SIEMENS

Data sheet

3VA2450-6KP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4-POLE, LINE PROTECTION ETU850, LSI, 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%) 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	Without				
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	ETU850				

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		
circuit-breaker / Design		3VA		
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		LSI
Switching capacity		
Switching capacity class of the circuit breaker		н
D: 1.12		
Dissipation Active power loss		
• maximum	W	105
· maximum		1.00
Electricity		
Continuous current / Rated value / maximum	A	630
Continuous current / Rated value	Α	500
Adjustable response value current / of the instantaneous short-circuit release / initial value	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	500
• at 50 °C / Rated value	Α	500
• at 60 °C / Rated value	Α	475
• at 65 °C / Rated value	Α	460
• at 70 °C / Rated value	Α	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		
of I-trip / Full-scale value	Α	13
of the short-time delayed short-circuit release /	Α	0.6
initial value		
• of the short-time delayed short-circuit release / Full-scale value	Α	10
• of S-trip / with standard characteristic / initial value	Α	0.6
 of S-trip / with standard characteristic / Full- scale value 	Α	10
• for N-conductor protection / initial value	Α	20
• for N-conductor protection / Full-scale value	Α	100

Adjustable delay time		
of S-trip / with I2t characteristic / initial value	S	0.05
of S-trip / with I2t characteristic / Full-scale	S	0.5
value		
• of S-trip / with standard characteristic / initial	s	0.05
value		
• of S-trip / with standard characteristic / Full-	s	0.5
scale value		
Adjustable response value current / of the current-	Α	0.4
dependent overload release / initial value		
Product details		
Product component		
Trip indicator		No
● display		Yes
undervoltage release		No
Product property		
for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		
overload proof		
Product expansion / optional / motor drive		Yes
Product function		
Product function		
 Intrinsic device protection 		Yes
 communication function 		Yes
 Phase failure detection 		No
 other measurement function 		Yes
Accessories		
Manufacturer article number / of the supplied basic		3VA2450-6KP42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
• at 690 V / Rated value	kA	6
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
• at 690 V / Rated value	kA	6
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	242
• at 415 V / Rated value	kA	187

Connections				
Arrangement of electrical connectors / for main current circuit		Front terminal		
Type of connectable conductor cross-section				
 for flat-bar terminal connection / minimum 	2	20 x 1		
• for flat-bar terminal connection / maximum	:	35 x 10		
Type of electrical connection / for main current circuit	ı	Lug terminal		

Mechanical Design					
Height	248				
Width	mm	184			
Depth	mm	137			
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		
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General Product Approval		EMC	Declaration of Conformity	other	
^		other		other	







other

Further information

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

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

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA24506KP420AA0}}$

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

http://support.automation.siemens.com/WW/view/en/3VA24506KP420AA0/all

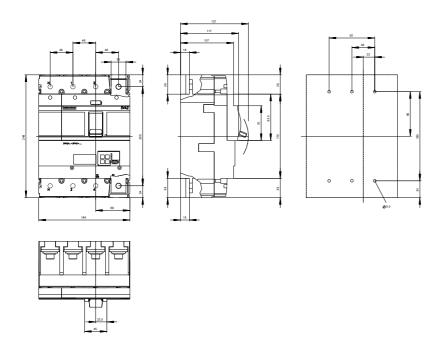
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA24506KP420AA0

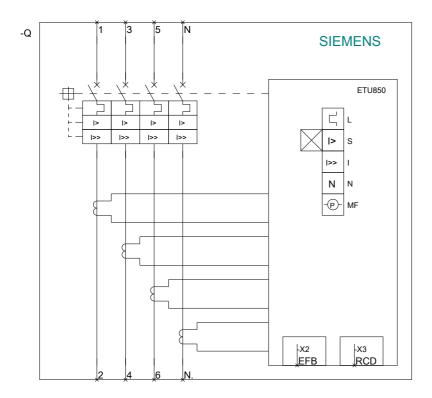
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015