3VA5140-4ED32-1AA0

Data sheet



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 3-pole, line protection TM210, FTFM, In=40A overload protection Ir=40A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 deg. cel. nut keeper kit on both sides

product designation product designation 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- Discharge circuit breaker (HO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (RIO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (RIO Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (RIO Type) design of the overcurrent release TM210 protection function of the overcurrent release LI number of poles General 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) / it AC-1 / at 380 V15 W electrical endurance (operating cycles) / at AC-1 / at 380 V15 W electrical endurance (operating cycles) / at AC-1 / at 380 V15 W electrical endurance (operating cycles) / at AC-1 / at 380 V15 W product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version product function • communication function • other measurement function No Operational current at 40 °C • at 45 °C • at 50 °C • at 60 °C • at 70 °C • at 60 °C • at 70 °C • at 60 °C • at 70 °C • at 70 °C	Model	
product designation / according to UL file SEAM System protection design of the product System protection System protection design of the load switch / according to UL 489 / Heating, Air Conditioning, and Retrigeration 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 TM210 protection function of the overcurrent release LI number of poles 3 3 Concrat tochnical 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) / 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 v / at 480 V 4 000 electrical endurance (operating cycles) / at AC v / at 480 V 4 000 electrical endurance (operating cycles) / at AC v / at 480 V 5 000 electrical endurance (operating cycles) / at AC v / at 480 V 5 000 electrical endurance (operating cycles) / at AC v / at 480 V 5 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles) / at AC v / at 480 V 6 000 electrical endurance (operating cycles)	product brand name	SENTRON
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 (IPACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge 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 LI number of poles 3 Ceneral technical data operating voltage / at AC / rated value operating voltage / at AC / rated value opower loss [W] / maximum 11.2 W opower loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / tg/pical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V product feature / for neutral conductors / upgradable/retrofittable / short-oricuit and overload proof ground-fault monitoring version v operational ourcent • at 40 °C • at 45 °C • at 45 °C • at 65 °C 37 A • at 65 °C 37 A	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 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 380415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 480 V electrical endurance (product designation / according to UL file	SEAM
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 operating voltage / at AC / rated value opower loss [W] / In or 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 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 600 V electrical endurance (operating cycles) / at AC-1 / at 600 V electrical endurance (operating cycles) / at AC-1 / at 600 V electrical endurance (operating cycles) / at AC-1 / at 600 V electrical endurance (operating cycles) / at AC-1 / at 600 V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cyc	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 Inumber 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-1 / at 690 V electrical endurance (operating cycles) / at AC-0 V electrical endurance		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] / maximum 11.2 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) / 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 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 50 °C • at 50 °C • at 60		No
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) / 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 AO V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cycles) / at 600 V oproduct feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function ocommunication function No No Not Weight Outer measurement function No Not Weight Outer maximg / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 55 °C • at 55 °C • at 60 °C • at 60 °C • at 60 °C • at 60 °C • at 65 °C 37 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 11.2 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 • at 45 °C • at 50 °C • at 55 °C • 38 A • at 60 °C • at 65 °C • 37 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 480 V 8 000 electrical endurance (operating cycles) / at 480 V 4 000 product leature / 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 0.951 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 40 A • at 45 °C 39 A • at 50 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	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 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 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function No other measurement function No Net Weight 0.951 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 40 A • at 45 °C 39 A • at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	power loss [W] / maximum	11.2 W
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 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function		3.73 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 65 °C 37 A • at 65 °C 37 A	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 oct at 40 °C oct at 45 °C oct at 55 °C oct at 60 °C oct at 65 °C oct at 65 °C oct at 65 °C oct at 65 °C oct at 60 °C oct at 60 °C oct at 65 °C oct at 60 °C oct at 60 °C oct at 60 °C oct at 60 °C oct at 65 °C oct 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 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 55 °C at 60 °C at 65 °C at 65 °C at 65 °C at 65 °C At 00 At 00 No At 00 At	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 0.951 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 40 A • at 45 °C 39 A • at 50 °C 39 A • at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 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 Outrent 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 37 A		No
 ● communication function No Nother measurement function No Net Weight 0.951 kg Current marking / according to UL 489 / 100%-rated breaker No operational current at 40 °C at 45 °C at 50 °C at 50 °C at 55 °C at 60 °C at 60 °C at 65 °C 37 A at 65 °C 	ground-fault monitoring version	without
● other measurement function No Net Weight 0.951 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 37 A	product function	
Net Weight 0.951 kg Current marking / according to UL 489 / 100%-rated breaker No operational current 40 A • at 40 °C 40 A • at 50 °C 39 A • at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	• communication function	No
Current marking / according to UL 489 / 100%-rated breaker No operational current 40 A • at 40 °C 40 A • at 50 °C 39 A • at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breaker No operational current 40 A • at 40 °C 40 A • at 50 °C 39 A • at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	Net Weight	0.951 kg
operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C • at 65 °C 37 A	Current	
 at 40 °C at 45 °C at 50 °C at 55 °C at 60 °C at 65 °C 37 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 39 A 39 A 39 A 39 A 39 A 38 A 37 A 37 A 37 A 	operational current	
 at 50 °C at 55 °C 38 A at 60 °C at 65 °C 37 A 39 A 38 A 37 A 37 A 	• at 40 °C	40 A
• at 55 °C 38 A • at 60 °C 37 A • at 65 °C 37 A	• at 45 °C	39 A
• at 60 °C 37 A • at 65 °C 37 A	• at 50 °C	39 A
• at 65 °C 37 A	• at 55 °C	38 A
	• at 60 °C	37 A
• at 70 °C 36 A	• at 65 °C	37 A
	● at 70 °C	36 A

witching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
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
witching capacity according to UL 489	
current breaking capacity	
• at 240 V	65 kA
• at 480 V	25 kA
• at 600 Y/347 V	14 kA
djustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with l2t characteristic	
• minimum	40 A
• maximum	40 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	400 A
• maximum	400 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of the current-dependent overload release	28 40 A
product function / grounding protection	No
lechanical 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	
arrangement of electrical connectors / for main current circuit	Front connection
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
auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
product extension / optional / motor drive	Yes
nvironmental 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
Sertificates	
er tillcates	











EMC

Test Certificates

Marine / Shipping

other



Type Test Certificates/Test Report



Miscellaneous

Confirmation

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)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5140-4ED32-1AA0

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

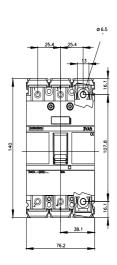
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5140-4ED32-1AA0

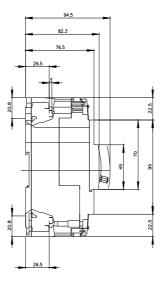
CAx-Online-Generator

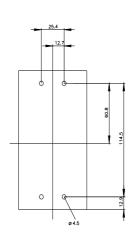
http://www.siemens.com/cax

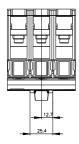
Tender specifications

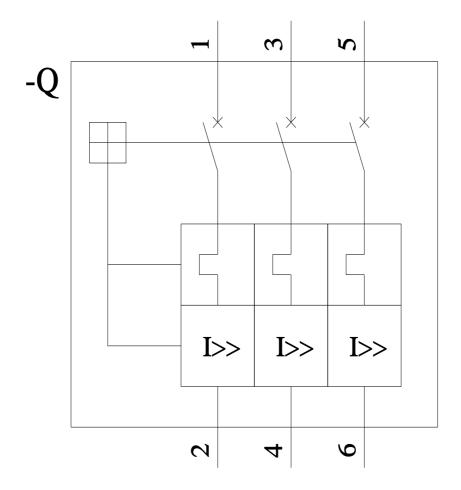
http://www.siemens.com/specifications

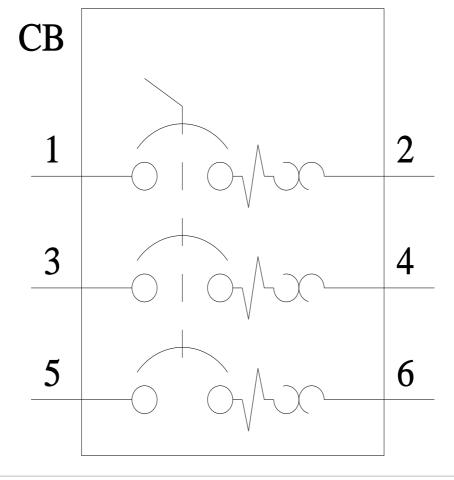












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3VA51404ED321AA0