



CIRCUIT BREAKER 3VA5 UL FRAME 600 BREAKING CAPACITY CLASS C 100kA @ 480 V 3POLE, LINE PROTECTION TM230, FTAM, In=450A OVERLOAD PROTECTION IR=450A FIXED SHORT CIRCUIT PROTECTION II=5...10 X IN UL489 SB (NAVAL), 50 DEG CEL. W/O CONNECTION

| Model | |
|---|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | HLAM |
| Product version | System protection |
| design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| design of the overcurrent release | TM230 |
| protection function of the overcurrent release | LI |
| number of poles | 3 |
| General technical data | |
| power loss [W] / maximum | 99 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 33 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 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz | 2 700 |
| electrical endurance (switching cycles) / at 480 V | 3 000 |
| electrical endurance (switching cycles) / at 600 V | 2 700 |
| Neutral conductors / upgradeable/retrofitable | No |
| ground-fault monitoring version | Without |
| product function | |
| • communication function | No |
| • other measurement function | No |
| Current | |
| marking / acc. to UL 489 / 100%-rated breaker | No |
| Max. rated operational current of the frame size | 600 A |
| Courant permanent assigné lu | 450 A |
| operational current | |
| • at 45 °C | 440 A |
| • at 50 °C | 429 A |
| • at 55 °C | 419 A |
| • at 60 °C | 409 A |
| • at 65 °C | 398 A |
| • at 70 °C | 388 A |
| Switching capacity according to IEC 60947 | |

| | |
|--|--------------------|
| switching capacity class of the circuit breaker | C |
| Switching capacity according to UL 489 | |
| breaking capacity current | |
| • at 240 V | 200 kA |
| • at 480 V | 100 kA |
| • at 600 V | 35 kA |
| Adjustable parameters | |
| Adjustable response value current / I _g min. | 450 A |
| Adjustable response value current / I _g min. | 450 A |
| Adjustable response value current / I _i min. | 2 250 A |
| Adjustable response value current / I _i max. | 4 500 A |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | No |
| Mechanical Design | |
| height [in] | 9.8 in |
| Height | 248 mm |
| width [in] | 5.4 in |
| Width | 138 mm |
| depth [in] | 4.3 in |
| depth | 110 mm |
| Connections | |
| arrangement of electrical connectors / for main current circuit | Without connection |
| type of electrical connection / for main current circuit | Without |
| 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 | |
| • during operation / minimum | -25 °C |
| • during operation / maximum | 70 °C |
| • during storage / minimum | -40 °C |
| • during storage / maximum | 80 °C |
| Certificates | |
| reference code / acc. to IEC 81346-2 | Q |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes |

General Product Approval

EMC



[Miscellaneous](#)



Declaration of
Conformity

other



[Miscellaneous](#)

Further information

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

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

Industry Mall (Online ordering system)

