



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4POLE, LINE PROTECTION ETU850, LSI, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) 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 | ETU850 |
| Protective function of the overcurrent release | LSI |
| 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 | 4 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 1.33 W |
| Mechanical service life (switching cycles) / typical | 20 000 |

| | |
|---|---------|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 12 000 |
| Neutral conductors / upgradeable/retrofitable | No |
| Ground fault monitoring version | Without |
| Product function | |
| • communication function | Yes |
| • other measurement function | Yes |
| Net weight | 2.95 kg |

Electricity

| | |
|---|-------|
| Marking / according to UL 489 / 100%-rated breaker | No |
| Max. rated operational voltage of the size of the circuit-breaker | 160 A |
| Courant permanent assigné Iu | 63 A |
| Operating current | |
| • at 40 °C | 63 A |
| • at 45 °C | 63 A |
| • at 50 °C | 63 A |
| • at 55 °C | 63 A |
| • at 60 °C | 63 A |
| • at 65 °C | 63 A |
| • at 70 °C | 63 A |

Switching capacity according to IEC 60947

| | |
|---|--------|
| Switching capacity class of the circuit breaker | H |
| Maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 110 kA |
| • at 415 V | 85 kA |
| • at 440 V | 85 kA |
| • at 500 V | 55 kA |
| • at 690 V | 2.5 kA |
| Operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 110 kA |
| • at 415 V | 85 kA |
| • at 440 V | 85 kA |
| • at 500 V | 55 kA |
| • at 690 V | 2.5 kA |
| Short-circuit current making capacity (Icm) | |
| • at 240 V | 242 kA |
| • at 415 V | 187 kA |
| • at 440 V | 187 kA |
| • at 500 V | 121 kA |
| • at 690 V | 3.8 kA |

| Adjustable parameters | |
|---|------------------------------|
| Adjustable response value current / I _g min. | 25 A |
| Adjustable response value current / I _g min. | 63 A |
| Adjustable response value current / I _g min. | 0.5 |
| Adjustable response value current / I _g min. | 25 |
| Adjustable response value current / I _g min. | 38 A |
| Adjustable response value current / I _g min. | 630 A |
| Short-term delayed / tripping switchable / I _{2t} =ON/OFF | Yes |
| Adjustable response value current / I _g min. | 0.05 s |
| Adjustable response value current / I _g min. | 0.5 s |
| Adjustable response value current / I _g min. | 0.05 s |
| Adjustable response value current / I _g min. | 0.5 s |
| Adjustable response value current / I _i min. | 95 A |
| Adjustable response value current / I _i max. | 756 A |
| Design of the N-conductor protection | adjustable OFF; 40% bis 160% |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | No |

| Mechanical Design | |
|-------------------|--------|
| Height [in] | 7.1 in |
| Height | 181 mm |
| Width [in] | 5.5 in |
| Width | 140 mm |
| Depth [in] | 4.2 in |
| Depth | 107 mm |

| Connections | |
|---|----------------|
| Arrangement of electrical connectors / for main current circuit | Front terminal |
| Type of electrical connection / for main current circuit | Lug terminal |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 13 x 1 mm |

| 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 | <ul style="list-style-type: none"> -25 °C 70 °C -40 °C |

• during storage / maximum

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 |



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Test Certificates

[Typprüfbescheinigung/Werkszeugnis](#)

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ABS

BUREAU
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GL

LRS

Shipping Approval

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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/3VA2163-6KP42-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2163-6KP42-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA2163-6KP42-0AA0

CAX-Online-Generator

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

Tender specifications

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

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