# **SIEMENS**

## **Datasheet**

## 3VA1140-6EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=40A OVERLOAD PROTECTION IR=28A ...40A SHORT CIRCUIT PROTECTION II=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	TM220			

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		
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		Н
Dissipation		
Active power loss	\A/	40.0
• maximum	W	10.8
Electricity		
Operating current / at 45 °C / Rated value	Α	40
Continuous current / Rated value / maximum	Α	160
Continuous current		
Rated value	Α	40
Adjustable response value current		
• of the current-dependent overload release /	Α	1
Full-scale value		
• of the instantaneous short-circuit release / initial	Α	10
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	Α	40
• at 50 °C / Rated value	Α	40
• at 55 °C / Rated value	Α	39
• at 60 °C / Rated value	Α	39
• at 65 °C / Rated value	Α	38
• at 70 °C / Rated value	Α	37
Auxiliary circuit		
Number of CO contacts		
for auxiliary contacts		0
•		
Suitability  Suitability		system protection
Suitability for use		System protection
Adjustable parameters		
Adjustable response value current		
Adjustable response value current  • of I-trip / Full-scale value	Α	10
	A A	10 0

Adjustable response value current / of the current- dependent overload release / initial value	Α	0.7
Appearance		
Product details		
Product component		
Trip indicator		No
● display		No
<ul> <li>Voltage trigger</li> </ul>		No
<ul> <li>undervoltage release</li> </ul>		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property		
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		No
Product expansion		
<ul><li>optional</li></ul>		
— motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
communication function		No
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1140-6EE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
● at 240 V / Rated value	kA	100
● at 415 V / Rated value	kA	70
● at 440 V / Rated value	kA	36
● at 500 V / Rated value	kA	15
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	100
• at 415 V / Rated value	kA	70
• at 440 V / Rated value	kA	36
• at 500 V / Rated value	kA	20
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	220
• at 415 V / Rated value	kA	154
• at 690 V / Rated value	kA	17

Connections				
Arrangement of electrical connectors				
• for main current circuit	Front terminal			
Type of connectable conductor cross-section				
<ul> <li>of the round conductor terminal / stranded</li> </ul>	1 x (1.5 - 70 mm²)			
Design of the electrical connection				
• for main current circuit	Box terminal			

Mechanical Design					
Height	mm	130			
Width	mm	101.6			
Depth	mm	70			
Mounting type		fixed mounting			

Environmental conditions					
Ambient temperature					
<ul><li>during operation / minimum</li></ul>	°C	-25			
<ul><li>during operation / maximum</li></ul>	°C	70			
<ul><li>during storage / minimum</li></ul>	°C	-40			
<ul><li>during storage / maximum</li></ul>	°C	80			

Certificates						
	Reference code					
	● acc. to DIN EN 61346-2			Q		
	• acc. to DIN EN 81346-2			Q		

General Product	EMC	Declaration of Conformity	Shipping Approval	other
Approval		Comoning	, pp. 6 va.	
	other			other







other

## 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/3VA11406EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11406EE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11406EE460AA0

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

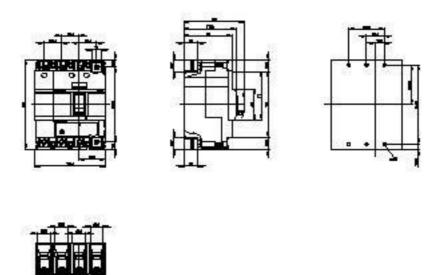


Figure similar

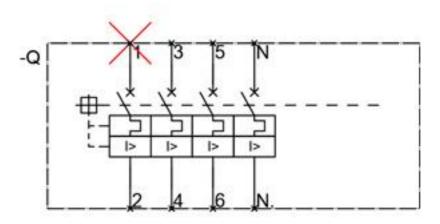


Figure similar

**last modified:** 21.10.2014