. for vari depth rotary handle - profalux ref. 421 009

##### 7.3 Mechanical accessories :

###### Insulated shields

- Set of 3 ref. 421 070

###### Sealable terminal shields

- sealable terminal shield for rear terminals 160 3P ref. 421 050
- sealable terminal shield for rear terminals 160 4P ref. 421 051
- sealable terminal shield for front spreaders 160 3P ref. 421 054
- sealable terminal shield for front spreaders 160 4P ref. 421 055

###### Padlocks

- DPX<sup>3</sup> padlock accessory for handle (off) ref. 421 049

###### Interlock:

- DPX<sup>3</sup> interlock mounting plate ref. 421 058
- DPX<sup>3</sup> interlock for plug-in / draw-out version ref. 421 059

##### 7.4 Connection's accessories :

###### Cage terminals

- high capacity terminals for al or cu cables kit (3) - flex 1x120mm<sup>2</sup>, rigid 1x150mm<sup>2</sup>, bar/cable lug 18mm ref. 421 026
- high capacity terminals for al or cu cables kit (4) - flex 1x120mm<sup>2</sup>, rigid 1x150mm<sup>2</sup>, bar/cable lug 18mm ref. 421 027
- rack screw and nut for cable lug (3) ref. 421 028
- rack screw and nut for cable lug (4) ref. 421 029

###### Front spreaders

- DPX<sup>3</sup> front spreaders for 3P DPX<sup>3</sup> 160 (3) ref. 421 032
- DPX<sup>3</sup> front spreaders for 4P DPX<sup>3</sup> 160 (4) ref. 421 033

# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/  
012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/  
050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/  
086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/  
124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### Rear terminals

- DPX<sup>3</sup> flat rear terminals for 3P DPX<sup>3</sup> 160 (3) ref. 421 036
- DPX<sup>3</sup> flat rear terminals for 4P DPX<sup>3</sup> 160 (4) ref. 421 037

#### 7.5 Plug-in version

##### Bases

- front/rear terminals plug-in base 3P DPX<sup>3</sup> 160 ref. 421 040
- front/rear terminals plug-in base 4P DPX<sup>3</sup> 160 ref. 421 041

##### Locking accessories

- locking accessory for plug-in base – ronis ref. 421 045
- locking accessory for plug-in base – profalux ref. 421 046
- padlock accessory for plug-in base ref. 421 047

#### 7.6 Motor operator

- side motor operator 24-230 Vac - 24-230 Vdc ref. 421 060
- front motor operator 24-230 Vac - 24-230 Vdc ref. 421 061

##### Locking accessories for front motor operator:

- locking acc. for front motor operator - ronis ref. 421 062
- locking acc. for front motor operator – profalux ref. 421 063
- padlock selector for front motor operator ref. 421 064

##### Locking accessories for side motor operator:

- locking acc. for side motor operator - ronis ref. 421 065
- locking acc. for side motor operator – profalux ref. 421 066
- padlock selector for side motor operator ref. 421 067

##### Din plate:

- DPX<sup>3</sup> din plate for motor operator DPX<sup>3</sup> 160 ref. 421 068

#### 7.7 Mounting on rail fixing plate

- DPX<sup>3</sup> din rail fixing plate DPX<sup>3</sup> 160 3P/4P ref. 421 071

# DPX<sup>3</sup> 160

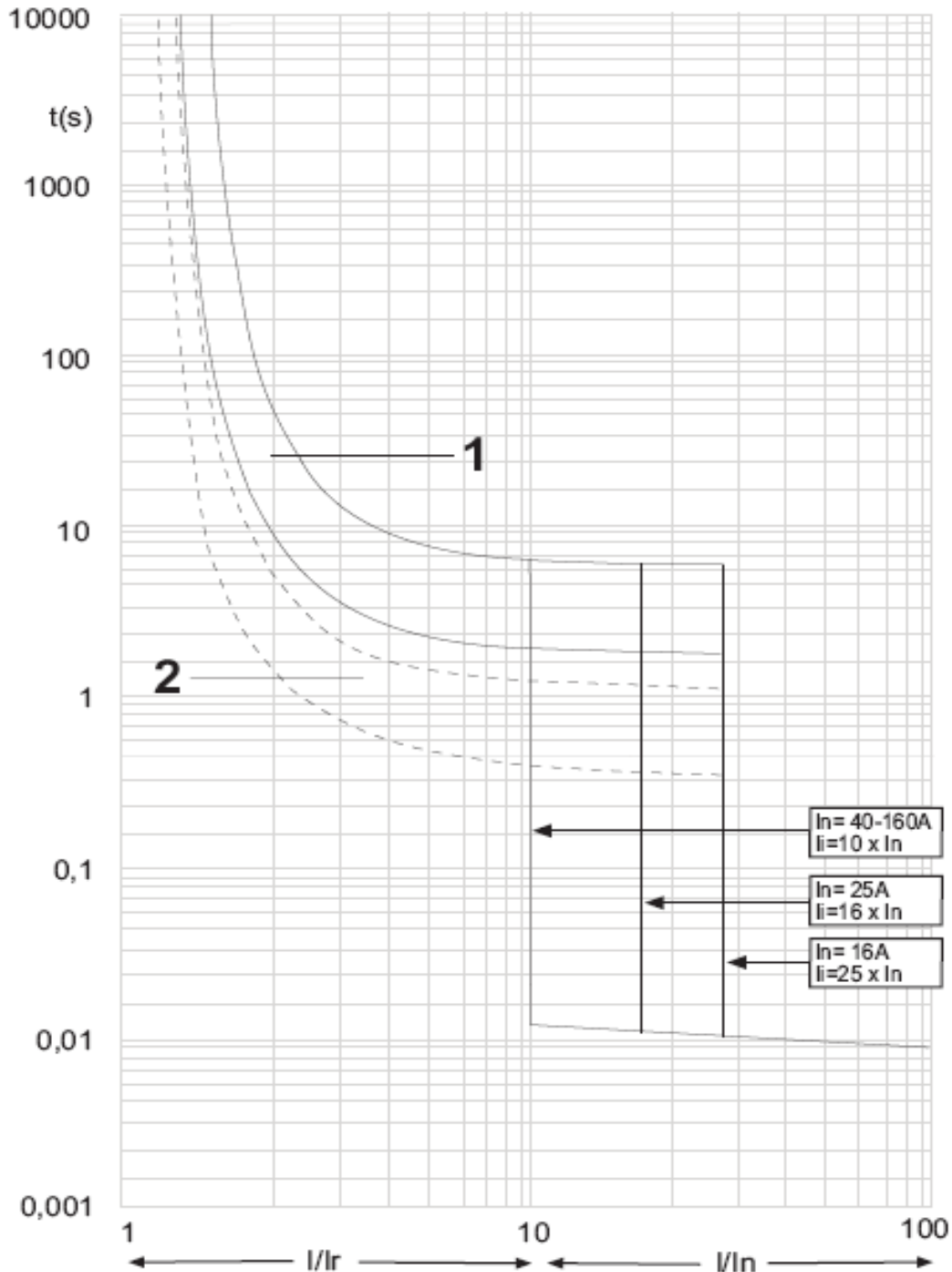
## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/  
 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/  
 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/  
 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/  
 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### 8. CURVES

##### 8.1 TRIPPING CURVE



$t$  = time  
 $I$  = rated current  $\square$   
 $I_r$  = setting current  
 curve number 1 = characteristic with cold start  
 curve number 2 = characteristic with hot start



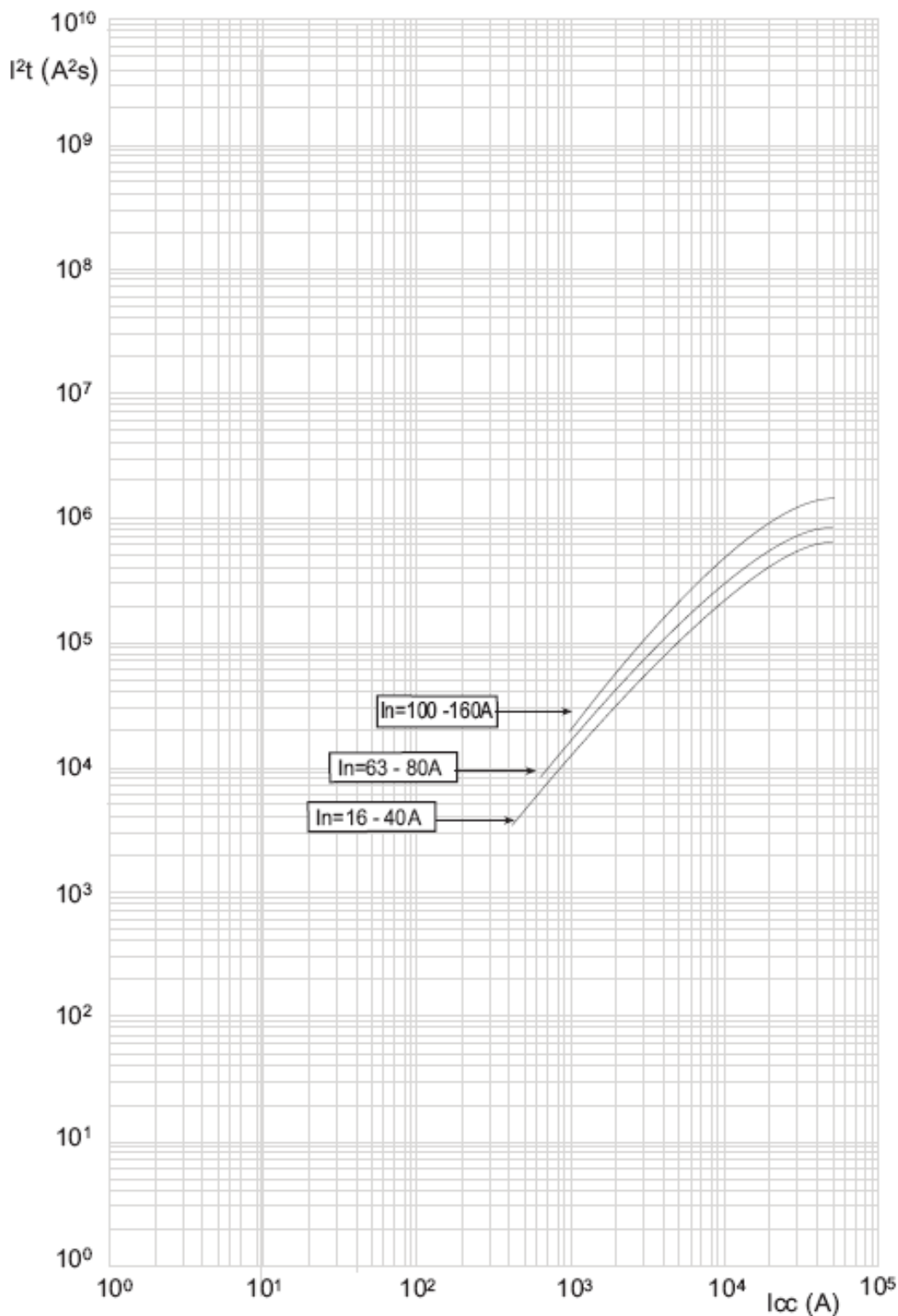
# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/ 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/ 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/ 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### 8.2 Energy curve



I<sub>cc</sub> = estimated short circuit symmetrical current (RMS value)  
 I<sup>2</sup>t (A<sup>2</sup>s) = pass-through specific energy

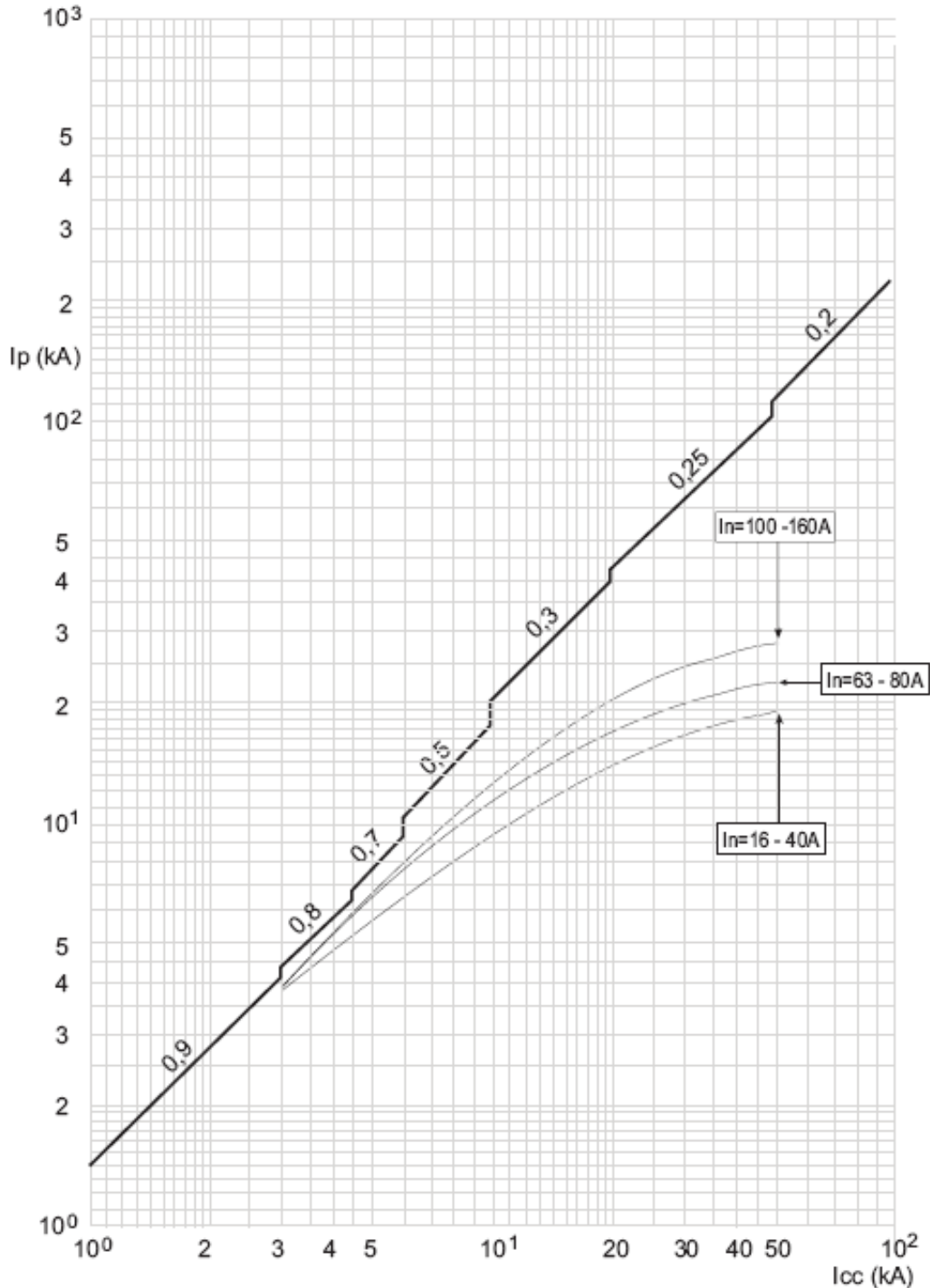
# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

### DPX<sup>3</sup>-I 160

Reference(s) : 420 000/ 001/ 002/003/ 004/ 005/ 006/ 007/ 010/ 011/ 012/ 013/ 014/ 015/ 016/ 017/ 040/ 041/ 042/ 043/ 044/ 045/ 046/ 047/ 050/ 051/ 052/ 053/ 054/ 055/ 056/ 057/ 080/ 081/ 082/ 083/ 084/ 085/ 086/ 087/ 090/ 091/ 092/ 093/ 094/ 095/ 096/ 097/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 198/ 199

#### 8.3 Restricted current curve

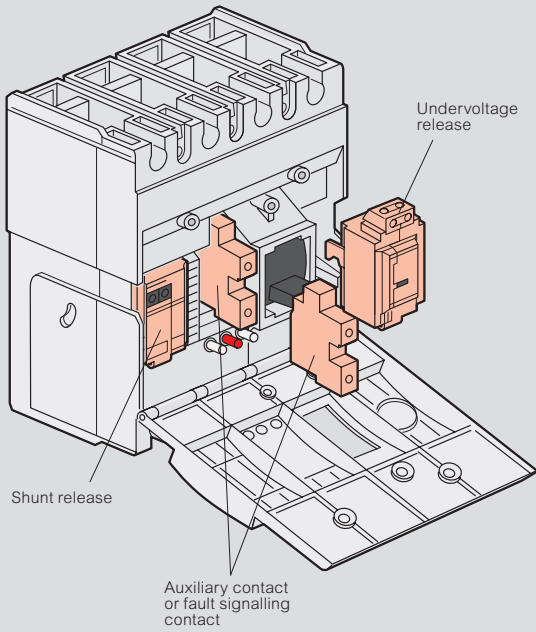


$I_{cc}$  = estimated short circuit symmetrical current (RMS value)  
 $I_p$  = maximum short circuit peak current  
 ——— maximum prospective short circuit peak current corresponding at the power factor  
 - - - - - maximum real peak short circuit current

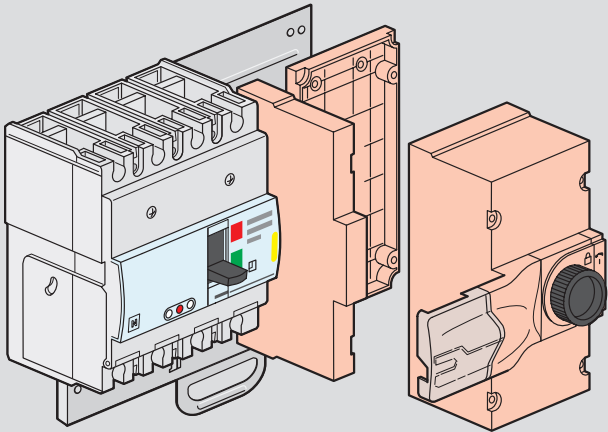
# DPX<sup>3</sup> 160/250

## installation principle

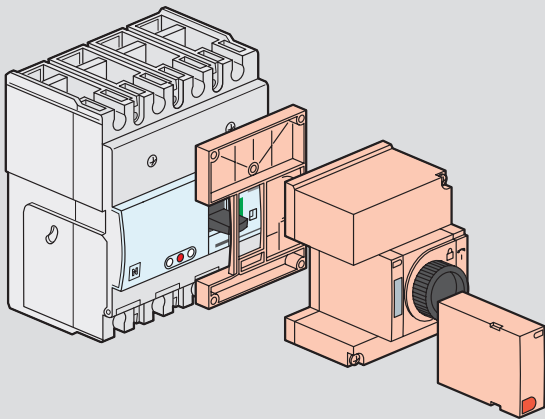
### Auxiliaries mounting



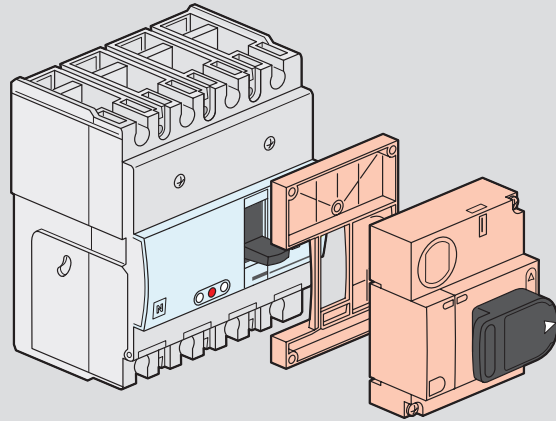
### Side mounting motor-driven handle



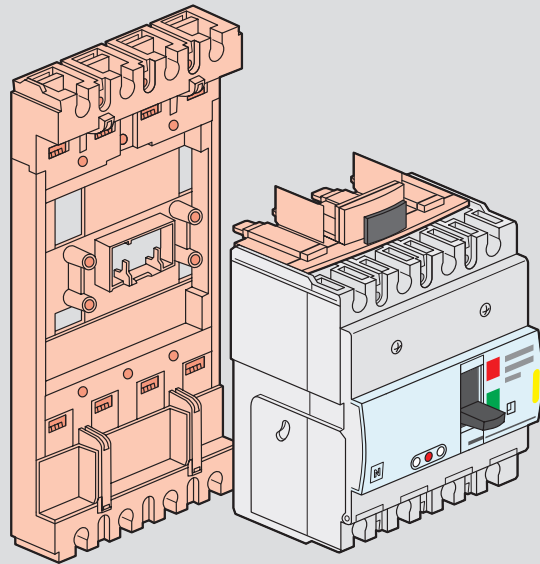
### Front mounting motor-driven handle



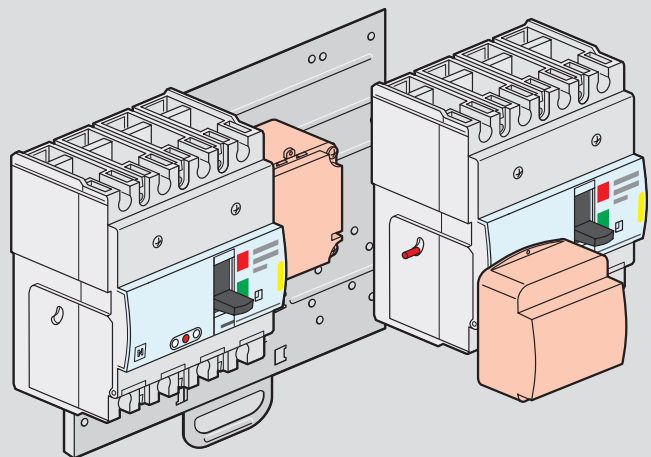
### Direct rotary handle

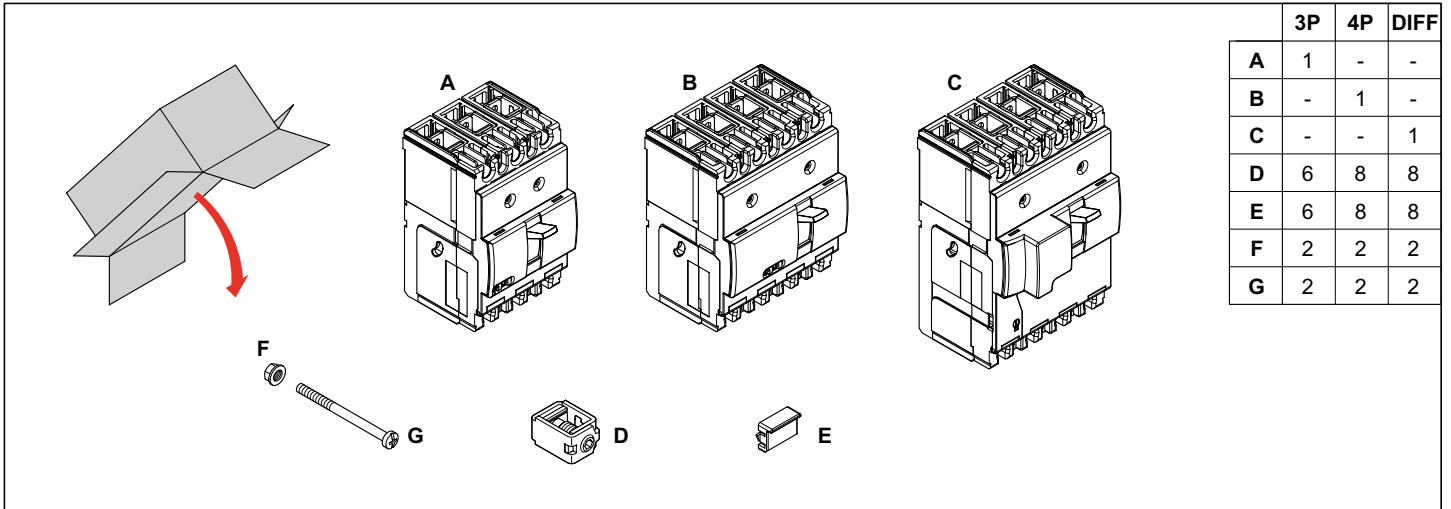


### Plug-in version



### Supply inverter type





|   | 3P | 4P | DIFF |
|---|----|----|------|
| A | 1  | -  | -    |
| B | -  | 1  | -    |
| C | -  | -  | 1    |
| D | 6  | 8  | 8    |
| E | 6  | 8  | 8    |
| F | 2  | 2  | 2    |
| G | 2  | 2  | 2    |

