SIEMENS

Data sheet

3VA1125-4EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=25A OVERLOAD PROTECTION IR=17,5A ...25A SHORT CIRCUIT PROTECTION II=12,8 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	_	1
value		
Trip class / of the L-trip / with I2t characteristic / Full-		1
scale value		
Mechanical service life (switching cycles) / typical		15 000
Voltage		
Insulation voltage / Rated value	V	800
Destrution along		
Protection class		ID40
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LI

Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 8.5 Electricity Continuous current / Rated value / maximum	Switching capacity		
Active power loss • maximum Maximum Was.5	Switching capacity class of the circuit breaker		S
Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 25 Adjustable response value current • of the current-dependent overload release / Full-scale value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at	Dissipation		
Continuous current / Rated value / maximum			
Continuous current / Rated value / maximum	• maximum	W	8.5
Continuous current / Rated value Adjustable response value current of the current-dependent overload release / Full-scale value Main circuit Operating voltage with AC / at 50/60 Hz / Rated value of ro DC / Rated value V 690 for DC / Rated value of ro DC / Rated value A 25 at 50 °C / Rated value at 50 °C / Rated value A 25 at 60 °C / Rated value A 24 at 65 °C / Rated value A 23 at 65 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Sultability for use Adjustable parameters Adjustable parameters Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of N-conductor protection / initial value of ro N-conductor protection / initial value of ro N-conductor protection / for the current-dependent overload release / initial value Product details Product details Product details Product component of the current-dependent overload release / initial value Trip indicator			
Adjustable response value current of the current-dependent overload release / Full-scale value Main circuit Operating voltage with AC / at 50/60 Hz / Rated value of the CV / Rated value V 690 Operating current at 40 °C / Rated value A 25 at 50 °C / Rated value A 25 at 60 °C / Rated value A 24 at 60 °C / Rated value A 23 at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of S-trip / with standard characteristic / Full-scale value of N-conductor protection / Full-scale value of N-conductor protection / Full-scale value Adjustable response value current / O Adjustable response value current / Of the current-dependent overload release / initial value For N-conductor protection / Full-scale value Product details Product details Product component • Trip indicator	Continuous current / Rated value / maximum	Α	160
of the current-dependent overload release / Full-scale value Main circuit Operating voltage with AC / at 50/60 Hz / Rated value v 690 vith AC / at 50/60 Hz / Rated value v 690 Operating current at 40 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 70 °C / Rate	Continuous current / Rated value	Α	25
Main circuit Operating voltage • 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 65 °C / Rated value • at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability Suitabile response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	Adjustable response value current		
Main circuit Operating voltage • 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 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current • of 5-trip / with standard characteristic / Full-scale value • for N-conductor protection / Full-	·	Α	25
Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value Operating current • at 40 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	Full-scale value		
with AC / at 50/60 Hz / Rated value for DC / Rated value V 600 Operating current at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 66 °C / Rated value at 66 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 67 °C / Rated value at 68 °C / Rated value at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of N-conductor protection / initial value of or N-conductor protection / Full-scale value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator	Main circuit		
• for DC / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 55 °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 • at 70 °C / Rated value • at 70 °C / Rated	Operating voltage		
Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °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 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator No	with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value at 50 °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 70 °C / Rated value at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / Full-scale value Adjustable response value current / A Adjustable response value current / A Adjustable response value current / Of the current-dependent overload release / initial value Product details Product component Trip indicator	• for DC / Rated value	V	600
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 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / Full-scale value A 0 Adjustable response value current / for normal for normal value for N-conductor protection / Full-scale value A 18 Product details Product component Trip indicator	Operating current		
at 55 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of for N-conductor protection / Initial value of for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component of Trip indicator A 24 24 24 24 24 24 24 24 24 24	• at 40 °C / Rated value	Α	25
at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 23 at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability for use Suitabile parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / O of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / Full-scale value A 18 Product details Product component of Trip indicator	• at 50 °C / Rated value	Α	25
at 65 °C / Rated value at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of S-trip / with standard characteristic / Full-scale value for N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator	• at 55 °C / Rated value	Α	24
at 70 °C / Rated value A 23 Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator	• at 60 °C / Rated value	Α	24
Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	• at 65 °C / Rated value	Α	23
Number of CO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	● at 70 °C / Rated value	Α	23
Suitability Suitability for use Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	Auxiliary circuit		
Suitability for use Adjustable parameters Adjustable response value current • of S-trip / with standard characteristic / initial value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator	Number of CO contacts / for auxiliary contacts		0
Adjustable parameters Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component of Trip indicator	Suitability		
Adjustable response value current of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator	Suitability for use		system protection
of S-trip / with standard characteristic / initial value of S-trip / with standard characteristic / Full-scale value of N-conductor protection / initial value of N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator No	Adjustable parameters		
value • of S-trip / with standard characteristic / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator No	Adjustable response value current		
scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator No	·	Α	250
• for N-conductor protection / Full-scale value A 0 Adjustable response value current / of the current- dependent overload release / initial value Product details Product component • Trip indicator No	·	Α	250
Adjustable response value current / of the current- dependent overload release / initial value Product details Product component • Trip indicator No	• for N-conductor protection / initial value	Α	0
Product details Product component Trip indicator No	• for N-conductor protection / Full-scale value	Α	0
Product component ● Trip indicator No	•	Α	18
• Trip indicator No	Product details		
P - 1 - 1 - 1	Product component		
• display No	Trip indicator		No
	• display		No

 Voltage trigger 		No
undervoltage release		No
 undervoltage release with leading contact 		No
Product property		
for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		
overload proof		V
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		3VA1125-4EE46-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• 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	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	16
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 440 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5
Connections		Front terminal
Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		
 of the round conductor terminal / stranded 		1 x (1.5 - 70 mm²)

Type of electrical connection / for main curren	t circuit		Box terminal	
Mechanical Design				
Height	m	nm	130	
Width	m	nm	101.6	
Depth	m	nm	70	
Mounting type			fixed mounting	ng
Net weight	9		1 200	
Environmental conditions				
Ambient temperature				
during operation / minimum	°(С	-25	
during operation / maximum	°(С	70	
during storage / minimum	°(С	-40	
during storage / maximum	°(С	80	
Certificates				
Equipment marking				
• acc. to DIN EN 61346-2			Q	
● acc. to DIN EN 81346-2			Q	
	eclaration of onformity		t tificates	Shipping Approval

Shipping Approval	other	
Lloyd's Register	other	

Type Test

Certificates/Test Report

Further information

LRS

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/3VA11254EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11254EE460AA0/all

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

EG-Konf.

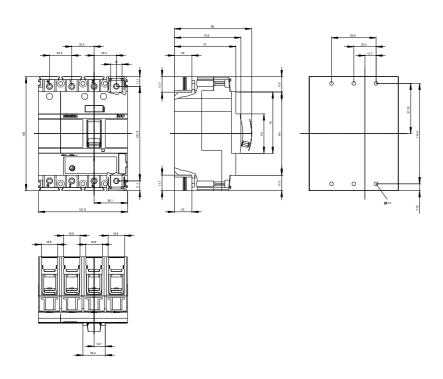
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11254EE460AA0

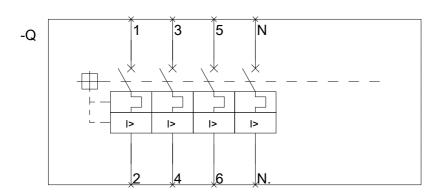
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