3VA5135-6ED31-1AA0

Data sheet



circuit breaker 3VA5 UL frame 125 breaking capacity class H 65kA @ 480V 3-pole, line protection TM210, FTFM, In=35A overload protection Ir=35A fixed short-circuit protection Ii=10 x In UL 489 SB (naval), 50° C without connection

product designation product designation product designation / according to UL file design of the product design of the product design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HIO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (KIO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (KIO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (KIO Type) design of the overcurrent release	Model	
product designation / according to UL file design of the product design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- bischarge circuit breaker (HID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (WID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release TM210 protection function of the overcurrent release LI number of poles 3 Ceneral technical data operating voltage / at AC / rated value power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC 80 V electrical endurance (operating cycles) / at AC 80 V electrical endurance (operating cycles) / at AC 80 V electrical endurance (operating cycles) / at AC V electrical endurance (operating cycles) / at AC V product feature / for neutral conductors / upgradable/retrofitable/ short-ficricuit and overload prof ground-fault monitoring version without No No No No No No No No e other measurement function No other measurement function No No No No AA A at 45 °C at 45 °C at 45 °C at 45 °C at 65 °C 33 A at 65 °C 32 A	product brand name	SENTRON
design of the product design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (IBVD Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the voercurrent release TM210 protection function of the overcurrent release ILI number of poles 3 General technical data operating voltage / at AC / rated value power loss [W] / maximum 11.4 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1/ at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1/ at 690 V 4 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 480 V 9 000 electrical endurance (operating cycles) / at 480 V 9 000 foround-fault monitoring version yersion of the sum o	product designation	Molded-case circuit breaker
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release	product designation / according to UL file	HEAM
Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- bischarge circuit breaker (HHD Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release protection function of the overcurrent release LL number of poles General technical data operating voltage / at AC / rated value opwer loss [W] / maximum 11.4 W opwer loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 60 V electrical endurance (operating cy	design of the product	System protection
Discharge circuit breaker (HID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release TM210 protection function of the overcurrent release ITM210 protection function of the overcurrent release LLI number of poles 3 Ceneral technical data operating voltage / at AC / rated value power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at ABO V 8 000 electrical endurance (operating cycles) / at 800 V 8 000 electrical endurance (operating cycles) / at 800 V 8 000 electrical endurance (operating cycles) / at 800 V 8 000 electrical endurance (operating cycles) / at 800 V 8 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • other measurement function No No No No No No No Operational current • at 40 °C • at 45 °C • at 45 °C • at 65 °C 33 A • at 65 °C 33 A • at 65 °C 32 A		Yes
design of the overcurrent release TM210 protection function of the overcurrent release LI number of poles 3 Ceneral technical data operating voltage / at AC / rated value 690 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function No Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 35 A • at 45 °C 34 A • at 55 °C 33 A • at 60 °C 33 A • at 60 °C 33 A • at 60 °C 33 A		Yes
protection function of the overcurrent release LI number of poles 3 General technical data operating voltage / at AC / rated value power loss [W] / maximum power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cycles) / at 600 V for outpart of the fauture / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function o communication function No No Not Weight O.88 kg Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C at 45 °C at 55 °C 33 A at 55 °C 33 A at 60 °C 33 A at 60 °C 33 A at 60 °C 32 A		No
Number of poles 3	design of the overcurrent release	TM210
Ceneral technical data	protection function of the overcurrent release	LI
operating voltage / at AC / rated value 690 V power loss [W] / maximum 11.4 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 35 A • at 45 °C 34 A A • at 50 °C 33 A • at 60 °C 33 A	number of poles	3
Dower loss [W] / maximum	General technical data	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-0 / at 690 V 4 000 electrical endurance (operating cycles) / at 80 V 8 000 electrical endurance (operating cycles) / at 80 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function No • other measurement function No Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C • at 45 °C • at 45 °C • at 45 °C • at 55 °C • 33 A • at 60 °C • at 60 °C • 33 A • at 60 °C • at 65 °C	operating voltage / at AC / rated value	690 V
operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 690 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • other measurement function No Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 45 °C • at 45 °C • at 55 °C 33 A • at 60 °C 33 A • at 60 °C 33 A • at 60 °C 33 A	power loss [W] / maximum	11.4 W
electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 600 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 60 °C • at 60 °C • at 65 °C 32 A		3.8 W
electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cycles) / at 600 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 45 °C • at 45 °C • at 60 °C • at 60 °C • at 65 °C at 65 °C at 65 °C at 65 °C at 60 °C at 65 °C	mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 600 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version product function ocommunication function No No Net Weight Current marking / according to UL 489 / 100%-rated breaker operational current o at 40 °C o at 45 °C o at 55 °C o at 65 °C solve at 60 °C o at 65 °C	electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at 600 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version product function communication function nother measurement function Nothet Weight Current marking / according to UL 489 / 100%-rated breaker operational current at 40 °C at 45 °C at 45 °C at 45 °C at 45 °C at 65 °C at 66 °C at 65 °C at 60 °C at 65 °C at 65 °C at 60 °C at 65 °C at 65 °C at 60 °C at 65 °C at 60 °C at 65 °C at 65 °C at 65 °C at 65 °C	electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function No • other measurement function No Net Weight 0.88 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	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof ground-fault monitoring version without product function	electrical endurance (operating cycles) / at 600 V	4 000
product function • communication function • other measurement function No Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C • at 60 °C • at 65 °C 32 A		No
 ● communication function No Not Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker No operational current at 40 °C at 45 °C at 45 °C at 50 °C at 55 °C at 60 °C at 60 °C at 65 °C 32 A 	ground-fault monitoring version	without
● other measurement function No Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker operational current ● at 40 °C ● at 45 °C ● at 50 °C ● at 55 °C ● at 60 °C ● at 65 °C 32 A	product function	
Net Weight 0.88 kg Current marking / according to UL 489 / 100%-rated breaker No operational current 	 communication function 	No
Current marking / according to UL 489 / 100%-rated breaker No operational current 35 A • 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	 other measurement function 	No
marking / according to UL 489 / 100%-rated breaker No operational current 35 A • 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	Net Weight	0.88 kg
operational current • at 40 °C • at 45 °C • at 50 °C 34 A • at 55 °C 33 A • at 60 °C 33 A • at 65 °C 32 A	Current	
 at 40 °C at 45 °C at 50 °C at 55 °C at 60 °C at 65 °C 32 A 	marking / according to UL 489 / 100%-rated breaker	No
 at 45 °C at 50 °C at 55 °C at 60 °C at 65 °C 33 A at 65 °C 32 A 	operational current	
 at 50 °C at 55 °C at 60 °C at 65 °C 33 A 33 A 34 A 33 A 33 A 32 A 	• at 40 °C	35 A
• at 55 °C 33 A • at 60 °C 33 A • at 65 °C 32 A	• at 45 °C	34 A
• at 60 °C 33 A • at 65 °C 32 A	• at 50 °C	34 A
• at 65 °C 32 A	• at 55 °C	33 A
	• at 60 °C	33 A
• at 70 °C 32 A	● at 65 °C	32 A
	● at 70 °C	32 A

switching capacity class of the circuit breaker	Н
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	
current breaking capacity	
• at 240 V	150 kA
● at 480 V	65 kA
● at 600 Y/347 V	25 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	35 A
• maximum	35 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	350 A
• maximum	350 A
adjustable absolute value setting current (lnN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of the current-dependent overload release	35 35 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No
height [in]	5.51 in
height	140 mm
width [in]	3 in
width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	70.5 11111
	VAPAL - A
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Invironmental 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
Certificates Certi	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes



Confirmation



Miscellaneous





Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other





Miscellaneous

Confirmation

Miscellaneous

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=3VA5135-6ED31-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5135-6ED31-1AA0

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

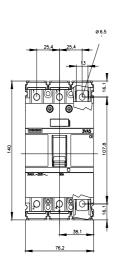
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5135-6ED31-1AA0

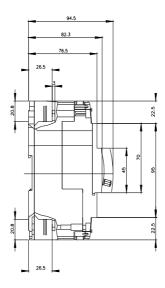
CAx-Online-Generator

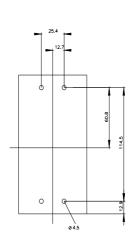
http://www.siemens.com/cax

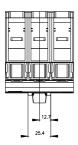
Tender specifications

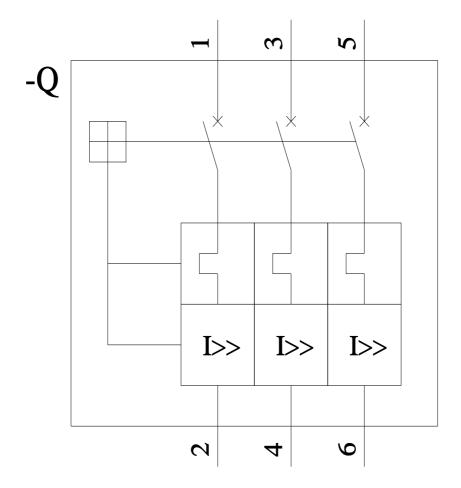
http://www.siemens.com/specifications

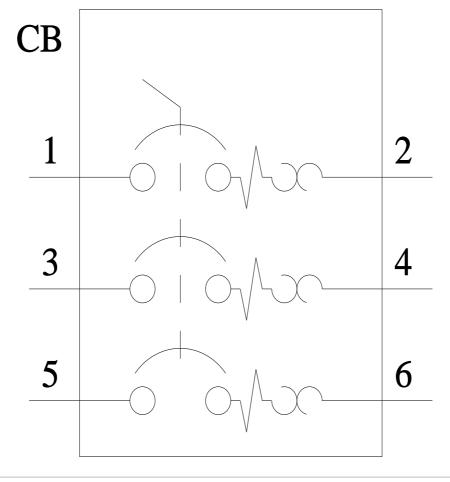












last modified: 7/15/2022 🖸