



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480V 3-pole, line protection TM230, FTAM, In=80A overload protection Ir=80A fixed short-circuit protection li=5...10 x In UL 489 SB (naval), 50 °C without connection

| Model   |  |
|---|--|
| product brand name  | SETRON   |
| product designation   | Molded-case circuit breaker  |
| product designation / according to UL file  | CFAM   |
| 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  | 20.4 W   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                        | 6.8 W  |
| mechanical service life (switching cycles) / typical  | 20 000   |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz   | 8 000  |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz   | 4 000  |
| electrical endurance (switching cycles) / at 480 V  | 8 000  |
| electrical endurance (switching cycles) / at 600 V  | 4 000  |
| 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  | 250 A  |
| Courant permanent assigné lu  | 80 A   |
| operational current   |  |
| • at 40 °C  | 80 A   |
| Switching capacity according to IEC 60947   |  |
| switching capacity class of the circuit breaker   | C  |
| design of short-circuit protection  | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |
| Switching capacity according to UL 489  |  |

|  |                    |
|--|--------------------|
| breaking capacity current  |                    |
| • at 240 V   | 200 kA             |
| • at 480 V   | 100 kA             |
| • at 600 Y/347 V   | 35 kA              |
| <b>Adjustable parameters</b>   |                    |
| Adjustable response value current / I <sub>g</sub> min.                                | 80 A               |
| Adjustable response value current / I <sub>g</sub> min.                                | 80 A               |
| Adjustable response value current / I <sub>i</sub> min.                                | 400 A              |
| Adjustable response value current / I <sub>i</sub> max.                                | 800 A              |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF                | No                 |
| <b>Mechanical Design</b>   |                    |
| height [in]  | 7.3 in             |
| Height   | 185 mm             |
| width [in]   | 4.1 in             |
| Width  | 105 mm             |
| depth [in]   | 3.3 in             |
| depth  | 83 mm              |
| <b>Connections</b>   |                    |
| arrangement of electrical connectors / for main current circuit                        | Without connection |
| type of electrical connection / for main current circuit                               | Without            |
| <b>Auxiliary circuit</b>   |                    |
| number of CO contacts / for auxiliary contacts   | 0                  |
| <b>Accessories</b>   |                    |
| product extension / optional / motor drive   | Yes                |
| <b>Environmental conditions</b>  |                    |
| 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              |
| <b>Certificates</b>  |                    |
| reference code / acc. to IEC 81346-2   | Q                  |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes                |

#### General Product Approval



[Miscellaneous](#)



|     |                   |       |
|-----|-------------------|-------|
| EMC | Shipping Approval | other |
|-----|-------------------|-------|



[Miscellaneous](#)

#### Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3VA5280-7EC31-1AA0>

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

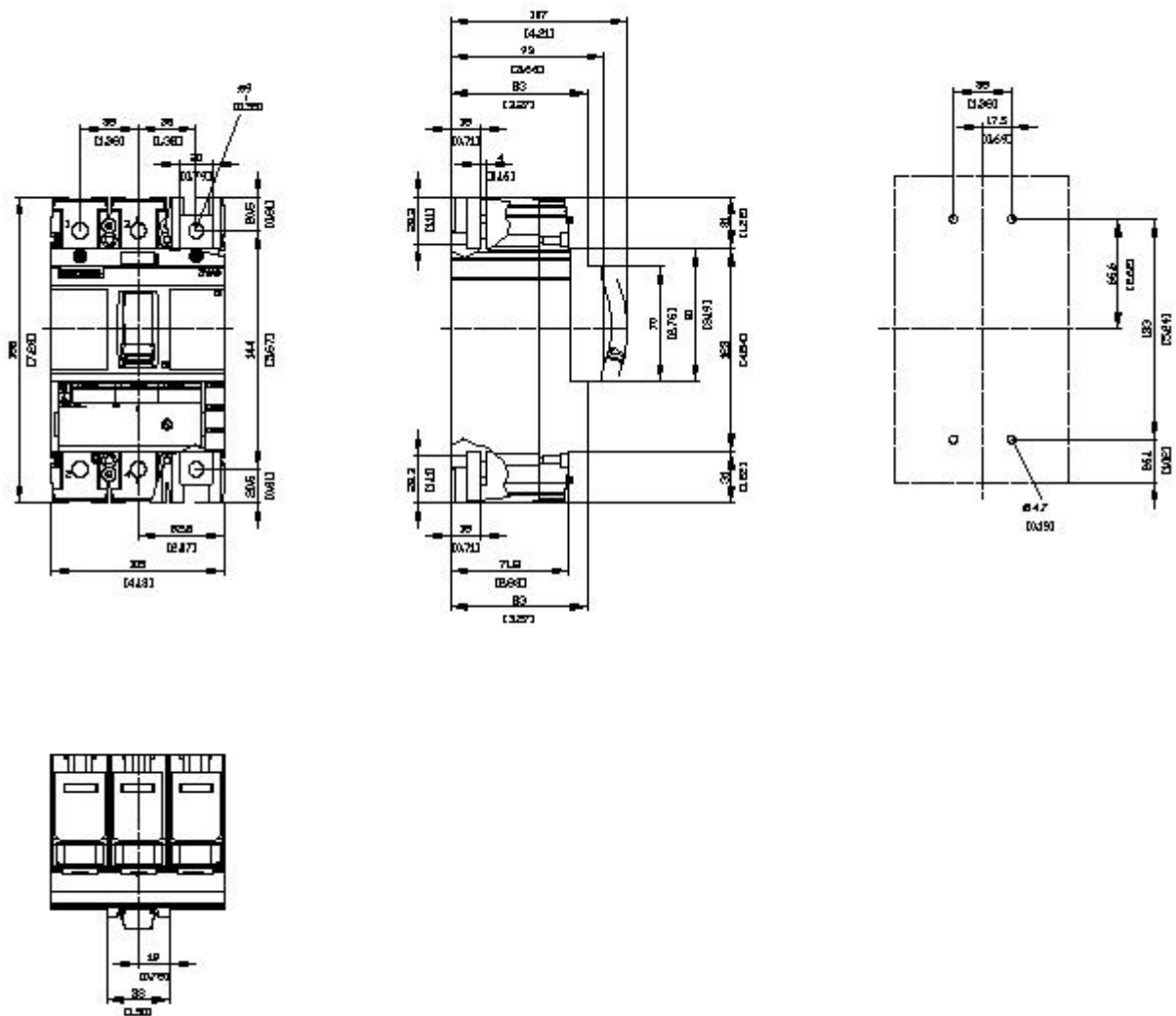
<https://support.industry.siemens.com/cs/ww/en/ps/3VA5280-7EC31-1AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5280-7EC31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5280-7EC31-1AA0)

Tender specifications

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



last modified:

12/20/2020 