SIEMENS

Data sheet 3VA2450-5JQ32-0AA0



circuit breaker 3VA2 IEC frame 630 breaking capacity class M Icu=55kA @ 415V 3-pole, line protection ETU560, LSIG, In=500A overload protection Ir=200A...500A short-circuit protection Isd=0.6..10x In, Ii=1.5..14x In N conductor protection optionally with external current transformer, up to 160% gr.-fault prot., can be sw. off Ig=0.2...1 x In, tg=0.05-0.8s nut keeper kit

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	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	99 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	Yes
ground-fault monitoring version	Summation current formation L-conductor
product function	
● communication function	Yes
● other measurement function	No
Net Weight	4.724 kg
Current	
short-time withstand current (Icw) / limited to 1 s	6 kA
operational current	
● at 40 °C	500 A
● at 45 °C	500 A
● at 50 °C	500 A
● at 55 °C	477 A
● at 60 °C	455 A
● at 65 °C	432 A
● at 70 °C	410 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 440 V	55 kA
● at 500 V	36 kA
● at 690 V	6 kA

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operating short-circuit current breaking capacity (Ics)	
● at 240 V	85 kA
● at 415 V	55 kA
● at 440 V	55 kA
● at 500 V	36 kA
● at 690 V	6 kA
short-circuit current making capacity (Icm)	
● at 240 V	187 kA
● at 415 V	121 kA
● at 440 V	121 kA
● at 500 V	75.6 kA
● at 690 V	9 kA
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
● minimum	200 A
● maximum	500 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
● minimum	0.5 s
● maximum	20 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic	
● minimum	300 A
● maximum	5 000 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic	
● minimum	300 A
● maximum	5 000 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic	
● minimum	0.05 s
● maximum	0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic	
● minimum	0.05 s
● maximum	0.5 s
adjustable response value setting current (Ii) / for I-tripping	
● minimum	750 A
● maximum	7 000 A
adjustable current response value current / for G-tripping / with standard characteristic	
● initial value	100 A
● full-scale value	500 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
● maximum	0.8 s
adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic	
● minimum	100 A
● maximum	500 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic	
● minimum	0.05 s
● maximum	0.8 s
adjustable setting current (InN) / for N-tripping	
● minimum	100 A
● maximum	800 A
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	Yes
Mechanical Design	
product component	
● undervoltage release	No

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• voltage trigger	No
• trip indicator	No
height [in]	9.76 in
height	248 mm
width [in]	5.43 in
width	138 mm
depth [in]	4.33 in
depth	110 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	on both sides nut keeper kit
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	20 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	35 x 10 mm
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
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
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval

Confirmation

Miscellaneous

General Product Approval	EMV	Test Certificates			Marine / Shipping
		Type Test Certificates/Test Report	Special Test Certificate	Miscellaneous	

Marine / Shipping					other
				CCS (China Classification Society)	Miscellaneous

other		Dangerous Good	Environment	
Confirmation	Miscellaneous	Transport Information	EPD Typ II/III (with life cylce assessment)	Environmental Confirmations

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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

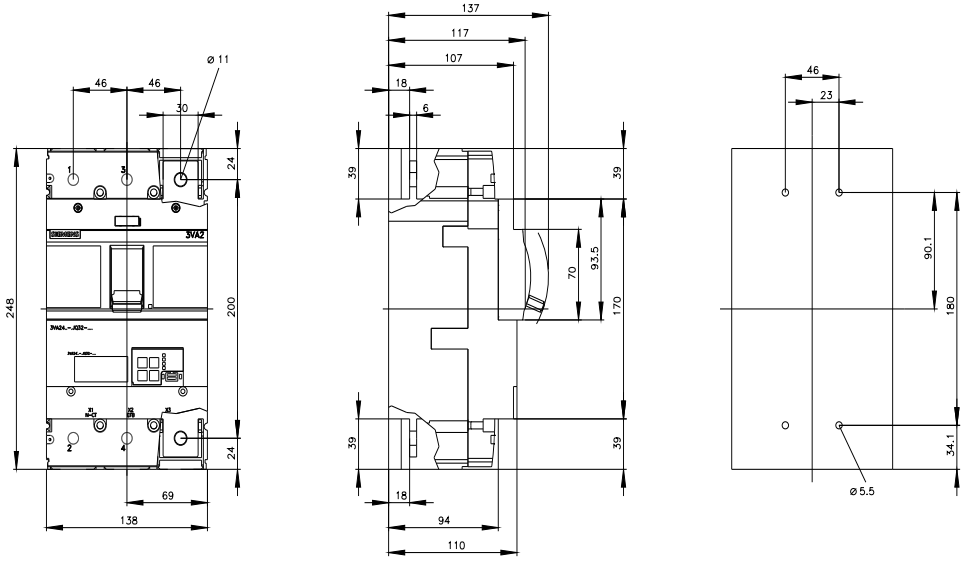
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2450-5JQ32-0AA0

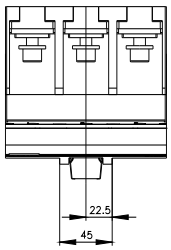
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA2450-5JQ32-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2450-5JQ32-0AA0

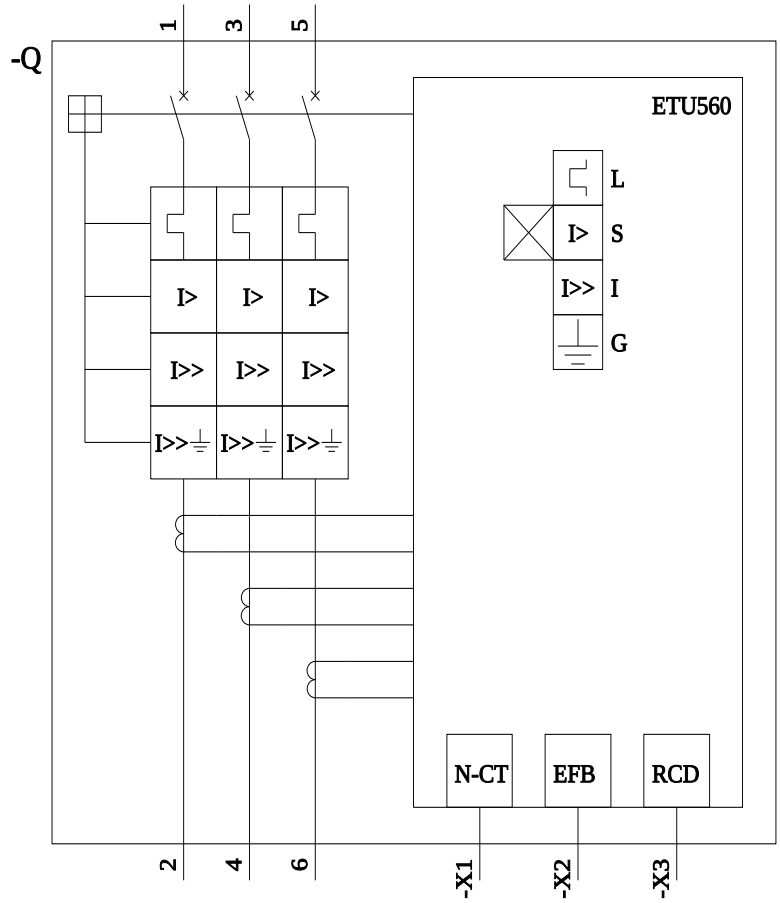
CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications





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