

circuit breaker 3VA1 IEC frame 160 breaking capacity class M
 $I_{cu}=55kA @ 415V$ 2-pole, line protection TM210, FTFM, $I_n=16A$
 overload protection $I_r=16A$ fixed short-circuit protection $I_i=20 \times I_n$
 clamp connection



| Model | |
|--|-----------------------------|
| Product brand name | SENTRON |
| Product designation | Molded case circuit breaker |
| Product version | Line protection |
| Design of the overcurrent release | TM210 |
| protection function of the overcurrent release | LI |
| Number of poles | 2 |
| General technical data | |
| Rated insulation voltage U_i | 500 V |
| Max. rated operational voltage U_e with AC 50/60Hz | 415 V |
| Max. rated operational voltage U_e with DC | 250 V |
| Power loss [W] / maximum | 7.1 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 3.55 W |
| Mechanical service life (switching cycles) / typical | 20 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 8 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 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 |

Current

| | |
|--|-------|
| Max. rated operational current of the frame size | 160 A |
| Rated continuous current I _u | 16 A |
| Operating current | |
| • at 40 °C | 16 A |
| • at 45 °C | 16 A |
| • at 50 °C | 16 A |
| • at 55 °C | 16 A |
| • at 60 °C | 15 A |
| • at 65 °C | 15 A |
| • at 70 °C | 15 A |

Switching capacity according to IEC 60947

| | |
|--|--|
| Switching capacity class of the circuit breaker | M |
| Maximum short-circuit current breaking capacity (I _{cu}) | |
| • at 240 V | 85 kA |
| • at 415 V | 55 kA |
| Operational short-circuit current breaking capacity (I _{cs}) | |
| • at 240 V | 85 kA |
| • at 415 V | 55 kA |
| Short-circuit current making capacity (I _{cm}) | |
| • at 240 V | 187 kA |
| • at 415 V | 121 kA |
| Design of short-circuit protection | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |

Adjustable parameters

| | |
|---|-------|
| Adjustable response value current / I _g min. | 16 A |
| Adjustable response value current / I _g min. | 16 A |
| Adjustable response value current / I _i min. | 320 A |
| Adjustable response value current / I _i max. | 320 A |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | No |

Mechanical Design

| | |
|-------------|--------|
| Height [in] | 5.1 in |
| Height | 130 mm |

| | |
|------------|---------|
| Width [in] | 2 in |
| Width | 50.8 mm |
| Depth [in] | 2.8 in |
| Depth | 70 mm |

Connections

| | |
|---|---------------------------------|
| Arrangement of electrical connectors / for main current circuit | Front terminal |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (1.5 - 70 mm ²) |

Auxiliary circuit

| | |
|--|---|
| Number of CO contacts / for auxiliary contacts | 0 |
|--|---|

Accessories

| | |
|--|----|
| Product extension / optional / motor drive | No |
|--|----|

Environmental conditions

| | |
|--|--|
| Protection class IP / on the front | IP40 |
| Ambient temperature | |
| <ul style="list-style-type: none"> during operation / minimum during operation / maximum during storage / minimum during storage / maximum | <ul style="list-style-type: none"> -25 °C 70 °C -40 °C 80 °C |

Certificates

| | |
|---|---|
| Reference code / acc. to DIN EN 81346-2 | Q |
|---|---|

| General Product Approval | | EMC | Declaration of Conformity |
|--|--|--|---|
|  CCC |  VDE |  EAC |  RCM |
| Miscellaneous | | |  EG-Konf. |

| Test Certificates | Shipping Approval | other |
|---|--|--|
| Miscellaneous Type Test Certificates/Test Report Special Test Certificate |  LRS | CCS / China Classification Society Manufacturer Declaration |

| 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?mfb=3VA1196-5ED26-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1196-5ED26-0AA0>

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

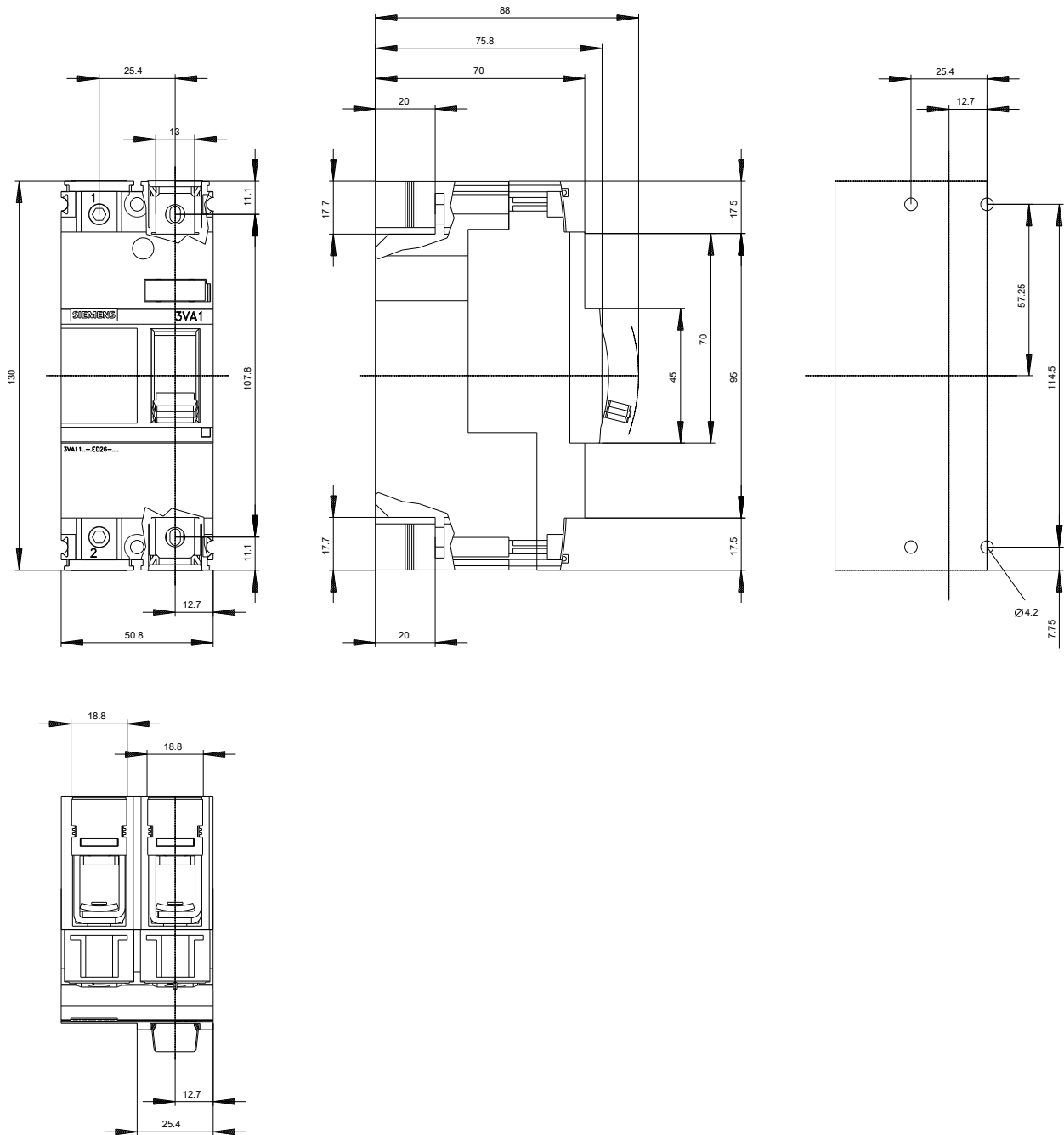
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1196-5ED26-0AA0

CAX-Online-Generator

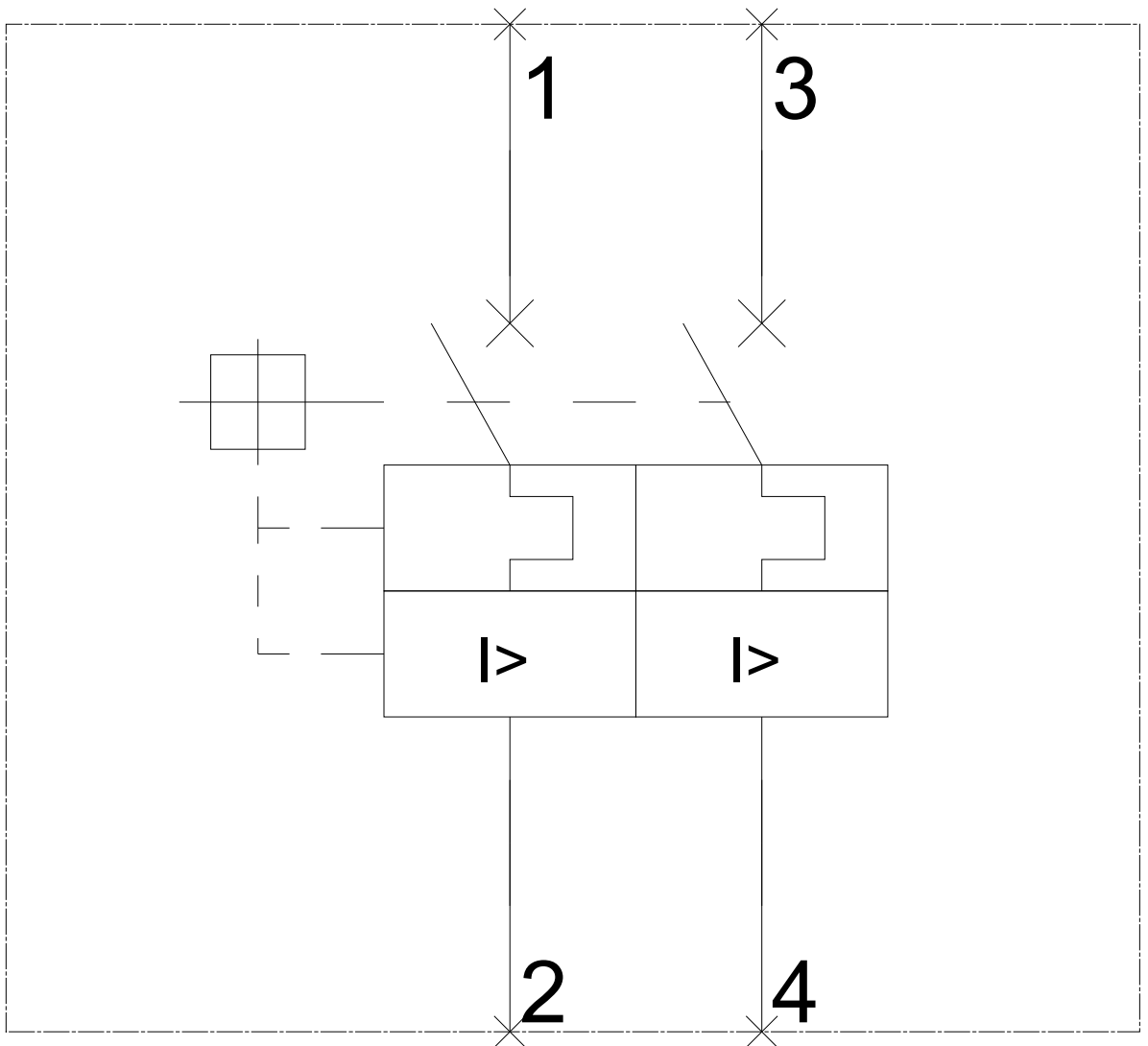
<http://www.siemens.com/cax>

Tender specifications

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



-Q



last modified:

07/20/2020