



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=250A OVERLOAD PROTECTION IR=175A ...250A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL PROTECTION 1 BUSBAR CONNECTION

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		TM240
General technical data		
Number of poles		4
Trip class / of the L-trip / with I <sup>2</sup> t characteristic / initial value		1
Trip class / of the L-trip / with I <sup>2</sup> t characteristic / Full-scale value		1
Total disconnection time / for G-tripping / with standard characteristic / initial value	s	0
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	s	0
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

<b>Protective function of the overcurrent release</b>		LI
<b>Switching capacity</b>		
<b>Switching capacity class of the circuit breaker</b>		S
<b>Dissipation</b>		
<b>Active power loss</b>		
• maximum	W	57
<b>Electricity</b>		
<b>Continuous current / Rated value / maximum</b>	A	250
Continuous current / Rated value	A	250
<b>Main circuit</b>		
<b>Operating voltage</b>		
• with AC / at 50/60 Hz / Rated value	V	690
• for DC / Rated value	V	600
<b>Operating current</b>		
• at 40 °C / Rated value	A	250
• at 50 °C / Rated value	A	250
• at 55 °C / Rated value	A	243.3
• at 60 °C / Rated value	A	236.5
• at 65 °C / Rated value	A	229.8
• at 70 °C / Rated value	A	223
<b>Auxiliary circuit</b>		
Number of CO contacts / for auxiliary contacts		0
<b>Suitability</b>		
<b>Suitability for use</b>		system protection
<b>Adjustable parameters</b>		
<b>Adjustable response value current</b>		
• for G-tripping / with I2t characteristic / initial value	A	0
• for G-tripping / with I2t characteristic / Full-scale value	A	0
<b>Adjustable delay time</b>		
• for G-tripping / with I2t characteristic / initial value	s	0
• for G-tripping / with I2t characteristic / Full-scale value	s	0
<b>Adjustable response value current / of the current-dependent overload release / initial value</b>	A	250
<b>Product details</b>		
<b>Product component</b>		
• Trip indicator		No

• display		No
• undervoltage release		No
<b>Product property</b>		
• of the circuit breaker with tripping unit / Tripping characteristic adjustable		No
• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof		No
Product expansion / optional / motor drive		Yes

### Product function

<b>Product function</b>		
• Intrinsic device protection		Yes
• communication function		No
• other measurement function		No

### Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 690 V / Rated value	kA	5
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 690 V / Rated value	kA	7
<b>Short-circuit current making capacity (Icm)</b>		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 440 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	11.9

### Connections

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

### Mechanical Design

<b>Height</b>	mm	158
<b>Width</b>	mm	140
<b>Depth</b>	mm	70
<b>Mounting type</b>		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	Declaration of Conformity	Test Certificates	other
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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/3VA12254GF420AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA12254GF420AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA12254GF420AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA12254GF420AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



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