## **SIEMENS**

## Data sheet

## 3VA1150-3EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=50A OVERLOAD PROTECTION IR=35A ...50A SHORT CIRCUIT PROTECTION II=5...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		TM240				
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		IP40	
Protection class IP / on the front	-	IP40	
Protective function of the overcurrent release	_	LI	
Quitching consoit (	_		
Switching capacity Switching capacity class of the circuit breaker	_	N	
Dissipation			
Active power loss	10/	44.0	
• maximum	W	14.6	
Electricity			
Continuous current / Rated value / maximum	А	160	
Continuous current / Rated value	А	50	
Adjustable response value current			
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	A	1	
• of the instantaneous short-circuit release / initial value	A	5	
Main circuit			
Operating voltage			
<ul> <li>with AC / at 50/60 Hz / Rated value</li> </ul>	V	690	
<ul> <li>for DC / Rated value</li> </ul>	V	600	
Operating current			
• at 40 °C / Rated value	А	50	
• at 50 °C / Rated value	А	50	
• at 55 °C / Rated value	А	49	
• at 60 °C / Rated value	А	48	
● at 65 °C / Rated value	А	46	
• at 70 °C / Rated value	А	45	
Auxiliary circuit			
Number of CO contacts / for auxiliary contacts		0	
Suitability			
Suitability for use		system protection	
Adjustable parameters			
Adjustable response value current			
<ul> <li>of I-trip / Full-scale value</li> </ul>	А	10	
<ul> <li>for N-conductor protection / initial value</li> </ul>	А	0	
<ul> <li>for N-conductor protection / Full-scale value</li> </ul>	А	0	
Adjustable response value current / of the current- dependent overload release / initial value	А	0.7	
Product details			
Product component			

• Trin indicator		No
Trip indicator		No
• display		
Voltage trigger		No
undervoltage release		No
undervoltage release with leading contact		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
<ul> <li>Phase failure detection</li> </ul>		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic switch		<u>3VA1150-3EF46-0AA0</u>
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• 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 current circuit		Front terminal

Type of connectable conductor cross-section

• of the round co	onductor terminal / str	anded		1 x (1.5 - 70 mm²)	
Type of electrical co	nnection / for main cu	urrent circuit		Box terminal	
Mechanical Design					
Height			mm	130	
Width			mm	101.6	
Depth			mm	70	
Mounting type				fixed mounting	
Environmental cond	litions				
Ambient temperature	9				
<ul> <li>during operation</li> </ul>	on / minimum		°C	-25	
<ul> <li>during operation</li> </ul>	on / maximum		°C	70	
<ul> <li>during storage</li> </ul>	/ minimum		°C	-40	
• during storage / maximum		°C	80		
Certificates					
Equipment marking					
• acc. to DIN EN 61346-2			Q		
<ul> <li>acc. to DIN EN</li> </ul>	81346-2			Q	
General Product Approval	EMC	Declaration Conformity		pping Approval	other
EHC	other	EG-Konf.			other

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs

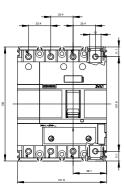
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11503EF460AA0

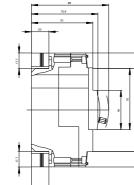
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11503EF460AA0/all

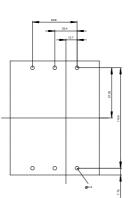
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11503EF460AA0

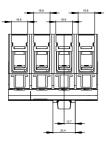
**CAx-Online-Generator** http://www.siemens.com/cax

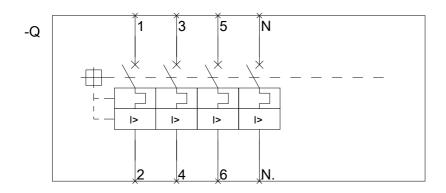
**Tender specifications** http://ausschreibungstexte.siemens.com/tiplv











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