3VA5215-6EC31-1AA0

Data sheet



circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480V 3-pole, line protection TM230, FTAM, In=150A overload protection Ir=150A fixed short-circuit protection Ii=5...10 x In UL 489 SB (naval), 50° C without connection

product brand name 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 Retrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HTD 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 load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release protection function of the overcurrent release poperating voltage / at AC / rated value operating voltage / at AC / rated value operating voltage / at AC / rated value 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 380/415 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / at AC-1 / at 580 V electrical endurance (operating cycles) / a	Model	
product design aftine product 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 (HID Type) design of the load switch / according to UL 489 / Switching Duty circuit Dreaker (FID Type) design of the load switch / according to UL 489 / Switching Duty circuit Dreaker (SWD Type) design of the overcurrent release protection function of the overcurrent release ILI number of poles 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 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • other measurement function • at 40 °C • at 60 °C • at 60 °C • at 50 °C 131 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 (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 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) / typical electrical endurance (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at 480 V electrical e	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 load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release TM230 protection function of the overcurrent release LI number of poles 3 Ceneral technical data operating voltage / at AC / rated value power loss [W] / maximum 30 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 electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / 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 • at 40 °C • at 45 °C • at 45 °C • at 45 °C • at 50 °C • 141 A • at 55 °C 137 A	product designation / according to UL file	HFAM
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 overcurrent release protection function of the overcurrent release protection function of the overcurrent release ILI number of poles General technical data operating voltage / at AC / rated value power loss [W] / maximum 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 890 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 800 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function oommunication function No Net Weight 2 kg Curront marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C • at 45 °C • at 45 °C • at 50 °C 141 A • at 55 °C 137 A	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 protection function of the overcurrent release I M230 protection function of the overcurrent release I M230 General technical data operating voltage / at AC / rated value power loss [W] / maximum power loss [W] / maximum 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 800 V electrical endurance (operating cycles) / at AC-1 / at 800 V electrical endurance (operating cycles) / at AC-1 / at 800 V electrical endurance (operating cycles) / at AC-1 / at 800 V electrical endurance (operating cycles) / at AC-1 / at 800 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 ocommunication function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker operational current at 45 °C at 45 °C 146 A at 50 °C 1411 A at 55 °C 137 A		Yes
circuit breaker (SWD Type) design of the overcurrent release TM230 protection function of the overcurrent release LI number of poles 3 General technical data operating voltage / at AC / rated value 690 V power loss [W] / maximum 30 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 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-ficuit 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 45 °C • at 45 °C • at 50 °C • 141 A • at 50 °C • 137 A		No
protection function of the overcurrent release number of poles 3 General technical data operating voltage / at AC / rated value 690 V power loss [W] / maximum 30 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / it pical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 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 600 V 8 000 electrical endurance (operating cycles) / at 600 V 8 000 electrical endurance (operating cycles) / at 600 V 7 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof without for neutral conductors / upgradable/retrofittable / short-circuit and overload proof without product function No No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 50 °C 141 A		No
number of poles General 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) / 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 8 000 electrical endurance (operating cycles) / at 600 V 8 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function	design of the overcurrent release	TM230
operating voltage / at AC / rated value 690 V power loss [W] / maximum 30 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 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 • communication function No Net Weight 2 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 50 °C • 141 A • at 50 °C • 141 A	protection function of the overcurrent release	Ш
operating voltage / at AC / rated value 690 V power loss [W] / maximum 30 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 80 V 8 000 electrical endurance (operating cycles) / at 800 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 2 kg Current marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 45 °C 146 A • at 50 °C 137 A	number of poles	3
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 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 • communication function No • other measurement function No Nott Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 55 °C 141 A • at 55 °C 137 A	General technical data	
power loss [VI] / 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 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 660 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function	operating voltage / at AC / rated value	690 V
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 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 No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 55 °C 141 A • at 55 °C 137 A	power loss [W] / maximum	30 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 • communication function • other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker • at 40 °C • at 45 °C • at 45 °C • at 50 °C • at 55 °C 137 A		9.7 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 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function	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 o communication function o other measurement function No Net Weight Current marking / according to UL 489 / 100%-rated breaker o at 40 °C o at 45 °C o at 55 °C 137 A	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 without product function • communication function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 50 °C 137 A	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 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 55 °C 137 A	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof ground-fault monitoring version without product function • communication function No • other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 55 °C 137 A	electrical endurance (operating cycles) / at 600 V	4 000
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 50 °C • at 55 °C 137 A		No
ormunication 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 50 °C at 55 °C 137 A	ground-fault monitoring version	without
● other measurement function No Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker operational current ● at 40 °C ● at 45 °C ● at 50 °C ● at 55 °C No No No 150 A 146 A 141 A ● at 55 °C 137 A	product function	
Net Weight 2 kg Current marking / according to UL 489 / 100%-rated breaker No operational current 0 at 40 °C 150 A 0 at 45 °C 146 A 0 at 50 °C 141 A 0 at 55 °C 137 A	 communication function 	No
Current marking / according to UL 489 / 100%-rated breaker No operational current 150 A • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 55 °C 137 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breaker No operational current 150 A • at 40 °C 150 A • at 45 °C 146 A • at 50 °C 141 A • at 55 °C 137 A	Net Weight	2 kg
operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C 137 A	Current	
 at 40 °C at 45 °C at 50 °C at 55 °C 150 A 146 A 141 A 137 A 	marking / according to UL 489 / 100%-rated breaker	No
 at 45 °C at 50 °C at 55 °C 146 A 141 A 137 A 	operational current	
• at 50 °C 141 A • at 55 °C 137 A	• at 40 °C	150 A
• at 55 °C 137 A	• at 45 °C	146 A
	• at 50 °C	141 A
• at 60 °C 132 A	● at 55 °C	137 A
	• at 60 °C	132 A
• at 65 °C 128 A	• at 65 °C	128 A
• at 70 °C 123 A	• at 70 °C	123 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
witching capacity according to UL 489	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	25 kA
djustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with l2t characteristic	
• minimum	150 A
maximum	150 A
adjustable response value delay time (tr) / for L-tripping / with l2t characteristic	
• minimum	1 s
maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	750 A
• maximum	1 500 A
adjustable absolute value setting current (InN) / for N-tripping	
• minimum	0 A
maximum adjustable current recognize value current / of the current	0 A
adjustable current response value current / of the current-dependent overload release	150 150 A
product function / grounding protection	No
lechanical Design	
product component	No
undervoltage releasevoltage trigger	No
trip indicator	No
height [in]	7.28 in
height	185 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.27 in
depth	83 mm
onnections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
uxiliary circuit	
number of CO contacts / for auxiliary contacts	0
ccessories	
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
ertificates	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	













other

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/lowyoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5215-6EC31-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5215-6EC31-1AA0

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

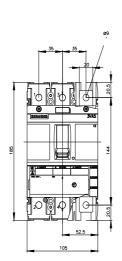
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5215-6EC31-1AA0

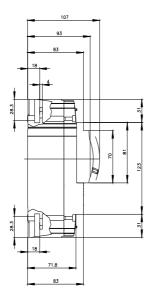
CAx-Online-Generator

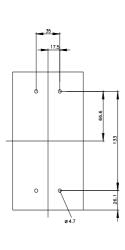
http://www.siemens.com/cax

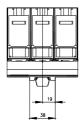
Tender specifications

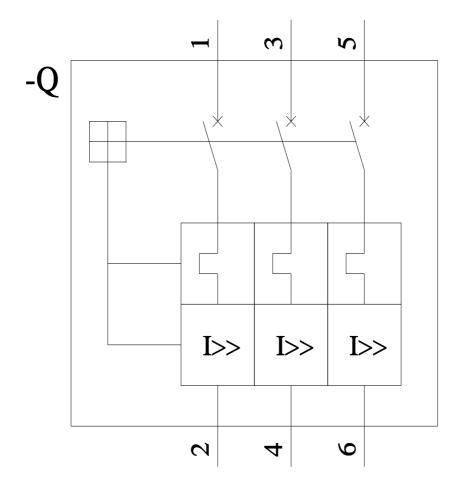
http://www.siemens.com/specifications

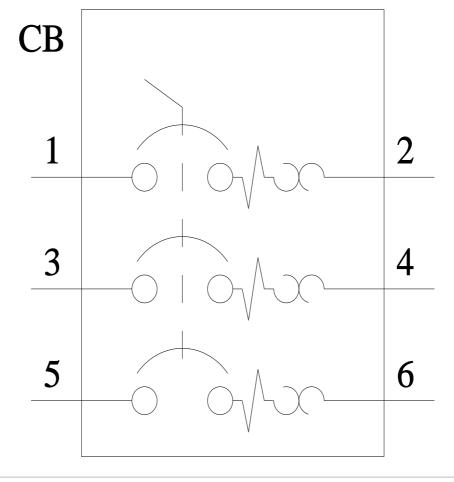












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