SIEMENS

Data sheet 3VA2450-5JP32-0AA0

Siemens EcoTech

circuit breaker 3VA2 IEC Frame 630 breaking capacity class M Icu=55 kA @ 415 V 3-pole, line protection ETU550, LSI, In=500 A overload protection Ir=200 A...500 A short-circuit protection Isd=0.6..10x In, Ii=1.5..14x In neutral conductor protection optionally with external current transformer, up to 160% 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	ETU550
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	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	Without
product function	
● communication function	Yes
● other measurement function	No
Net Weight	5.007 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
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	75.5 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 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	No
Mechanical Design	
product component	
● undervoltage release	No
● 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
Environmental footprint	
global warming potential [CO2 eq] / total	495 kg
global warming potential [CO2 eq] / during manufacturing	28.7 kg
global warming potential [CO2 eq] / during operation	470 kg
global warming potential [CO2 eq] / after end of life	-4.07 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval

CCC VDE Miscellaneous EAC Confirmation

General Product Approval	EMV	Test Certificates		
UKCA CE EG-Konf.	RCM	Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report

Maritime application

ABS BUREAU VERITAS DNV LRS RMRS CCS (China Classification Society)

other				Dangerous goods	Environment
Miscellaneous	Miscellaneous	Confirmation	产品合格 QC PASS	Transport Information	Environmental Confirmations

Environment

Siemens EcoTech

Environmental Confirmations

EPD

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875

Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012

Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2450-5JP32-0AA0

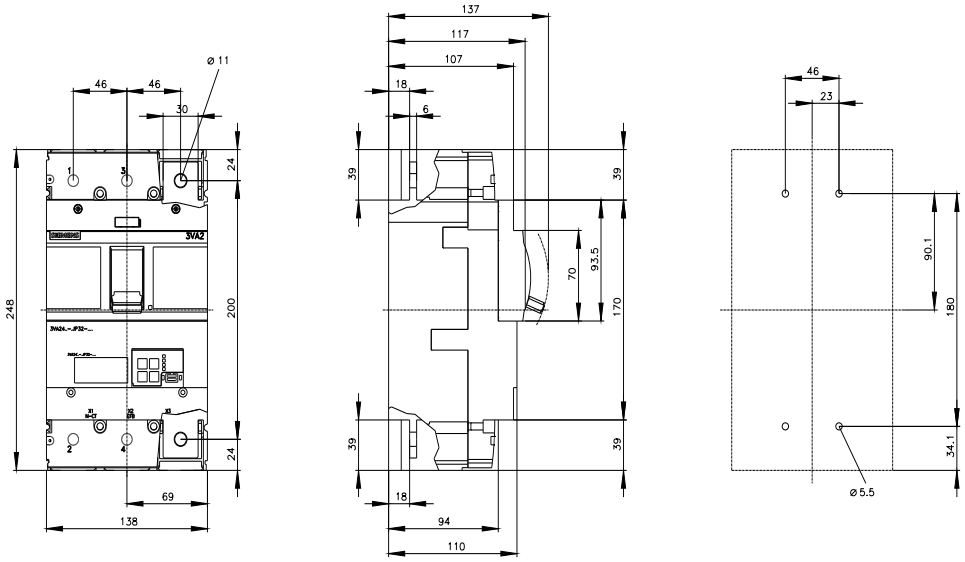
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA2450-5JP32-0AA0

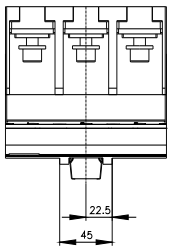
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2450-5JP32-0AA0

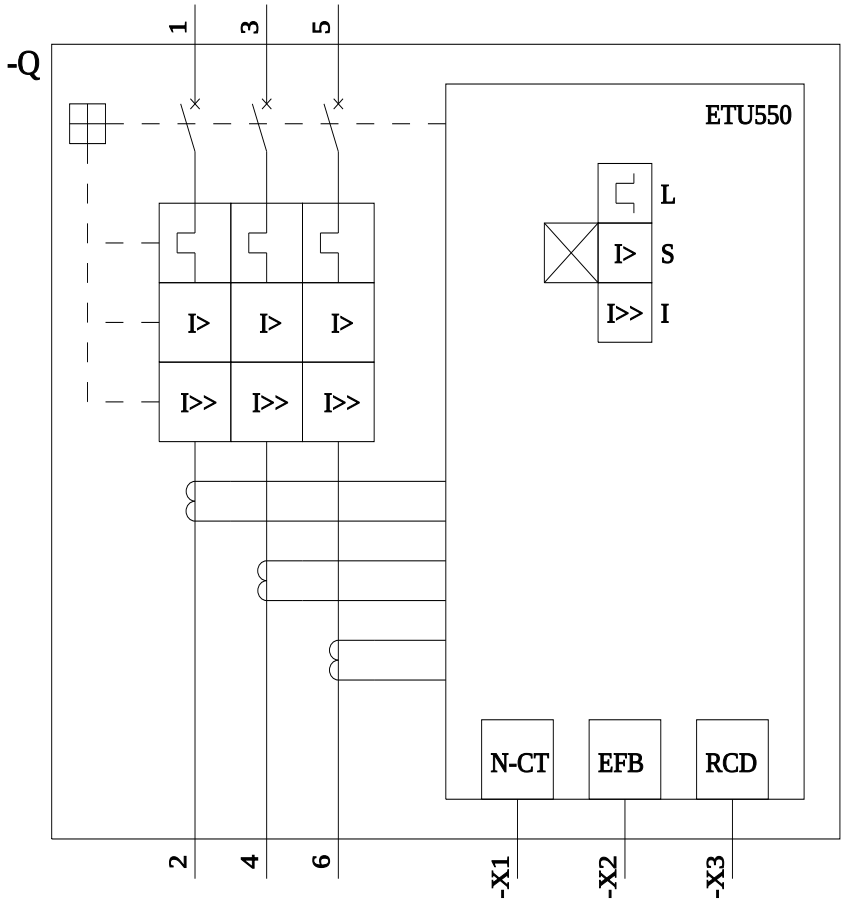
CAx-Online-Generator
https://www.siemens.com/cax

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

Characteristic curves
https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod__no>







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