



CIRCUIT BREAKER 3VA6 UL FRAME 600 BREAKING CAPACITY CLASS M 35KA @ 480V 3-POLE, LINE PROTECTION ETU350, LSI, IN=400A OVERLOAD PROTECTION IR=160A ...400A SHORT CIRCUIT PROTECTION ISD=1,5... 10 X IR, II=12 X IN W/O CONNECTION

| Model                                                                                                                 |                             |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Product brand name                                                                                                    | SENTRON                     |
| Product designation                                                                                                   | Molded-case circuit breaker |
| Design of the product                                                                                                 | 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                                                                                     | ETU350                      |
| Protective function of the overcurrent release                                                                        | LSI                         |
| Number of poles                                                                                                       | 3                           |

| 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 | 70 W    |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole   | 23.33 W |
| Mechanical service life (switching cycles) / typical                                             | 15 000  |

|                                                                           |         |
|---------------------------------------------------------------------------|---------|
| 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     | 2 500   |
| Electrical endurance (switching cycles) / at 480 V / at 50/60 Hz          | 4 000   |
| Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz          | 3 000   |
| Neutral conductors / upgradeable/retrofitable                             | No      |
| Ground fault monitoring version                                           | Without |
| Product function                                                          |         |
| • communication function                                                  | No      |
| • other measurement function                                              | No      |

### Electricity

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| Marking / acc. to UL 489 / 100%-rated breaker                     | No    |
| Max. rated operational voltage of the size of the circuit-breaker | 600 A |
| Courant permanent assigné lu                                      | 400 A |
| Operating current                                                 |       |
| • at 40 °C                                                        | 400 A |
| • at 45 °C                                                        | 400 A |
| • at 50 °C                                                        | 400 A |
| • at 55 °C                                                        | 400 A |
| • at 60 °C                                                        | 400 A |
| • at 65 °C                                                        | 400 A |
| • at 70 °C                                                        | 400 A |

### Switching capacity according to IEC 60947

|                                                           |        |
|-----------------------------------------------------------|--------|
| Switching capacity class of the circuit breaker           | M      |
| Maximum short-circuit current breaking capacity (Icu)     |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 690 V                                                | 6 kA   |
| Operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 690 V                                                | 6 kA   |
| Short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 187 kA |
| • at 415 V                                                | 121 kA |
| • at 690 V                                                | 9 kA   |

### Switching capacity according to UL 489

|                           |        |
|---------------------------|--------|
| Breaking capacity current |        |
| • at 240 V                | 100 kA |
| • at 480 Y/277 V          | 35 kA  |
| • at 480 V                | 35 kA  |
| • at 600 Y/347 V          | 18 kA  |
| • at 600 V                | 18 kA  |

| Adjustable parameters                                      |         |
|------------------------------------------------------------|---------|
| Adjustable response value current / Ig min.                | 150 A   |
| Adjustable response value current / Ig min.                | 400 A   |
| Adjustable response value current / Ig min.                | 0.5     |
| Adjustable response value current / Ig min.                | 17      |
| Adjustable response value current / Ig min.                | 600 A   |
| Adjustable response value current / Ig min.                | 4 000 A |
| Adjustable response value current / Ig min.                | 0.04 s  |
| Adjustable response value current / Ig min.                | 0.4 s   |
| Adjustable response value current / Ii min.                | 4 800 A |
| Adjustable response value current / Ii max.                | 4 800 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No      |

| Mechanical Design |        |
|-------------------|--------|
| Height [in]       | 9.8 in |
| Height            | 248 mm |
| Width [in]        | 5.4 in |
| Width             | 138 mm |
| Depth [in]        | 4.3 in |
| Depth             | 110 mm |

| Connections                                                     |                    |
|-----------------------------------------------------------------|--------------------|
| Arrangement of electrical connectors / for main current circuit | Without connection |
| Type of electrical connection / for main current circuit        | Without            |

| 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 |

|                                 |            |                                  |
|---------------------------------|------------|----------------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Declaration of Conformity</b> |
|---------------------------------|------------|----------------------------------|



CSA



UL



VDE



RCM



EG-Konf.

|                          |              |
|--------------------------|--------------|
| <b>Shipping Approval</b> | <b>other</b> |
|--------------------------|--------------|



ABS

[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=3VA6440-5HN31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-5HN31-0AA0>

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

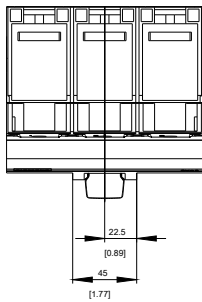
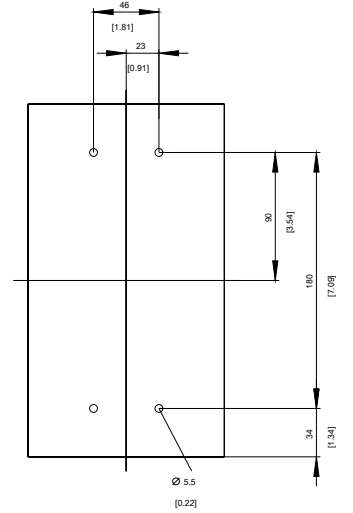
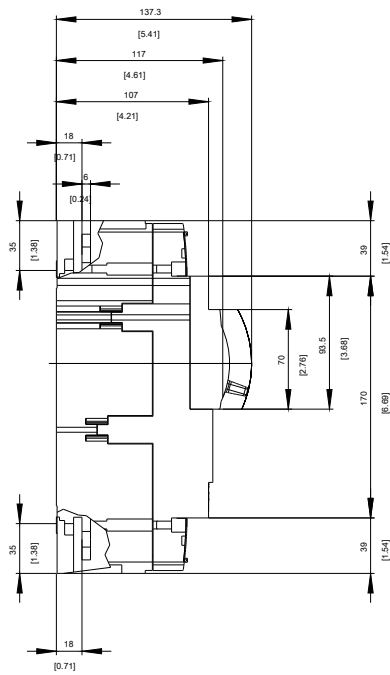
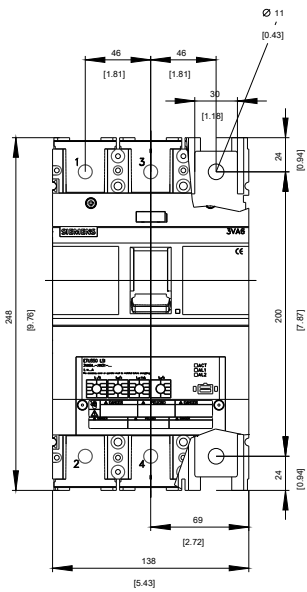
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6440-5HN31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6440-5HN31-0AA0)

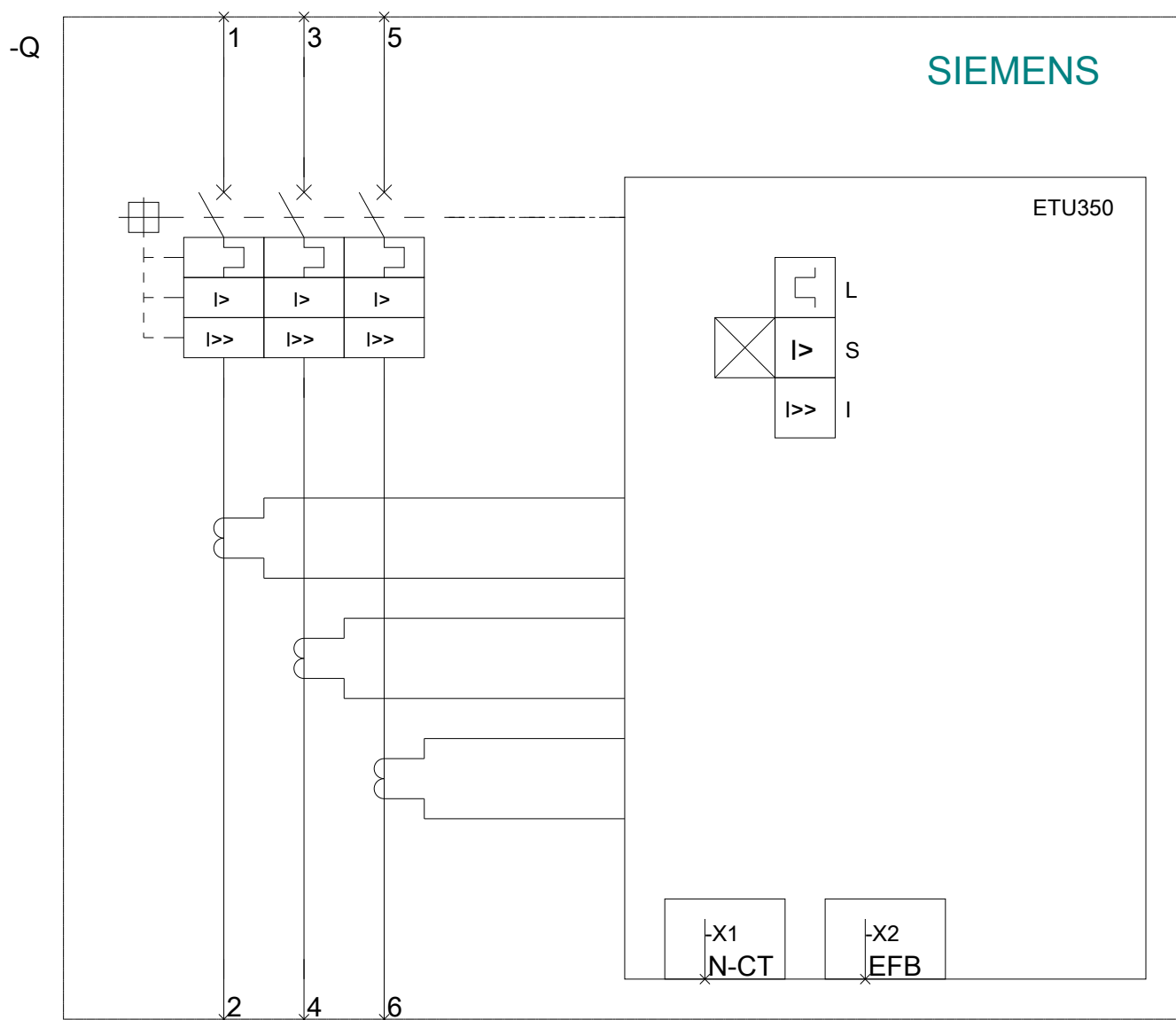
**CAX-Online-Generator**

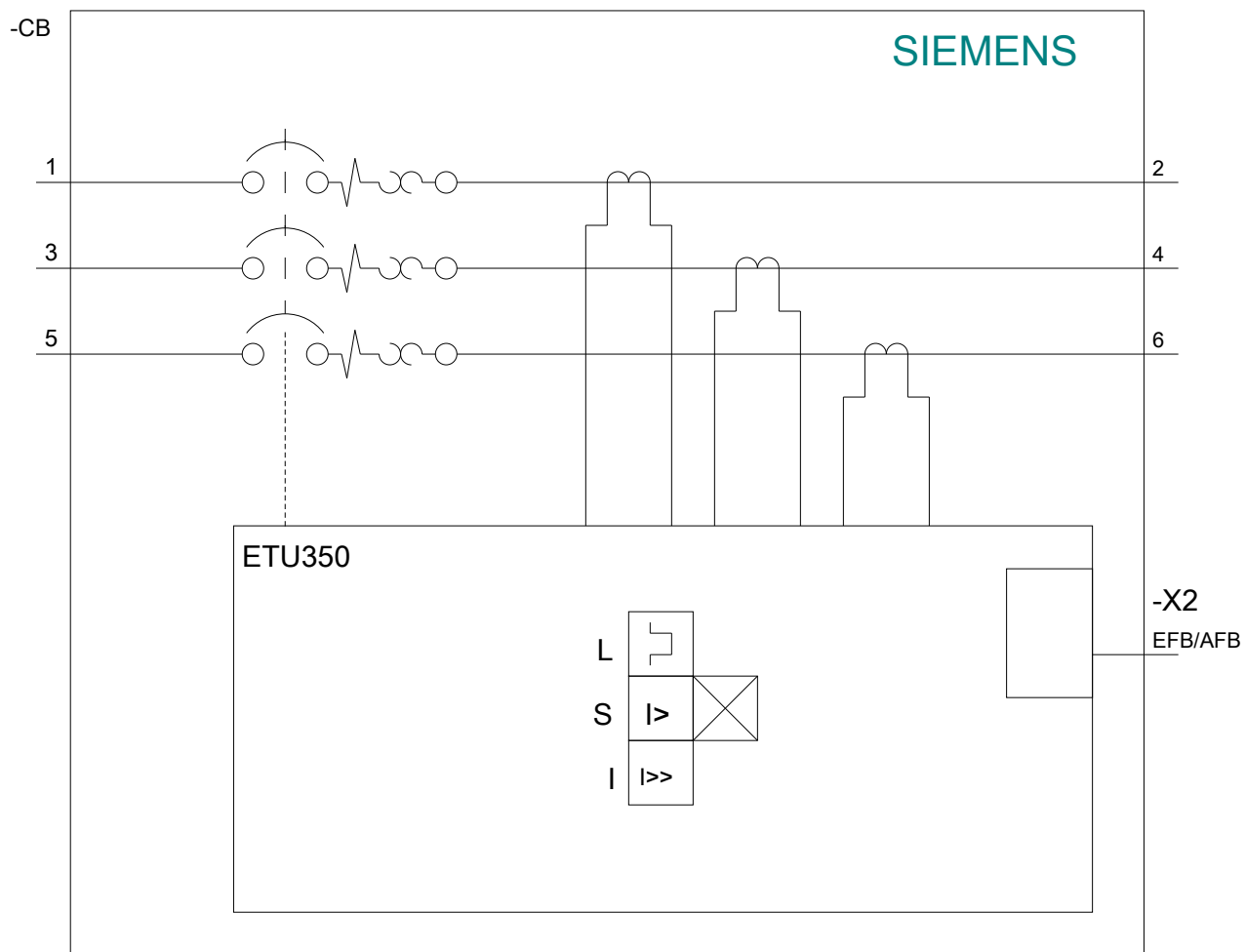
<http://www.siemens.com/cax>

**Tender specifications**

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







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