SIEMENS

Data sheet

3VA1140-3EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=40A OVERLOAD PROTECTION IR=28A ...40A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED 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 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	TM240

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

Protection class

Protection class IP / on the front Protective function of the overcurrent release LI Switching capacity Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value	
Switching capacity Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A Continuous current / Rated value A A Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial A	
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 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 A 5	
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 10.8 Electricity Continuous current / Rated value / maximum A 160 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 A 5	
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Active power loss • maximum Maximum Warman 10.8 Electricity Continuous current / Rated value / maximum Aa 160 Continuous current / Rated value Aa 40 Adjustable response value current • of the current-dependent overload release / Aaa 1 Full-scale value • of the instantaneous short-circuit release / initial Aaa 5	
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 of the current-dependent overload release / A Full-scale value of the instantaneous short-circuit release / initial A 5 	
Full-scale value • of the instantaneous short-circuit release / initial A 5	
value	
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 A 40	
at 50 °C / Rated value A 40	
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 0	
Suitability	
Suitability for use system protection	
Adjustable parameters	
Adjustable response value current	
● of I-trip / Full-scale value A 10	
• for N-conductor protection / initial value A 0	
• for N-conductor protection / Full-scale value A 0	
Adjustable response value current / of the current- A 0.7 dependent overload release / initial value	
Product details	
Product component	

		N
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		Yes
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		3VA1140-3EF46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	75.6
• at 415 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		

• of the round condu	uctor terminal / stra	anded			1 x (1.5 - 70 mm²)	
Type of electrical conne	ection / for main cu	rrent circuit			Box terminal	
Mechanical Design						
Height			mm		130	
Width	Width		mm		101.6	
Depth			mm		70	
Mounting type					fixed mounting	
Environmental condition	Environmental conditions					
Ambient temperature						
during operation /	minimum		°C		-25	
during operation / maximum		°C		70		
during storage / m	ninimum		°C		-40	
during storage / maximum		°C		80		
Certificates						
Equipment marking						
• acc. to DIN EN 61346-2				Q		
• acc. to DIN EN 81	• acc. to DIN EN 81346-2				Q	
General E	EMC	Declaration of Shi		Ship	pping Approval	other

Further information

Product

Approval

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

other

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

Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11403EF460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11403EF460AA0/all

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

Conformity

EG-Konf.

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11403EF460AA0

CAx-Online-Generator

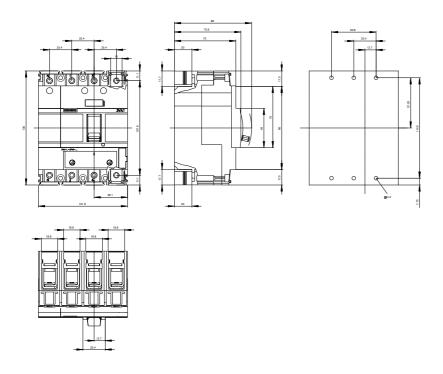
http://www.siemens.com/cax

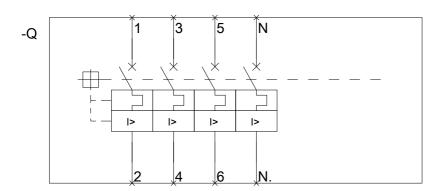
Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

other

GL





last modified: 11.03.2015