



circuit breaker 3VA2 IEC frame 100 breaking capacity class L $I_{cu}=150\text{kA}$ @ 415V
4-pole, line protection ETU560, LSIG, $I_n=100\text{A}$ overload protection $I_r=40\text{A}\dots100\text{A}$
short-circuit protection $I_{sd}=0.6\dots10\times I_n$, $I_i=1.5\dots12\times I_n$ N conductor protection
adjustable (OFF, up to 100%) gr.-fault prot., can be sw. off $I_g=0.2\dots1\times I_n$ $t_g=0.05\text{-}0.8\text{s}$ clamp connection

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU560
protection function of the overcurrent release	LSIG
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	7.7 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.57 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	15 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	10 500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
• communication function	Yes
• other measurement function	No
Net Weight	3.2 kg
Current	
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	L
maximum short-circuit current breaking capacity (I_{cu})	
• at 240 V	200 kA
• at 415 V	150 kA
• at 440 V	150 kA
• at 500 V	100 kA
• at 690 V	25 kA
operating short-circuit current breaking capacity (I_{cs})	

• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	200 kA 150 kA 150 kA 100 kA 18 kA
short-circuit current making capacity (I _{cm}) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	440 kA 330 kA 330 kA 220 kA 52.5 kA

Adjustable parameters

product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum • maximum	40 A 100 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum • maximum	0.5 s 25 s
adjustable response value setting current (I _{sd}) / of S-trip / with I _{0t} characteristic	
• minimum • maximum	60 A 1 000 A
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic	
• minimum • maximum	60 A 1 000 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	
• minimum • maximum	0.05 s 0.5 s
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic	
• minimum • maximum	0.05 s 0.5 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum • maximum	150 A 1 200 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value • full-scale value	20 A 100 A
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic	
• minimum • maximum	0.05 s 0.8 s
adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic	
• minimum • maximum	20 A 100 A
adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic	
• minimum • maximum	0.05 s 0.8 s
adjustable setting current (I _n) / for N-tripping	
• minimum • maximum	20 A 100 A
design of the N-conductor protection	adjustable OFF; 20% to 100%
product function / grounding protection	Yes

Mechanical Design

product component	
• undervoltage release	No

• voltage trigger	No
• trip indicator	No
height [in]	7.13 in
height	181 mm
width [in]	5.51 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (6 - 120 mm²)
width	140 mm
depth [in]	3.39 in
depth	86 mm

Connections

arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	double-sided box terminal
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	tin
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	Yes
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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

Certificates

reference code / according to IEC 81346-2	Q
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General Product Approval	EMC
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[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



Marine / Shipping	other
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[CCS / China Classification Society](#)

[Confirmation](#)

[Miscellaneous](#)

other	Dangerous Good	Environment
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[Miscellaneous](#)

[Transport Information](#)

[Environmental Confirmations](#)

Further information

Siemens has decided to exit the Russian market (see here).
<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3VA2010-8JQ46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2010-8JQ46-0AA0>

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

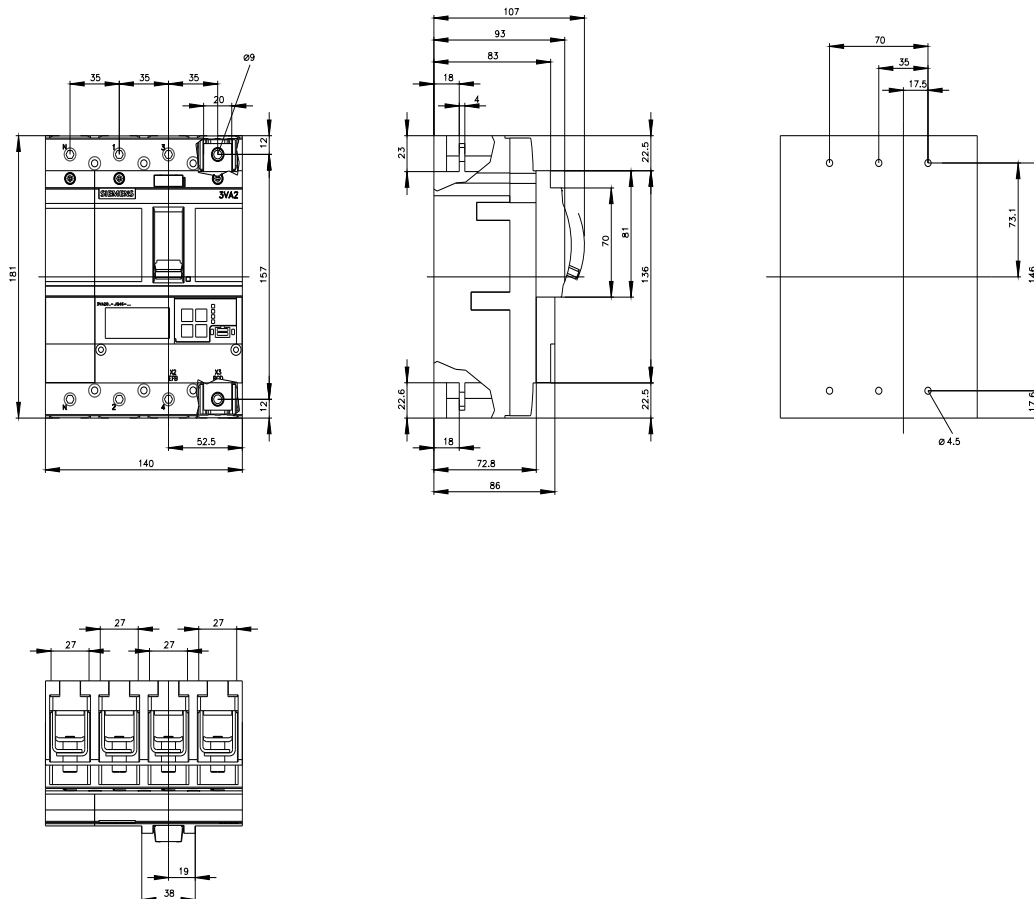
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-8JQ46-0AA0

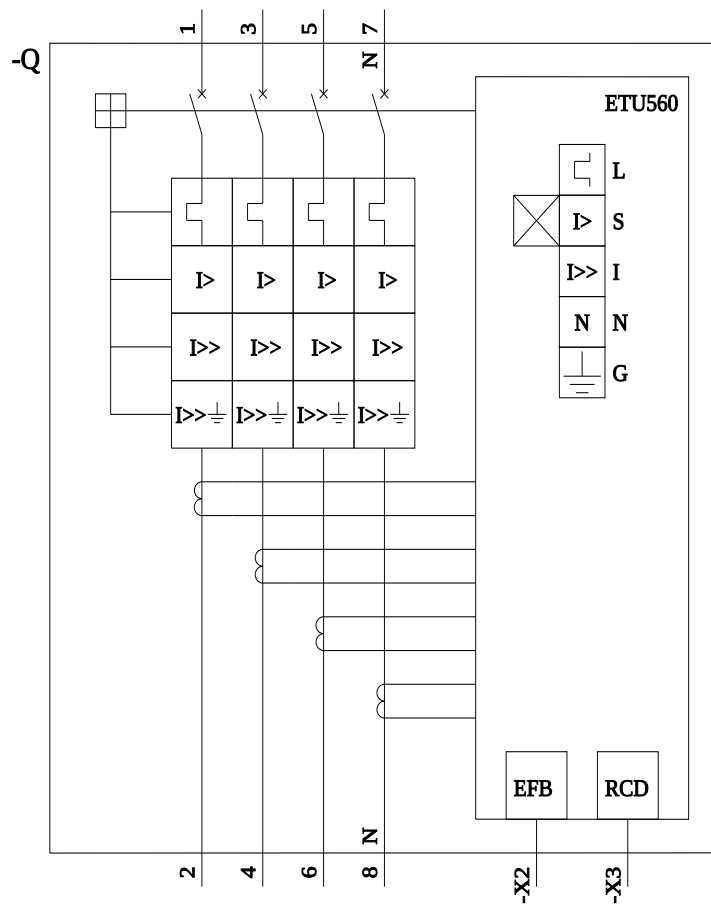
CAX-Online-Generator

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

Tender specifications

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





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