



CIRCUIT BREAKER 3VA6 UL FRAME 150 BREAKING CAPACITY CLASS H 65KA @ 480 V 4-POLE, LINE PROTECTION ETU560, LSIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) GROUND-FAULT-PROTECTION IG=0,2... 1 X IN, TG=0,05-0,8S 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                                                                                                      | 4       |
| General technical data                                                                                               |         |
| Tension assignée d'isolement Ui                                                                                      | 600 V   |
| Max. rated operational voltage Ue with AC 50/60Hz                                                                    | 600 V   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device                     | 13 W    |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                       | 4.33 W  |
| Mechanical service life (switching cycles) / typical                                                                 | 20 000  |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                                            | 9 000   |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                                                | 5 000   |
| Electrical lifetime (switching cycles) / at 480 V / at 50/60 Hz                                                      | 9 000   |

|                                                                 |       |
|-----------------------------------------------------------------|-------|
| Electrical lifetime (switching cycles) / at 600 V / at 50/60 Hz | 9 000 |
| Neutral conductors / upgradeable/retrofitable                   | No    |
| Product function                                                |       |
| • communication function                                        | Yes   |
| • other measurement function                                    | No    |

#### Electricity

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| Marking / according to UL 489 / 100%-rated breaker                | Yes   |
| Max. rated operational voltage of the size of the circuit-breaker | 150 A |
| Courant permanent assigné lu                                      | 100 A |
| Operating current                                                 |       |
| • at 40 °C                                                        | 100 A |
| • at 45 °C                                                        | 100 A |
| • at 50 °C                                                        | 100 A |
| • at 55 °C                                                        | 100 A |
| • at 60 °C                                                        | 95 A  |
| • at 65 °C                                                        | 100 A |
| • at 70 °C                                                        | 100 A |

#### Switching capacity according to IEC 60947

|                                                           |        |
|-----------------------------------------------------------|--------|
| Maximum short-circuit current breaking capacity (Icu)     |        |
| • at 240 V                                                | 110 kA |
| • at 415 V                                                | 85 kA  |
| • at 690 V                                                | 2.5 kA |
| Operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 110 kA |
| • at 415 V                                                | 85 kA  |
| • at 690 V                                                | 2.5 kA |
| Short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 242 kA |
| • at 415 V                                                | 187 kA |
| • at 690 V                                                | 3.8 kA |

#### Switching capacity according to UL 489

|                           |        |
|---------------------------|--------|
| Breaking capacity current |        |
| • at 240 V                | 100 kA |
| • at 480 Y/277 V          | 65 kA  |
| • at 480 V                | 65 kA  |
| • at 600 Y/347 V          | 22 kA  |
| • at 600 V                | 22 kA  |

#### Adjustable parameters

|                                                                         |         |
|-------------------------------------------------------------------------|---------|
| Adjustable response value current / I <sub>g</sub> min.                 | 40 A    |
| Adjustable response value current / I <sub>g</sub> min.                 | 100 A   |
| Adjustable response value current / I <sub>g</sub> min.                 | 60 A    |
| Adjustable response value current / I <sub>g</sub> min.                 | 1 000 A |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5 s   |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5 s   |
| Adjustable response value current / I <sub>i</sub> min.                 | 150 A   |
| Adjustable response value current / I <sub>i</sub> max.                 | 1 200 A |
| Ground fault protection can be switched ON/OFF                          | Yes     |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | Yes     |
| Adjustable response value current / I <sub>g</sub> min.                 | 20 A    |
| Adjustable response value current / I <sub>g</sub> max.                 | 100 A   |
| Adjustable response value current / t <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.8 s   |

#### Mechanical Design

|             |        |
|-------------|--------|
| Height [in] | 7.8 in |
| Height      | 198 mm |
| Width [in]  | 5.5 in |
| Width       | 140 mm |
| Depth [in]  | 3.4 in |
| Depth       | 86 mm  |

#### 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

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| 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/3VA6110-6JQ41-2AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA6110-6JQ41-2AA0/all>

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

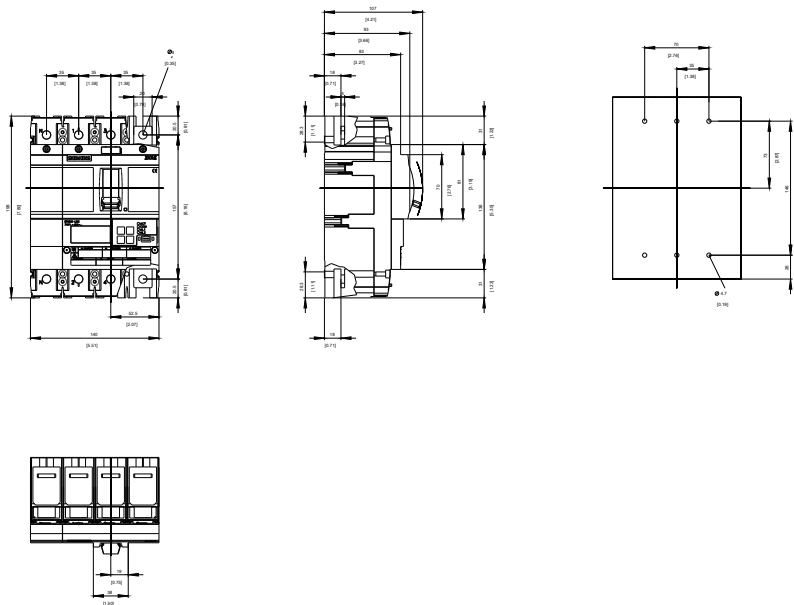
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6110-6JQ41-2AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6110-6JQ41-2AA0)

### CAX-Online-Generator

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

### Tender specifications

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



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