



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=100A OVERLOAD PROTECTION IR=70A ...100A SHORT CIRCUIT PROTECTION II=5...10 X IN CABLE CONNECTION

| Model                                                                                            |                             |
|--------------------------------------------------------------------------------------------------|-----------------------------|
| Product brand name                                                                               | SENTRON                     |
| Product designation                                                                              | Molded case circuit breaker |
| Design of the product                                                                            | Line protection             |
| Design of the overcurrent release                                                                | TM240                       |
| Protective function of the overcurrent release                                                   | LI                          |
| Number of poles                                                                                  | 3                           |
| General technical data                                                                           |                             |
| Tension assignée d'isolement Ui                                                                  | 800 V                       |
| Max. rated operational voltage Ue with AC 50/60Hz                                                | 690 V                       |
| Max. rated operational voltage Ue with DC                                                        | 500 V                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 25 W                        |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole   | 8.33 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                       |
| Neutral conductors / upgradeable/retrofitable                                                    | No                          |

|                                 |          |
|---------------------------------|----------|
| Ground fault monitoring version | Without  |
| Product function                |          |
| • communication function        | No       |
| • other measurement function    | No       |
| Net weight                      | 1.026 kg |

#### Electricity

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| Max. rated operational voltage of the size of the circuit-breaker | 160 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                                                        | 98 A  |
| • at 60 °C                                                        | 96 A  |
| • at 65 °C                                                        | 94 A  |
| • at 70 °C                                                        | 91 A  |

#### Switching capacity according to IEC 60947

|                                                           |         |
|-----------------------------------------------------------|---------|
| Switching capacity class of the circuit breaker           | N       |
| Maximum short-circuit current breaking capacity (Icu)     |         |
| • at 240 V                                                | 36 kA   |
| • at 415 V                                                | 25 kA   |
| • at 440 V                                                | 16 kA   |
| • at 500 V                                                | 7 kA    |
| • at 690 V                                                | 7 kA    |
| Operational short-circuit current breaking capacity (Ics) |         |
| • at 240 V                                                | 36 kA   |
| • at 415 V                                                | 25 kA   |
| • at 440 V                                                | 16 kA   |
| • at 500 V                                                | 5 kA    |
| • at 690 V                                                | 5 kA    |
| Short-circuit current making capacity (Icm)               |         |
| • at 240 V                                                | 76 kA   |
| • at 415 V                                                | 53 kA   |
| • at 440 V                                                | 32 kA   |
| • at 500 V                                                | 11.9 kA |
| • at 690 V                                                | 11.9 kA |

#### Adjustable parameters

|                                                         |       |
|---------------------------------------------------------|-------|
| Adjustable response value current / I <sub>g</sub> min. | 70 A  |
| Adjustable response value current / I <sub>g</sub> min. | 100 A |

|                                                            |         |
|------------------------------------------------------------|---------|
| Short-term delayed / tripping switchable / I2t=ON/OFF      | No      |
| Adjustable response value current / li min.                | 500 A   |
| Adjustable response value current / li max.                | 1 000 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No      |

#### Mechanical Design

|             |         |
|-------------|---------|
| Height [in] | 5.1 in  |
| Height      | 130 mm  |
| Width [in]  | 3 in    |
| Width       | 76.2 mm |
| Depth [in]  | 2.8 in  |
| Depth       | 70 mm   |

#### Connections

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Arrangement of electrical connectors / for main current circuit                 | Front terminal     |
| Type of electrical connection / for main current circuit                        | box terminal       |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (1.5 - 70 mm²) |

#### 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 |
|--------------------------------------------|---|

|                          |     |                           |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|



CCC



VDE

[Miscellaneous](#)



RCM



EG-Konf.

|                   |                   |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Type Test  
Certificates/Test  
Report](#)

[Miscellaneous](#)

[Special Test  
Certificate](#)



ABS



BUREAU  
VERITAS



GL

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



LRS



RMRS

[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=3VA1110-3EF36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-3EF36-0AA0>

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

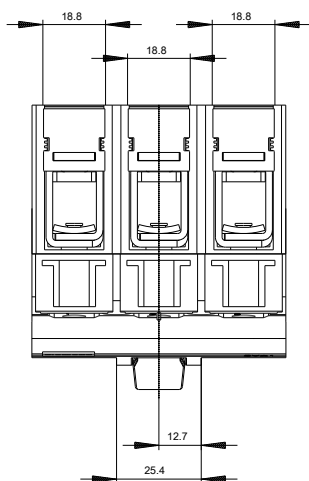
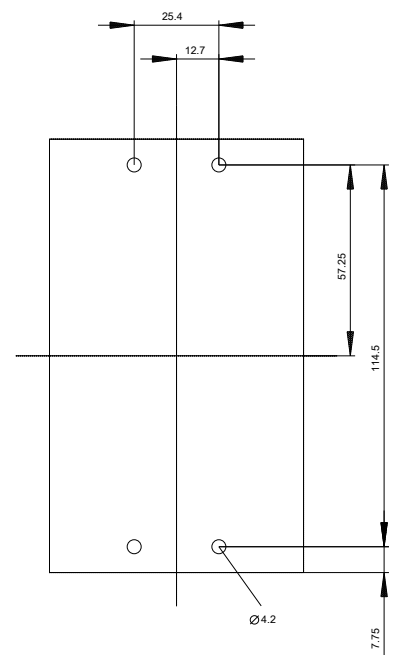
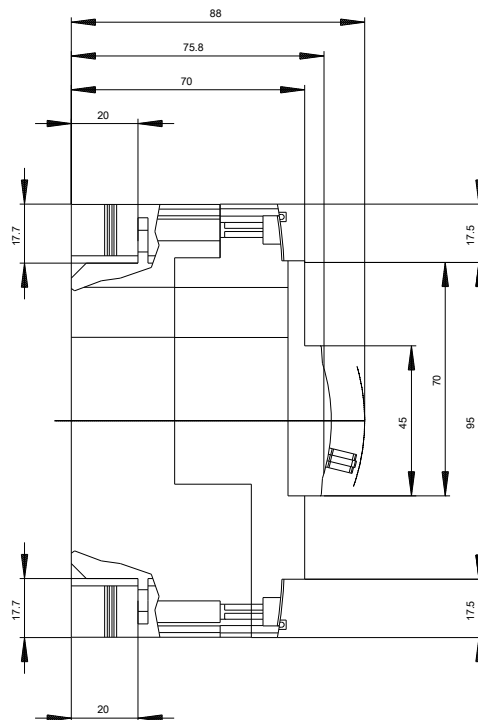
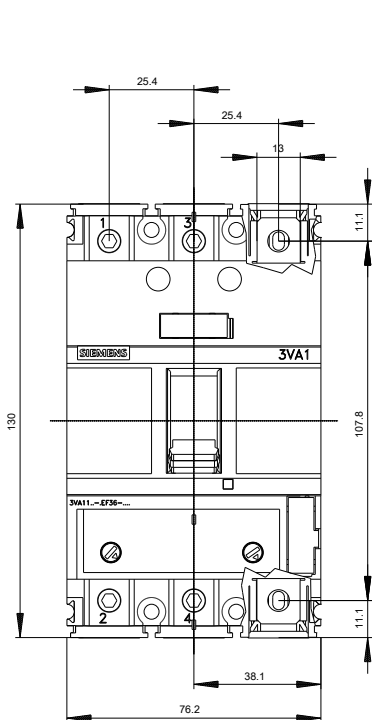
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1110-3EF36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1110-3EF36-0AA0)

**CAX-Online-Generator**

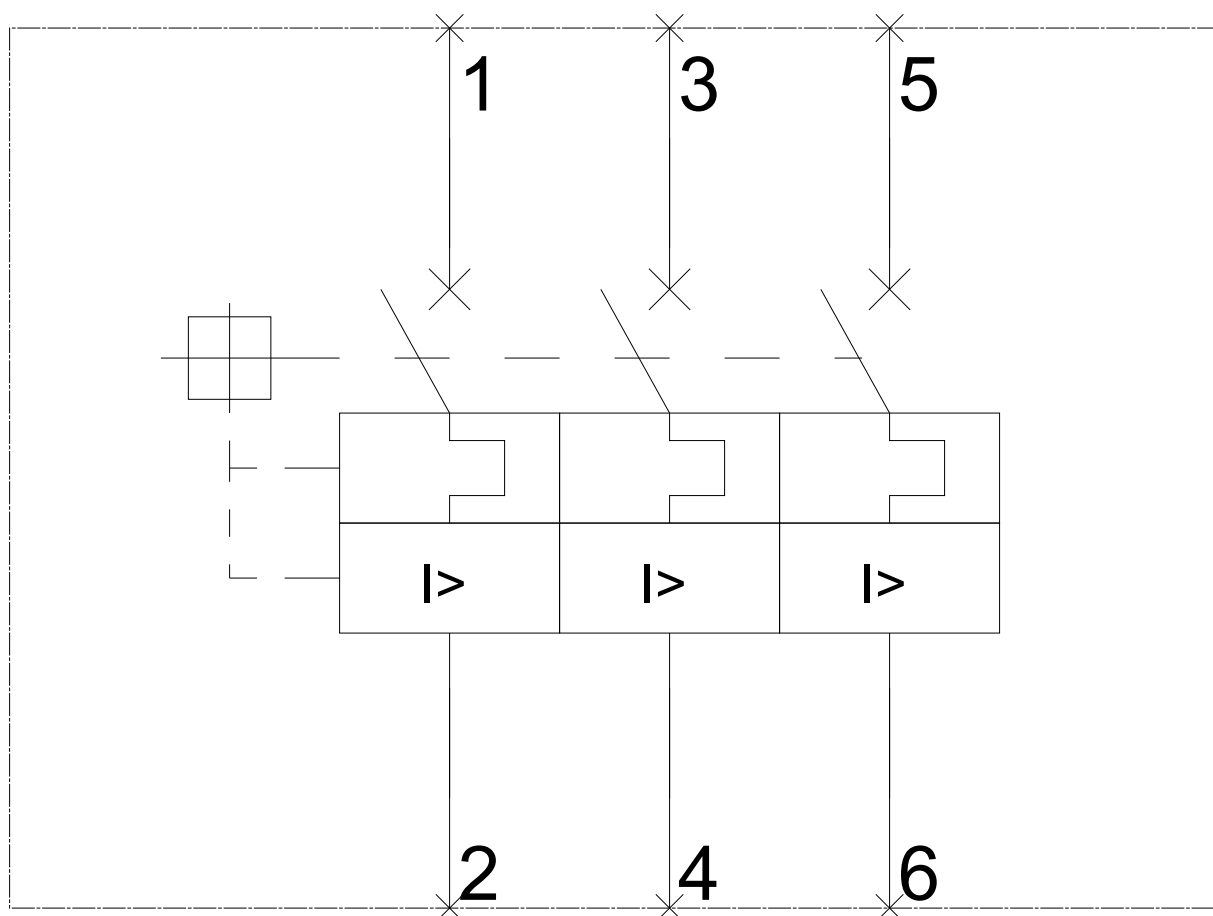
<http://www.siemens.com/cax>

**Tender specifications**

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



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