

# Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 100A

Rated current 100A, Short circuit switching capacity (400V) 36kA, Size type 2, Tripping Unit Electronic release for motor protection - Type ENM, Poles 3



## Schrack-Info

### Basic electronic type release for motor protection ENM

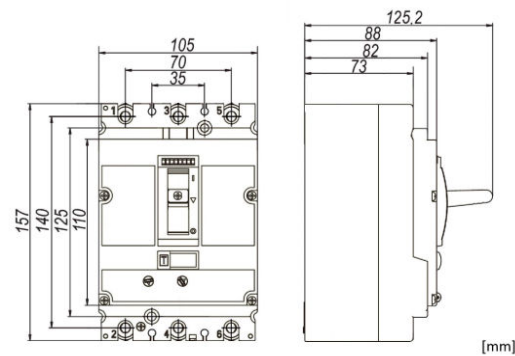
The ENM electronic trip unit allows for tighter tolerance trip times.

- Over-load long-time delay protection  
Setting current  $I_r = I_n \times 0.4-0.5-0.6-0.7-0.8-0.9-1.0$ , OFF  
Tripping time  $T_r$  (s): 4, 8, 16, Accuracy  $\pm 10\%$
- Short circuit short-time delay protection  
Setting current  $I_{sd} = I_r \times 5-6-8-9-10-11-12$ , OFF, Accuracy  $\pm 15\%$   
Tripping time  $T_{sd}$  (ms): 100, Accuracy  $\pm 40$
- Short circuit instantaneous protection  
Setting current  $I_i = I_n \times 15$ , Setting current  $I_{sd} < I_i$  (within tolerance).  
Max. tripping time (ms): 60
- Phase unbalance/Phase failure  $I_{unbal}$ : 30%-40%-50%-60%-70%-80%-90% (Phase failure)-OFF  
Max. trip time of phase imbalance (s): 4-6-8-10, Accuracy  $\pm 10\%$   
Tripping time of phase failure (s): 0.25, Accuracy  $\pm 20\%$

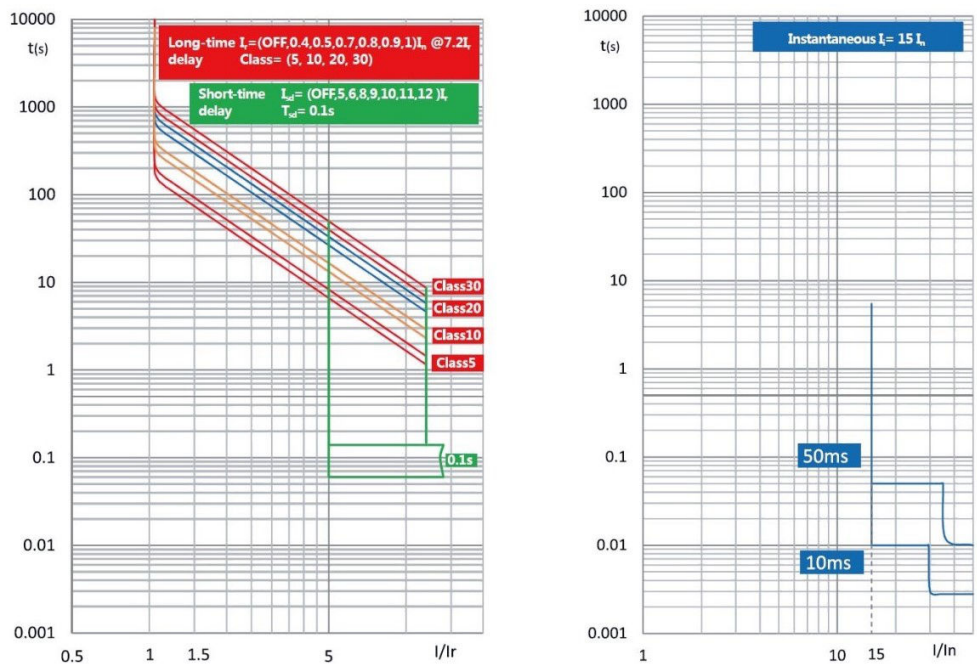
## Technical Data

|                                                         |                                                    |
|---------------------------------------------------------|----------------------------------------------------|
| Net width (mm)                                          | 105,00                                             |
| Net height (mm)                                         | 157,00                                             |
| Net weight (kg)                                         | 1,85                                               |
| EAN                                                     | 9004840893229                                      |
| Power loss (W)                                          | 12,00                                              |
| Min. ambient temperature (°C)                           | -40                                                |
| Max. ambient temperature (°C)                           | 70                                                 |
| Device category                                         | circuit breaker                                    |
| Standard                                                | EN 60947-2                                         |
| Rated current (A)                                       | 100                                                |
| Rated voltage                                           | < 690VAC                                           |
| Short circuit switching capacity (400V) (kA)            | 36                                                 |
| Size type                                               | 2                                                  |
| Tripping Unit                                           | Electronic release for motor protection - Type ENM |
| Poles                                                   | 3                                                  |
| Pollution degree                                        | 3                                                  |
| IP Rating                                               | IP40                                               |
| Mechanical durability                                   | 15000 operation cycles                             |
| Rated insulation voltage [Ui] (V)                       | 1000                                               |
| Rated impulse withstand voltage [Uimp] (V)              | 8000                                               |
| Rated ultimate short-circuit breaking capacity Icu (kA) | 36                                                 |
| Rated service breaking capacity Ics (kA)                | 36                                                 |
| AC 380/400/415V                                         | 36kA (Icu) / 36kA (Ics)                            |
| AC 440V                                                 | 36kA (Icu) / 36kA (Ics)                            |
| AC 500V                                                 | 25kA (Icu) / 25kA (Ics)                            |
| AC 660/690V                                             | 6kA (Icu) / 6kA (Ics)                              |
| <b>Electrical endurance (Operation cycle)</b>           |                                                    |
| AC 415V, In                                             | 6000                                               |
| AC 690V, In                                             | 1500                                               |

**Dimensions**



**Tripping characteristic curves**



**Article Table**

| DESCRIPTION                                                                                  | COPPER WEIGHT (kg/km) | Order No. |
|----------------------------------------------------------------------------------------------|-----------------------|-----------|
| Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 100A                                    |                       |           |
| Rated current 100A, Short circuit switching capacity (400V) 36kA, Size type 2, Tripping Unit |                       | MX210437  |
| Electronic release for motor protection - Type ENM, Poles 3                                  |                       |           |
| <b>Optional Accessories</b>                                                                  |                       |           |
| Toggle Lever Locking Device for MX2                                                          |                       | MX290199  |
| No lock included in the scope of delivery.                                                   |                       |           |
| Clip Plate 35mm DIN-S for MX2 3 pole                                                         |                       | MX290213  |
| Size type 2, Poles 3                                                                         |                       |           |

## Article Table

| DESCRIPTION                                                                                                                                                                                                                                                         | COPPER WEIGHT (kg/km) | Order No. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|
| <b>Optional Accessories</b>                                                                                                                                                                                                                                         |                       |           |
| Communication module Modbus-RTU 24VDC 1.5m                                                                                                                                                                                                                          |                       | MX290000  |
| Communication module Modbus-RTU 230VAC 1.5m                                                                                                                                                                                                                         |                       | MX290001  |
| Box Terminal for MX2 10-120mm <sup>2</sup> , 1 piece<br>Size type 2, Al/Cu                                                                                                                                                                                          |                       | MX290015  |
| Connection extension 3 pole for MX2, 6 pieces<br>Poles 3, 6 pieces included per item, for 3-pole MX2 (for top and bottom)                                                                                                                                           |                       | MX290019  |
| Terminal Cover short 3 pole for MX2<br>Poles 3, for top and bottom                                                                                                                                                                                                  |                       | MX290780  |
| Terminal Cover long 3 pole for MX2<br>Poles 3, for top and bottom                                                                                                                                                                                                   |                       | MX290783  |
| Tunnel Terminal 1x35-240mm <sup>2</sup> for MX2, 1 piece, max. 200A<br>Size type 2, Al/Cu, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted!                         |                       | MX296730  |
| Tunnel Terminal 2x35-120mm <sup>2</sup> for MX2, 1 piece, max. 200A<br>Size type 2, Al/Cu, control connection: M4, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted! |                       | MX296731  |
| Tunnel Terminal 6x10-35mm <sup>2</sup> for MX2, 1 piece, max. 200A<br>Size type 2, Al/Cu, control connection: M4, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted!  |                       | MX296732  |
| Rear Connection, 3P for MX2, for both connection sides<br>Size type 2                                                                                                                                                                                               |                       | MX296734  |
| Socket for MX2 3 pole<br>Size type 2, Poles 3                                                                                                                                                                                                                       |                       | MX296871  |
| Safety release for socket MX2 for thermal release<br>Size type 2                                                                                                                                                                                                    |                       | MX296873  |
| Safety release for socket MX2 for electronic release<br>Size type 2                                                                                                                                                                                                 |                       | MX296874  |
| Phase separator plates MX2<br>Size type 2                                                                                                                                                                                                                           |                       | MX296870  |
| Rotary handle complete, lockable for MX2, thermal release                                                                                                                                                                                                           |                       | MX290125  |
| Rotary handle complete, lockable for MX2, electronic release                                                                                                                                                                                                        |                       | MX290126  |
| Door Coupling Rotary Handle, for MX2 for thermal release<br>Size type 2, Axle length 50cm                                                                                                                                                                           |                       | MX290172  |
| Door Coupling Rotary Handle, for MX2 for electronic release<br>Size type 2, Axle length 50cm                                                                                                                                                                        |                       | MX290173  |

## Article Table

| DESCRIPTION                                                                                                                                                                                   | COPPER WEIGHT (kg/km) | Order No. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|
| <b>Optional Accessories</b>                                                                                                                                                                   |                       |           |
| Mechanical Interlock for MX2 3 pole<br>Size type 2, Poles 3                                                                                                                                   |                       | MX291581  |
| Under Voltage Release 110VAC for MX2, MX3<br>Size type 2,3                                                                                                                                    |                       | MX299462  |
| Under Voltage Release 220-240VAC for MX2, MX3<br>Size type 2,3                                                                                                                                |                       | MX299471  |
| Under Voltage Release 380-415VAC for MX2, MX3<br>Size type 2,3                                                                                                                                |                       | MX299473  |
| Under Voltage Release 24VDC for MX2, MX3<br>Size type 2,3                                                                                                                                     |                       | MX299481  |
| Under Voltage Release 220VDC for MX2, MX3<br>Size type 2,3                                                                                                                                    |                       | MX299489  |
| Shunt trip 110VAC for MX2, MX3                                                                                                                                                                |                       | MX299567  |
| Shunt trip 220-240VAC for MX2, MX3                                                                                                                                                            |                       | MX290154  |
| Shunt trip 380-415VAC for MX2, MX3                                                                                                                                                            |                       | MX291607  |
| Shunt trip 24VDC for MX2, MX3                                                                                                                                                                 |                       | MX299736  |
| Shunt trip 220VDC for MX2, MX3                                                                                                                                                                |                       | MX299742  |
| Remote Operator 24VDC for MX2<br>Size type 2                                                                                                                                                  |                       | MX299837  |
| Remote Operator 110VAC/110-120VDC for MX2<br>Size type 2                                                                                                                                      |                       | MX299838  |
| Remote Operator 220-240VAC/220VDC for MX2<br>Size type 2                                                                                                                                      |                       | MX299832  |
| Remote Operator 380-415VAC for MX2<br>Size type 2                                                                                                                                             |                       | MX299833  |
| RCD für MX2 3 pole Type A 50-200mA-0.5-2A                                                                                                                                                     |                       | MX294609  |
| Auxiliary contact 1 CO                                                                                                                                                                        |                       | MX199411  |
| Alarm contact 1 CO                                                                                                                                                                            |                       | MX199511  |
| Universal Adapter 250A outgoing conn. top                                                                                                                                                     | 383                   | SI321680  |
| RCD for MX2 3 pole, 0.03 - 2A, Type A<br>Size type 2, Tripping Unit Residual Current Circuit Device - RCCD with setting range 0.03A - 0.05A<br>- 0.1A - 0.2A - 0.3A - 0.5A - 1A - 2A, Poles 3 |                       | MX294611  |