



circuit breaker 3VA6 UL frame 1200 breaking capacity class M 35kA @ 480 V 3-pole, line protection ETU856, LSI, In=800A overload protection Ir=315A - 800A short circuit protection Isd=0,6-10x In, li=1,5-12x In w/o connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MNAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU856
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	600 V
power loss [W] / maximum	108 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	108 W
mechanical service life (operating cycles) / typical	3 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	1 500
electrical endurance (operating cycles) / at AC-1 / at 690 V	500
electrical endurance (operating cycles) / at 480 V	1 500
electrical endurance (operating cycles) / at 600 V	500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	Yes
ground-fault monitoring version	without
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	3.133 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	800 A
• at 45 °C	800 A
• at 50 °C	800 A
• at 55 °C	800 A
• at 60 °C	800 A
• at 65 °C	800 A
• at 70 °C	800 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (Icu)	

<ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	<p>65 kA</p> <p>50 kA</p> <p>20 kA</p>
operating short-circuit current breaking capacity (Ics) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	<p>35 kA</p> <p>25 kA</p> <p>15 kA</p>
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	<p>143 kA</p> <p>105 kA</p> <p>63 kA</p>

Switching capacity according to UL 489

current breaking capacity <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V 	<p>85 kA</p> <p>35 kA</p> <p>25 kA</p>
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Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>315 A</p> <p>800 A</p>
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>2.5 s</p> <p>30 s</p>
adjustable response value setting current (I _{sd}) / of S-trip / with I _{0t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>480 A</p> <p>8 000 A</p>
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>480 A</p> <p>8 000 A</p>
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>0.05 s</p> <p>0.5 s</p>
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>0.05 s</p> <p>0.5 s</p>
adjustable response value setting current (I _i) / for I-tripping <ul style="list-style-type: none"> • minimum • maximum 	<p>1 200 A</p> <p>9 600 A</p>
adjustable current response value current / for G-tripping / with standard characteristic <ul style="list-style-type: none"> • initial value • full-scale value 	<p>150 A</p> <p>800 A</p>
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>0.05 s</p> <p>0.8 s</p>
adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>150 A</p> <p>800 A</p>
adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic <ul style="list-style-type: none"> • minimum • maximum 	<p>0.05 s</p> <p>0.8 s</p>
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	No

Mechanical Design

product component	
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• undervoltage release	No
• trip indicator	No
height [in]	8.14 in
height	206.9 mm
width [in]	8.99 in
width	228.4 mm
depth [in]	16 in
depth	406.4 mm

Connections

type of electrical connection / for main current circuit	without terminals
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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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
reference code / according to IEC 81346-2	F

Approvals / Certificates

General Product Approval



[Confirmation](#)



General Product Approval

EMV

Test Certificates

Marine / Shipping



[Miscellaneous](#)



[Type Test Certificates/Test Report](#)



other

Dangerous goods

Environment

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VA6780-5KT31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6780-5KT31-0AA0>

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

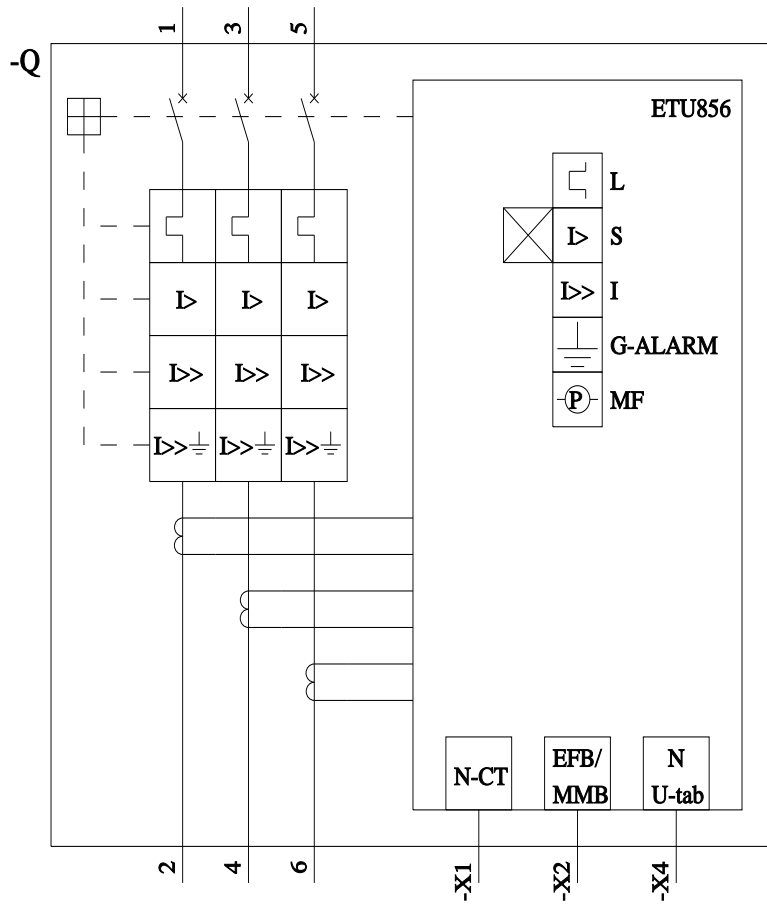
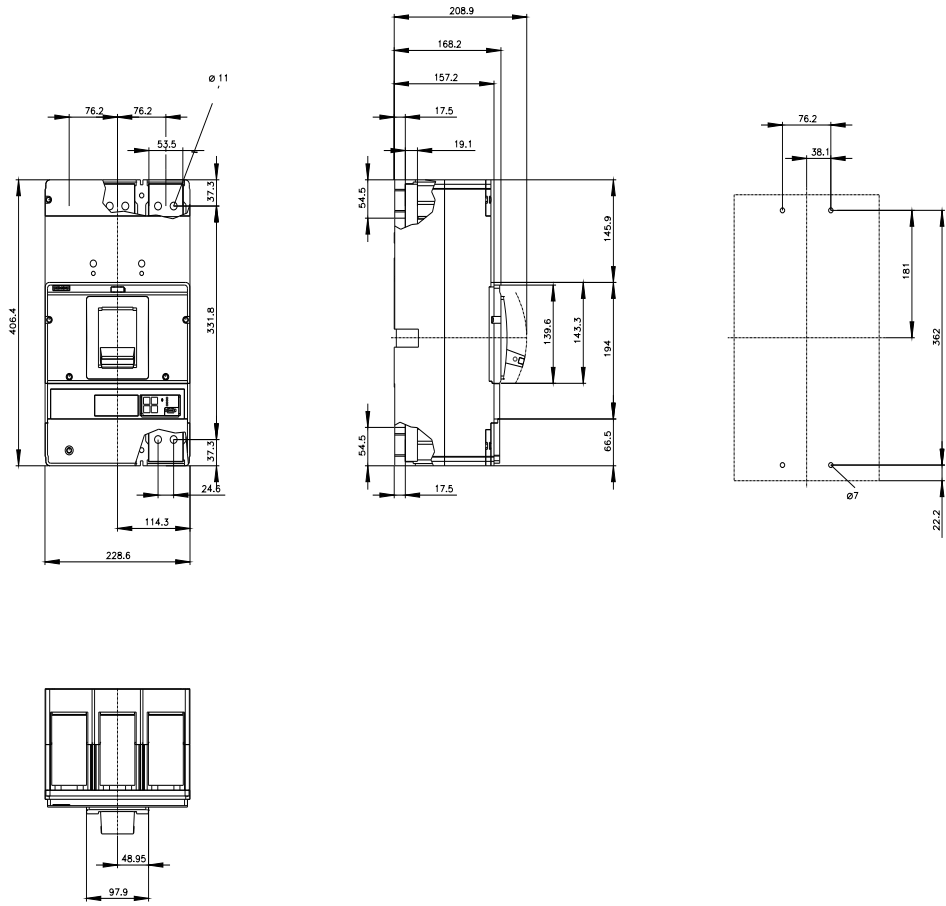
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6780-5KT31-0AA0

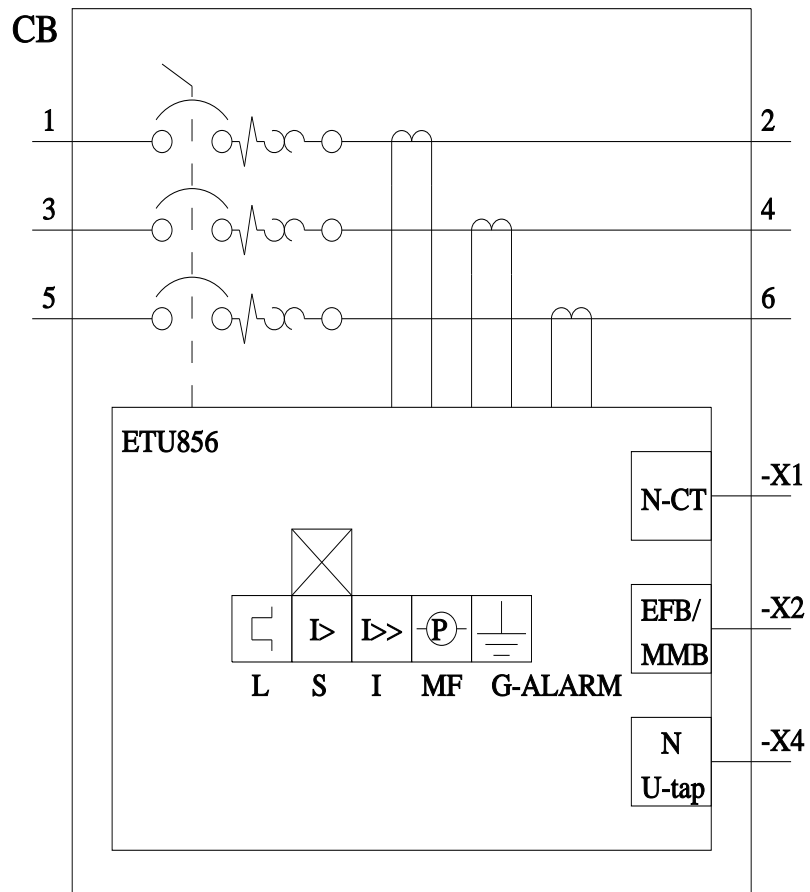
CAX-Online-Generator

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

Tender specifications

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





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