



circuit breaker 3VA2 IEC frame 160 breaking capacity class M
 $I_{cu}=55kA$ @ 415V 3-pole, line protection ETU560, LSIG, $I_n=160A$
 overload protection $I_r=63A...160A$ short-circuit protection
 $I_{sd}=0.6..10x I_n$, $I_i=1.5..10x I_n$ N conductor protection optionally with
 external current transformer gr.-fault prot., can be sw. off $I_g=0.2...1 x$
 I_n , $t_g=0.05-0.8s$ nut keeper kit undervoltage release (UVR) 208-230V
 AC 50/60Hz 2 auxiliary switches HQ 1 trip alarm switch HQ

Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU560
Protective function of the overcurrent release	LSIG
Number of poles	3
Design of the auxiliary release	Undervoltage release (UVR)
Auxiliary contact version	2 auxiliary switches + 1 trip alarm switch HQ
General technical data	
Rated insulation voltage U_i	800 V
Max. rated operational voltage U_e with AC 50/60Hz	690 V
Power loss [W] / maximum	28 W
Latching - endurance	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Neutral conductors / upgradeable/retrofitable	Yes
Ground fault monitoring version	Summation current formation L-conductor
Product function	

• communication function	Yes
• Phase failure detection	No
• other measurement function	No
Net weight	2.5 kg

Current

Max. rated operational current of the frame size	160 A
Rated continuous current I _u	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	154 A
• at 60 °C	148 A
• at 65 °C	142 A
• at 70 °C	136 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Operational short-circuit current breaking capacity (I _{cs})	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Short-circuit current making capacity (I _{cm})	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	79 kA
• at 690 V	4.25 kA

Adjustable parameters

Adjustable response value current / I _r min.	64 A
Adjustable response value current / I _r max.	160 A
Adjustable response value time / t _r min.	0.5
Adjustable response value time / t _r max.	20

Adjustable response value current / Isd min.	96 A
Adjustable response value current / Isd max.	1 600 A
Short-term delayed / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value time / tsd min.	0.05 s
Adjustable response value time / tsd max.	0.5 s
Adjustable response value time / tsd min.	0.05 s
Adjustable response value time / tsd max.	0.5 s
Adjustable response value current / li min.	240 A
Adjustable response value current / li max.	1 600 A
Ground fault protection can be switched ON/OFF	Yes
Adjustable response value current / Ig min.	32 A
Adjustable response value current / Ig max.	160 A
Adjustable response value current / for G-tripping / with I2t characteristic / min.	0.2 A
Adjustable response value current / for G-tripping / with I2t characteristic / max.	1 A

Mechanical Design

Height	181 mm
Width	105 mm
Depth	86 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	Lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8.5

Auxiliary circuit

Product component	
<ul style="list-style-type: none"> • undervoltage release • Voltage trigger • undervoltage release with leading contact • Trip indicator 	<p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p>
Number of CO contacts / for auxiliary contacts	3

Accessories

Product extension / optional / motor drive	Yes
Manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied basic switch • of the integrated auxiliary switch/alarm switch • of the integrated auxiliary switch/alarm switch 	<p>3VA2116-5JQ32-0AA0</p> <p>3VA9988-0AA12</p> <p>3VA9988-0AB12</p>

- of the integrated auxiliary trip

3VA9608-0BB25

Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum 	-25 °C
<ul style="list-style-type: none"> • during operation / maximum 	70 °C
<ul style="list-style-type: none"> • during storage / minimum 	-40 °C
<ul style="list-style-type: none"> • during storage / maximum 	80 °C

Certificates

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval EMC



[Miscellaneous](#)



Declaration of Conformity Test Certificates Shipping Approval



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



Shipping Approval other



[CCS / China Classification Society](#)

[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=3VA2116-5JQ32-0DH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2116-5JQ32-0DH0>

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

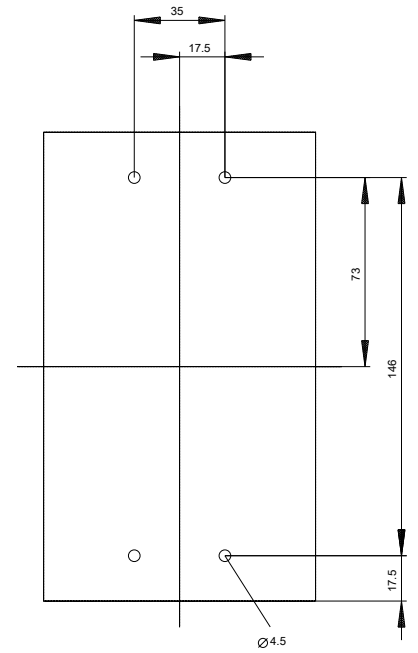
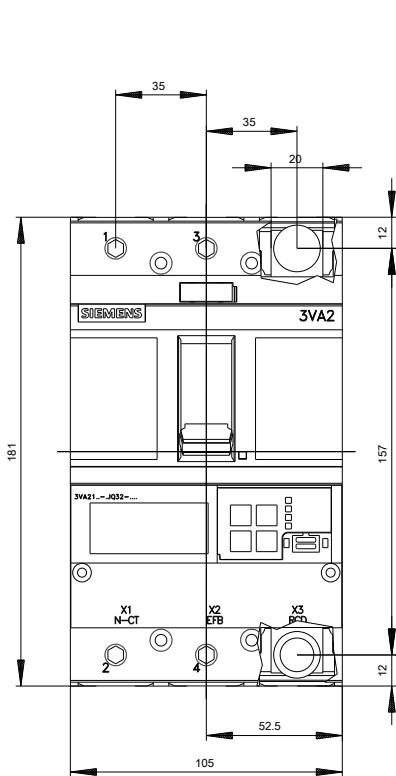
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-5JQ32-0DH0

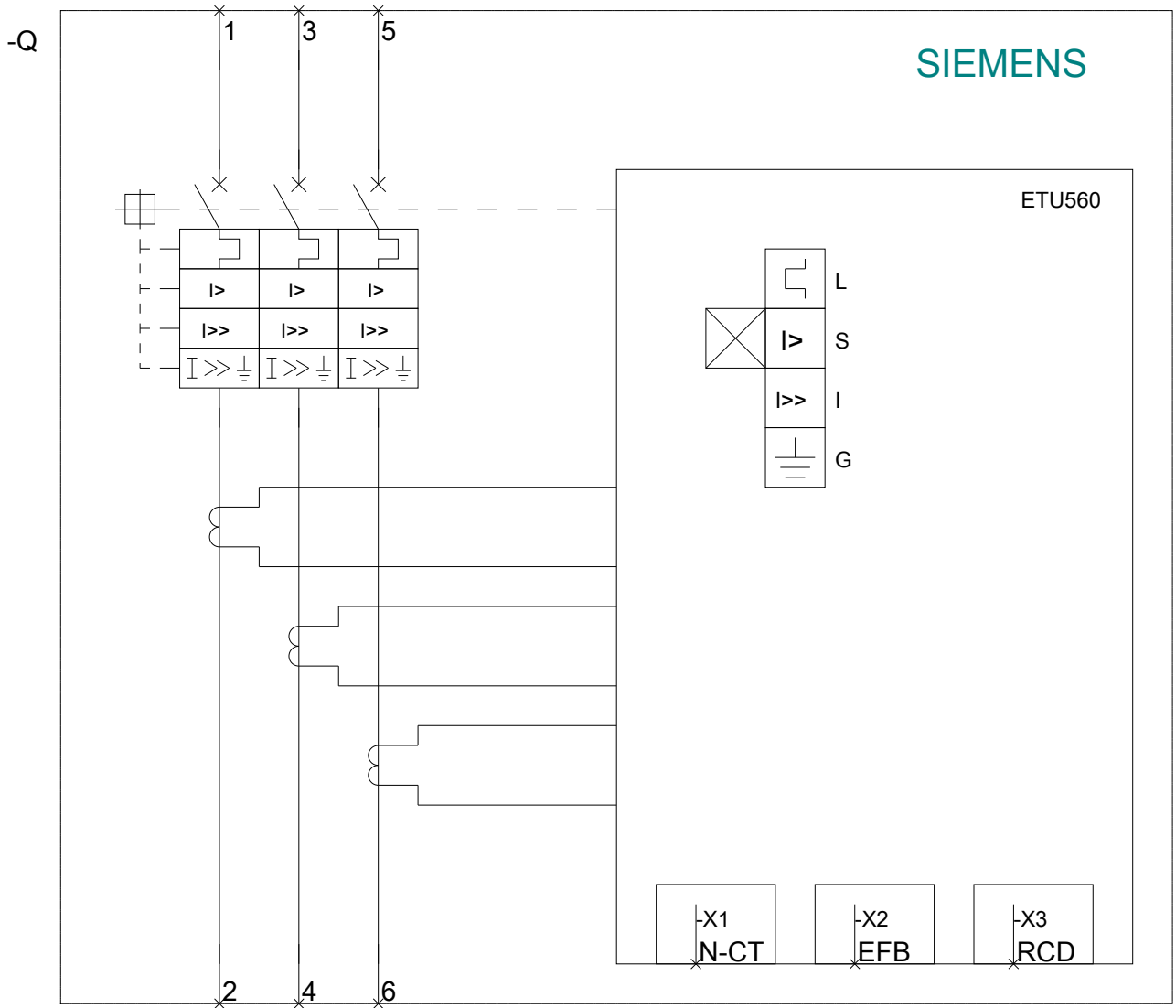
CAX-Online-Generator

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

Tender specifications

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





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