SIEMENS

Datasheet

3VA1040-4ED42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=40A OVERLOAD PROTECTION IR=40A FIXED SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED BUSBAR 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 auxiliary release	Without auxiliary release	
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	TM210	

General technical data			
Number of poles		4	
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)			
• at AC-1 / at 380/415 V / at 50/60 Hz		8 000	
circuit-breaker / Design		3VA	
Mechanical service life (switching cycles) / typical		15 000	

Voltage		
Insulation voltage		
Rated value	V	800

Active power loss • maximum W 10.8 **Tectricity Operating current / at 45 °C / Rated value	Protection class		
Switching capacity class of the circuit breaker Sissipation Active power loss • maximum W 10.8 Secretary Operating current / at 45 °C / Rated value • Continuous current / Rated value / maximum • Rated value • Rated value • A 40 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the full-scale value • of the full-scale value • of the current dependent overload release / Full-scale value • of the current-dependent overload release / Full-scale value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • with AC / at 50/60 Hz / Rated value • with AC / at 50/60 Hz / Rated value • of the C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated va	Protective function of the overcurrent release		LI
Switching capacity class of the circuit breaker Sissipation Active power loss • maximum W 10.8 Secretary Operating current / at 45 °C / Rated value • Continuous current / Rated value / maximum • Rated value • Rated value • A 40 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the full-scale value • of the full-scale value • of the current dependent overload release / Full-scale value • of the current-dependent overload release / Full-scale value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • of the current-dependent overload release / initial value • with AC / at 50/60 Hz / Rated value • with AC / at 50/60 Hz / Rated value • of the C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated va	Switching canacity		
Active power loss • maximum W 10.8 Tectricity Operating current / at 45 °C / Rated value			S
Active power loss • maximum W 10.8 **Tectricity Operating current / at 45 °C / Rated value			
Tectricity Operating current / at 45 °C / Rated value	Dissipation		
Continuous current / at 45 °C / Rated value	·		10.0
Operating current / at 45 °C / Rated value A 100 Continuous current • Rated value A 40 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / Initial value • of the instantaneous short-circuit release / Initial value Net weight Operating voltage • with AC / at 50/60 Hz / Rated value • of p DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 838 • at 70 °C / Rated value • at 838 • at 70 °C / Rated value • at 838 • at 838 • at 70 °C / Rated value • at 838 • at 838	• maximum	W	10.8
Continuous current / Rated value / maximum • Rated value A 40 Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the instantaneous short-circuit release / initial value • of the original value Net weight Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • of DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 67 °C / Rated value • at 68 °C / Rated value • at 67 °C / Rated value • at 67 °C / Rated value • at 68 °C / Rated value • at 68 °C / Rated value • at 69 °C / Rated value • at 60 °C / Rated v	Electricity		
Continuous current Rated value Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Operating voltage owith AC / at 50/60 Hz / Rated value of DC / Rated value value Operating current outlease	Operating current / at 45 °C / Rated value	А	40
Rated value Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Departing voltage with AC / at 50/60 Hz / Rated value of the V 690 for DC / Rated value at 40 °C / Rated value at 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 68 °C / Rated value at 69 °C / Rated value at 69 °C / Rated value at 60 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 68 °C / Rated value at 69 °C / Rated value be at 60 °C / Rated value be at 70 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 70 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 70 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value be at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Ra	Continuous current / Rated value / maximum	Α	100
Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value Net weight Operating voltage with AC / at 50/60 Hz / Rated value of r DC / Rated value value V 690 Operating current at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value be at 65 °C / Rated value be at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value at 70 °C / Rated value be at 70 °C / Rated value be at 70 °C / Rated value be at 70 °C / Rated value currents	Continuous current		
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of the instantaneous short-circuit release / initial value Net weight g 1 200 Main circuit Operating voltage with AC / at 50/60 Hz / Rated value v 690 for DC / Rated value v 600 Operating current at 40 °C / Rated value at 55 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value at 80 °	 of the current-dependent overload release / 	Α	1
Net weight g	Full-scale value		
Net weight g	• of the instantaneous short-circuit release / initial	Α	10
Asin circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 70 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value			
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 with AC / at 50/60 Hz / Rated value for DC / Rated value Operating current at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 70 °C /	Main circuit		
for DC / Rated value or at 40 °C / Rated value at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value A 39 at 65 °C / Rated value A 38 at 70 °C / Rated value A 37 Auxiliary circuit Number of CO contacts or auxiliary contacts or suitability Suitability for use Sustability Sustability system protection	Operating voltage		
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at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value A 39 at 60 °C / Rated value A 39 at 65 °C / Rated value A 38 at 70 °C / Rated value A 37 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability for use A 40 A 39 A 39 A 39 A 38 A 38 A 37 Auxiliary circuit Suitability Suitability for use System protection	• for DC / Rated value	V	600
at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value A 39 at 60 °C / Rated value A 38 at 70 °C / Rated value A 37 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability for use system protection	Operating current		
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at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 38 at 70 °C / Rated value A 37 Auxiliary circuit Number of CO contacts at for auxiliary contacts Suitability Suitability for use System protection	• at 50 °C / Rated value	Α	40
at 65 °C / Rated value at 70 °C / Rated value A 38 Auxiliary circuit Number of CO contacts for auxiliary contacts Suitability Suitability for use System protection	• at 55 °C / Rated value	Α	39
at 70 °C / Rated value Auxiliary circuit Number of CO contacts of rauxiliary contacts Suitability Suitability for use A 37 Auxiliary circuit O Suitability Suitability for use	• at 60 °C / Rated value	Α	39
Auxiliary circuit Number of CO contacts • for auxiliary contacts 0 Suitability • Suitability for use system protection	• at 65 °C / Rated value	Α	38
Number of CO contacts • for auxiliary contacts 0 Suitability • Suitability for use system protection	• at 70 °C / Rated value	Α	37
Number of CO contacts • for auxiliary contacts 0 Suitability • Suitability for use system protection	Auviliany circuit		
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Suitability ■ Suitability for use system protection			0
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diustable parameters	■ Suitability for use		system protection
	Adjustable parameters		
Adjustable response value current			
• of I-trip / Full-scale value A 10	● of I-trip / Full-scale value	Α	10
• for N-conductor protection / initial value A 0	• for N-conductor protection / initial value	Α	0
• for N-conductor protection / Full-scale value A 0	• for N-conductor protection / Full-scale value	A	0

Adjustable response value current / of the current- dependent overload release / initial value	Α	1
Appearance		
Product details		
Product component		
Trip indicator		No
● display		No
 Voltage trigger 		No
undervoltage release		No
 undervoltage release with leading contact 		No
Product property		
 for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof 		No
Product expansion		
optional		
— motor drive		No
Product function		
Product function		
 Intrinsic device protection 		Yes
 communication function 		No
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1040-4ED42-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)	kA	55
• at 240 V / Rated value	kA	
at 415 V / Rated value		36
at 440 V / Rated value	kΑ	25
at 500 V / Rated value	kA kA	15
at 690 V / Rated value Movimum short circuit surrent breaking conceits (lov)	kA	5
Maximum short-circuit current breaking capacity (Icu)	kΛ	55
• at 240 V / Rated value	kA kA	55
at 415 V / Rated value	kΑ	36
• at 440 V / Rated value	kA kA	25
at 500 V / Rated value	kA IsA	16
at 690 V / Rated value	kA	7
Short-circuit current making capacity (lcm)		

• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	11.9

Connections			
Arrangement of electrical connectors			
• for main current circuit	Front terminal		
Type of connectable conductor cross-section			
• for flat-bar terminal connection / minimum	12 x 0		
• for flat-bar terminal connection / maximum	17 x 6.5		
Design of the electrical connection			
• for main current circuit	Lug terminal		

Mechanical Design			
Height	mm	130	
Width	mm	101.6	
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		
Reference code		
• acc. to DIN EN 61346-2		Q
• acc. to DIN FN 81346-2		Q

General Product	Approval	EMC	Declaration of Conformity	Shipping Approval	other	
		other			other	







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/3VA10404ED420AA0

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

http://support.automation.siemens.com/WW/view/en/3VA10404ED420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA10404ED420AA0

Tender specifications http://ausschreibungstexte.siemens.com/tiplv

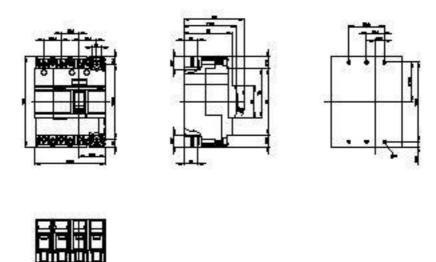


Figure similar

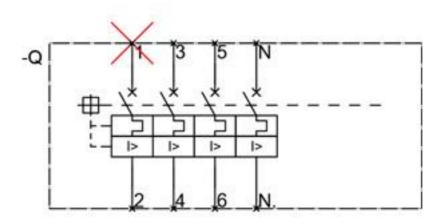


Figure similar

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