# **SIEMENS**

#### Data sheet

### 3VA1125-3EF42-0AA0



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 BUSBAR CONNECTION

Figure similar

Model				
product brand name	SENTI	RON		
Product designation	Molde	d case circuit breaker		
Design of the product	Line p	rotection		
Product variations	Gener	al Applications		
Ground fault monitoring version	Withou	ut		
Design of the auxiliary release	Withou	ut auxiliary release		
Design of the auxiliary switch	Withou	ut		
Design of the operating mechanism	toggle	handle		
Type of the driving mechanism / motor drive	No			
Design of the overcurrent release	TM240	0		

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  8.5  Electricity  Continuous current / Rated value / maximum  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  V  690  Operating current  IP40  I IP40  I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
Switching capacity  Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W  8.5  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  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  V  690  V  600	
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  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  • for DC / Rated value  V 690  V 600	
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  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  • for DC / Rated value  V 690  V 600	
Active power loss  • maximum    W   8.5	
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 / A 1  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	
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  for DC / Rated value  V 690  of the instantaneous value  V 690  of the instantaneous value  V 690  of the instantaneous value  V 690	
Continuous current / Rated value / maximum A 160  Continuous current / Rated value A 25  Adjustable response value current  • of the current-dependent overload release / A 1  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  V 690  • for DC / Rated value	
Continuous current / Rated value  Adjustable response value current  of the current-dependent overload release / A	
Adjustable response value current  of the current-dependent overload release / A 1 Full-scale value of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage outline with AC / at 50/60 Hz / Rated value for DC / Rated value  V 690 outline with AC / At 50/60 Hz / Rated value V 690	
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  V 690  Operating voltage  Operat	
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  V 690  • 600	
Value     Main circuit     Operating voltage   ● with AC / at 50/60 Hz / Rated value V   ● for DC / Rated value V   690   ● for DC / Rated value V	
Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  V 690  V 600	
<ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>for DC / Rated value</li> <li>V</li> <li>690</li> <li>V</li> <li>600</li> </ul>	
• for DC / Rated value V 600	
.0, 20, 14,00	
Operating current	
at 40 °C / Rated value     A 25	
at 50 °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	
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	

		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		3VA1125-3EF42-0AA0
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		

• for flat-bar terminal connection / minimum	12 x 0
• for flat-bar terminal connection / maximum	17 x 6.5
Type of electrical connection / for main current circuit	Lug 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			

Equipment marking	
• acc. to DIN EN 61346-2	

Q • acc. to DIN EN 81346-2

General F	General Product Approval		Declaration of Conformity	Shipping Approval
		other		0 0

Q



Certificates









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/3VA11253EF420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11253EF420AA0/all

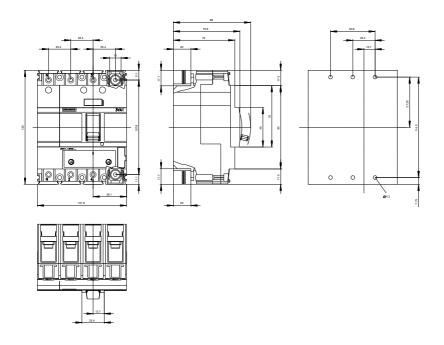
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11253EF420AA0

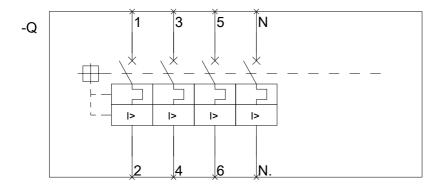
**CAx-Online-Generator** 

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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