



circuit breaker 3VA6 UL frame 600 breaking capacity class M 35kA @ 480 V 3-pole, line protection ETU550, LSI,  $I_n=600A$  overload protection  $I_r=240A$  ...600A short-circuit protection  $I_{sd}=0.6..9x I_n$ ,  $I_i=1.5..9x I_n$  N conductor protection opt. w. ext. CT; up to 160% nut keeper kit on both sides

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SETRON                      |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | MLAE                        |
| Product version                                                                                                            | System protection           |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                         |
| design of the overcurrent release                                                                                          | ETU550                      |
| protection function of the overcurrent release                                                                             | LSI                         |
| number of poles                                                                                                            | 3                           |
| General technical data                                                                                                     |                             |
| rated insulation voltage $U_i$                                                                                             | 800 V                       |
| power loss [W] / maximum                                                                                                   | 151 W                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                             | 50.33 W                     |
| mechanical service life (switching cycles) / typical                                                                       | 20 000                      |
| 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                                                      | 3 500                       |
| electrical endurance (switching cycles) / at 480 V                                                                         | 4 000                       |
| electrical endurance (switching cycles) / at 600 V                                                                         | 3 500                       |
| Neutral conductors / upgradeable/retrofitable                                                                              | Yes                         |
| ground-fault monitoring version                                                                                            | Without                     |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | Yes                         |
| • other measurement function                                                                                               | No                          |
| Net Weight                                                                                                                 | 5.596 kg                    |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | No                          |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 600 A                       |
| • at 45 °C                                                                                                                 | 600 A                       |
| • at 50 °C                                                                                                                 | 570 A                       |
| • at 55 °C                                                                                                                 | 540 A                       |
| • at 60 °C                                                                                                                 | 510 A                       |
| • at 65 °C                                                                                                                 | 480 A                       |
| • at 70 °C                                                                                                                 | 450 A                       |
| Switching capacity according to IEC 60947                                                                                  |                             |

|                                                                                                                                                                                                             |                                    |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------|
| switching capacity class of the circuit breaker                                                                                                                                                             | M                                  |                           |
| breaking capacity maximum short-circuit current (Icu) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>                                                      | 85 kA<br>55 kA<br>6 kA             |                           |
| breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>                                                    | 85 kA<br>55 kA<br>6 kA             |                           |
| short-circuit current making capacity (Icm) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>                                                                | 187 kA<br>121 kA<br>9 kA           |                           |
| Switching capacity according to UL 489                                                                                                                                                                      |                                    |                           |
| breaking capacity current <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 480 V</li><li>• at 600 V</li></ul>                                                                                  | 100 kA<br>35 kA<br>18 kA           |                           |
| Adjustable parameters                                                                                                                                                                                       |                                    |                           |
| Adjustable response value current / Ig min.                                                                                                                                                                 | 0.5 s                              |                           |
| Adjustable response value current / Ig min.                                                                                                                                                                 | 15 s                               |                           |
| Adjustable response value current / Ig min.                                                                                                                                                                 | 0.5 s                              |                           |
| Adjustable response value current / Ii min.                                                                                                                                                                 | 900 A                              |                           |
| Adjustable response value current / Ii max.                                                                                                                                                                 | 5 400 A                            |                           |
| Ground fault protection / tripping switchable / I2t=ON/OFF                                                                                                                                                  | No                                 |                           |
| Mechanical Design                                                                                                                                                                                           |                                    |                           |
| height [in]                                                                                                                                                                                                 | 9.76 in                            |                           |
| Height                                                                                                                                                                                                      | 248 mm                             |                           |
| width [in]                                                                                                                                                                                                  | 5.43 in                            |                           |
| Width                                                                                                                                                                                                       | 138 mm                             |                           |
| depth [in]                                                                                                                                                                                                  | 4.33 in                            |                           |
| depth                                                                                                                                                                                                       | 110 mm                             |                           |
| Connections                                                                                                                                                                                                 |                                    |                           |
| arrangement of electrical connectors / for main current circuit                                                                                                                                             | Front connection                   |                           |
| Auxiliary circuit                                                                                                                                                                                           |                                    |                           |
| product component <ul style="list-style-type: none"><li>• undervoltage release</li><li>• voltage trigger</li><li>• trip indicator</li></ul>                                                                 | No<br>No<br>No                     |                           |
| 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"><li>• during operation / minimum</li><li>• during operation / maximum</li><li>• during storage / minimum</li><li>• during storage / maximum</li></ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C |                           |
| Certificates                                                                                                                                                                                                |                                    |                           |
| reference code / according to IEC 81346-2                                                                                                                                                                   | Q                                  |                           |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB                                                                                                                      | Yes                                |                           |
| General Product Approval                                                                                                                                                                                    | EMC                                | Declaration of Conformity |



[Confirmation](#)



[UK Declaration of  
Conformity](#)



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?mlfb=3VA6460-5JP32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6460-5JP32-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6460-5JP32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6460-5JP32-0AA0)

CAX-Online-Generator

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

Tender specifications

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





