

Данни за артикула: MC350341--

## Автоматичен прекъсвач MC3 Тип А, 4Р, 150kA, 500A

Размер 3, Номинален ток 500A, Полюси 4, Степен на защита - IP IP20, Изключвателна възможност 150kA, Защита А (термо-магнитна защита за системи и кабели)



### Технически данни

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Нето ширина (mm)              | 185,00                                        |
| Нето височина (mm)            | 275,00                                        |
| Нето тегло (kg)               | 5,80                                          |
| EAN                           | 9004840551303                                 |
| Разсейвана мощност (W)        | 93,00                                         |
| Мин. околна температура (°C)  | -25                                           |
| Макс. околна температура (°C) | 60                                            |
| Standard                      | IEC EN 60947<br>VDE 0660                      |
| Тип на устройството           | автоматичен прекъсвач                         |
| Номинален ток (A)             | 500                                           |
| Номинално напрежение          | < 690VAC                                      |
| Изключвателна възможност (kA) | 150                                           |
| Размер                        | 3                                             |
| Защита                        | A (термо-магнитна защита за системи и кабели) |
| Акcesoари                     | SI325810--                                    |

## Технически данни - продължение

|                                                   |                                                                                |
|---------------------------------------------------|--------------------------------------------------------------------------------|
| Полюси                                            | 4                                                                              |
| ток на късо съединение                            | 500A                                                                           |
| Protection against direct contact                 | finger-proof and back-of-hand-proof according to VDE 0106 Part 100             |
| Climatic proofing                                 | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Mech. shock resistance Half-sinusoidal shock 10ms | 20 (Halbsinusstoß 20 ms)                                                       |
| Степен на защита - IP                             | IP20                                                                           |
| Rated insulation voltage [Ui] (V)                 | 1000                                                                           |
| Mechanical durability                             | 20000 operation cycles                                                         |
| Електрическа износоустойчивост (работни цикли)    | 10000                                                                          |
| Terminal type                                     | Screw terminal                                                                 |
| Rated short-time withstand current Icw            | 3,3kA                                                                          |

## GENERAL DATA - MC2, MC3, MC4

|                                              |                                                                                            |
|----------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Normen und Bestimmungen</b>               | IEC/EN 60947, VDE 0660                                                                     |
| <b>Berührungsschutz</b>                      | finger- und handrückensicher nach VDE 0106 Teil 100                                        |
| <b>Klimafestigkeit</b>                       | Feuchte Wärme, konstant nach IEC 60068-2-78<br>Feuchte Wärme, zyklisch nach IEC 60068-2-30 |
| <b>Umgebungstemperatur</b>                   |                                                                                            |
| Lagerung                                     | -25...+70°C                                                                                |
| Betrieb                                      | -25...+70°C                                                                                |
| <b>Schockfestigkeit (IEC/EN 60068-2-27)</b>  | 20 (Halbsinusstoß 20 ms)                                                                   |
| <b>Sichere Trennung nach EN 61140</b>        |                                                                                            |
| zwischen Hilfskontakten und Hauptstrombahnen | 500V AC                                                                                    |
| zwischen den Hilfskontakten                  | 300V AC                                                                                    |

## Таблични файлове: Автоматичен прекъсвач MC3 Тип A, 4P, 150kA, 500A

|                   |                                         |
|-------------------|-----------------------------------------|
| <b>Einbaulage</b> | senkrecht und 90° nach allen Richtungen |
|-------------------|-----------------------------------------|



|                                  |                                                          |
|----------------------------------|----------------------------------------------------------|
| <b>Energie-Einspeiserichtung</b> | beliebig                                                 |
| <b>Schutzart</b>                 |                                                          |
| Gerät                            | im Bereich der Bedienteile: IP20 (Basisschutzart)        |
| Gehäuse                          | mit Blendrahmen: IP40<br>mit Türkupplungsdrehgriff: IP66 |
| Anschlusstechnik                 | Tunnelklemme: IP10<br>Phasentrenner und Bandklemme: IP00 |

## DIELECTRIC STRENGTH OF MCCB - MC3

|                                                               | Bemessungsdauerstrom max. 160A |                       |                       |
|---------------------------------------------------------------|--------------------------------|-----------------------|-----------------------|
|                                                               | MC3 - 36kA                     | MC3 - 50kA            | MC3 - 150kA           |
| <b>Bemessungsstoßspannungsfestigkeit <math>U_{imp}</math></b> |                                |                       |                       |
| Hauptstrombahnen                                              | 8000V                          | 8000V                 | 8000V                 |
| Hilfsstrombahnen                                              | 6000V                          | 6000V                 | 6000V                 |
| <b>Bemessungsbetriebsspannung <math>U_e</math></b>            | 690V AC                        | 690V AC               | 690V AC               |
| <b>Bemessungsbetriebsspannung Schalten über 3 Strombahnen</b> | -                              | 750V DC <sup>1)</sup> | 750V DC <sup>1)</sup> |
| <b>Überspannungskategorie/Verschmutzungsgrad</b>              | III/3                          | III/3                 | III/3                 |
| <b>Bemessungsisolationsspannung <math>U_i</math></b>          | 1000V <sup>2)</sup>            | 1000V                 | 1000V                 |
| <b>Einsatz in IT-Netzen</b>                                   | 690V                           | 690V                  | 690V                  |

### Hinweis:

<sup>1)</sup> Für Bemessungsbetriebsspannung Schalten über 3 Strombahnen gilt: Korrekturfaktor DC für Schnellauslöseransprechwert:

MC3: 1,35

Einstellwert für  $I_i$  bei DC = Einstellwert  $I_i$  AC/Korrekturfaktor DC

Angabe gilt für 3-polige Anlagenschutzschalter mit thermomagnetischem Auslöser MC3



1 \* Schalten von einem Pol über zwei Strombahnen in Reihe

2 \* Schalten von einem Pol über drei Strombahnen in Reihe

<sup>2)</sup> Für 3-polige Anlagenschutzschalter gilt: 690V

## BREAKING CAPACITY - MC3

Бемесингсдурестром max.300A

MC2 - 25kA      MC2 - 50kA      MC2 - 150kA

### Бемесингскурзschlussеинсчлтвемөгн I<sub>cm</sub>

|          |      |       |       |
|----------|------|-------|-------|
| 240V     | 63kA | 187kA | 330kA |
| 400/415V | 53kA | 105kA | 330kA |
| 440V     | 53kA | 74kA  | 286kA |
| 525V     | -    | 53kA  | 105kA |
| 690V     | -    | 40kA  | 40kA  |

### Бемесингскурзschlussауссчлтвемөгн I<sub>cn</sub>/I<sub>cs</sub>

|                         |                  |        |      |        |
|-------------------------|------------------|--------|------|--------|
| Icu nach IEC/EN 60947   | 240V 50/60 Hz    | 30kA   | 85kA | 150kA  |
| Schaltfolge O-I-CO      | 400/415V 50/60Hz | 25kA   | 50kA | 150kA  |
|                         | 440V 50/60Hz     | 25kA   | 35kA | 130kA  |
|                         | 525V 50/60Hz     | -      | 25kA | 50kA   |
|                         | 690V 50/60Hz     | -      | 20kA | 20kA   |
|                         | 500V DC          | -      | 30kA | 60kA   |
|                         | 750V DC          | -      | 30kA | 60kA   |
| Ics nach IEC/EN 60947   | 240V 50/60Hz     | 30kA   | 85kA | 150kA  |
| Schaltfolge O-I-CO-I-CO | 400/415V 50/60Hz | 25kA   | 50kA | 150kA  |
|                         | 440V 50/60Hz     | 18,5kA | 35kA | 130kA  |
|                         | 525V 50/60Hz     | -      | 25kA | 37,5kA |
|                         | 690V 50/60Hz     | -      | 5kA  | 5kA    |

maximale NH-Sicherung ≤1600A

355A gG/gL

### Гелручскетегорле нел IEC/EN 60947-2

A      A      A

### Бемесингскурзzeitstromfestigkeit I<sub>cw</sub>

|          |   |       |       |
|----------|---|-------|-------|
| t = 0,3s | - | 1,9kA | 1,9kA |
| t = 1s   | - | 1,9kA | 1,9kA |

### Бемесингсеин- и - ауссчлтвемөгн I<sub>e</sub>

|                      |      |                                  |      |      |      |
|----------------------|------|----------------------------------|------|------|------|
| Бемесингсбетрлбсстрм | AC-1 | 400/415V 50/60Hz                 | 250A | 250A | 250A |
|                      |      | 690V 50/60Hz                     | 250A | 250A | 250A |
|                      | AC-3 | 400/415V 50/60Hz                 | 250A | 250A | 250A |
|                      |      | 690V 50/60Hz                     | 250A | 250A | 250A |
|                      | DC-1 | 500V DC мlt thermischen Auslöser | -    | 250A | 250A |
|                      |      | 750V DC мlt thermischen Auslöser | -    | 250A | 250A |
|                      | DC-3 | 500V DC мlt thermischen Auslöser | -    | 250A | 250A |
|                      |      | 750V DC мlt thermischen Auslöer  | -    | 250A | 250A |

## LIFETIME - MC3

| Bemessungsdauerstrom max. 630A                                   |            |            |             |
|------------------------------------------------------------------|------------|------------|-------------|
|                                                                  | MC3 - 36kA | MC3 - 50kA | MC3 - 150kA |
| <b>Lebensdauer, mechanisch (Schaltspiele)</b>                    | 15000      | 15000      | 15000       |
| <b>Maximale Schalthäufigkeit</b>                                 | 60 S/h     | 60 S/h     | 60 S/h      |
| <b>Lebensdauer, elektrisch (Schaltspiele)</b>                    |            |            |             |
| AC-1 400/415V 50/60Hz                                            | 5000       | 5000       | 5000        |
| 690V 50/60Hz                                                     | 3000       | 3000       | 3000        |
| AC-3 400/415V 50/60Hz                                            | 2000       | 2000       | 2000        |
| 690V 50/60Hz                                                     | 2000       | 2000       | 2000        |
| DC-1 500V mit thermischem Auslöser                               | -          | 5000       | 5000        |
| 750V mit thermischem Auslöser                                    | -          | 5000       | 5000        |
| DC-3 500V mit thermischem Auslöser                               | -          | 2000       | 2000        |
| 750V mit thermischem Auslöser                                    | -          | 2000       | 2000        |
| <b>Stromwärmeverluste je Pol bei I<sub>N</sub> <sup>1)</sup></b> | 31W        | 31W        | 31W         |
| <b>Gesamtausschaltzeit im Kurzschlussfall</b>                    | <10ms      | <10ms      | <10ms       |

<sup>1)</sup> Bei Stromwärmeverluste je Pol beziehen sich die Angaben auf den maximalen Nennstrom der Baugröße.

## WEIGHT - MC1

ACTIVE POWER DISSIPATION

| $I_n$ [A] | MC1 - Leistungsschalter |         |             |         | MC2 - Leistungsschalter |         |             |         | MC3 - Leistungsschalter |         |             |         |
|-----------|-------------------------|---------|-------------|---------|-------------------------|---------|-------------|---------|-------------------------|---------|-------------|---------|
|           | Anlagenschutz           |         | Motorschutz |         | Anlagenschutz           |         | Motorschutz |         | Anlagenschutz           |         | Motorschutz |         |
|           |                         |         |             |         |                         |         |             |         |                         |         |             |         |
|           | P [W]                   | R [Ohm] | P [W]       | R [Ohm] | P [W]                   | R [Ohm] | P [W]       | R [Ohm] | P [W]                   | R [Ohm] | P [W]       | R [Ohm] |

## CONNECTION CROSS SECTIONS

|                                                           |          |        |      | MC3                                                      | I <sub>n</sub> <sup>1)</sup> |
|-----------------------------------------------------------|----------|--------|------|----------------------------------------------------------|------------------------------|
| Standard equipment                                        |          |        |      | Screw connection                                         | -                            |
| Accessories                                               |          |        |      | Box terminal<br>Tunnel terminals<br>Rear-side connection |                              |
| Cu-conductors, Cu-cable                                   |          |        |      |                                                          |                              |
| Box terminal                                              | solid    |        |      | 2 x 16mm <sup>2</sup>                                    | 500A                         |
|                                                           | stranded |        |      | 1 x (35 - 240)mm <sup>2</sup>                            |                              |
|                                                           |          |        |      | 2 x (25 - 120)mm <sup>2</sup>                            |                              |
| Tunnel terminal                                           | solid    |        |      | -                                                        | -                            |
|                                                           | stranded | 1-hole |      | 1 x (25-185)mm <sup>2</sup>                              | 350A                         |
|                                                           |          | 2-hole |      | 1 x (50 - 240)mm <sup>2</sup>                            | 630A                         |
|                                                           |          |        |      | 2 x (50 - 240)mm <sup>2</sup>                            | 2 x 185A                     |
|                                                           |          | 4-hole |      | -                                                        | -                            |
| Screw connection and Rear-side connection                 |          |        |      |                                                          |                              |
| directly on switch                                        | solid    |        |      | 1 x 16mm <sup>2</sup>                                    | 630A2 x 185A                 |
|                                                           |          |        |      | 2 x 16mm <sup>2</sup>                                    |                              |
|                                                           | stranded |        |      | 1 x (25 - 240)mm <sup>2</sup>                            |                              |
|                                                           |          |        |      | 2 x (25 - 240)mm <sup>2</sup>                            |                              |
| Module plate                                              | 1-hole   | min.   |      | -                                                        | -                            |
|                                                           |          | max.   |      | -                                                        | -                            |
| Module plate                                              | 2-hole   | min.   |      | -                                                        | -                            |
|                                                           |          | max.   |      | -                                                        | -                            |
| Connection extension                                      |          |        |      | 2 x 300mm <sup>2</sup>                                   | 630A2x185                    |
| Al-conductors, Al-cable                                   |          |        |      |                                                          |                              |
| Tunnel terminal                                           | solid    |        |      | 1 x 16mm <sup>2</sup>                                    | 350A                         |
|                                                           | stranded | 1-hole |      | 1 x (25 - 185) <sup>2)</sup> mm <sup>2</sup>             |                              |
|                                                           |          | 2-hole |      | 1 x (50 - 240)mm <sup>2</sup>                            | 630A                         |
|                                                           |          |        |      | 2 x (50-240)mm <sup>2</sup>                              |                              |
|                                                           |          | 4-hole |      | -                                                        | -                            |
| Screw connection and Rear-side connection                 |          |        |      |                                                          |                              |
| directly on switch                                        | solid    |        |      | 1 x 16mm <sup>2</sup>                                    | 400A                         |
|                                                           |          |        |      | 2 x (10 - 16)mm <sup>2</sup>                             |                              |
|                                                           | stranded |        |      | 1 x (25 - 120)mm <sup>2</sup>                            |                              |
|                                                           |          |        |      | 2 x (25 - 120)mm <sup>2</sup>                            |                              |
| Module plate                                              | 1-hole   | min.   |      | -                                                        | -                            |
|                                                           |          | max.   |      | -                                                        | -                            |
| Module plate                                              | 2-hole   |        |      | -                                                        | -                            |
| Connection extension                                      |          |        |      | -                                                        | -                            |
| Cu-strip (number of segments x width x segment thickness) |          |        |      |                                                          |                              |
| Box terminal                                              |          |        | min. | 6 x 16 x 0,8mm                                           | 630A                         |
|                                                           |          |        | max. | 10 x 24 x 1,0mm                                          |                              |
|                                                           |          |        |      | +5 x 24 x 1,0mm                                          |                              |
|                                                           |          |        |      | (2x) 8 x 24 x 1,0mm                                      |                              |
| Flat conductor terminal, basic                            |          |        | min. | -                                                        | -                            |
|                                                           |          |        | max. | -                                                        | -                            |

|                                           |        |      |                      |
|-------------------------------------------|--------|------|----------------------|
| Module plate                              | 1-hole | -    | -                    |
| Screw connection and Rear-side connection |        |      |                      |
| Cu-strip, with holes                      |        | min. | 6 x 16 x 0,8mm       |
|                                           |        | max. | 10 x 32 x 1,0mm      |
|                                           |        |      | +5 x 32 x 1,0mm      |
| Connection extension                      |        |      | (2x) 10 x 50 x 1,0mm |
| <b>Cu-rail (width x thickness)</b>        |        |      |                      |
| Screw connection and Rear-side connection |        |      |                      |
| Screw connection                          |        | M10  | -                    |
| directly on switch                        |        | min. | 20 x 5mm             |
|                                           |        | max. | 30 x 10mm            |
|                                           |        |      | +30 x 5mm            |
| Module plate                              | 1-hole | min. | -                    |
|                                           |        | max. | -                    |
| Module plate                              | 2-hole | -    | -                    |
| Connection extension                      |        | min. | -                    |
|                                           |        | max. | 2 x (10 x 50)        |

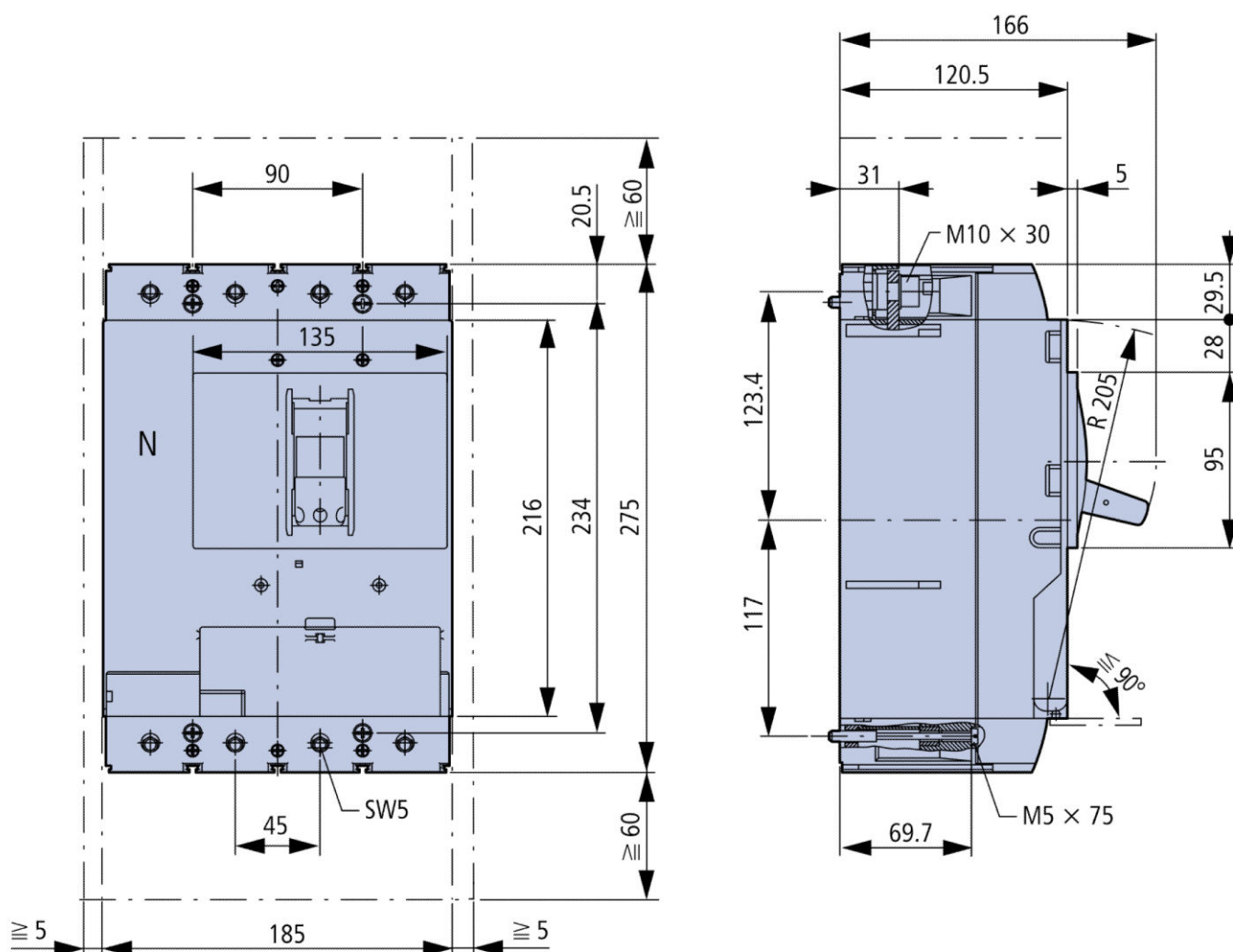
630A

630A

630A10 x 40

- Notes:**
- 1) The rated currents  $I_n$  have been calculated in accordance with IEC/EN 60947 (protection devices standard) and generally relate to the max. specified cross-sections and are used here for the purpose of orientation. The design standards which apply in each case must be observed.
- 2) Depending on the cable manufacturer up to 240mm<sup>2</sup> can be connected.

## Чертеж: Автоматичен прекъсвач МСЗ Тип А, 4Р, 150kA, 500А



## Таблица с артикули

| Описание                                                                                                                                                 | Тегло на медта (kg/km) | Артикулен No. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
| Автоматичен прекъсвач MC3 Тип A, 4P, 150kA, 500A                                                                                                         |                        |               |
| Размер 3, Номинален ток 500A, Полюси 4, Степен на защита - IP IP20, Изключвателна възможност 150kA, Защита A (термо-магнитна защита за системи и кабели) |                        | MC350341      |
| <b>Акcesoари</b>                                                                                                                                         |                        |               |
| Адаптер за шинна с-ма, за NZM3-XKR13O                                                                                                                    | 2160                   | SI325810      |