# **SIEMENS**

### Data sheet

### 3VA1125-3EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=25A OVERLOAD PROTECTION IR=17,5A ...25A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED CABLE CONNECTION

Figure similar

Model		
product brand name	SENTRON	
Product designation	Molded case circuit brea	aker
Design of the product	Line protection	
Product variations	General Applications	
Ground fault monitoring version	Without	
Design of the auxiliary release	Without auxiliary release	е
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	

Caracinal table in all data				
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  Active power loss • active loss • acti						
Switching capacity  Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 8.5  Electricity  Continuous current / Rated value / maximum  A 160  Continuous current / Rated value  • of the current-dependent overload release / Full-scale value  • of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  • 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 70 °C / Rated va						
Switching capacity class of the circuit breaker  Dissipation Active power loss  • maximum  W 8.5  Electricity  Continuous current / Rated value / maximum						
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   Maxi						
maximum      W 8.5  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      of the instantaneous short-circuit release / initial 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 25      at 55 °C / Rated value A 25      at 55 °C / Rated value A 24      at 60 °C / Rated value A 24      at 65 °C / Rated value A 23      at 70 °C / Rated value A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts 0  Suitability  Suitability for use system protection						
Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 25  Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  with AC / at 50/60 Hz / Rated value  of or DC / Rated value  V 690  Operating current  of at 40 °C / Rated value  A 25  at 50 °C / Rated value  A 25  at 50 °C / Rated value  A 24  at 60 °C / Rated value  A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Output Defension of Contacts /						
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  • of the instantaneous short-circuit release / initial 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 25  • at 50 °C / Rated value A 25  • at 60 °C / Rated value A 24  • at 60 °C / Rated value A 23  • at 60 °C / Rated value A 23  • at 70 °C / Rated value A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Output Department A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Output Department A 23  Suitability For use system protection						
Continuous current / Rated value  Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  with AC / at 50/60 Hz / Rated value  of to DC / Rated value  V 600  Operating current  at 40 °C / Rated value  A 25  at 50 °C / Rated value  at 60 °C / Rated value  state of the current-dependent overload release / A  at 60 °C / Rated value  at 70 °C / Rated value  at 70 °C / Rated value  state of the current-dependent overload release / A  at 70 °C / Rated value  Duriting circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use						
Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  with AC / at 50/60 Hz / Rated value  of tor DC / Rated value  very 690  Operating current  at 40 °C / Rated value  A 25  at 50 °C / Rated value  at 60 °C / Rated value  at 65 °C / Rated value  at 67 °C / Rated value  at 67 °C / Rated value  at 68 °C / Rated value  at 67 °C / Rated value  at 68 °C / Rated value  at 68 °C / Rated value  at 70 °C / Rated value  stated value  at 70 °C / Rated value  stated value  at 70 °C / Rated value  stated value  stated value  at 82  at 70 °C / Rated value  stated value						
of the current-dependent overload release / Full-scale value     of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage     with AC / at 50/60 Hz / Rated value     of ro DC / Rated value     of ro DC / Rated value     at 40 °C / Rated value     at 50 °C / Rated value     at 60 °C / Rated value     substitution of CO contacts / for auxiliary contacts  O  Suitability  Suitability for use						
Full-scale value  • of the instantaneous short-circuit release / initial value  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 50 °C / Rated value  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 60 °C / Rated value  • at 67 °C / Rated value  • at 67 °C / Rated value  • at 68 °C / Rated value  • at 65 °C / Rated value  • at 55 °C / Rated value  • at						
Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  V 690  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  A 25  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  A 24  • at 65 °C / Rated value  A 23  • at 70 °C / Rated value  A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability for use						
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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  system protection						
at 65 °C / Rated value     at 70 °C / Rated value  A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  system protection						
at 70 °C / Rated value  A 23  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  system protection						
Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use system protection						
Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use system protection						
Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use system protection						
Suitability for use system protection						
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- dependent overload release / initial value						
Product details						
Product component Product component						

		NI
Trip indicator		No
<ul><li>display</li></ul>		No
Voltage trigger		No
undervoltage release		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 / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA1125-3EF46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• 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 conductor	terminal / str	anded			1 x (1.5 - 70 mm²)	
Type of electrical connection	/ for main cu	rrent 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 / minir</li></ul>	num		°C		-25	
<ul><li>during operation / maxi</li></ul>	mum		°C		70	
• during storage / minimu	ım		°C		-40	
<ul><li>during storage / maxim</li></ul>	um		°C		80	
Certificates						
Equipment marking						
• acc. to DIN EN 61346-2	2				Q	
• acc. to DIN EN 81346-2	2				Q	
General EMC		Declaration	n of	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/3VA11253EF460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11253EF460AA0/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=3VA11253EF460AA0

**CAx-Online-Generator** 

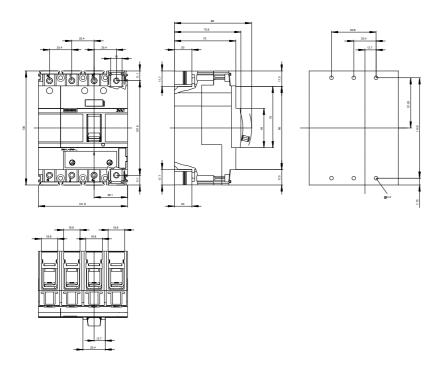
http://www.siemens.com/cax

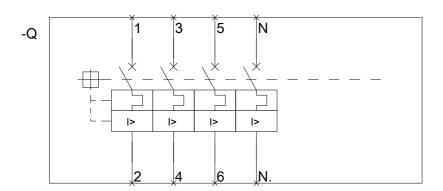
**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv

other

GL





last modified: 11.03.2015