

[illegible]

|                     | Amb. Temp.    | -5°C   | 0°C    | 10°C   | 20°C   | 25°C   | 30°C   | 35°C   | 40°C   | 45°C  | 50°C  |
|---------------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| Calibrated for 40°C | In=15 to 30   | 111.9% | 111.3% | 110.0% | 108.0% | 106.6% | 104.9% | 102.7% | 100.0% | 96.8% | 93.3% |
|                     | In=40 to 100  | 110.2% | 109.8% | 108.7% | 107.0% | 105.8% | 104.3% | 102.4% | 100.0% | 97.2% | 94.0% |
|                     | In=100 to 225 | 114.3% | 113.2% | 110.6% | 107.5% | 105.8% | 104.0% | 102.0% | 100.0% | 97.9% | 95.6% |
|                     | In=250 to 800 | 110.0% | 109.0% | 107.0% | 105.0% | 104.0% | 103.0% | 101.5% | 100.0% | 98.5% | 97.0% |

# Molded Case Circuit Breakers

## Metasol 400AF to 1200AF Series

| Frame Size (AF)                                                                        |                        | 400                |         |         |         |
|----------------------------------------------------------------------------------------|------------------------|--------------------|---------|---------|---------|
| Type                                                                                   |                        | N-Type             | S-Type  | H-Type  | L-Type  |
| Type and Pole                                                                          | 2 pole                 | ABN402c            | ABS402c | ABH402c | ABL402c |
|                                                                                        | 3 pole                 | ABN403c            | ABS403c | ABH403c | ABL403c |
|                                                                                        | 4 pole                 | ABN404c            | ABS404c | ABH404c | ABL404c |
| Rated current, I <sub>n</sub>                                                          | (A)                    | 250, 300, 350, 400 |         |         |         |
| Rated operational voltage, U <sub>e</sub>                                              | AC(V)                  | 690                | 690     | 690     | 690     |
|                                                                                        | DC(V)                  | 500                | 500     | 500     | 500     |
| Rated insulation voltage, U <sub>i</sub>                                               | (V)                    | 1000               | 1000    | 1000    | 1000    |
| Rated impulse withstand voltage, U <sub>imp</sub>                                      | (kV)                   | 8                  | 8       | 8       | 8       |
| Rated short-circuit breaking capacity(I <sub>cu</sub> ) kA (Sym), KSC8321, IEC 60947-2 |                        |                    |         |         |         |
| AC                                                                                     | 690V                   | 5                  | 8       | 10      | 14      |
|                                                                                        | 480/500V               | 18                 | 35      | 50      | 65      |
|                                                                                        | 415/460V               | 37                 | 50      | 65      | 85      |
|                                                                                        | 380V                   | 42                 | 65      | 70      | 100     |
|                                                                                        | 220/250V               | 50                 | 75      | 85      | 125     |
| DC                                                                                     | 500V(3P)               | 10                 | 20      | 40      | 40      |
|                                                                                        | 250V(2P)               | 10                 | 20      | 40      | 40      |
| Service breaking capacity(%I <sub>cu</sub> ), I <sub>cs</sub>                          |                        | 100                | 100     | 100     | 75      |
| Category of use                                                                        |                        | A                  | A       | A       | A       |
| Endurance<br>(Number of operations)                                                    | Mechanical             | 4,000              | 4,000   | 4,000   | 4,000   |
|                                                                                        | Electrical             | 1,000              | 1,000   | 1,000   | 1,000   |
| Type of trip unit                                                                      |                        |                    |         |         |         |
| Thermal-magnetic release                                                               |                        | fixed              | fixed   | fixed   | fixed   |
| Hydraulic-magnetic release                                                             |                        | -                  | -       | -       | -       |
| Magnetic release only without thermal trip                                             |                        | -                  | -       | -       | -       |
| Earth leakage protection                                                               | for 3 pole             | ☒                  | ☒       | ☒       | ☒       |
| Accessories                                                                            |                        |                    |         |         |         |
| Electrical auxiliaries                                                                 | Auxiliary switch       | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Alarm switch           | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Shunt trip             | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Undervoltage trip      | ☒                  | ☒       | ☒       | ☒       |
| External accessories                                                                   | Direct rotary handle   | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Extended rotary handle | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Terminal shield        | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Insulation barrier     | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Rear connection        | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Mechanical interlock   | ☒                  | ☒       | ☒       | ☒       |
|                                                                                        | Plug-in device         | ☒                  | ☒       | ☒       | ☒       |
| Dimensions (mm)                                                                        | W× H× D (3P)           | 140 × 257 × 109    |         |         |         |
| Weight(kg)                                                                             | 2 pole                 | 5.2                | 5.2     | 5.2     | 5.2     |
|                                                                                        | 3 pole                 | 6.2                | 6.2     | 6.2     | 6.2     |
|                                                                                        | 4 pole                 | 7.8                | 7.8     | 7.8     | 7.8     |

Note) 1. ☒ applicable or available  
2. ☒ available as a separate breaker