

circuit breaker 3VA2 IEC frame 160 breaking capacity class M
 $I_{cu}=55kA @ 415V$ 3-pole, line protection ETU320, LI, $I_n=160A$
 overload protection $I_r=63A...160A$ short-circuit protection $I_i=1.5...10 \times I_n$
 In nut keeper kit undervoltage release (UVR) 120-127V AC 50/60Hz
 2 auxiliary switches HQ 1 trip alarm switch HQ



Model	
Product brand name	SETRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU320
Protective function of the overcurrent release	LI
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	No
Ground fault monitoring version	Without
Product function	

• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	2.49 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.	63 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.	17

Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _i min.	240 A
Adjustable response value current / I _i max.	1 600 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 	Yes
<ul style="list-style-type: none"> • Voltage trigger 	No
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No
<ul style="list-style-type: none"> • Trip indicator 	Yes
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 	3VA2116-5HL32-0AA0
<ul style="list-style-type: none"> • of the integrated auxiliary switch/alarm switch 	3VA9988-0AA12
<ul style="list-style-type: none"> • of the integrated auxiliary switch/alarm switch 	3VA9988-0AB12
<ul style="list-style-type: none"> • of the integrated auxiliary trip 	3VA9608-0BB24

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
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CCC



VDE

CB

CB

[Miscellaneous](#)

EAC



RCM

Declaration of Conformity	Test Certificates	Shipping Approval
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EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Shipping Approval	other
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LRS



RMRS

[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=3VA2116-5HL32-0CH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2116-5HL32-0CH0>

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

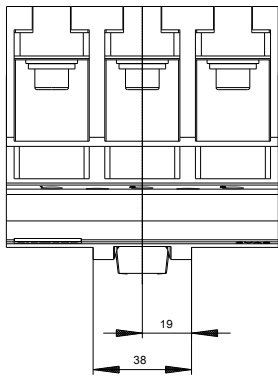
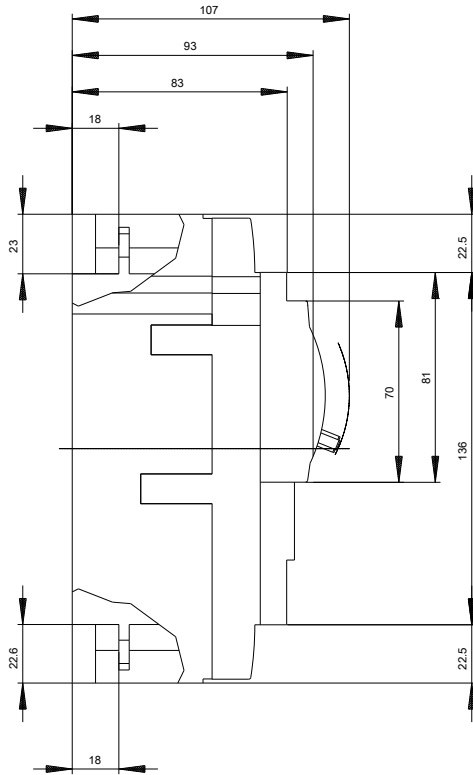
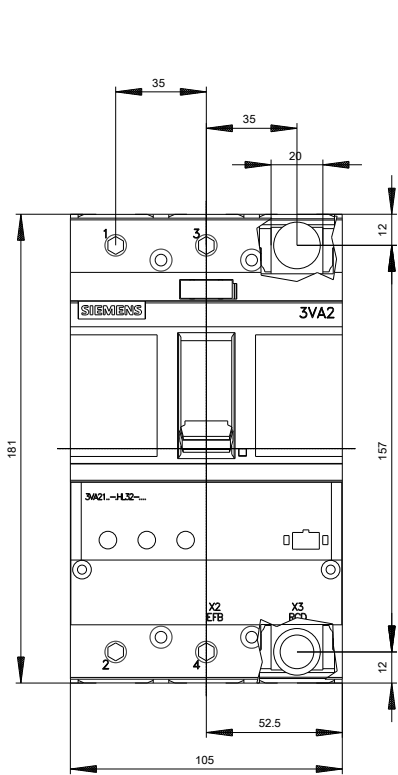
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-5HL32-0CH0

CAx-Online-Generator

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

Tender specifications

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



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09/13/2019