



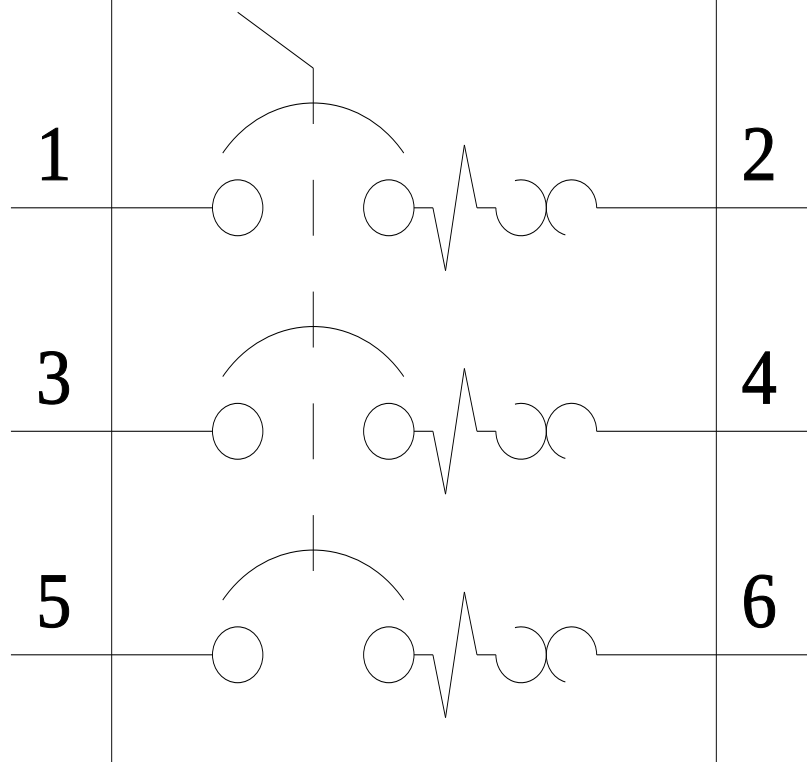
circuit breaker 3VA5 UL Frame 250 breaking capacity class C 100 kA @ 480 V 3-pole, line protection TM230, FTAM, In=225 A overload protection, 100%-rated Ir=225 A permanently set short-circuit protection Ii=5...10 x In nut keeper kit on two sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CFAS
design of the product	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	TM230
protection function of the overcurrent release	LI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	51 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	17.1 W
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/retrofitable / short-circuit and overload proof	No
product function	
• communication function	No
• other measurement function	No
Net Weight	2 170 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	225 A
• at 45 °C	220 A
• at 50 °C	216 A
• at 55 °C	211 A
• at 60 °C	206 A
• at 65 °C	201 A
• at 70 °C	197 A

Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
operating short-circuit current breaking capacity (I _{cs})	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	440 kA
• at 415 V	242 kA
• at 690 V	17 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	
current breaking capacity	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I ² t characteristic	
• minimum	225 A
• maximum	225 A
adjustable response value delay time (t _r) / for L-tripping / with I ² t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum	1 125 A
• maximum	2 250 A
adjustable setting current (I _N) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	No
Mechanical Design	
product component	
• undervoltage release	No
• voltage 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
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	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 mm
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes

manufacturer's article number		3VA52227EC322AA0	
● of the supplied basic switch			
Environmental 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	
reference code / according to IEC 81346-2		Q	
Approvals / Certificates			
General Product Approval			
  EG-Konf. Confirmation  UL  UL Miscellaneous			
General Product Approval	EMV	Marine / Shipping	other
  RCM  ABS Confirmation Miscellaneous Miscellaneous			
Environment			
Environmental Confirmations			
Further information			
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=3VA5222-7EC32-2AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA5222-7EC32-2AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5222-7EC32-2AA0 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications			

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