



circuit breaker 3VA1 IEC frame 630 breaking capacity class S $I_{cu}=36\text{kA}$ @ 415V 4-pole, line protection TM240, ATAM, $I_n=630\text{A}$ overload protection $I_r=440\text{A}\dots630\text{A}$ short-circuit protection $I_i=4\dots8 \times I_n$ N conductor protection 100% 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 U_i	800 V
Max. rated operational voltage U_e with DC	600 V
power loss [W] / maximum	192.9 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	64.3 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	6,446 kg
Current	
Max. rated operational current of the frame size	630 A
Courant permanent assigné I_u	630 A
operational current	
• at 40 °C	630 A
• at 45 °C	630 A
• at 50 °C	630 A
• at 55 °C	618 A
• at 60 °C	607 A
• at 65 °C	595 A
• at 70 °C	583 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
breaking capacity maximum short-circuit current (I_{cu})	
• at 240 V	55 kA
• at 415 V	36 kA

• at 440 V • at 500 V • at 690 V	36 kA 25 kA 7 kA
breaking capacity operating short-circuit current (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	55 kA 36 kA 25 kA 25 kA 5 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	121 kA 75.6 kA 75.6 kA 52.5 kA 11.9 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	
Adjustable response value current / li min.	3 150 A
Adjustable response value current / li max.	5 040 A
design of the N-conductor protection	100%
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design	
height [in]	9.76 in
Height	248 mm
width [in]	7.24 in
Width	184 mm
depth [in]	4.33 in
depth	110 mm

Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10 mm
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	Yes

Environmental conditions	
protection class IP / on the front	IP40
ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum	-25 °C 70 °C -40 °C 80 °C

Certificates	
reference code / acc. to IEC 81346-2	Q

General Product Approval	EMC	Declaration of Conformity
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[Miscellaneous](#)



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

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Miscellaneous](#)



Marine / Shipping	other
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[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=3VA1463-4GF42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1463-4GF42-0AA0>

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

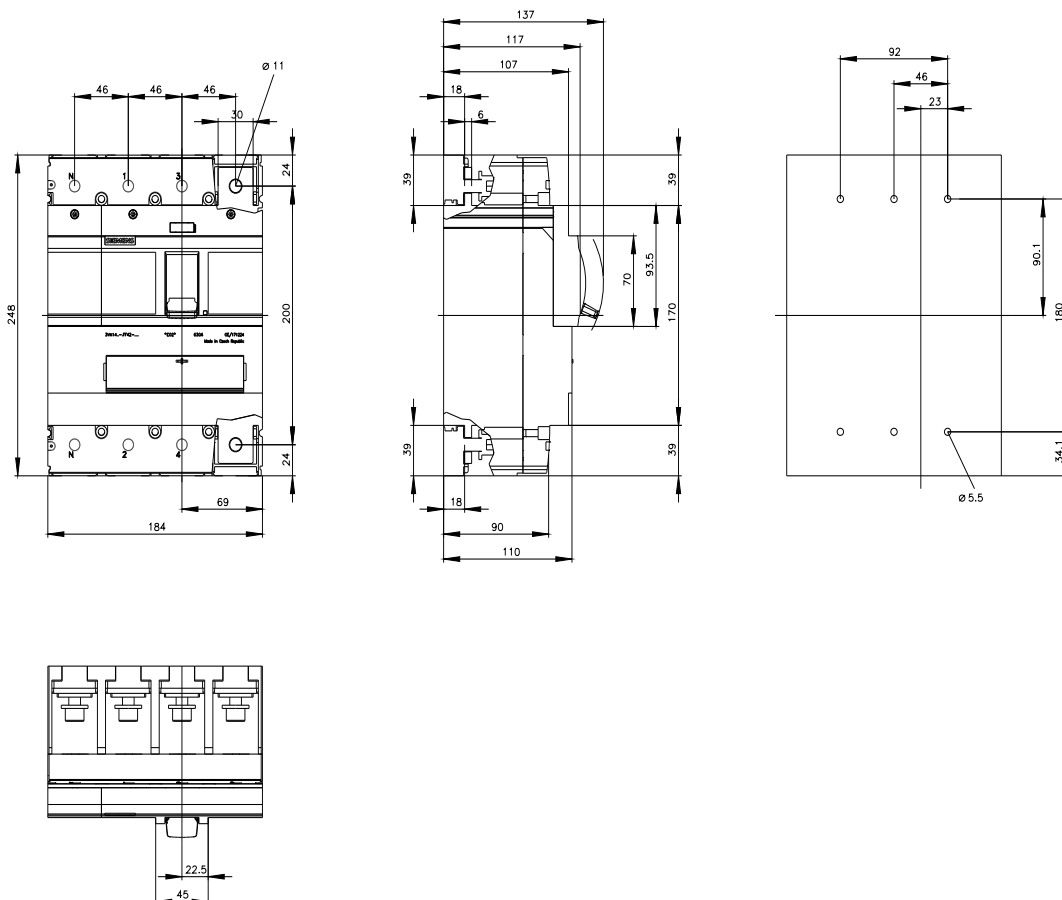
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1463-4GF42-0AA0

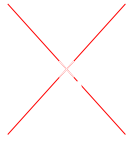
CAX-Online-Generator

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

Tender specifications

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





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