



circuit breaker 3VA1 IEC Frame 100 breaking capacity class B Icu=16 kA @ 415 V
4-pole, line protection TM210, FTFM, In=63 A overload protection Ir=63 A
permanently set short-circuit protection Ii=10 x In N conductor unprotected nut
keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	17.3 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.77 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	9 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	6 300
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	1.202 kg
Current	
operational current	
• at 40 °C	63 A
• at 45 °C	63 A
• at 50 °C	63 A
• at 55 °C	62 A
• at 60 °C	61 A
• at 65 °C	60 A
• at 70 °C	58 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	B
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	25 kA
• at 415 V	16 kA
• at 440 V	8 kA

• at 500 V • at 690 V	5 kA 5 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	25 kA 16 kA 8 kA 5 kA 5 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	52.5 kA 32 kA 13.6 kA 7.5 kA 7.5 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
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic • minimum • maximum	63 A 63 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic • minimum • maximum	1 s 1 s
adjustable response value setting current (Ii) / for I-tripping • minimum • maximum	630 A 630 A
adjustable setting current (InN) / for N-tripping • minimum • maximum	0 A 0 A
design of the N-conductor protection	without
product function / grounding protection	No
Mechanical Design	
product component • undervoltage release • voltage trigger • trip indicator	No No No
height [in]	5.12 in
height	130 mm
width [in]	4 in
width	101.6 mm
depth [in]	2.76 in
depth	70 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
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
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	Silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Tin
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	No

Environmental conditions			
protection class IP / on the front	IP40		
ambient temperature			
- during operation / minimum - during operation / maximum - during storage / minimum - during storage / maximum	-25 °C 70 °C -40 °C 80 °C		
Environmental footprint			
Environmental Product Declaration(EPD)	Yes		
global warming potential [CO2 eq] / total	190 kg		
global warming potential [CO2 eq] / during manufacturing	4.67 kg		
global warming potential [CO2 eq] / during operation	186 kg		
global warming potential [CO2 eq] / after end of life	-0.826 kg		
reference code / according to IEC 81346-2	Q		
Approvals / Certificates			
General Product Approval			
 CCC  EG-Konf.   VDE Miscellaneous 			
General Product Approval	EMV	Test Certificates	Maritime application
  RCM Miscellaneous Special Test Certificate Type Test Certificates/Test Report  ABS			
Maritime application			other
 BUREAU VERITAS  DNV  LRS  RMRS CCS (China Classification Society) 产品合格 QC PASS			
other		Environment	
Confirmation	Miscellaneous	 EPD  EPD	Environmental Confirmations 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=3VA1063-2ED42-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA1063-2ED42-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1063-2ED42-0AA0 CAX-Online-Generator https://www.siemens.com/cax Tender specifications https://www.siemens.com/specifications					



