



CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4-POLE, LINE PROTECTION ETU330, LIG, IN=400A OVERLOAD PROTECTION IR=160A ...400A SHORT CIRCUIT PROTECTION II=1,5...12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,50%,100%) GROUND-FAULT-PROTECTION IG=0,2... 1 X IN, TG=0,1/0,3S BUSBAR CONNECTION

| Model | |
|--|-----------------------------|
| product brandname | SENTRON |
| Product designation | Molded case circuit breaker |
| Design of the product | Line protection |
| Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| Design of the overcurrent release | ETU330 |
| Protective function of the overcurrent release | LIG |
| Number of poles | 4 |
| General technical data | |
| Tension assignée d'isolement Ui | 800 V |
| Max. rated operational voltage Ue with AC 50/60Hz | 690 V |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 63.3 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 21.1 W |
| Mechanical service life (switching cycles) / typical | 15 000 |

| | |
|---|---|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 4 000 |
| Neutral conductors / upgradeable/retrofitable | No |
| Ground fault monitoring version | Summation current formation L + N conductor |
| Product function | |
| • communication function | No |
| • other measurement function | No |
| Net weight | 5.7 kg |

Electricity

| | |
|---|-------|
| Marking / according to UL 489 / 100%-rated breaker | No |
| Max. rated operational voltage of the size of the circuit-breaker | 630 A |
| Courant permanent assigné Iu | 400 A |
| Operating current | |
| • at 40 °C | 400 A |
| • at 45 °C | 400 A |
| • at 50 °C | 400 A |
| • at 55 °C | 384 A |
| • at 60 °C | 372 A |
| • at 65 °C | 356 A |
| • at 70 °C | 340 A |

Switching capacity according to IEC 60947

| | |
|---|--------|
| Switching capacity class of the circuit breaker | C |
| Maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 150 kA |
| • at 415 V | 110 kA |
| • at 440 V | 110 kA |
| • at 500 V | 85 kA |
| • at 690 V | 6 kA |
| Operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 150 kA |
| • at 415 V | 110 kA |
| • at 690 V | 6 kA |
| Short-circuit current making capacity (Icm) | |
| • at 240 V | 330 kA |
| • at 415 V | 242 kA |
| • at 440 V | 242 kA |
| • at 500 V | 187 kA |
| • at 690 V | 9 kA |

Adjustable parameters

| | |
|---|---------------------------|
| Adjustable response value current / I _g min. | 160 A |
| Adjustable response value current / I _g min. | 400 A |
| Adjustable response value current / I _g min. | 0.5 |
| Adjustable response value current / I _g min. | 17 |
| Short-term delayed / tripping switchable / I _{2t} =ON/OFF | No |
| Adjustable response value current / I _i min. | 600 A |
| Adjustable response value current / I _i max. | 4 800 A |
| Design of the N-conductor protection | adjustable OFF; 50%; 100% |
| Ground fault protection can be switched ON/OFF | No |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | Yes |
| Adjustable response value current / I _g min. | 80 A |
| Adjustable response value current / I _g max. | 400 A |
| Adjustable response value current / t _g min. | 0.1 s |
| Adjustable response value current / I _g min. | 0.3 s |
| Adjustable response value current / for G-tripping / with I _{2t} characteristic / min. | 0 A |
| Adjustable response value current / for G-tripping / with I _{2t} characteristic / max. | 0 A |

Mechanical Design

| | |
|-------------|--------|
| Height [in] | 9.8 in |
| Height | 248 mm |
| Width [in] | 7.2 in |
| Width | 184 mm |
| Depth [in] | 5.4 in |
| Depth | 137 mm |

Connections

| | |
|---|----------------|
| Arrangement of electrical connectors / for main current circuit | Front terminal |
| Type of electrical connection / for main current circuit | Lug terminal |

Auxiliary circuit

| | |
|--|---|
| Number of CO contacts / for auxiliary contacts | 0 |
|--|---|

Accessories

| | |
|--|-----|
| Product extension / optional / motor drive | Yes |
|--|-----|

Environmental conditions

| | |
|--|--|
| Protection class IP / on the front | IP40 |
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum | <ul style="list-style-type: none"> -25 °C 70 °C -40 °C 80 °C |

Certificates

| | |
|--|----|
| Equipment marking / acc. to DIN EN 81346-2 | Q |
| Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB | No |

| General Product Approval | EMC | Declaration of Conformity | Test Certificates | | |
|--|--|--|--|---|---|
|  CCC |  VDE |  EAC |  RCM |  EG-Konf. | Typprüfbescheinigung/Werkszeugnis |

| Test Certificates | Shipping Approval | | | | |
|-------------------------|--|---|---|--|---|
| sonstig |  ABS |  BUREAU VERITAS |  GL |  LRS |  RMRS |

| |
|-------------------------|
| other |
| sonstig |

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA2440-7HM42-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3VA2440-7HM42-0AA0/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2440-7HM42-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>

last modified:

10/29/2016