

Siemens
EcoTech



circuit breaker 3VA2 IEC Frame 160 breaking capacity class M Icu=55 kA @ 415 V
3-pole, line protection ETU330, LIG, In=160 A overload protection Ir=63 A...160 A
short-circuit protection Ii=1.5...10 x In ground-fault protection Ig=0.2...1 x In,
tg=0.1/0.3s 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	ETU330
protection function of the overcurrent release	LIG
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	25.5 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	8.5 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	Summation current formation L-conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	2.127 kg
Current	
operational current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	160 A
• at 60 °C	160 A
• at 65 °C	160 A
• at 70 °C	160 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
• at 440 V	55 kA

• at 500 V • at 690 V	36 kA
operating short-circuit current breaking capacity (Ics)	2.5 kA
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	85 kA
	55 kA
	55 kA
	36 kA
	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	187 kA
	121 kA
	121 kA
	75.6 kA
	3.7 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	63 A
	160 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum • maximum	0.5 s
	17 s
adjustable response value setting current (Ii) / for I-tripping	
• minimum • maximum	240 A
	1 600 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value • full-scale value	32 A
	160 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
• maximum	0.3 s
adjustable setting current (InN) / for N-tripping	
• minimum • maximum	0 A
	0 A
product function / grounding protection	Yes

Mechanical Design

product component	
• undervoltage release • voltage trigger • trip indicator	No
	No
	No
height [in]	7.13 in
height	181 mm
width [in]	4.13 in
width	105 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
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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.  Confirmation  VDE Miscellaneous											
General Product Approval		EMV		Test Certificates		Marine / Shipping					
		 RCM		Type Test Certificates/Test Report		Special Test Certificate		Miscellaneous		 ABS	
Marine / Shipping						other					
 BUREAU VERITAS		 DNV		 LRS		CCS (China Classification Society)		Confirmation		Miscellaneous	
other		Dangerous goods		Environment							
Miscellaneous		Transport Information		 EPD		 Siemens EcoTech		 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=3VA2116-5HM32-0AA0>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2116-5HM32-0AA0>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-5HM32-0AA0
CAX-Online-Generator
<http://www.siemens.com/cax>
Tender specifications
<http://www.siemens.com/specifications>



