



circuit breaker 3VA1 IEC Frame 160 breaking capacity class M Icu=55 kA @ 415 V
2-pole, line protection TM210, FTFM, In=16 A overload protection Ir=16 A
permanently set short-circuit protection Ii=20 x In terminal connection

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	2
General technical data	
insulation voltage / rated value	500 V
operating voltage / at DC / rated value	250 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	7.06 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	3.53 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	0.669 kg
Current	
operational current	
• at 40 °C	16 A
• at 45 °C	16 A
• at 50 °C	16 A
• at 55 °C	16 A
• at 60 °C	15 A
• at 65 °C	15 A
• at 70 °C	15 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA

short-circuit current making capacity (Icm)	• at 240 V • at 415 V	187 kA 121 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	16 A	
• maximum	16 A	
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic		
• minimum	1 s	
• maximum	1 s	
adjustable response value setting current (Ii) / for I-tripping		
• minimum	320 A	
• maximum	320 A	
adjustable setting current (InN) / 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]	5.12 in	
height	130 mm	
width [in]	2 in	
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (1,5 - 70 mm²)	
width	50.8 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	box terminal on both sides	
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	-25 °C	
• during operation / maximum	70 °C	
• during storage / minimum	-40 °C	
• during storage / maximum	80 °C	
Environmental footprint		
Environmental Product Declaration (EPD)	Yes	
global warming potential [CO2 eq] / total	126 kg	
global warming potential [CO2 eq] / during manufacturing	2.72 kg	
global warming potential [CO2 eq] / during operation	124 kg	
global warming potential [CO2 eq] / after end of life	-0.365 kg	
reference code / according to IEC 81346-2	Q	
Approvals / Certificates		

General Product Approval



[Confirmation](#)



[Miscellaneous](#)

General Product Approval

Test Certificates

Marine / Shipping



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other

Environment

[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)



Environment

[Environmental Confirmations](#)

[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=3VA1196-5ED26-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1196-5ED26-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1196-5ED26-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



