SIEMENS

Data sheet

3VA1080-3ED36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=80A OVERLOAD PROTECTION IR=80A FIXED 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	TM210
Compared to abraical data	

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 0	00	
circuit-breaker / Design	3V/	4	
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 Switching capacity Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 19.2 Electricity Continuous current / Rated value / maximum • of the current-dependent overload release / Full-scale 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 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value •	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 19.2 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 Main circuit Operating outage • with AC / at 50/60 Hz / Rated value • of PC / Rated value • of PC / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 19.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value A 80 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 C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated val	Protective function of the overcurrent release		LI
Switching capacity class of the circuit breaker N Dissipation Active power loss • maximum W 19.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value A 80 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 C / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated val	Switching capacity		
Active power loss • maximum Maximum Maxi			N
Active power loss • maximum Maximum	Dissipation		
Electricity Continuous current / Rated value / maximum Continuous current / Rated value A 80 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 the OFC / Rated value volue Volue Operating current otal 40 °C / Rated value otal 50 °C / Rated value at 50 °C / Rated value otal 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value otal 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value otal 77 at 75 at 76 at 70 °C / Rated value at 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suttability Suitability Suitability Fruit-scale value of I-trip / Full-scale value of or N-conductor protection / initial value of or N-conductor protection / Full-scale value A 10 Adjustable response value current of the current-dependent overload release / initial value Product details			
Continuous current / Rated value / maximum 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 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 of the current value value of value	• maximum	W	19.2
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 of the current dependent overload release / initial value A 10 of the current overload release / initial value of the current overload release / initial value Product details	Electricity		
Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value A 10 of the instantaneous short-circuit release / initial value of the current of the c	Continuous current / Rated value / maximum	А	100
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	80
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 50 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value	Adjustable response value current		
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 55 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 75 • at 70 °C / Rated value A 74 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 / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details		Α	1
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 A 80 • at 50 °C / Rated value A 80 • at 55 °C / Rated value A 78 • at 60 °C / Rated value A 77 • at 65 °C / Rated value A 75 • at 70 °C / Rated value A 75 • at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability for use System protection 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 Product details		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 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters 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 Product details	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 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 77 • at 65 °C / Rated value • at 70 °C / Rated value • at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters 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 A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details	• with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value at 50 °C / Rated value A 80 at 55 °C / Rated value A 78 at 60 °C / Rated value A 77 at 60 °C / Rated value A 77 at 60 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value A 10 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 Product details	• for DC / Rated value	V	500
at 50 °C / Rated value at 55 °C / Rated value A 78 at 60 °C / Rated value A 77 at 65 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability 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 Product details	Operating current		
at 55 °C / Rated value at 60 °C / Rated value At 77 at 65 °C / Rated value At 75 at 70 °C / Rated value At 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts Suitability Suitability Suitability system protection 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 Product details	• at 40 °C / Rated value	Α	80
at 60 °C / Rated value at 65 °C / Rated value A 75 at 65 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts 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 Adjustable response value current / of the current-dependent overload release / initial value Product details	• at 50 °C / Rated value	Α	80
at 65 °C / Rated value at 65 °C / Rated value A 75 at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 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 Product details	• at 55 °C / Rated value	Α	78
at 70 °C / Rated value Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details	• at 60 °C / Rated value	Α	77
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 Product details	• at 65 °C / Rated value	Α	75
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 A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details	• at 70 °C / Rated value	Α	74
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 A 0 Adjustable response value current / of the current-dependent overload release / initial value Product details	Auxiliary circuit		
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 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			0
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 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	Suitability		
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 A D Adjustable response value current / of the current-dependent overload release / initial value Product details			system protection
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 Product details	Adjustable parameters		
• 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 Product details	Adjustable response value current		
◆ for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details O A 1	● of I-trip / Full-scale value	Α	10
Adjustable response value current / of the current- dependent overload release / initial value Product details	• for N-conductor protection / initial value	Α	0
Product details	• for N-conductor protection / Full-scale value	Α	0
	-	Α	1
	Product details		
r roduct component	Product component		

		N
• Trip indicator		No
display		No
Voltage trigger		No
undervoltage release		No
 undervoltage release with leading contact 		No
Product property		
 for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof 		No
Product expansion / optional / motor drive		No
Product function		
Product function		
Intrinsic device protection		Yes
• communication function		No
Phase failure detection		No
 other measurement function 		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1080-3ED36-0AA0
switch		
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	5
Short-circuit current making capacity (lcm)		
• 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 / stra	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		76.2	
Depth		mm		70	
Mounting type				fixed mounting	
Environmental conditions					
Ambient temperature					
during operation / minimum		°C		-25	
during operation / maximum		°C		70	
during storage / minimum		°C		-40	
during storage / maximum		°C		80	
Certificates					
Equipment marking					
• acc. to DIN EN 61346-2				Q	
• acc. to DIN EN 81346-2				Q	
General EMC	Declaration	n of	Ship	pping Approval	other
Product	Conformity	<i>(</i>			
Approval					
other			2	S. Comments	other

Further information

EAC

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/3VA10803ED360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA10803ED360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA10803ED360AA0

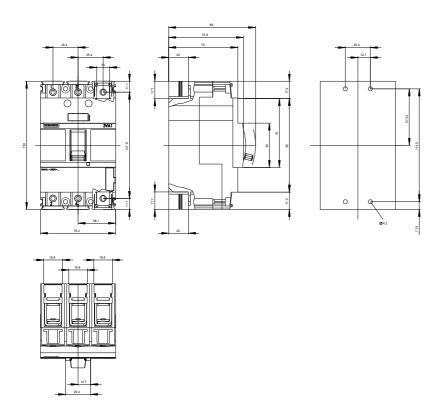
CAx-Online-Generator

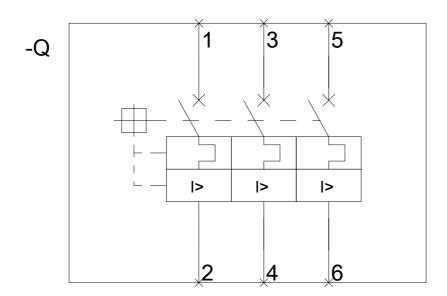
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

GL





last modified: 11.03.2015