



circuit breaker 3VA2 IEC Frame 1000 breaking capacity class C Icu=110 kA @ 415 V 4-pole, line protection ETU330, LIG, In=800 A overload protection Ir=320 A...800 A short-circuit protection Ii=1.5...10 x In neutral conductor protection adjustable (OFF, 50%, 100%) 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	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	231 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	77 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 600
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 200
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	18.2 kg
Current	
operational current	
• at 40 °C	800 A
• at 45 °C	800 A
• at 50 °C	800 A
• at 55 °C	800 A
• at 60 °C	800 A
• at 65 °C	767 A
• at 70 °C	703 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA

• at 690 V	35 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	150 kA 85 kA 70 kA 65 kA 19 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	440 kA 242 kA 242 kA 187 kA 73.5 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	320 A 800 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	1 200 A 8 000 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value • full-scale value	160 A 800 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
• minimum • maximum	0.1 s 0.3 s
adjustable setting current (InN) / for N-tripping	
• minimum • maximum	160 A 800 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
product function / grounding protection	Yes
Mechanical Design	
product component	
• undervoltage release • voltage trigger • trip indicator	No No No
height [in]	12.6 in
height	320 mm
width [in]	11.02 in
width	280 mm
depth [in]	4.72 in
depth	120 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	20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	50 x 28 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)	silver

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
reference code / according to IEC 81346-2	Q
Approvals / Certificates	
General Product Approval	EMV



[Miscellaneous](#)



Test Certificates	Maritime application
Type Test Certificates/Test Report	Special Test Certificate
Miscellaneous	
	
	
Maritime application	other



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



[Confirmation](#)

[Miscellaneous](#)

Dangerous goods	Environment
Transport Information	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=3VA2580-7HM42-0AA0>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2580-7HM42-0AA0>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2580-7HM42-0AA0
CAx-Online-Generator
<https://www.siemens.com/cax>
Tender specifications
<https://www.siemens.com/specifications>



