SIEMENS

Data sheet

3VA5135-6ED56-0AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class H 65kA @ 277 V 1-pole, line protection TM210, FTFM, In=35A overload protection Ir=35A fixed short circuit protection Ii=10 x In cable connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAS
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)	Yes
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	1
General technical data	
insulation voltage / rated value	500 V
Max. rated operational voltage Ue with DC	125 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	3.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.8 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	0.541 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	35 A
• at 45 °C	34 A
• at 50 °C	34 A
• at 55 °C	33 A
• at 60 °C	33 A

● at 65 °C	32 A
• at 70 °C	32 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
breaking capacity maximum short-circuit current (lcu)	
• at 240 V	55 kA
• at 415 V	5 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	55 kA
• at 415 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	121 kA
• at 415 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

	In the last chapter	
Switching capacity according to UL 489		
breaking capacity current		
• at 120 V	150 kA	
• at 277 V	65 kA	
• at 347 V	25 kA	
Adjustable parameters		
product feature / for L-tripping / selectable characteristic function	No	
type of value list setting current (Ir) / for L-tripping / with I2t characteristic	Fest	
reference value setting current (Ir) / for L-tripping / with I2t characteristic	x In	
set values setting current (Ir) / for L-tripping / with I2t characteristic	1	
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	35 A	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum	35 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	
reference value setting current (li) / for I-tripping	x In	
set values setting current (li) / for I-tripping	10	
adjustable response factor setting current (li) / for l- tripping / minimum	10	
adjustable response factor setting current (Ii) / for I- tripping / maximum	10	
adjustable response value setting current (li) / for I-tripping / minimum	350 A	
adjustable response value setting current (li) / for I-tripping / maximum	350 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	

type of value list setting current (InN) / for N-tripping	St
reference value setting current (InN) / for N-tripping	xIn
adjustable absolute value setting current (InN) / for N-	0 A
tripping / minimum	
adjustable absolute value setting current (InN) / for N- tripping / maximum	0 A
tripping characteristic / of the lower tolerance band	AK_3VA5_1_35A_TM2_SuMuH_uT
tripping characteristic / of the upper tolerance band	AK_3VA5_1_35A_TM2_SuMuH_oT
let-through energy characteristic / at 240 V	DE_3VA5_1_35A_TM210_line_1p_240V
let-through energy characteristic / at 415 V	DE_3VA5_1_35A_TM210_line_1p_415V
type of value list setting current (li) / for I-tripping	Fest
tripping characteristic / of the let-through current	DS_3VA5_1_35A_TM210_line_1p_240V
characteristic / at 240 V tripping characteristic / of the let-through current	DS_3VA5_1_35A_TM210_line_1p_415V
characteristic / at 415 V	b0_0v//0_1_00//_1//210_inite_1p_410v
Adjustable response value current / lg min.	35 A
adjustable current response value current / of the current-	35 A
dependent overload release / full-scale value Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	NU
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 (14 AWG - 8 AWG)
Width	50.8 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
Connections	Front connection
Connections arrangement of electrical connectors / for main current circuit	
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit	Front connection circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit	circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit	
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories	circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive	circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions	circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front	circular conductor terminal on both sides
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature	circular conductor terminal on both sides 0 No IP40
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum	circular conductor terminal on both sides 0 No IP40 -25 °C
Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum	circular conductor terminal on both sides 0 No IP40 -25 °C 70 °C
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Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum	circular conductor terminal on both sides 0 No IP40 -25 °C 70 °C -40 °C
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Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during storage / minimum • during storage / maximum Certificates reference code / according to IEC 81346-2 General Product Approval Confirmation	circular conductor terminal on both sides 0 No IP40 -25 °C 70 °C -40 °C 80 °C Q EMC Declaration of Conformity







other

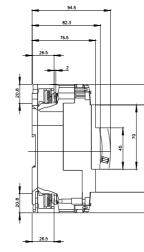
Miscellaneous

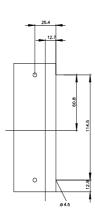
Further information

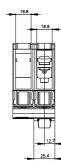
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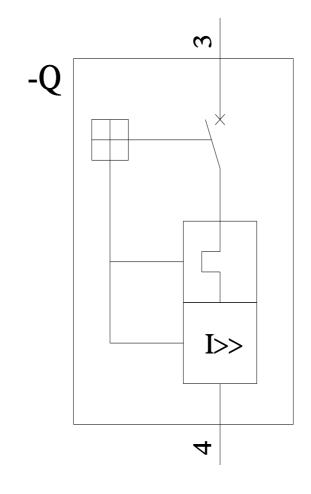
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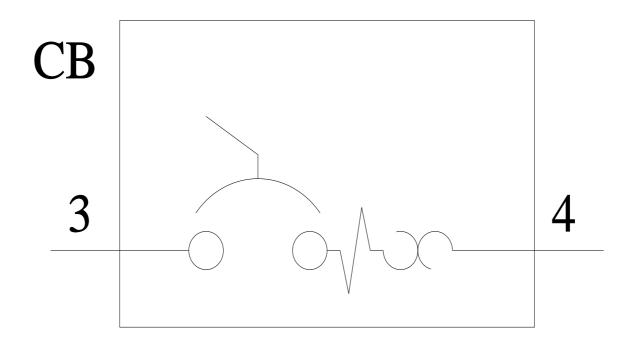












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