## Data sheet

## 3VA2116-6JQ36-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 3POLE, LINE PROTECTION ETU560, LSIG, IN=160A OVERLOAD PROTECTION IR=64A ...160A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5...10X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT,UPTO 160% GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8MS CABLE CONNECTION

Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Product variations	Selective Applications
Ground fault monitoring version	Summation current formation L-conductor
Design of the auxiliary release	without auxiliaryrelease
Design of the auxiliary switch	Without
Design of the operating mechanism	toggle handle
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU560

General technical data		
Number of poles		3
Trip class / of the L-trip / with I2t characteristic / initial value		0.5
Trip class / of the L-trip / with I2t characteristic / Full-scale value		25
Electrical endurance (switching cycles)		
• at AC-1 / at 380/415 V / at 50/60 Hz		12 000
Total disconnection time / for G-tripping / with standard characteristic / initial value	S	0.05
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	S	0.8
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		20 000

Voltage		
Insulation voltage / Rated value	V	800
Protection class		
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LSIG
0.41		
Switching capacity Switching capacity class of the circuit breaker		Н
Switching capacity class of the circuit breaker		П
Dissipation		
Active power loss		
• maximum	W	25.5
Electricity		
Continuous current / Rated value / maximum	Α	160
Continuous current / Rated value	Α	160
Adjustable response value current / of the	Α	1.5
instantaneous short-circuit release / initial value		
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
Operating current		
• at 40 °C / Rated value	Α	160
• at 50 °C / Rated value	Α	160
• at 60 °C / Rated value	Α	160
● at 65 °C / Rated value	Α	160
• at 70 °C / Rated value	Α	160
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
·		
Suitability Suitability for use		system protection
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
<ul> <li>for G-tripping / with I2t characteristic / initial value</li> </ul>	Α	0.2
for G-tripping / with I2t characteristic / Full-scale	Α	1
value	,	
for G-tripping / with standard characteristic /	Α	0.2
initial value		
for G-tripping / with standard characteristic /	Α	1
Full-scale value		

• of I-trip / Full-scale value	Α	12
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	А	0.6
<ul> <li>of the short-time delayed short-circuit release / Full-scale value</li> </ul>	Α	10
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	Α	0.6
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	Α	10
Adjustable delay time		
<ul> <li>for G-tripping / with I2t characteristic / initial value</li> </ul>	S	0.05
<ul> <li>for G-tripping / with I2t characteristic / Full-scale value</li> </ul>	S	0.8
• of S-trip / with I2t characteristic / initial value	S	0.05
<ul> <li>of S-trip / with I2t characteristic / Full-scale value</li> </ul>	S	0.5
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	S	0.05
• of S-trip / with standard characteristic / Full-scale value	S	0.5
Adjustable response value current / of the current- dependent overload release / initial value	A	0.4
Product details		
Product component		
Trip indicator		No
• display		Yes
undervoltage release		No
Product property		
<ul> <li>of the circuit breaker with tripping unit / Tripping characteristic adjustable</li> </ul>		Yes
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		Yes
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
• communication function		Yes

Accessories

• Phase failure detection

• other measurement function

No No

Manufacturer article number / of the supplied basic switch		3VA2116-6JQ36-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	110
● at 415 V / Rated value	kA	85
● at 440 V / Rated value	kA	85
● at 500 V / Rated value	kA	55
● at 690 V / Rated value	kA	2.5
Maximum short-circuit current breaking capacity (Icu)		
● at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
• at 440 V / Rated value	kA	85
• at 500 V / Rated value	kA	55
• at 690 V / Rated value	kA	2.5
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	242
• at 415 V / Rated value	kA	187
● at 440 V / Rated value	kA	187
● at 500 V / Rated value	kA	121
• at 690 V / Rated value	kA	3.75
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		4 (0.4002)
of the round conductor terminal / stranded	_	1 x (6-120 mm²)
Type of electrical connection / for main current circuit		Box terminal
Mechanical Design		
Height	mm	181
Width	mm	105
Depth	mm	107
Mounting type		fixed mounting
Environmental conditions		
Ambient temperature		
<ul><li>during operation / minimum</li></ul>	°C	-25
<ul><li>during operation / maximum</li></ul>	°C	70
<ul><li>during storage / minimum</li></ul>	°C	-40
• during storage / maximum	°C	80
Certificates		
Equipment marking		

• acc. to DIN EN 61346-2

• acc. to DIN EN 81346-2

Q Q

**EMC** 

**General Product Approval** 

**Declaration of** Conformity

**Shipping Approval** 











Shipping	other
Approval	



other

GL

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21166JQ360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21166JQ360AA0/all

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

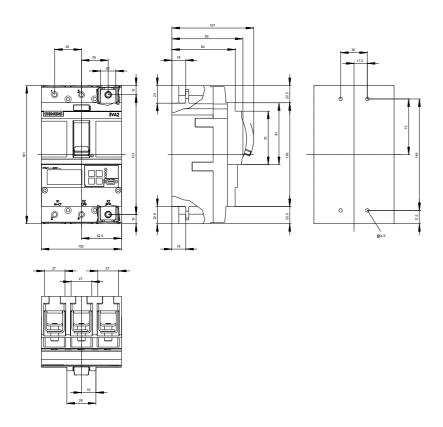
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21166JQ360AA0

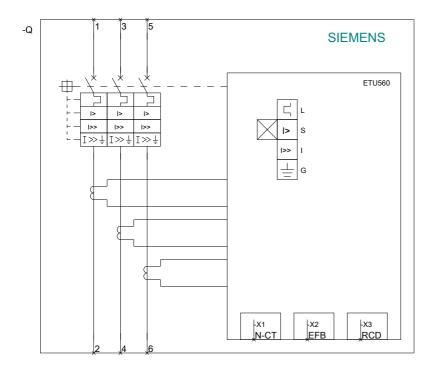
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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