



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=16A OVERLOAD PROTECTION IR=16A FIXED SHORT CIRCUIT PROTECTION II=20 X IN CABLE CONNECTION

Figure similar

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
Design of the product		Line protection
Product variations		General Applications
Ground fault monitoring version		Without
Design of the operating mechanism		toggle handle
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		TM210
General technical data		
Number of poles		3
Trip class / of the L-trip / with I2t characteristic / initial value		1
Trip class / of the L-trip / with I2t characteristic / Full-scale value		1
Electrical endurance (switching cycles)		8 000
• at AC-1 / at 380/415 V / at 50/60 Hz		
Mechanical service life (switching cycles) / typical		15 000

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		LI
Switching capacity		
Switching capacity class of the circuit breaker		S
Dissipation		
Active power loss		
• maximum	W	10.6
Electricity		
Continuous current / Rated value / maximum	A	160
Continuous current / Rated value	A	16
Adjustable response value current		
• of the current-dependent overload release / Full-scale value	A	16
• of the instantaneous short-circuit release / initial value	A	320
Main circuit		
Operating voltage		
• at AC / at 50/60 Hz / Rated value	V	690
• at DC / Rated value	V	500
Operating current		
• at 40 °C / Rated value	A	16
• at 50 °C / Rated value	A	16
• at 55 °C / Rated value	A	16
• at 60 °C / Rated value	A	15
• at 65 °C / Rated value	A	15
• at 70 °C / Rated value	A	15
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
• of I-trip / Full-scale value	A	320
• for N-conductor protection / initial value	A	0
• for N-conductor protection / Full-scale value	A	0

Adjustable response value current / of the current-dependent overload release / initial value	A	16
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Product details

Product component		
<ul style="list-style-type: none"> display 		No
Product property		
<ul style="list-style-type: none"> for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof 		No
Product expansion / optional / motor drive		Yes

Product function

Product function		
<ul style="list-style-type: none"> Intrinsic device protection 		Yes
<ul style="list-style-type: none"> communication function 		No
<ul style="list-style-type: none"> other measurement function 		No

Short circuit

Operational short-circuit current breaking capacity (Ics)		
<ul style="list-style-type: none"> at 240 V / Rated value 	kA	55
<ul style="list-style-type: none"> at 415 V / Rated value 	kA	36
<ul style="list-style-type: none"> at 440 V / Rated value 	kA	25
<ul style="list-style-type: none"> at 500 V / Rated value 	kA	15
<ul style="list-style-type: none"> at 690 V / Rated value 	kA	5
Maximum short-circuit current breaking capacity (Icu)		
<ul style="list-style-type: none"> at 240 V / Rated value 	kA	55
<ul style="list-style-type: none"> at 415 V / Rated value 	kA	36
<ul style="list-style-type: none"> at 440 V / Rated value 	kA	25
<ul style="list-style-type: none"> at 500 V / Rated value 	kA	16
<ul style="list-style-type: none"> at 690 V / Rated value 	kA	7
Short-circuit current making capacity (Icm)		
<ul style="list-style-type: none"> at 240 V / Rated value 	kA	121
<ul style="list-style-type: none"> at 415 V / Rated value 	kA	75.6
<ul style="list-style-type: none"> at 440 V / Rated value 	kA	52.5
<ul style="list-style-type: none"> at 500 V / Rated value 	kA	32
<ul style="list-style-type: none"> at 690 V / Rated value 	kA	7.5

Connections

Arrangement of electrical connectors / for main current circuit		Front terminal
Type of electrical connection / for main current circuit		Box terminal

Mechanical Design

Height	mm	130
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Width	mm	76.2
Depth	mm	70
Mounting type		fixed mounting

Environmental conditions

Ambient temperature		
• during operation / minimum	°C	-25
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

Certificates

Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General Product Approval	EMC	Declaration of Conformity	Test Certificates	Shipping Approval
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[sonstig](#)



EG-Konf.

[Typprüfbescheinigung/Werkszeugnis](#)



DNV



GL

Shipping Approval	other
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LRS

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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/3VA11964ED360AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11964ED360AA0/all>

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

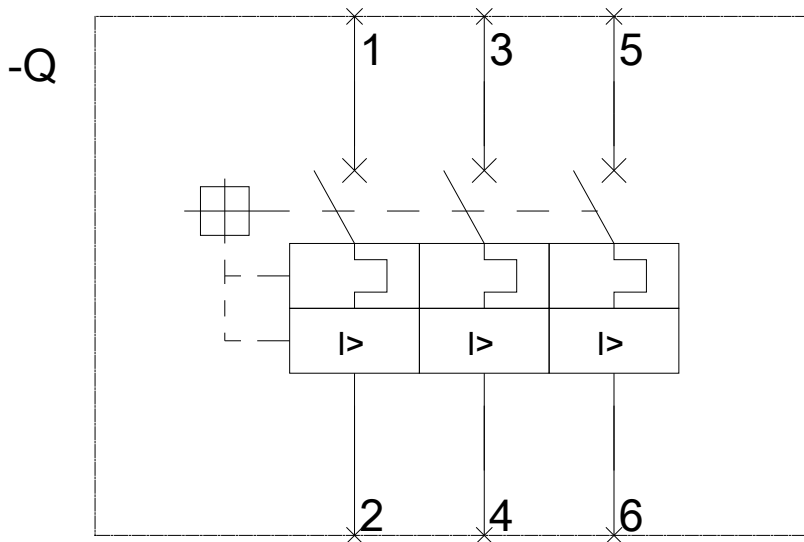
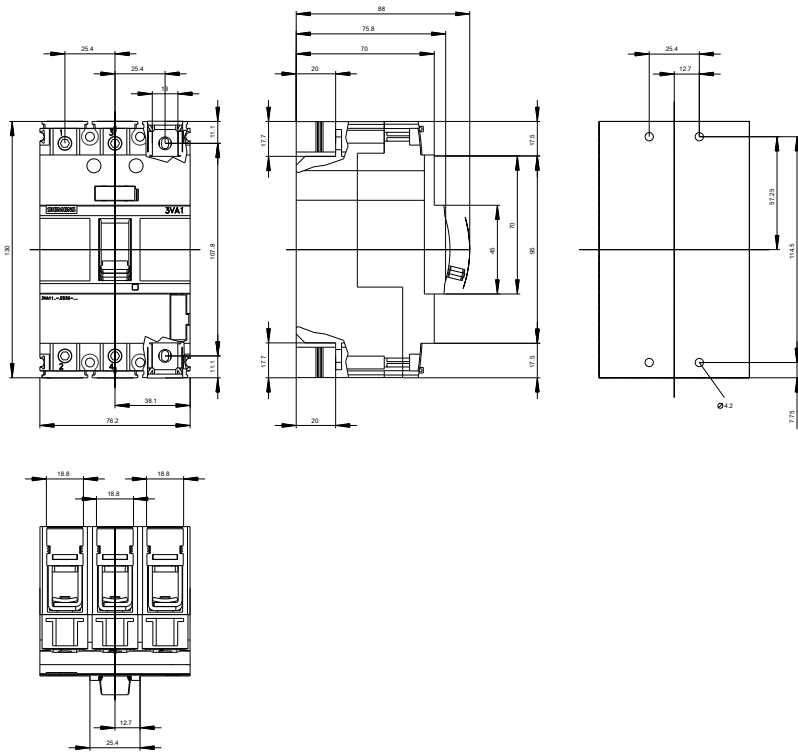
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA11964ED360AA0

CAX-Online-Generator

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

Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>



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