

CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS S 25KA @ 277 V 1-POLE, LINE PROTECTION TM210, FTFM, IN=45A OVERLOAD PROTECTION IR=45A FIXED SHORT CIRCUIT PROTECTION II=10 X IN W/O CONNECTION



| Model | |
|----------------------------------------------------------------------------------------------------------------------|---------|
| product brandname | SENTRON |
| Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| Number of poles | 1 |

| General technical data | |
|--------------------------------------------------------------------------------------------------|--------|
| Tension assignée d'isolement U_i | 500 V |
| Max. rated operational voltage U_e with AC 50/60Hz | 415 V |
| Max. rated operational voltage U_e with DC | 125 V |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 3.8 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 3.8 W |
| Mechanical service life (switching cycles) / typical | 15 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 8 000 |
| Electrical lifetime (switching cycles) / at 480 V / at 50/60 Hz | 8 000 |

| | |
|-----------------------------------------------------------------|-------|
| Electrical lifetime (switching cycles) / at 600 V / at 50/60 Hz | 4 000 |
| Neutral conductors / upgradeable/retrofitable | No |
| Product function | |
| • communication function | No |
| • other measurement function | No |

Electricity

| | |
|-------------------------------------------------------------------|---------|
| Marking / according to UL 489 / 100%-rated breaker | No |
| Max. rated operational voltage of the size of the circuit-breaker | 125 A |
| Courant permanent assigné lu | 45 A |
| Operating current | |
| • at 40 °C | 45 A |
| • at 45 °C | 44.29 A |
| • at 50 °C | 43.6 A |
| • at 55 °C | 42.94 A |
| • at 60 °C | 42.29 A |
| • at 65 °C | 41.67 A |
| • at 70 °C | 41.06 A |

Switching capacity according to IEC 60947

| | |
|-----------------------------------------------------------|---------|
| Maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 25 kA |
| • at 415 V | 5 kA |
| Operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 25 kA |
| • at 415 V | 5 kA |
| Short-circuit current making capacity (Icm) | |
| • at 240 V | 52.5 kA |
| • at 415 V | 7.5 kA |

Switching capacity according to UL 489

| | |
|---------------------------|-------|
| Breaking capacity current | |
| • at 120 V | 65 kA |
| • at 277 V | 25 kA |
| • at 347 V | 14 kA |

Adjustable parameters

| | |
|---------------------------------------------------------|-------|
| Adjustable response value current / I _g min. | 45 A |
| Adjustable response value current / I _g min. | 45 A |
| Adjustable response value current / I _i min. | 450 A |
| Adjustable response value current / I _i max. | 450 A |

| | |
|------------------------------------------------------------|----|
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |
|------------------------------------------------------------|----|

Mechanical Design

| | |
|-------------|---------|
| Height [in] | 5.5 in |
| Height | 140 mm |
| Width [in] | 1 in |
| Width | 25.4 mm |
| Depth [in] | 3 in |
| Depth | 76.5 mm |

Auxiliary circuit

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

Accessories

| | |
|--------------------------------------------|----|
| Product extension / optional / motor drive | No |
|--------------------------------------------|----|

Environmental conditions

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



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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/3VA5145-4ED11-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA5145-4ED11-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5145-4ED11-0AA0

Cx-Online-Generator

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

