SIEMENS

Data sheet

3VA1025-3ED42-0AA0



circuit breaker 3VA1 IEC Frame 100 breaking capacity class N Icu=25 kA @ 415 V 4-pole, line protection TM210, FTFM, In=25 A overload protection Ir=25 A permanently set short-circuit protection Ii=12.8 x In N conductor unprotected 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	TM210
protection function of the overcurrent release	U
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	8.5 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.83 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	9 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	6 300
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
 communication function 	No
 other measurement function 	No
Net Weight	1.225 kg
Current	
operational current	
● at 40 °C	25 A
● at 45 °C	25 A
● at 50 °C	25 A
• at 55 °C	24 A
• at 60 °C	24 A
• at 65 °C	23 A
• at 70 °C	23 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	N
maximum short-circuit current breaking capacity (lcu)	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
• at 500 V	5 kA
● at 690 V	5 kA

operating short-circuit current breaking capacity (lcs)	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
● at 500 V	5 kA
● at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	75.6 kA
● at 415 V	52.5 kA
● at 440 V	32 kA
● at 500 V	7.5 kA
● at 690 V	7.5 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	
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	25 A
maximum	25 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1s
• maximum	1s
adjustable response value setting current (li) / for I-tripping	
• minimum	320 A
• maximum	320 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
design of the N-conductor protection	without
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No
height [in]	5.12 in
height	130 mm
width [in]	4 in
width	101.6 mm
depth [in]	2.76 in
depth	70 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	12 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	17 x 6,5 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) $$	Tin
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	
during operation / minimum	-25 °C

 during operation / maximum 	70 °C
during storage / minimum	-40 °C
 during storage / maximum 	80 °C
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] / total	190 kg
Global Warming Potential [CO2 eq] / during manufacturing	4.67 kg

186 kg

Q

-0.826 kg

Approvals / Certificates

General Product Approval





Confirmation





Miscellaneous

General Product Approval

EMV

Global Warming Potential [CO2 eq] / during operation

Global Warming Potential [CO2 eq] / after end of life

reference code / according to IEC 81346-2

Test Certificates

Marine / Shipping

other





Special Test Certificate

Miscellaneous

Type Test Certificates/Test Report



Marine / Shipping









CCS (China Classification Society) **Miscellaneous**

other

Environment

Confirmation

Miscellaneous





Environmental Confirmations

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=3VA1025-3ED42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1025-3ED42-0AA0

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

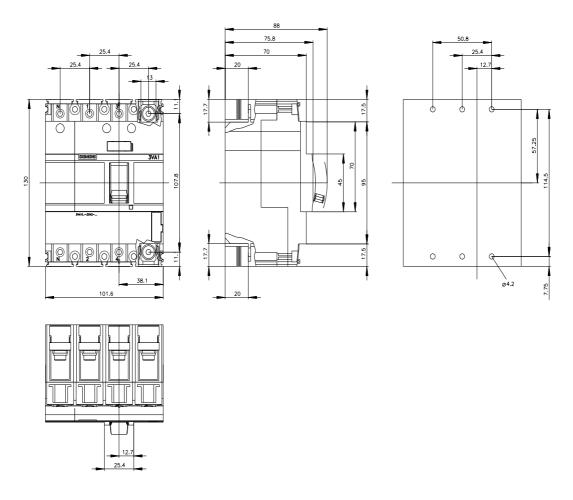
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1025-3ED42-0AA0

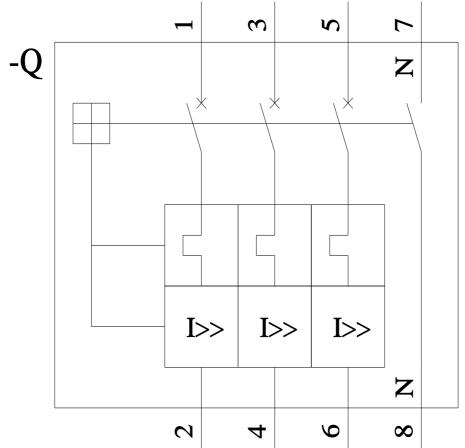
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





last modified: 3/11/2024 🖸

