



circuit breaker 3VA2 IEC frame 1000 breaking capacity class M Icu=55kA @ 415V 4-pole, line protection ETU320, LI, In=1000A overload protection Ir=400A...1000A short-circuit protection Ii=1.5...10 x In N conductor protection adjustable (OFF, 50%, 100%) nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU320
protection function of the overcurrent release	LI
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	330 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	110 W
mechanical service life (switching cycles) / typical	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 900
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 400
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	18.4 kg
Current	
Max. rated operational current of the frame size	1 000 A
Courant permanent assigné Iu	1 000 A
operational current	
• at 40 °C	1 000 A
• at 45 °C	1 000 A
• at 50 °C	1 000 A
• at 55 °C	1 000 A
• at 60 °C	955 A
• at 65 °C	885 A
• at 70 °C	815 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA

• at 440 V • at 500 V • at 690 V	55 kA 36 kA 25 kA
breaking capacity operating short-circuit current (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	85 kA 55 kA 55 kA 36 kA 19 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 52.5 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / minimum	400 A
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum	1 000 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / minimum	0.5 s
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / maximum	17 s
adjustable response value setting current (Ii) / for I-tripping / maximum	10 000 A
adjustable response value setting current (Ii) / for I-tripping / minimum	1 500 A
adjustable absolute value setting current (InN) / for N-tripping / maximum	1 000 A
adjustable absolute value setting current (InN) / for N-tripping / minimum	500 A
Adjustable response value current / Ii min.	1 500 A
Adjustable response value current / Ii max.	10 000 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
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-section, connection screw, width x thickness , min.	20 x 4 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	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	
product component	
• undervoltage release • voltage trigger • trip indicator	No No No
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
Certificates	
reference code / according to IEC 81346-2	Q
General Product Approval	EMC



[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[CCS / China Classification Society](#)

[Environmental Confirmations](#)

other

[Miscellaneous](#)

[Miscellaneous](#)

Further information

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=3VA2510-5HL42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2510-5HL42-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2510-5HL42-0AA0

CAX-Online-Generator

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

Tender specifications

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



