# **SIEMENS**

## Data sheet

## 3VA2125-7HL46-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU320, LI, IN=25A OVERLOAD PROTECTION IR=10A ...25A SHORT CIRCUIT PROTECTION II=12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,100%) CABLE CONNECTION

Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Product variations	Selective Applications
Ground fault monitoring version	Without
Design of the auxiliary release	without auxiliaryrelease
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	ETU320
Consequence data	

General technical data	
Number of poles	4
Trip class / of the L-trip / with I2t characteristic / initial value	0.5
Trip class / of the L-trip / with I2t characteristic / Full-scale value	17
Electrical endurance (switching cycles)	
• at AC-1 / at 380/415 V / at 50/60 Hz	12 000
circuit-breaker / Design	3VA
Mechanical service life (switching cycles) / typical	20 000

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  C  Dissipation  Active power loss  • maximum  W  0.6  Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value / A 25 Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value A 25  • at 40 °C / Rated value A 25  • at 60 °C / Rated value A 25  • at 60 °C / Rated value A 25  • at 60 °C / Rated value A 25  • at 60 °C / Rated value A 25  • at 60 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25  • at 70 °C / Rated value A 25	
Switching capacity  Switching capacity class of the circuit breaker  C  Dissipation  Active power loss  • maximum  W  0.6  Electricity  Continuous current / Rated value / maximum  A  Continuous current / Rated value  A  A  A  A  A  A  A  A  A  A  A  A  A	
Switching capacity class of the circuit breaker  C  Dissipation  Active power loss  • maximum  W  0.6  Electricity  Continuous current / Rated value / maximum  A  Continuous current / Rated value  A  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • at 40 °C / Rated value  • at 40 °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  A  A  A  A  A  A  A  A  A  A  A  A	
Dissipation  Active power loss  • maximum  W 0.6  Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 25  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • at 40 °C / Rated value  • at 40 °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  • at 70 °C / Rated value  • A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
Active power loss  • maximum    M	
maximum     W 0.6  Electricity  Continuous current / Rated value / maximum    A 160  Continuous current / Rated value    A 25  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage      with AC / at 50/60 Hz / Rated value    V 690  Operating current      at 40 °C / Rated value	
Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 25  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  V 690  Operating current  • at 40 °C / Rated value  • at 50 °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 25  • at 70 °C / Rated value  A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
Continuous current / Rated value / maximum  Continuous current / Rated value  A 25  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  V 690  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
Continuous current / Rated value  Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  V 690  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
Adjustable response value current / of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  V 690  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 67 °C / Rated value  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  • at 70 °C / Rated value  A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
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Operating voltage  • with AC / at 50/60 Hz / Rated value  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  A 25  • at 65 °C / Rated value  A 25  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  O 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
<ul> <li>with AC / at 50/60 Hz / Rated value</li> <li>Operating current</li> <li>at 40 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>A 25</li> <li>Auxiliary circuit</li> <li>Number of NC contacts / for auxiliary contacts</li> <li>0</li> </ul>	
Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  A 25  • at 70 °C / Rated value  A 25  A 25  • at 70 °C / Rated value  Output   A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts	
<ul> <li>at 40 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 60 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 65 °C / Rated value</li> <li>at 70 °C / Rated value</li> <li>A 25</li> <li>Auxiliary circuit</li> <li>Number of NC contacts / for auxiliary contacts</li> <li>0</li> </ul>	
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at 60 °C / Rated value     at 65 °C / Rated value     at 70 °C / Rated value     A 25     at 70 °C / Rated value  A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts  0	
at 65 °C / Rated value     at 70 °C / Rated value     A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts  0	
at 70 °C / Rated value     A 25  Auxiliary circuit  Number of NC contacts / for auxiliary contacts  0	
Auxiliary circuit  Number of NC contacts / for auxiliary contacts  0	
Number of NC contacts / for auxiliary contacts 0	
Number of NO contacts (for conflict, contact	
Number of NO contacts / for auxiliary contacts 0	
Suitability	
Suitability for use system protection	
Adjustable parameters	
Adjustable response value current	
of I-trip / Full-scale value     A     12	
Adjustable response value current / of the current- A 0.4 dependent overload release / initial value	
Product details	
Product component	
• Trip indicator No	
• display No	
• undervoltage release No	
Product property	

• for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and overload proof		
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
• communication function		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic		3VA2125-7HL46-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
● at 240 V / Rated value	kA	150
● at 415 V / Rated value	kA	110
• at 440 V / Rated value	kA	110
● at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2.5
Maximum short-circuit current breaking capacity (Icu)	-	
● at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
• at 440 V / Rated value	kA	110
• at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2.5
Short-circuit current making capacity (lcm)		
• at 240 V / Rated value	kA	330
• at 415 V / Rated value	kA	242
• at 440 V / Rated value	kA	242
• at 500 V / Rated value	kA	187
• at 690 V / Rated value	kA	3.75
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		
of the round conductor terminal / stranded		1 x (6-120 mm²)
Type of electrical connection / for main current circuit		Box terminal
Mechanical Design		
Height	mm	181

Width	mm	140
Depth	mm	107
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		
Equipment marking		
● acc. to DIN EN 61346-2		Q

• acc. to DIN EN 81346-2 **General Product Approval** 





other

Q

**EMC** 



**Declaration of** 

Conformity



**Shipping** 

**Approval** 

Shipping	other
Approval	



GL

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/3VA21257HL460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21257HL460AA0/all

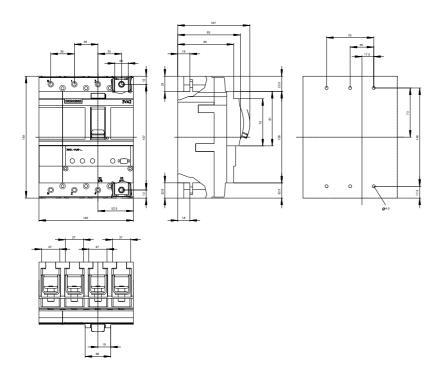
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21257HL460AA0

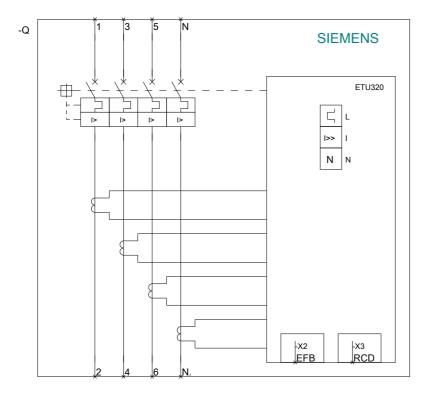
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015