



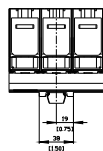
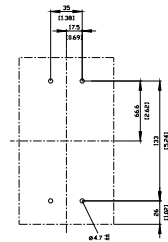
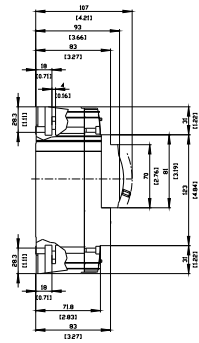
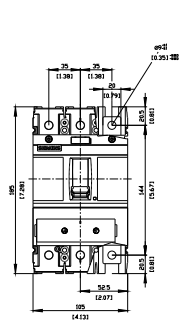
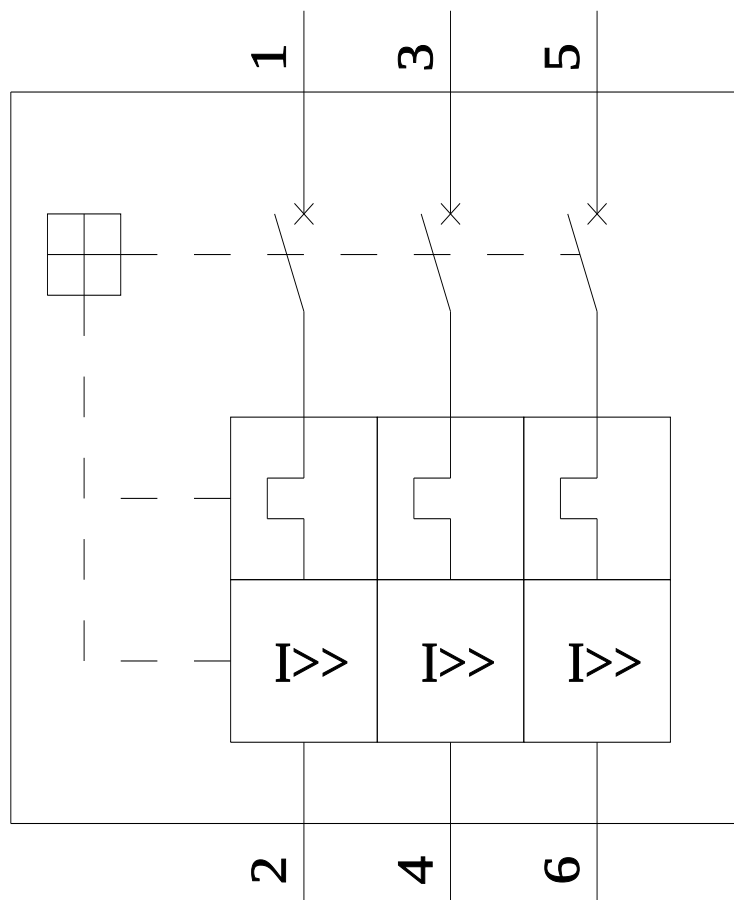
circuit breaker 3VA5 UL Frame 250 breaking capacity class C 100 kA @ 480 V 3-pole, line protection TM240, ATAM, In=80 A overload protection, 100%-rated Ir=64 A ...80 A short-circuit protection Ii=5...10 x In without connection

Model	
product brand name	SETRON
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	TM240
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	20 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	6.8 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	2 100 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	80 A
• at 45 °C	77.7 A
• at 50 °C	75.5 A
• at 55 °C	73.2 A
• at 60 °C	71 A

• at 65 °C	68.7 A
• at 70 °C	66.4 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 _{2t} characteristic	
• minimum	64 A
• maximum	80 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum	400 A
• maximum	800 A
adjustable setting current (I _{nN}) / 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	Without connection
type of electrical connection / for main current circuit	Without
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		3VA52807EF312AA0	
• 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	Maritime application
   RCM  ABS  BUREAU VERITAS  DNV			
Maritime application	other	Environment	
 LRS Confirmation Miscellaneous Environmental Confirmations			
Further information			
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information for data generation and storage https://support.industry.siemens.com/cs/ww/en/view/109995012 Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5280-7EF31-2AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA5280-7EF31-2AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5280-7EF31-2AA0 CAX-Online-Generator https://www.siemens.com/cax Tender specifications https://www.siemens.com/specifications			

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