



circuit breaker 3VA2 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 4-pole, line protection ETU320, LI, In=63A overload protection Ir=25A...63A short-circuit protection li=1.5...12 x In N conductor protection adjustable (OFF, 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	
rated insulation voltage Ui	800 V
power loss [W] / maximum	4 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	1.33 W
mechanical service life (switching cycles) / typical	25 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	14 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	9 800
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
net weight	2.93 kg
Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné Iu	63 A
operational current	
• at 40 °C	63 A
• at 45 °C	63 A
• at 50 °C	63 A
• at 55 °C	63 A
• at 60 °C	63 A
• at 65 °C	63 A
• at 70 °C	63 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

<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	55 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	55 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	36 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	2.5 kA
breaking capacity operating short-circuit current (Ics)	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	55 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	55 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	36 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	2.5 kA
short-circuit current making capacity (Icm)	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	187 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	121 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	121 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	75.6 kA
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 500 V • at 690 V 	3.7 kA
Adjustable parameters	
Adjustable response value current / li min.	95 A
Adjustable response value current / li max.	756 A
design of the N-conductor protection	adjustable OFF; 100%
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	7.13 in
Height	181 mm
width [in]	5.51 in
Width	140 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-section, connection screw, width x thickness , min.	13 x 1 mm
Auxiliary circuit	
product component	
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No
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	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-25 °C
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	70 °C
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-40 °C
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	80 °C
Certificates	
reference code / acc. to IEC 81346-2	Q

General Product Approval

EMC

Declaration of Conformity



Miscellaneous



[UK Declaration of Conformity](#)

Declaration of Conformity	Test Certificates	Marine / Shipping			
---------------------------	-------------------	-------------------	--	--	--



EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU
VERITAS

Marine / Shipping	other				
-------------------	-------	--	--	--	--



LRS



RMRS

[CCS / China Classification Society](#)



DNV-GIL

[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=3VA2163-5HL42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-5HL42-0AA0>

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

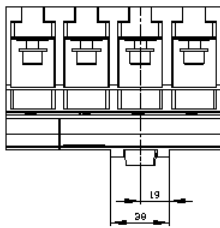
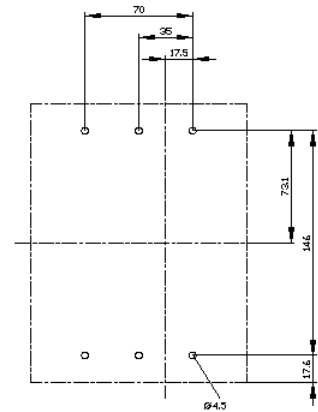
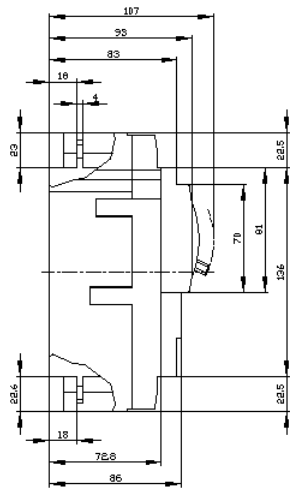
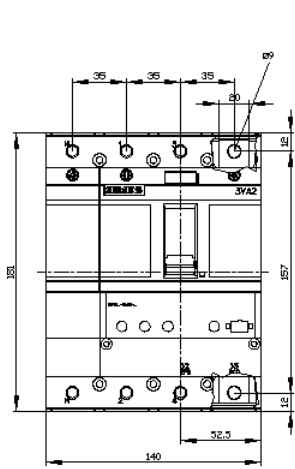
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-5HL42-0AA0

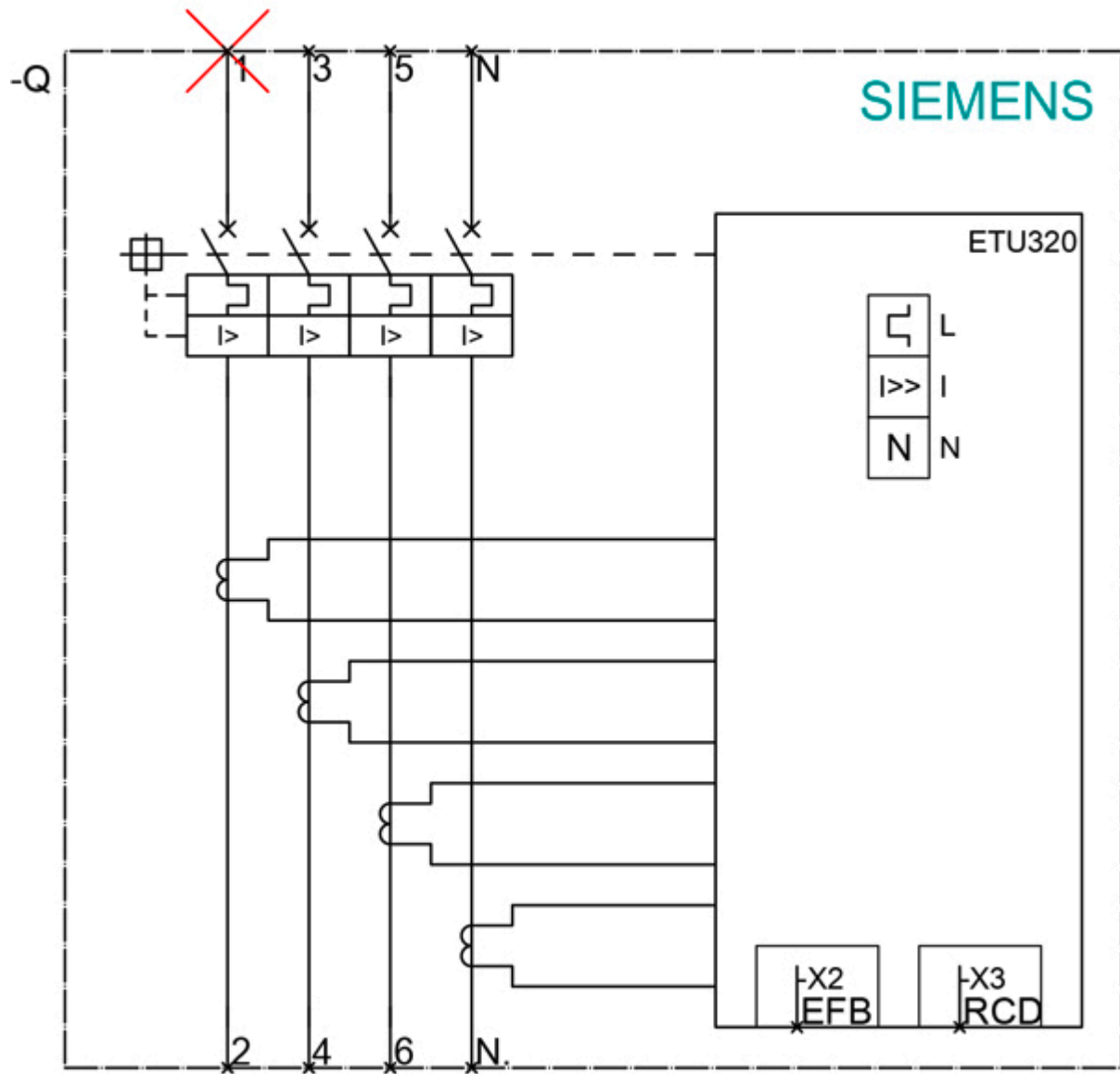
CAx-Online-Generator

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

Tender specifications

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





last modified:

6/11/2021