



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY  
CLASS H ICU=70KA @ 415 V 3-POLE, LINE PROTECTION  
TM210, FTFM, IN=40A OVERLOAD PROTECTION IR=40A FIXED  
SHORT CIRCUIT PROTECTION II=10 X IN CABLE CONNECTION

| Model                                                                                            |                             |
|--------------------------------------------------------------------------------------------------|-----------------------------|
| Product brand name                                                                               | SETRON                      |
| Product designation                                                                              | Molded case circuit breaker |
| Design of the product                                                                            | Line protection             |
| Design of the overcurrent release                                                                | TM210                       |
| 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 | 10.8 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole   | 3.6 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/retrofittable                                                   | No                          |

|                                 |         |
|---------------------------------|---------|
| Ground fault monitoring version | Without |
| Product function                |         |
| • communication function        | No      |
| • other measurement function    | No      |
| Net weight                      | 0.9 kg  |

#### Electricity

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| Max. rated operational voltage of the size of the circuit-breaker | 160 A |
| Courant permanent assigné lu                                      | 40 A  |
| Operating current                                                 |       |
| • at 40 °C                                                        | 40 A  |
| • at 45 °C                                                        | 40 A  |
| • at 50 °C                                                        | 40 A  |
| • at 55 °C                                                        | 39 A  |
| • at 60 °C                                                        | 39 A  |
| • at 65 °C                                                        | 38 A  |
| • at 70 °C                                                        | 37 A  |

#### Switching capacity according to IEC 60947

|                                                           |        |
|-----------------------------------------------------------|--------|
| Switching capacity class of the circuit breaker           | H      |
| Maximum short-circuit current breaking capacity (Icu)     |        |
| • at 240 V                                                | 100 kA |
| • at 415 V                                                | 70 kA  |
| • at 440 V                                                | 55 kA  |
| • at 500 V                                                | 10 kA  |
| • at 690 V                                                | 10 kA  |
| Operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 100 kA |
| • at 415 V                                                | 70 kA  |
| • at 440 V                                                | 40 kA  |
| • at 500 V                                                | 5 kA   |
| • at 690 V                                                | 5 kA   |
| Short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 220 kA |
| • at 415 V                                                | 154 kA |
| • at 440 V                                                | 121 kA |
| • at 500 V                                                | 17 kA  |
| • at 690 V                                                | 17 kA  |

#### Adjustable parameters

|                                                         |      |
|---------------------------------------------------------|------|
| Adjustable response value current / I <sub>g</sub> min. | 40 A |
| Adjustable response value current / I <sub>g</sub> min. | 40 A |

|                                                            |       |
|------------------------------------------------------------|-------|
| Short-term delayed / tripping switchable / I2t=ON/OFF      | No    |
| Adjustable response value current / li min.                | 400 A |
| Adjustable response value current / li max.                | 400 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



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=3VA1140-6ED36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1140-6ED36-0AA0>

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

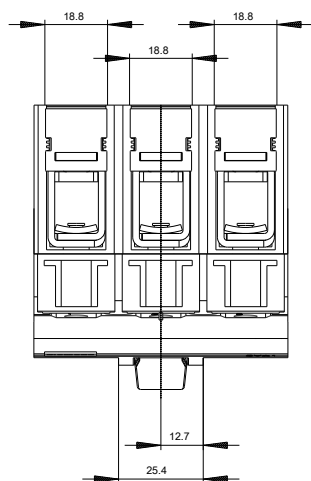
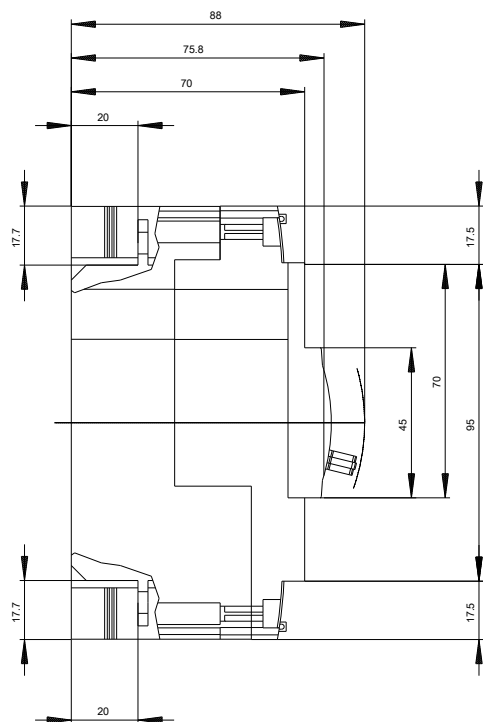
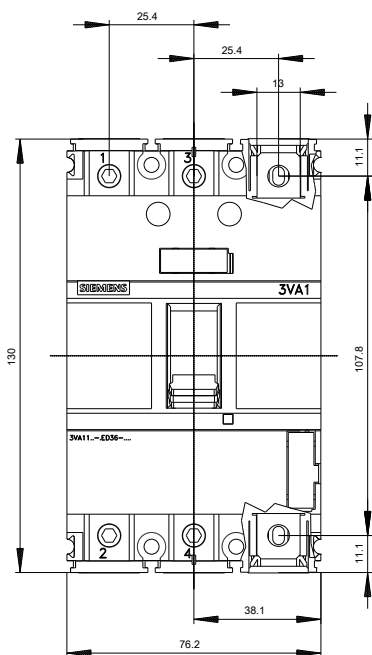
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1140-6ED36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1140-6ED36-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



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