SIEMENS

Data sheet

3VA5112-4ED26-0AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=125A overload protection Ir=125A fixed short-circuit protection Ii=10 x In cable connection on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	SEAS
Product version	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High- Intensity-Discharge circuit breaker (HID Type)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	2
General technical data	
insulation voltage / rated value	600 V
Max. rated operational voltage Ue with DC	250 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	20.06 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	10.03 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofittable	No
ground-fault monitoring version	without
product function	
 communication function 	No
 other measurement function 	No
Net Weight	0.668 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
● at 40 °C	125 A
● at 45 °C	122 A
• at 50 °C	119 A
● at 55 °C	117 A
● at 60 °C	114 A

● at 65 °C ● at 70 °C	112 A 109 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	55 kA
• at 415 V	36 kA
 breaking capacity operating short-circuit current (Ics) at 240 V 	55 kA
• at 240 V	36 kA
short-circuit current making capacity (Icm)	
• at 240 V	121 kA
● at 415 V	75.6 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
Switching capacity according to UL 489	
breaking capacity current	
• at 240 V	65 kA
● at 480 V ● at 600 Y/347 V	25 kA 14 kA
• at 600 Y/347 V Adjustable parameters	
product feature / for L-tripping / selectable characteristic	No
function type of value list setting current (Ir) / for L-tripping / with I2t	Fest
characteristic	x In
reference value setting current (Ir) / for L-tripping / with I2t characteristic	1
set values setting current (Ir) / for L-tripping / with I2t characteristic	
adjustable response factor setting current (Ir) / for L- tripping / with I2t characteristic / minimum	1
adjustable response factor setting current (Ir) / for L- tripping / with I2t characteristic / maximum	1
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / minimum	125 A
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum	125 A
type of value list delay time (tr) / for L-tripping / with I2t characteristic	Fest
reference value delay time (tr) / for L-tripping / with I2t characteristic	S
set values delay time (tr) / for L-tripping / with I2t characteristic	1
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / minimum	1 s
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / maximum	1 s
product feature / for S-tripping / independent of direction / selectable characteristic function	No
product feature / for I-tripping / can be switched on/off	No
design of I-trip / adjustable	No x In
reference value setting current (Ii) / for I-tripping set values setting current (Ii) / for I-tripping	10
adjustable response factor setting current (li) / for l- tripping / minimum	10
adjustable response factor setting current (li) / for l- tripping / maximum	10
adjustable response value setting current (li) / for I-tripping / minimum	1 250 A
adjustable response value setting current (li) / for I-tripping / maximum	1 250 A
product feature / for G-tripping / selectable characteristic function	No
product feature / with neutral conductor protection / can be switched on/off	No
product feature / with neutral conductor protection / adjustable	Yes

tripping / minimum adjustable absolute value setting current (InN) / for N-	0 A
tripping / maximum	
tripping characteristic / of the lower tolerance band	AK_3VA5_1_125A_TM2_SuMuH_uT
tripping characteristic / of the upper tolerance band	AK_3VA5_1_125A_TM2_SuMuH_oT
let-through energy characteristic / at 240 V	DE_3VA5_1_125A_TM2uMCS110_line_2p_240V
let-through energy characteristic / at 415 V	DE_3VA5_1_125A_TM2uMCS110_line_2p_415V
type of value list setting current (li) / for l-tripping tripping characteristic / of the let-through current	Fest
characteristic / at 240 V	DS_3VA5_1_125A_TM2uMCS110_line_2p_240V
tripping characteristic / of the let-through current characteristic / at 415 V	DS_3VA5_1_125A_TM2uMCS110_line_2p_415V
Adjustable response value current / lg min.	125 A
adjustable current response value current / of the current-	125 A
dependent overload release / full-scale value Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
trip indicator	No
height [in]	5.51 in
Height	140 mm
width [in]	2 in
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (8 AWG - 3/0)
Width	50.8 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides
Auxiliary circuit	0
number of CO contacts / for auxiliary contacts	0
Accessories	Na
product extension / optional / motor drive	No
Environmental conditions	1040
protection class IP / on the front ambient temperature	IP40
during operation / minimum	-25 °C
during operation / maximum	70 °C
during storage / minimum	
	-40 °C
during storage / maximum during storage / maximum	-40 °C 80 °C
during storage / maximum	
during storage / maximum Certificates	80 °C
during storage / maximum Certificates reference code / according to IEC 81346-2 General Product Approval	80 °C Q
during storage / maximum Certificates reference code / according to IEC 81346-2	80 °C
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Marine / Shipping





Miscellaneous

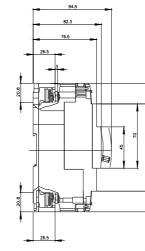
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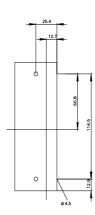
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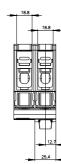
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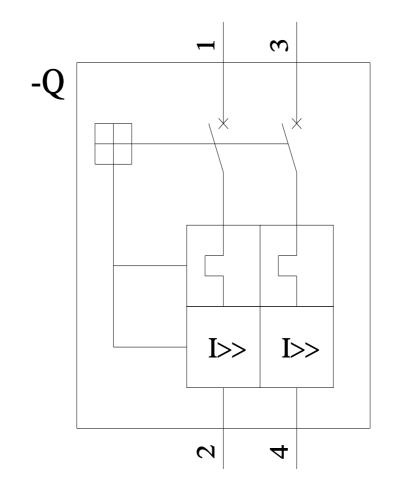
http://www.siemens.com/specifications

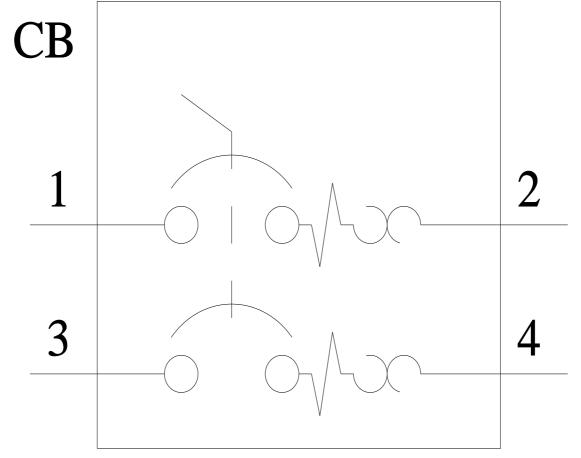












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