SIEMENS

Data sheet 3VA1510-5EF42-0AA0



circuit breaker 3VA1 IEC frame 1000 breaking capacity class M Icu=55kA @ 415V 4-pole, line protection TM240, ATAM, In=1000A overload protection Ir=700A...1000A short-circuit protection Ii=5...10 x In N conductor unprotected nut keeper kit

Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	TM240
protection function of the overcurrent release	LI
Number of poles	4

General technical data	
Rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Max. rated operational voltage Ue with DC	750 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

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Neutral conductors / upgradeable/retrofittable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No

Current

Max. rated operational current of the frame size	1 000 A
Rated continuous current Iu	1 000 A
Operating current	
• at 40 °C	1 000 A
• at 45 °C	1 000 A
• at 50 °C	1 000 A
• at 55 °C	975 A
• at 60 °C	950 A
• at 65 °C	925 A
• at 70 °C	900 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	36 kA
• at 690 V	25 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	19 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	76 kA
• at 690 V	53 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

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Adjustable response value current / Ig min.	700 A
Adjustable response value current / Ig min.	1 000 A
Adjustable response value current / Ii min.	5 000 A
Adjustable response value current / Ii max.	10 000 A
Design of the N-conductor protection	Without
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

Height [in]	12.6 in
Height	320 mm
Width [in]	11 in
Width	280 mm
Depth [in]	4.7 in
Depth	120 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 4 mm

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

Certificates

Reference code / acc. to DIN EN 81346-2	Q

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General Product Approval			EMC	Declaration of Conformity	Test Certificates
VDE	Miscellaneous	EAC	RCM	EG-Konf.	Miscellaneous

Test Certificates	Shipping Approval	other	
Type Test Certificates/Test Report	LRS	Manufacturer Declaration	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=3VA1510-5EF42-0AA0

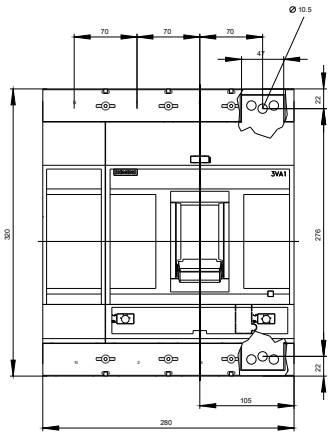
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA1510-5EF42-0AA0

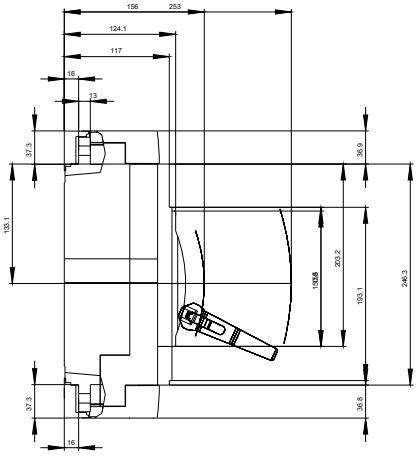
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1510-5EF42-0AA0

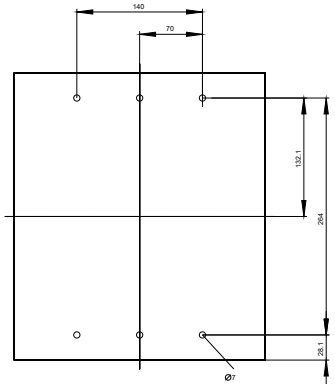
CAx-Online-Generator
http://www.siemens.com/cax

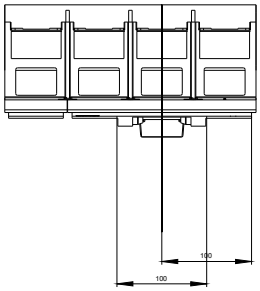
Tender specifications
http://www.siemens.com/specifications

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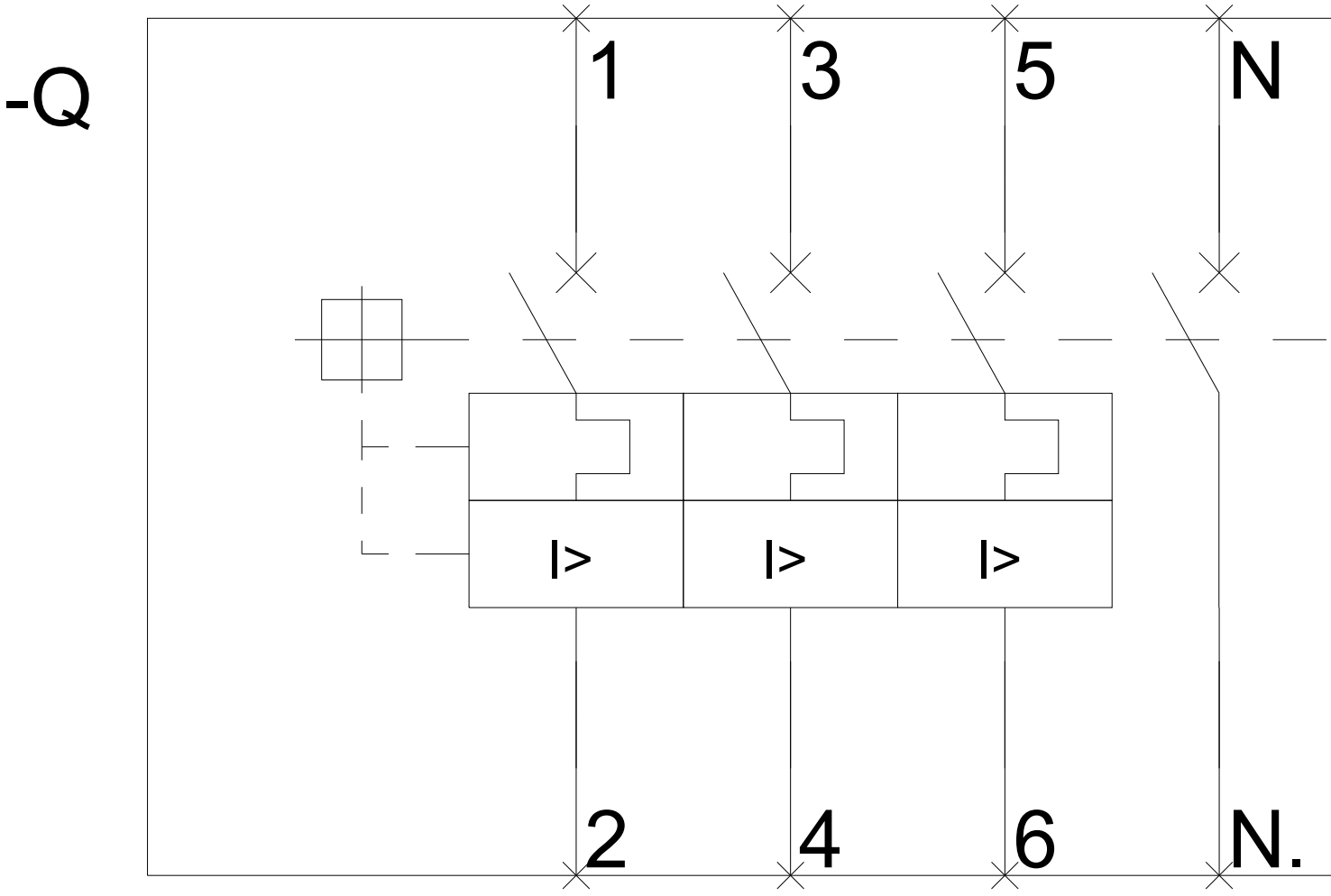








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