

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

## technical characteristics (continued)

### Technical characteristics (at 40 °C and 50 °C)

| MCCBs                                     | DPX <sup>3</sup> 160 thermal magnetic |       |       |       | DPX <sup>3</sup> 160 with electronic earth leakage module |       |       |       |    |
|---|---------------------------------------|-------|-------|-------|---|-------|-------|-------|----|
|   | 16 kA                                 | 25 kA | 36 kA | 50 kA | 16 kA   | 25 kA | 36 kA | 50 kA |    |
| Nominal current In (A)                    | 16-25-40-63-80-100-125-160            |       |       |       | 16-25-40-63-80-100-125-160                                |       |       |       |    |
| Rated insulation voltage (V)              | 50-60 Hz                              |       |       |       | 500   |       |       |       |    |
| Rated operational voltage (V)             | 50-60 Hz                              |       |       |       | 500   |       |       |       |    |
| Rated impulse withstand current Uimp (kV) | 8                                     |       |       |       | 6   |       |       |       |    |
| Category of use                           | A                                     |       |       |       | A   |       |       |       |    |
| Ultimate breaking capacity (kA) in AC     | 220/240 V~                            | 25    | 35    | 50    | 65  | 25    | 35    | 50    | 65 |
|   | 380/415 V~                            | 16    | 25    | 36    | 50  | 16    | 25    | 36    | 50 |
|   | 440/460 V~                            | 10    | 18    | 25    | 30  | 10    | 18    | 25    | 30 |
|   | 480/500 V~                            | 8     | 10    | 12    | 15  | 8     | 10    | 12    | 15 |
|   | 600 V~                                | 6     | 8     | 10    | 12  | -     | -     | -     | -  |
| 690 V~                                    | 5                                     | 5     | 8     | 10    | -   | -     | -     | -     |    |
| Standard breaking capacity Ics (% Icu)    | 100                                   |       |       |       | 100   |       |       |       |    |
| Short-circuit making capacity Icm (kA)    | 415 V~                                |       |       |       | 32  |       |       |       |    |
|   |                                       | 52.5  | 75.6  | 105   |   | 52.5  | 75.6  | 105   |    |

| MCCBs                                     | DPX <sup>3</sup> 250 thermal magnetic |       |       | DPX <sup>3</sup> 250 thermal magnetic with electronic earth leakage module |       |       |    |
|---|---------------------------------------|-------|-------|--|-------|-------|----|
|   | 25 kA                                 | 36 kA | 50 kA | 25 kA  | 36 kA | 50 kA |    |
| Nominal current In (A)                    | 100-160-200-250                       |       |       | 100-160-200-250  |       |       |    |
| Rated insulation voltage (V)              | 50-60 Hz                              |       |       | 800 (with integrated e.l.c.bs: 500)  |       |       |    |
| Rated operational voltage (V)             | 50-60 Hz                              |       |       | 690 (with integrated e.l.c.bs: 500)  |       |       |    |
| Rated impulse withstand current Uimp (kV) | 8                                     |       |       | 8  |       |       |    |
| Category of use                           | A                                     |       |       | A  |       |       |    |
| Ultimate breaking capacity (kA) in AC     | 220/240 V~                            | 40    | 60    | 80   | 40    | 60    | 80 |
|   | 380/415 V~                            | 25    | 36    | 50   | 25    | 36    | 50 |
|   | 440/460 V~                            | 20    | 30    | 40   | 20    | 30    | 40 |
|   | 480/500 V~                            | 10    | 25    | 30   | 8     | 16    | 18 |
|   | 600 V~                                | 9     | 20    | 22   | -     | -     | -  |
| 690 V~                                    | 8                                     | 16    | 18    | 8  | 16    | 18    |    |
| Standard breaking capacity Ics (% Icu)    | 100                                   |       |       | 100  |       |       |    |

| MCCBs                                     | DPX <sup>3</sup> 250 electronic release |       |       | DPX <sup>3</sup> 250 electronic release |       |       |    |
|---|---|-------|-------|---|-------|-------|----|
|   | 25 kA                                   | 36 kA | 50 kA | 25 kA                                   | 36 kA | 50 kA |    |
| Nominal current In (A)                    | 40-100-160-250                          |       |       | 40-100-160-250                          |       |       |    |
| Rated insulation voltage (V)              | 50-60 Hz                                |       |       | 800 (with integrated e.l.c.bs: 500)     |       |       |    |
| Rated operational voltage (V)             | 50-60 Hz                                |       |       | 690 (with integrated e.l.c.bs: 500)     |       |       |    |
| Rated impulse withstand current Uimp (kV) | 6                                       |       |       | 6                                       |       |       |    |
| Category of use                           | A                                       |       |       | A                                       |       |       |    |
| Ultimate breaking capacity (kA) in AC     | 220/240 V~                              | 40    | 60    | 80                                      | 40    | 60    | 80 |
|   | 380/415 V~                              | 25    | 36    | 50                                      | 25    | 36    | 50 |
|   | 440/460 V~                              | 20    | 30    | 40                                      | 20    | 30    | 40 |
|   | 480/500 V~                              | 10    | 25    | 30                                      | 8     | 16    | 18 |
|   | 600 V~                                  | 9     | 20    | 22                                      | -     | -     | -  |
| 690 V~                                    | 8                                       | 16    | 18    | 8                                       | 16    | 18    |    |
| Standard breaking capacity Ics (% Icu)    | 100                                     |       |       | 100                                     |       |       |    |

### Adjustment for thermal-magnetic DPX<sup>3</sup>

| Setting  | DPX <sup>3</sup> thermal magnetic       | DPX <sup>3</sup> with integrated e.l.c.bs |
|--|---|---|
| I <sub>r</sub> overload trip threshold (thermal)       | 0.8 to 1 I <sub>n</sub>                 | 0.8 to 1 I <sub>n</sub>                   |
| I <sub>m</sub> short-circuit trip threshold (magnetic) | fixed: 10 I <sub>n</sub> <sup>(1)</sup> | fixed: 10 I <sub>n</sub> <sup>(1)</sup>   |
| I <sub>Δn</sub> (A)                                    | -                                       | 0.03 - 0.03 - 1 - 3                       |
| Δt (s)   | -                                       | 0 - 0.3 - 1 - 3                           |

1: 400 A for DPX<sup>3</sup> 160 In 16 A and 25 A

### Adjustment for DPX<sup>3</sup> electronic release

| Setting  | DPX <sup>3</sup>   | DPX <sup>3</sup> with integrated e.l.c.bs |
|--|--|---|
| I <sub>r</sub> overload trip threshold (long delay)        | 0.4 to 1 I <sub>n</sub>  |   |
| t <sub>r</sub> long delay trip time                        | 3 - 5 - 10 - 15s   |   |
| I <sub>Δn</sub> (A)  | -  | 0.03 - 0.03 - 1 - 3                       |
| Δt (s)   | -  | 0 - 0.3 - 1 - 3                           |
| I <sub>sd</sub> short-circuit trip threshold (short delay) | 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 x I <sub>r</sub>      |   |
| t <sub>sd</sub> short delay trip time                      | 0.01 - 0.1 - 0.2 - 0.3 - 0.4 - 0.5 s                                 |   |
| I <sub>g</sub>   | (0.2 - 0.3 - 0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 1 - OFF) x I <sub>n</sub> |   |
| t <sub>g</sub>   | 0.1 - 0.2 - 0.3 - 0.4 - 0.5 - 1 s                                    | -   |

Functioning in particular conditions (temperature and altitude derating) **see technical sheets**

DPX<sup>3</sup> tripping curves **see technical sheets**