# **SIEMENS**

## Data sheet

## 3VA1163-4EE36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=63A OVERLOAD PROTECTION IR=44,1A ...63A SHORT CIRCUIT PROTECTION II=10 X IN 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		3	
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		
	tage	
Insulation voltage / Rated value V 800	sulation voltage / Rated value	V

#### Protection class

Protection class IP / on the front Protective function of the overcurrent release  LI  Switching capacity Switching capacity Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 17.3  Electricity Confinuous current / Rated value / maximum	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker    Dissipation	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker  S  Dissipation  Active power loss  • maximum  W  17.3  Electricity  Continuous current / Rated value / maximum  • of the current-dependent overload release / Full-scale value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the ord of the instantaneous short-circuit release / Initial value  • of the ord of the instantaneous short-circuit release / Initial value  • of the Ord / Rated value  • of the Ord / Rated value  • of ord Ord / Rated value  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 63  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 70 °C / Rated value	Protective function of the overcurrent release		Ц
Switching capacity class of the circuit breaker  S  Dissipation  Active power loss  • maximum  W  17.3  Electricity  Continuous current / Rated value / maximum  • of the current-dependent overload release / Full-scale value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the instantaneous short-circuit release / Initial value  • of the ord of the instantaneous short-circuit release / Initial value  • of the ord of the instantaneous short-circuit release / Initial value  • of the Ord / Rated value  • of the Ord / Rated value  • of ord Ord / Rated value  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 63  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 70 °C / Rated value	Switching capacity		
Active power loss  • maximum    M			S
Active power loss  • maximum    Maximum   Maxi	Dissipation		
Electricity  Continuous current / Rated value / maximum  A 160  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  • for DC / Rated value  • at 40 °C / Rated value  • at 40 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  • at 65 °C / Rated value  • at 67 °C / Rated value  • at 70 °C / Rated value  •	·		
Continuous current / Rated value / maximum Continuous current / Rated value A 63  Adjustable response value current • of the current-dependent overload release / Full-scale value • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the current-dependent overload release / initial value  A 10  • of the current-value value  • of I-trip / Full-scale value value  • of or N-conductor protection / initial value  • of or N-conductor protection / Full-scale value  A 0.7	• maximum	W	17.3
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 r DC / Rated value  of r DC / Rated value  A 63  at 50 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  bat 70 °C / Rated value  at 60 °C / Rated value  at 60 °C / Rated value  bat 70 °C / Rated value  at 60 °C / Rated value  bat 70 °C / Rated value  at 70 °C / Rated value  bat 70 °C / Rated value  bat 70 °C / Rated value  bat 70 °C / Rated value  at 70 °C / Rated value  bat 70 °C / Rated value  at 70 °C / Rated value  bat 70 °C / Rated value  at 70 °C / Rated value  bat 70 °C / Rated value  at 70 °C / Rated value  at 70 °C / Rated value  bat 70 °C / Rated value  A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitabile parameters  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / Full-scale value  for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value	Electricity		
Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  of the current of the current-dependent overload release / initial value		Α	160
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	Continuous current / Rated value	Α	63
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 500  Operating current  • at 40 °C / Rated value  A 63 • at 50 °C / Rated value  A 63 • at 55 °C / Rated value  A 61 • at 60 °C / Rated value  A 60 • at 70 °C / Rated value  A 60  • at 70 °C / Rated value  A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitabile parameters  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  A 0.7	Adjustable response value current		
Main circuit           Operating voltage           ● with AC / at 50/60 Hz / Rated value         V         690           ● for DC / Rated value         V         500           Operating current           ● at 40 °C / Rated value         A         63           ● at 50 °C / Rated value         A         62           ● at 60 °C / Rated value         A         61           ● at 65 °C / Rated value         A         60           ● at 70 °C / Rated value         A         58           Auxiliary circuit           Number of CO contacts / for auxiliary contacts         0           Suitability           Suitability for use           System protection           Adjustable parameters           Adjustable response value current           ● 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         A         0.7		Α	1
Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  V 500  Operating current  • at 40 °C / Rated value  A 63  • at 50 °C / Rated value  A 63  • at 55 °C / Rated value  A 62  • at 60 °C / Rated value  A 61  • at 65 °C / Rated value  A 60  • at 70 °C / Rated value  A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitable parameters  Adjustable parameters  Adjustable presponse value current  • of I-trip / 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  A 0.7		Α	10
with AC / at 50/60 Hz / Rated value     for DC / Rated value     v 500  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 65 °C / Rated value     at 65 °C / Rated value     at 65 °C / Rated value     at 70 °C / Rated value     at 65 °C / Rated value     at 60 °C / Rated value     at	Main circuit		
for DC / Rated value	Operating voltage		
Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 70 °C / Rated value  • at 70 °C / Rated value  A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / initial value  • for N-conductor protection / Full-scale value  • for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value	• with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value at 50 °C / Rated value A 63  at 55 °C / Rated value A 62  at 60 °C / Rated value A 61  at 65 °C / Rated value A 60  at 60 °C / Rated value A 60  at 70 °C / Rated value A 58   Auxiliary circuit  Number of CO contacts / for auxiliary contacts   Suitability  Suitability for use  Suitabile parameters  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value A 10  for N-conductor protection / initial value of ror N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value  A 0.7	• for DC / Rated value	V	500
at 55 °C / Rated value at 55 °C / Rated value A 62  at 60 °C / Rated value A 61  at 65 °C / Rated value A 60  at 67 °C / Rated value A 58   Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability or use  Suitability or use  Adjustable parameters  Adjustable response value current  of I-trip / 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  A 0.7	Operating current		
at 55 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability Suitability for use  Adjustable parameters  Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current of N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value  A 0.7	• at 40 °C / Rated value	Α	63
at 60 °C / Rated value at 65 °C / Rated value A 60 at 70 °C / Rated value A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / 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  A 0.7	• at 50 °C / Rated value	Α	63
at 65 °C / Rated value     at 70 °C / Rated value     A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current     of I-trip / Full-scale value     for N-conductor protection / initial value  Adjustable response value current / of the current-dependent overload release / initial value  A 0.7	• at 55 °C / Rated value	Α	62
• at 70 °C / Rated value  A 58  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / 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  A 0.7	• at 60 °C / Rated value	Α	61
Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / 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	• at 65 °C / Rated value	Α	60
Number of CO contacts / for auxiliary contacts  Suitability Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / 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  0  System protection  A	• at 70 °C / Rated value	Α	58
Number of CO contacts / for auxiliary contacts  Suitability Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / 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  0  System protection  A	Auxiliary circuit		
Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  of Intrip / Full-scale value  A  O  Adjustable response value current / of the current-dependent overload release / initial value  system protection  A  0  0  0  0  0  0  0  0  0  0  0  0			0
Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  A  A  O  Adjustable response value current / of the current-dependent overload release / initial value	Suitability		
Adjustable response value current  of I-trip / 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	Suitability for use		system protection
of I-trip / Full-scale value     of r N-conductor protection / initial value     of r N-conductor protection / Full-scale value     of r N-conductor protection / Full-scale value     A     of r N-conductor protection / Full-scale value     A     of r	Adjustable parameters		
<ul> <li>for N-conductor protection / initial value</li> <li>for N-conductor protection / Full-scale value</li> <li>Adjustable response value current / of the current-dependent overload release / initial value</li> </ul> A 0 0.7	Adjustable response value current		
• for N-conductor protection / Full-scale value A 0  Adjustable response value current / of the current- dependent overload release / initial value 0.7	• of I-trip / Full-scale value	Α	10
Adjustable response value current / of the current- dependent overload release / initial value	• for N-conductor protection / initial value	Α	0
dependent overload release / initial value	• for N-conductor protection / Full-scale value	Α	0
Product details	•	Α	0.7
	Product details		
Product component			

		N
• 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		
Intrinsic device protection		Yes
communication function		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1163-4EE36-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• 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 (lcm)		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
		Front terminal

- 60			1 \( / 1 \)	70 mm²)	
of the round conductor terminal / str			·	5 - 70 mm²)	
Type of electrical connection / for main cu	irrent circuit		Box ter	Box terminal	
Mechanical Design					
Height		mm	130		
Width		mm	76.2		
Depth		mm	70		
Mounting type			fixed m	fixed mounting	
Environmental conditions					
Ambient temperature					
<ul><li>during operation / minimum</li></ul>		°C	-25		
<ul><li>during operation / maximum</li></ul>		°C	70		
• during storage / minimum		°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			Q		
General EMC	Declaration	n of	Shipping Ap	proval	other
Product	Conformity	,			
Approval					
other			2 8		other
LHI	( +		$\Phi \nabla$	GL	
LIIL	EG-Konf.		DNV	GL	

## 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/3VA11634EE360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11634EE360AA0/all

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

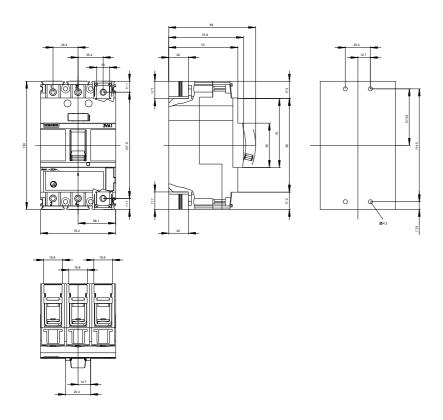
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11634EE360AA0

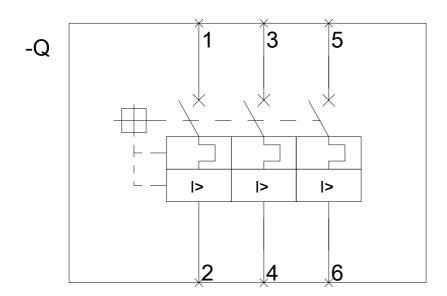
**CAx-Online-Generator** 

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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