

**Siemens
EcoTech**



circuit breaker 3VA2 IEC Frame 160 breaking capacity class L Icu=150 kA @ 415 V 4-pole, line protection ETU550, LSI, In=63 A overload protection Ir=25 A...63 A short-circuit protection Isd=0.6..10x In, li=1.5..12x In neutral conductor protection adjustable (OFF, up to 160%) 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	ETU550
protection function of the overcurrent release	LSI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	3.1 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.03 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	Yes
• other measurement function	No
Net Weight	3.2 kg
Current	
operational current	
• at 40 °C	63 A
• at 45 °C	63 A
• at 50 °C	63 A
• at 55 °C	63 A
• at 60 °C	63 A
• at 65 °C	63 A
• at 70 °C	63 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	L
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	200 kA

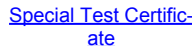
• at 415 V • at 440 V • at 500 V • at 690 V	150 kA 150 kA 100 kA 25 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	200 kA 150 kA 150 kA 100 kA 18 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	440 kA 330 kA 330 kA 220 kA 52.5 kA

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	25 A 63 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic • minimum • maximum	0.5 s 25 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic • minimum • maximum	37 A 630 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic • minimum • maximum	37 A 630 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic • minimum • maximum	0.05 s 0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic • minimum • maximum	0.05 s 0.5 s
adjustable response value setting current (Ii) / for I-tripping • minimum • maximum	94 A 756 A
adjustable setting current (InN) / for N-tripping • minimum • maximum	25 A 100 A
design of the N-conductor protection	adjustable OFF; 40% to 160%
product function / grounding protection	No

Mechanical Design

product component • undervoltage release • voltage trigger • trip indicator	No No No
height [in]	7.13 in
height	181 mm
width [in]	5.51 in
width	140 mm
depth [in]	3.39 in
depth	86 mm

Connections			
arrangement of electrical connectors / for main current circuit	Front terminal		
type of electrical connection / for main current circuit	on both sides nut keeper kit		
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 top of the switch (N, 1, 3, 5)	tin		
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	Yes		
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			
global warming potential [CO2 eq] / total	61.814 kg		
global warming potential [CO2 eq] / during manufacturing	14.6 kg		
global warming potential [CO2 eq] / during operation	48.9 kg		
global warming potential [CO2 eq] / after end of life	-2.2 kg		
Siemens Eco Profile (SEP)	Siemens EcoTech		
reference code / according to IEC 81346-2	Q		
Approvals / Certificates			
General Product Approval			
 CCC	 EG-Konf.		
	 VDE		
Confirmation	Miscellaneous		
General Product Approval	EMV	Test Certificates	
		 RCM	 Special Test Certificate
		Miscellaneous	Type Test Certificates/Test Report
Maritime application			
 ABS	 BUREAU VERITAS	 DNV	 LRS
		 RMRS	CCS (China Classification Society)
other		Dangerous goods	Environment
 产品合格 QC PASS	Confirmation	Miscellaneous	Transport Information
		 EPD	 Siemens EcoTech
Environment			

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=3VA2163-8JP42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-8JP42-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-8JP42-0AA0

CAX-Online-Generator

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

Tender specifications

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

