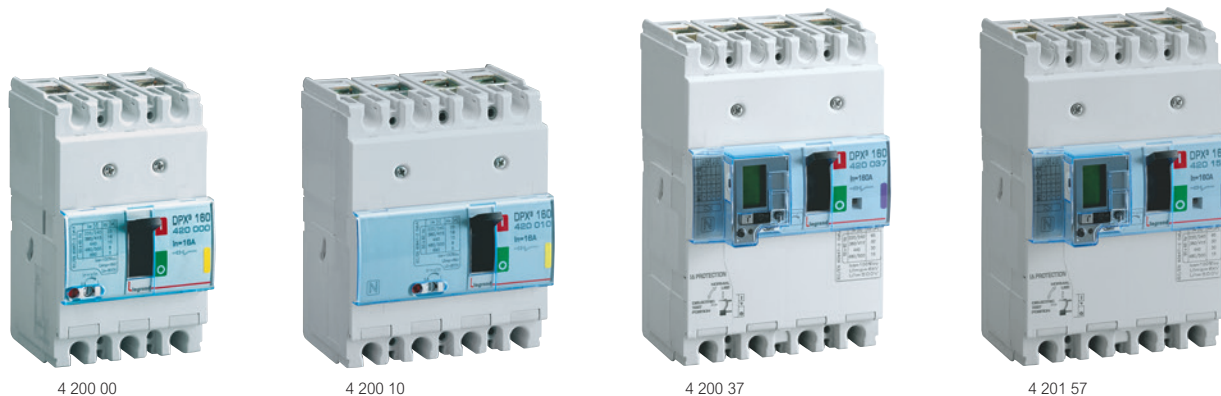


# DPX<sup>3</sup> 160 thermal magnetic

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



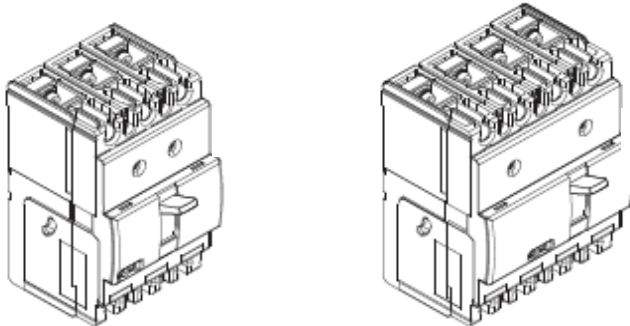


# DPX<sup>3</sup> 160

## 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



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### 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 |

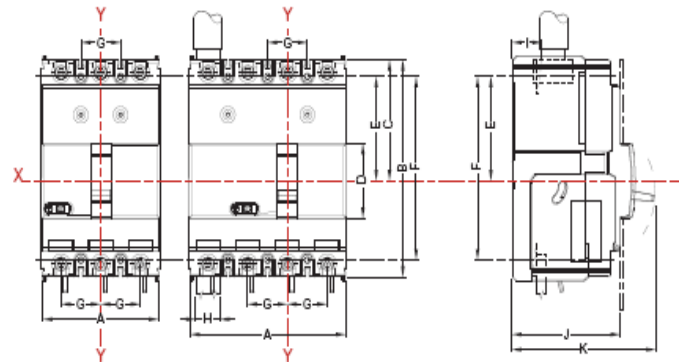
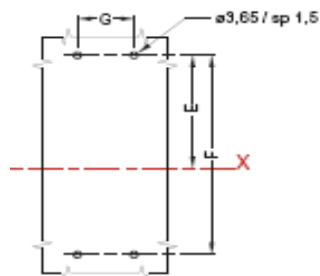
DPX<sup>3</sup>-I

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

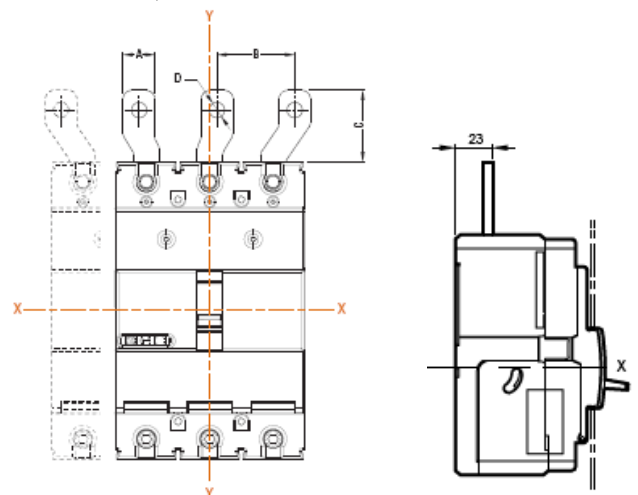
### 3. DIMENSIONS

#### 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 |

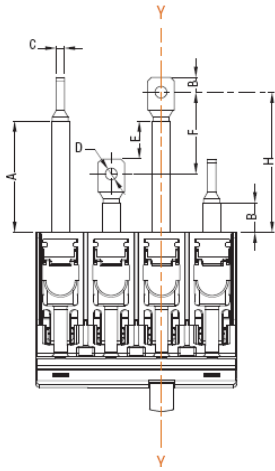
# DPX<sup>3</sup> 160

## Thermal magnetic and trip-free switches

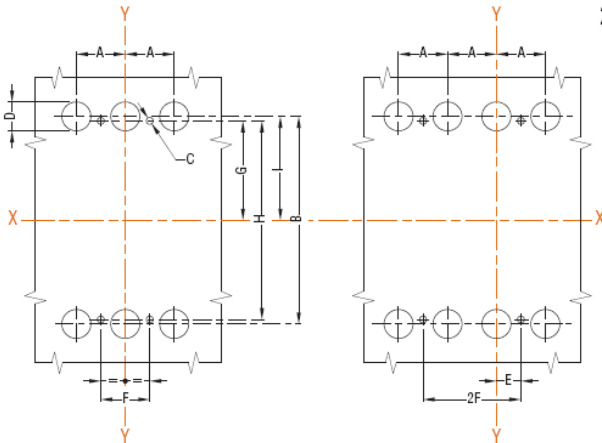
### DPX<sup>3</sup>-I 160

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

#### 3.3 Fixed version, rear terminals

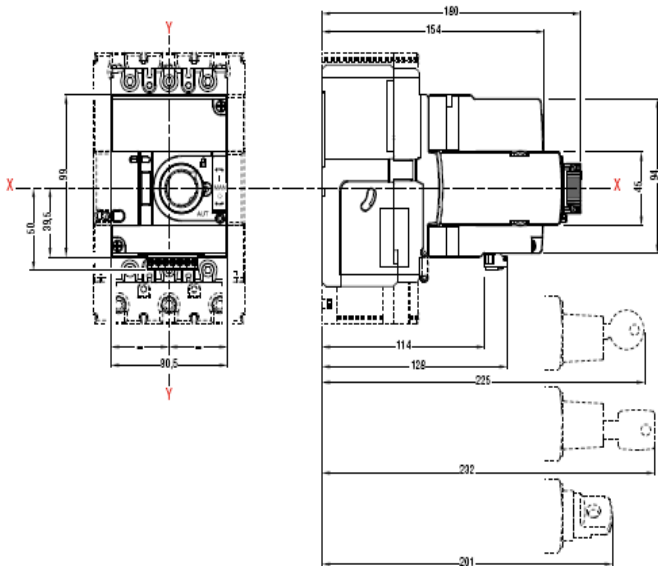


|     | A    | B    | C   | D   | E    | F  | G  | H  |
|-----|------|------|-----|-----|------|----|----|----|
| 160 | 65,5 | 21,5 | 4,5 | 6,3 | 19,5 | 44 | 11 | 79 |

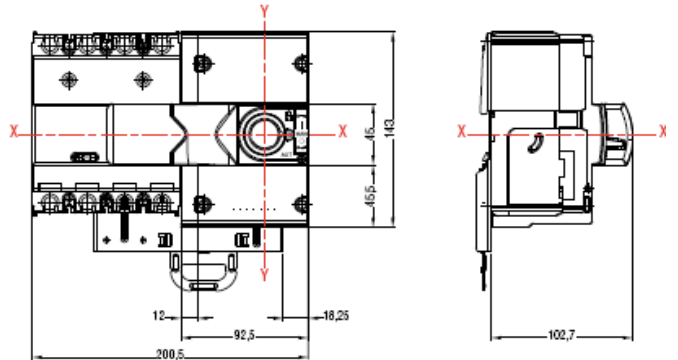


|     | A  | B   | C    | D  | E    | F  | G    | H   | I  |
|-----|----|-----|------|----|------|----|------|-----|----|
| 160 | 27 | 115 | 3,65 | 16 | 13,5 | 27 | 62,5 | 110 | 65 |

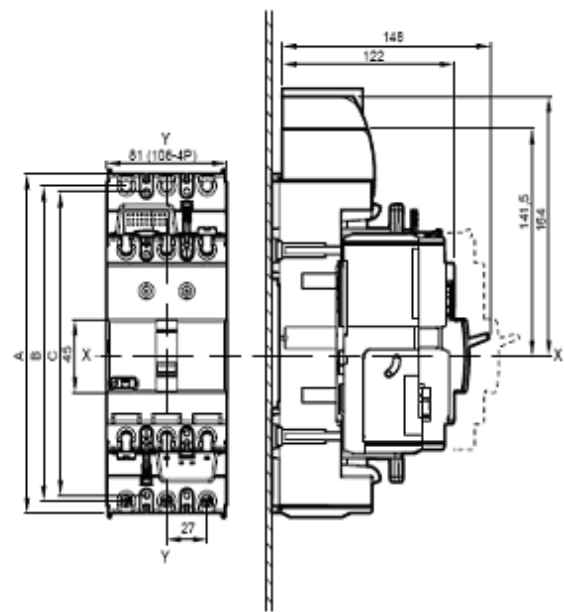
#### 3.4 Fixed version, front motor operator



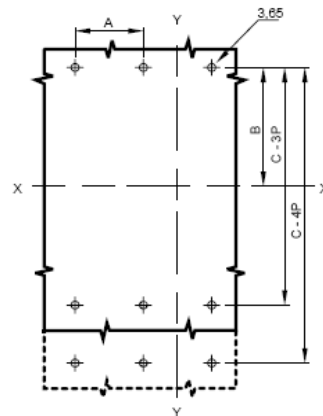
#### 3.5 Fixed version, side motor operator



#### 3.6 Plug-in version



|                           | A   | B   | C   |
|---------------------------|-----|-----|-----|
| DPX <sup>3</sup> 160 - 3P | 208 | 193 | 186 |
| DPX <sup>3</sup> 160 - 4P | 238 | 223 | 216 |



|                      | A  | B     | C   |
|----------------------|----|-------|-----|
| DPX <sup>3</sup> 160 | 27 | 100,5 | 186 |

# 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) |     |     |     |     |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| I <sub>n</sub> (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)

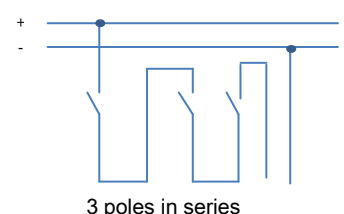
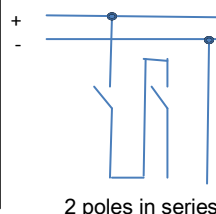
| Power loss DPX <sup>3</sup> 160 (W) |     |     |     |     |     |      |      |      |
|-------------------------------------|-----|-----|-----|-----|-----|------|------|------|
| I <sub>n</sub> (A) ---->            | 16  | 25  | 40  | 63  | 80  | 100  | 125  | 160  |
| Cage terminals                      | 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) |      |
|--|------|
| I <sub>n</sub> (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       |

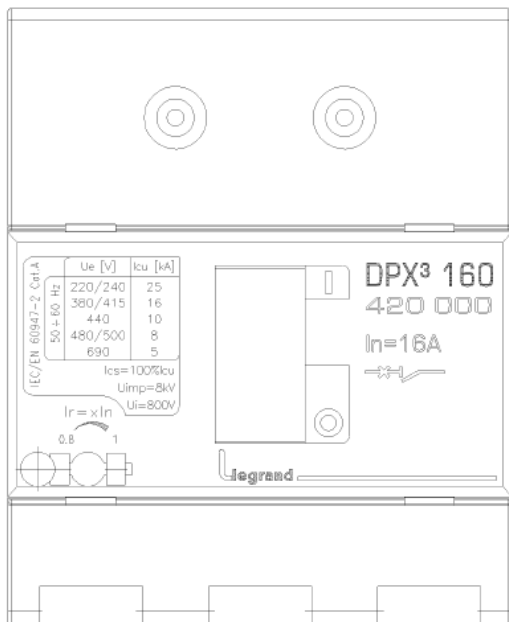
#### 4.9 Loads operation

| 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

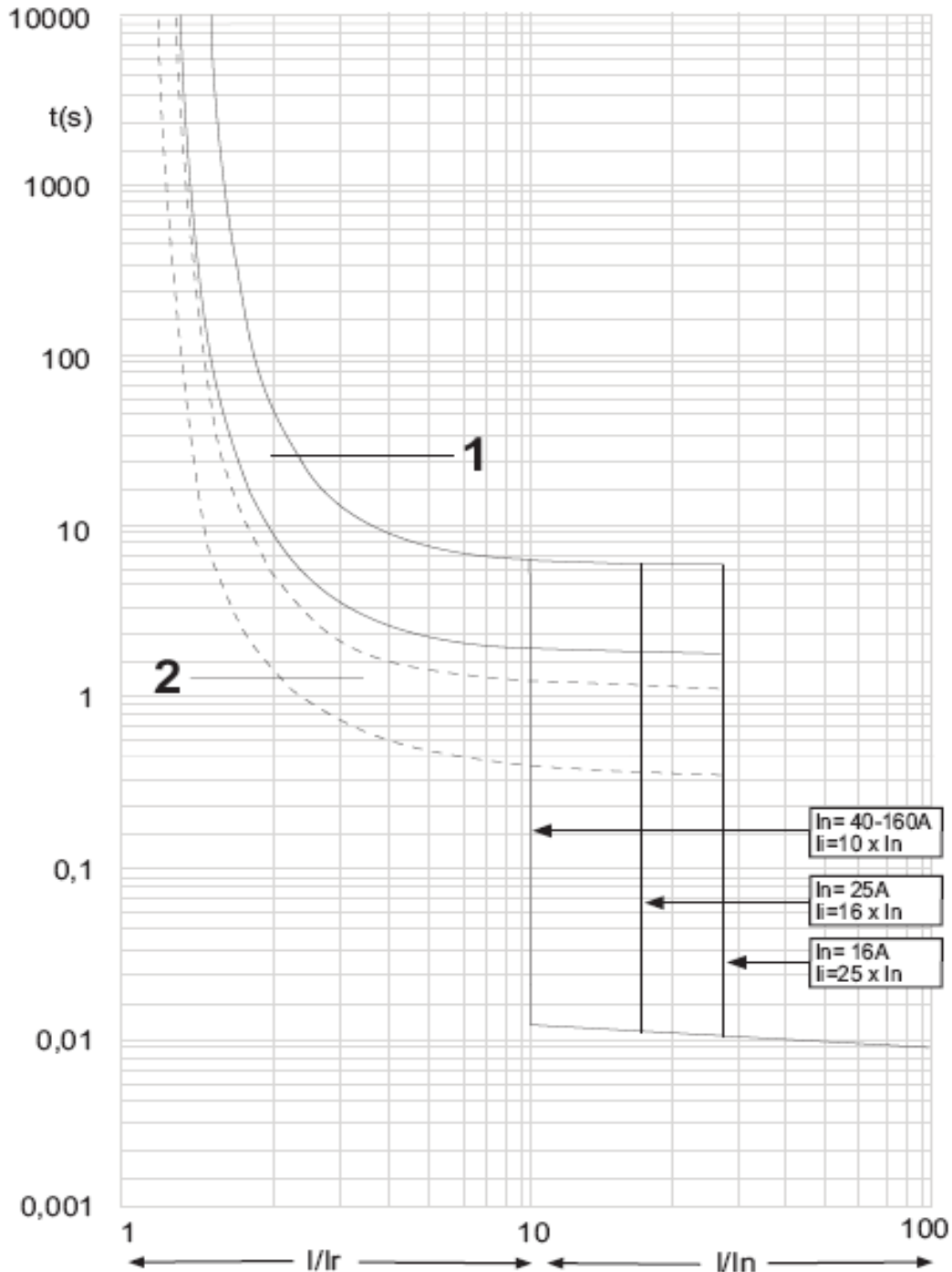
## Thermal magnetic and trip-free switches

### 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



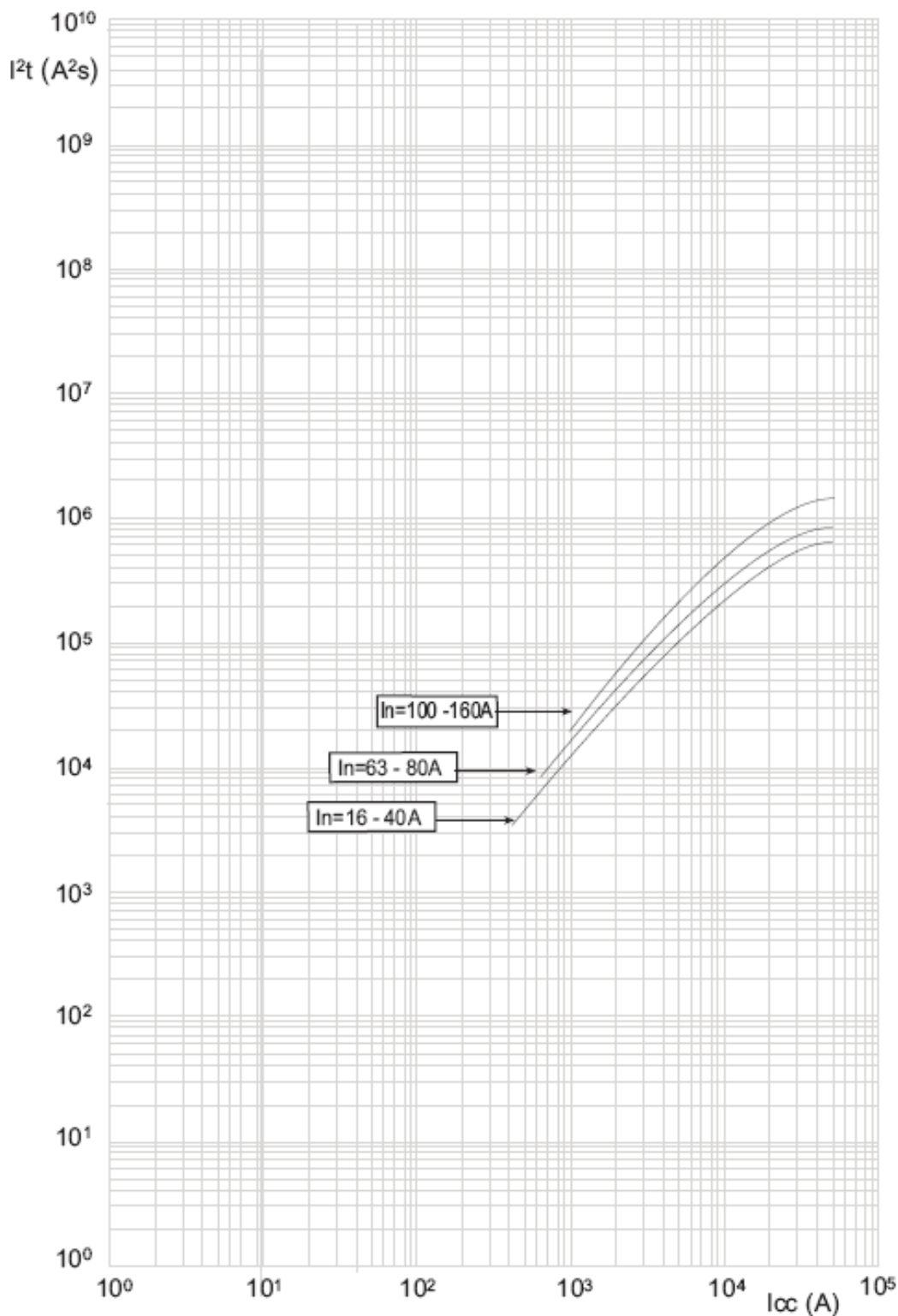
# DPX<sup>3</sup> 160

## 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



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

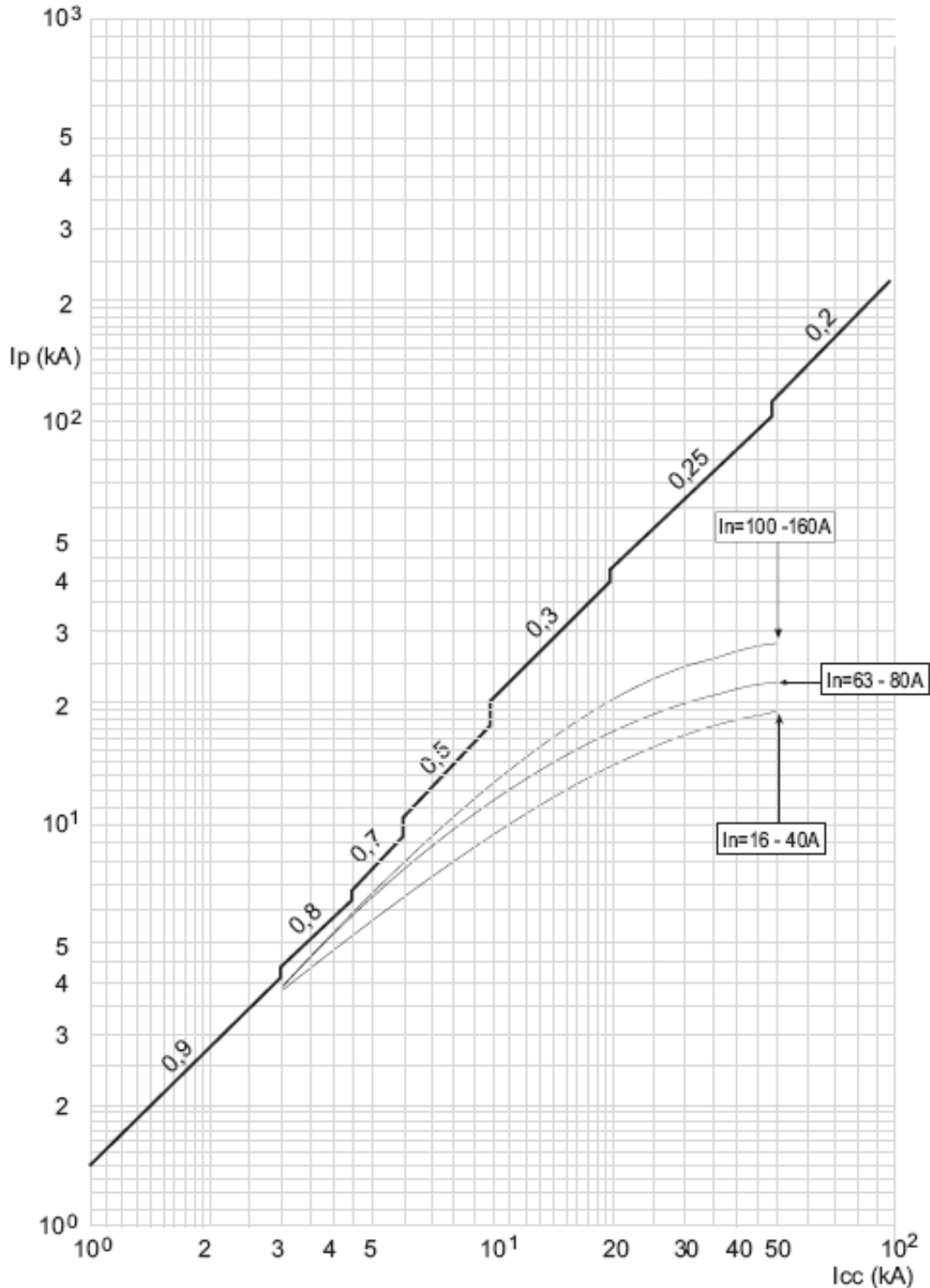
# DPX<sup>3</sup> 160

## 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

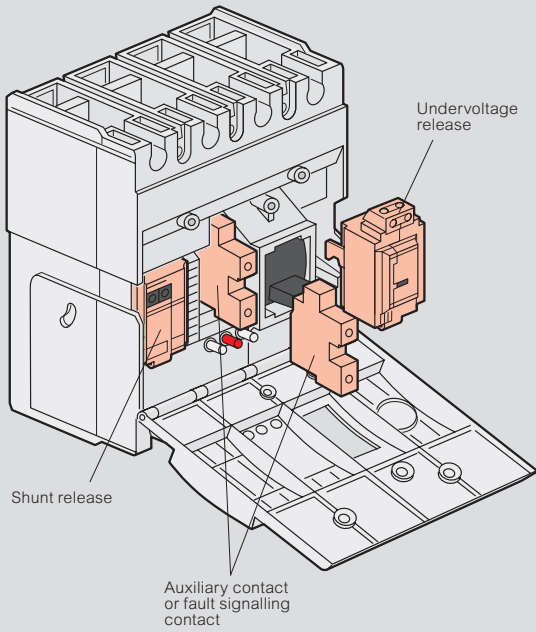


$I_{cc}$  = estimated short circuit symmetrical current (RMS value)  
 $I_p$  = maximum short circuit peak current  
 ——— maximum prospective short circuit peak current corresponding at the power factor  
 - - - - - maximum real peak short circuit current

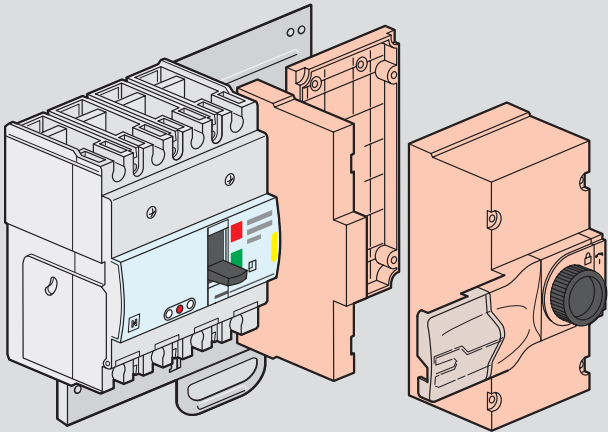
# DPX<sup>3</sup> 160/250

## installation principle

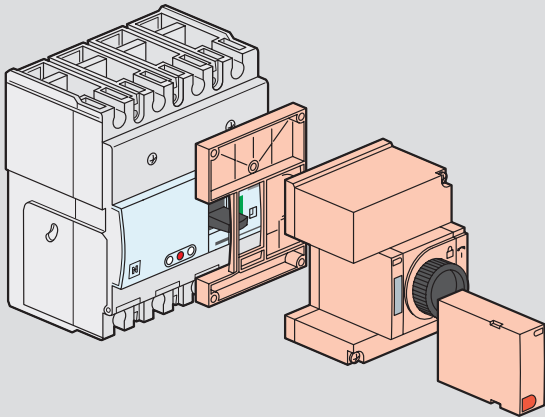
### Auxiliaries mounting



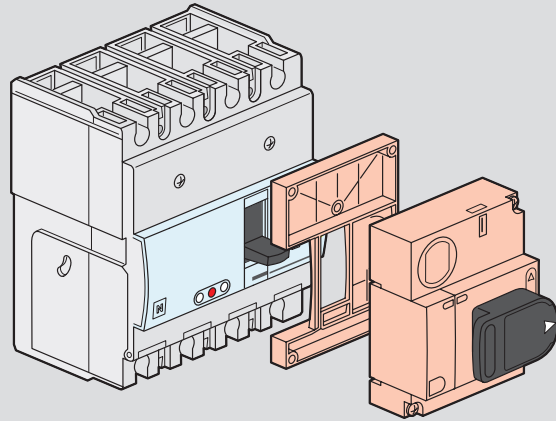
### Side mounting motor-driven handle



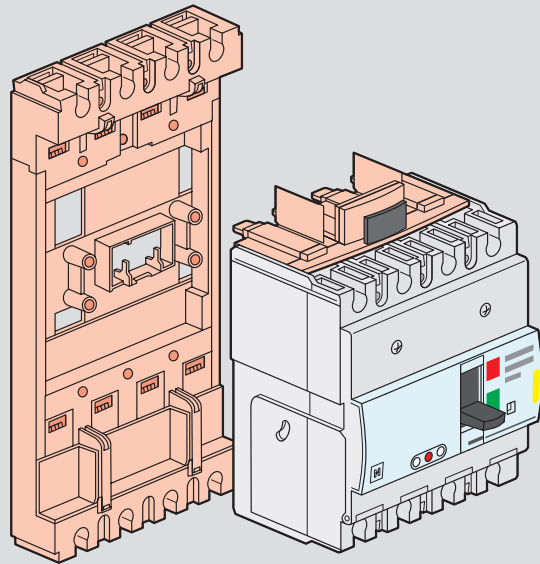
### Front mounting motor-driven handle



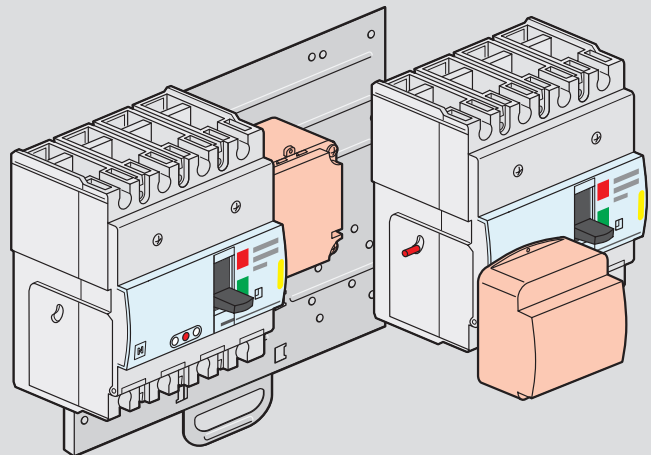
### Direct rotary handle

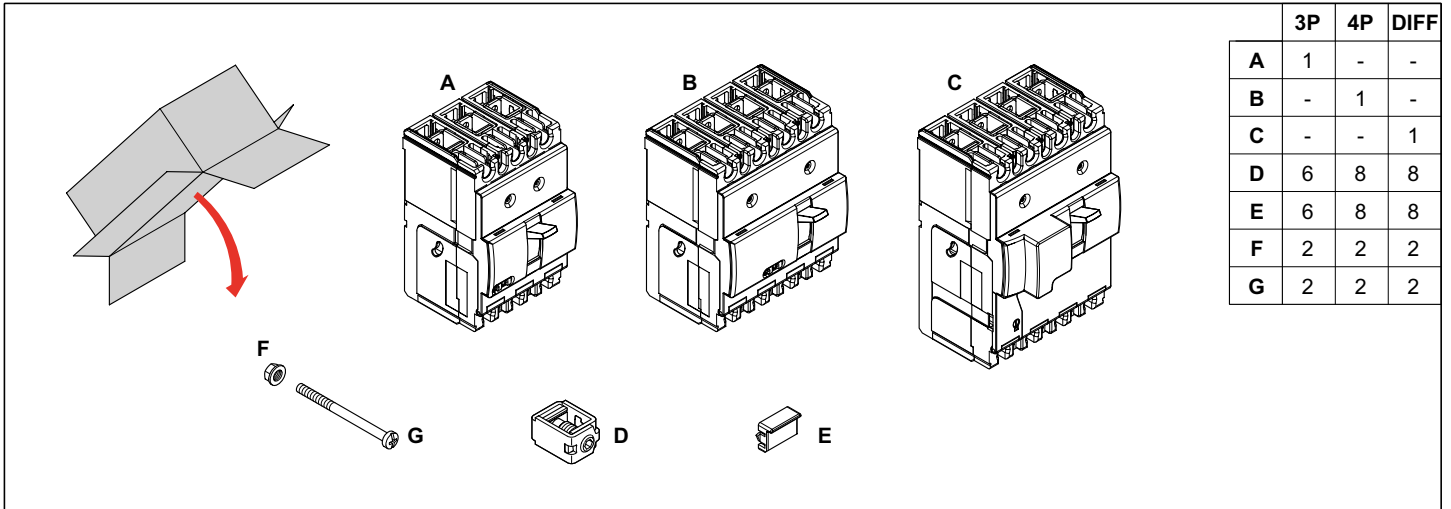


### Plug-in version



### 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    |

