



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING
CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE,
LINE PROTECTION TM240, ATAM, IN=25A
OVERLOAD PROTECTION IR=17,5A ...25A SHORT
CIRCUIT PROTECTION II=5...10 X IN NEUTRAL
UNPROTECTED CABLE CONNECTION

| Model | | |
|---|---|-----------------------------|
| product brand name | | SENTRON |
| Product designation | | Molded case circuit breaker |
| Design of the product | | Line protection |
| Product variations | | General Applications |
| Ground fault monitoring version | | Without |
| Design of the auxiliary release | | Without auxiliary release |
| Design of the auxiliary switch | | Without |
| Design of the operating mechanism | | toggle handle |
| Type of the driving mechanism / motor drive | | No |
| Design of the overcurrent release | | TM240 |
| General technical data | | |
| Number of poles | | 4 |
| Trip class / of the L-trip / with I _{2t} characteristic / initial value | | 1 |
| Trip class / of the L-trip / with I _{2t} characteristic / Full-scale value | | 1 |
| Electrical endurance (switching cycles) | | |
| • at AC-1 / at 380/415 V / at 50/60 Hz | | 8 000 |
| circuit-breaker / Design | | 3VA |
| Mechanical service life (switching cycles) / typical | | 15 000 |
| Voltage | | |
| Insulation voltage | | |
| • Rated value | V | 800 |

| | | |
|--|---|-------------------|
| Protection class | | |
| Protective function of the overcurrent release | | LI |
| Switching capacity | | |
| Switching capacity class of the circuit breaker | | N |
| Dissipation | | |
| Active power loss | | |
| • maximum | W | 8.5 |
| Electricity | | |
| Operating current / at 45 °C / Rated value | A | 25 |
| Continuous current / Rated value / maximum | A | 160 |
| Continuous current | | |
| • Rated value | A | 25 |
| Adjustable response value current | | |
| • of the current-dependent overload release / Full-scale value | A | 1 |
| • of the instantaneous short-circuit release / initial value | A | 5 |
| Net weight | g | 1 200 |
| Main circuit | | |
| Operating voltage | | |
| • with AC / at 50/60 Hz / Rated value | V | 690 |
| • for DC / Rated value | V | 600 |
| Operating current | | |
| • at 40 °C / Rated value | A | 25 |
| • at 50 °C / Rated value | A | 25 |
| • at 55 °C / Rated value | A | 24 |
| • at 60 °C / Rated value | A | 24 |
| • at 65 °C / Rated value | A | 23 |
| • at 70 °C / Rated value | A | 23 |
| Auxiliary circuit | | |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| Suitability | | |
| • Suitability for use | | system protection |
| Adjustable parameters | | |
| Adjustable response value current | | |
| • of I-trip / Full-scale value | A | 10 |
| • for N-conductor protection / initial value | A | 0 |
| • for N-conductor protection / Full-scale value | A | 0 |

| | | |
|---|----------------------------|----------------------------|
| Adjustable response value current / of the current-dependent overload release / initial value | A | 0.7 |
| Appearance | | |
| Product details | | |
| Product component <ul style="list-style-type: none"> • Trip indicator • display • Voltage trigger • undervoltage release • undervoltage release with leading contact | | No No No No No |
| Product property <ul style="list-style-type: none"> • for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof | | No |
| Product expansion <ul style="list-style-type: none"> • optional — motor drive | | Yes |
| Product function | | |
| Product function <ul style="list-style-type: none"> • Intrinsic device protection • communication function • Phase failure detection • other measurement function | | Yes No No No |
| Accessories | | |
| Manufacturer article number / of the supplied basic switch | | 3VA1125-3EF46-0AA0 |
| Short circuit | | |
| Operational short-circuit current breaking capacity (Ics) <ul style="list-style-type: none"> • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value | kA kA kA kA kA | 36 25 16 8 5 |
| Maximum short-circuit current breaking capacity (Icu) <ul style="list-style-type: none"> • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value | kA kA kA kA kA | 36 25 16 8 7 |
| Short-circuit current making capacity (Icm) | | |

- at 240 V / Rated value
- at 415 V / Rated value
- at 690 V / Rated value

| | |
|----|------|
| kA | 75.6 |
| kA | 52.5 |
| kA | 7.5 |

Connections

| | |
|--|--------------------|
| Arrangement of electrical connectors | |
| • for main current circuit | Front terminal |
| Type of connectable conductor cross-section | |
| • of the round conductor terminal / stranded | 1 x (1.5 - 70 mm²) |
| Design of the electrical connection | |
| • for main current circuit | Box terminal |

Mechanical Design

| | | |
|----------------------|----|----------------|
| Height | mm | 130 |
| Width | mm | 101.6 |
| Depth | mm | 70 |
| Mounting type | | fixed mounting |

Environmental conditions

| Ambient temperature | | |
|------------------------------|----|-----|
| • during operation / minimum | °C | -25 |
| • during operation / maximum | °C | 70 |
| • during storage / minimum | °C | -40 |
| • during storage / maximum | °C | 80 |

Certificates

| | |
|--------------------------|---|
| Reference code | |
| • acc. to DIN EN 61346-2 | Q |
| • acc. to DIN EN 81346-2 | Q |

| | | | | |
|---------------------------------|------------|----------------------------------|--------------------------|--------------|
| General Product Approval | EMC | Declaration of Conformity | Shipping Approval | other |
|---------------------------------|------------|----------------------------------|--------------------------|--------------|



[other](#)



EG-Konf.



GL

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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/3VA11253EF460AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11253EF460AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11253EF460AA0

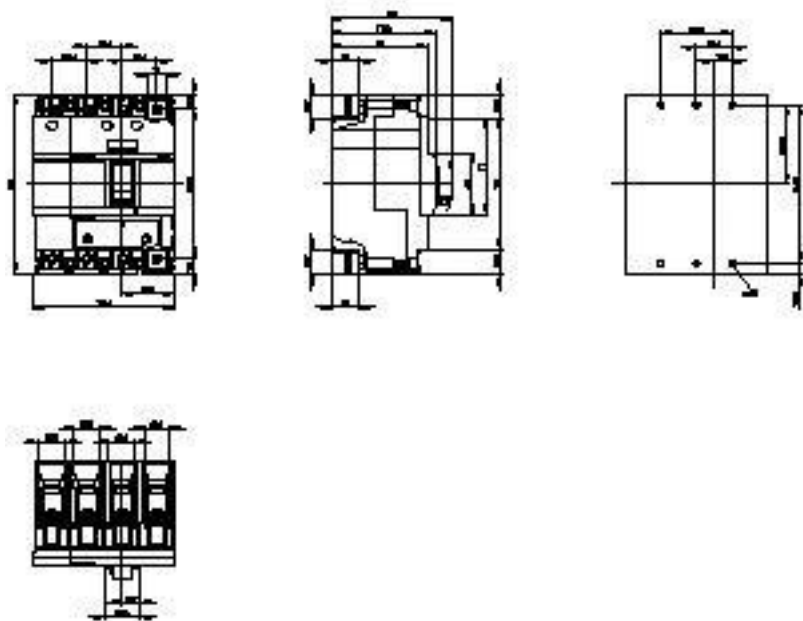


Figure similar



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