SIEMENS

Data sheet

3VA2450-5JQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION ETU560, LSIG, IN=500A OVERLOAD PROTECTION IR=200A ...500A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..14X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) GROUND-FAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,05-0,8MS BUSBAR CONNECTION

Figure similar

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 + N 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		4	
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		20	
Electrical endurance (switching cycles)			
• at AC-1 / at 380/415 V / at 50/60 Hz		4 000	
Total disconnection time / for G-tripping / with	S	0.05	
standard characteristic / initial value			
Total disconnection time / for G-tripping / with	S	0.8	
standard characteristic / Full-scale value			
circuit-breaker / Design		3VA	
Mechanical service life (switching cycles) / typical		15 000	

Voltage Insulation voltage / Rated value		
	V	800
Distoction close	_	
Protection class Protection class IP		IP40
Protection class IP / on the front	-	IP40
Protective function of the overcurrent release	_	LSIG
	_	
Switching capacity Switching capacity class of the circuit breaker	_	M
		IVI
Dissipation		
Active power loss		
• maximum	W	105
Electricity		
Continuous current / Rated value / maximum	А	630
Continuous current / Rated value	А	500
Adjustable response value current / of the	А	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	А	500
• at 50 °C / Rated value	А	500
• at 60 °C / Rated value	А	475
 at 65 °C / Rated value 	А	460
● at 70 °C / Rated value	А	440
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
• for G-tripping / with I2t characteristic / initial	А	0.2
value		
 for G-tripping / with I2t characteristic / Full-scale value 	A	1
 for G-tripping / with standard characteristic / initial value 	A	0.2
 for G-tripping / with standard characteristic / Full-scale value 	A	1

 of I-trip / Full-scale value 	А	13
 of the short-time delayed short-circuit release / initial value 	A	0.6
 of the short-time delayed short-circuit release / Full-scale value 	A	10
 of S-trip / with standard characteristic / initial value 	A	0.6
 of S-trip / with standard characteristic / Full- scale value 	A	10
• for N-conductor protection / initial value	А	0.2
• for N-conductor protection / Full-scale value	A	1
Adjustable delay time		
 for G-tripping / with I2t characteristic / initial value 	S	0.05
 for G-tripping / with I2t characteristic / Full-scale value 	S	0.8
• of S-trip / with I2t characteristic / initial value	S	0.05
 of S-trip / with I2t characteristic / Full-scale value 	S	0.5
 of S-trip / with standard characteristic / initial value 	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		
 of the circuit breaker with tripping unit / Tripping characteristic adjustable 		No
 for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof 		No
Product expansion / optional / motor drive		Yes
Product function		
Product function		
 Intrinsic device protection 		Yes
• communication function		Yes
Phase failure detection		No
 other measurement function 		No

ccessories		
Manufacturer article number / of the supplied basic		3VA2450-5JQ42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• at 240 V / Rated value	kA	85
• at 415 V / Rated value	kA	55
• at 690 V / Rated value	kA	6
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	85
• at 415 V / Rated value	kA	55
• at 690 V / Rated value	kA	6
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	187
• at 415 V / Rated value	kA	121
• at 690 V / Rated value	kA	9
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		
 for flat-bar terminal connection / minimum 		20 x 1
 for flat-bar terminal connection / maximum 		35 x 10
Type of electrical connection / for main current circuit		Lug terminal
lechanical Design		
Height	mm	248
Width	mm	184
Depth	mm	137
Mounting type		fixed mounting
nvironmental conditions	_	
Ambient temperature	° C	25
• 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 Proc	luct Approval	EMC	Declaration of Conformity	other
UDE VDE	EHC	other	EG-Konf.	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/3VA24505JQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA24505JQ420AA0/all

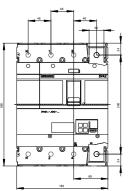
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA24505JQ420AA0

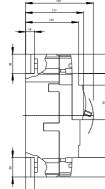
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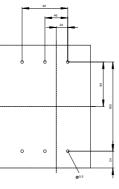
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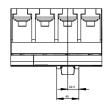
Tender specifications

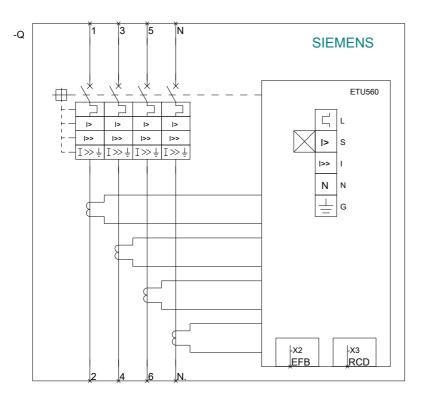
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