SIEMENS

Data sheet

3VA1080-2ED36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 100 BREAKING CAPACITY CLASS B ICU=16KA @ 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
General technical 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		8 000	
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

Protective function of the overcurrent release LI Switching capacity Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 19.2 Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value / maximum 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • of ro PC / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 60 °C / Rated value • at 75 • at 60 °C / Rated value • at 75 • at 60 °C / Rated value • at 75 • at 60 °C / Rated value • at 77 • at 60 °C / Rated value • at 77 • at 60 °C / Rated value • at 77 • at 60 °C / Rated value • at 70	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 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 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 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 7	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • at 40 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 60 °C / Rated value • at 77 • at 77 • at 77 • at 77 • at 65 °C / Rated value • at 77 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitability Suitability for use system protection Adjustable parameters Adjustable parameters Adjustable parameters Adjustable parameters Adjustable parameters Adjustable response value current • of l-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / initial value • of or N-conductor protection / initial value • of or N-conductor protection / initial value • of or N-conductor protection / initial value	Protective function of the overcurrent release		Ц
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum Electricity Continuous current / Rated value / maximum A 100 Continuous current / Rated value / maximum A 100 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 or DC / Rated value • of or DC / Rated value • at 40 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 60 °C / Rated value • at 77 • at 77 • at 65 °C / Rated value • at 76 • at 70 °C / Rated value • at 70 °C / Rated	Switching capacity		
Active power loss • maximum Maximum Maxi			В
Active power loss • maximum Maximum Maxi	Dissipation		
Continuous current / Rated value / maximum			
Continuous current / Rated value / maximum	• 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 Main circuit Operating voltage with AC / at 50/60 Hz / Rated value of rD C / Rated value v 500 Operating current o at 40 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 67 °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 parameters Adjustable response value current of l-trip / Full-scale value for N-conductor protection / initial value A 0	Electricity		
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 55 °C / Rated value • at 55 °C / Rated value • at 65 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 77 • at 65 °C / Rated value • 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 l-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / initial value A 10	Continuous current / Rated value / maximum	Α	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 of or DC / Rated value voluments or A 80	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 Operating current • at 40 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value • at 60 °C / Rated value A 77 • at 65 °C / Rated value A 75 • at 70 °C / Rated value A 75 Auxiliary circuit Number of CO contacts / for auxiliary contacts O Suitability Suitable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 10	Adjustable response value current		
Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value Operating current • at 40 °C / Rated value A 80 • at 50 °C / Rated value A 78 • at 60 °C / Rated value A 77 • at 60 °C / Rated value A 77 • at 65 °C / Rated value A 77 • 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 Suitabile parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0		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 80 • at 50 °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 O Suitability Suitabile parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0		Α	10
with AC / at 50/60 Hz / Rated value v 690 for DC / Rated value V 500 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 65 °C / Rated value at 65 °C / Rated value at 670 °C / Rated value at 670 °C / Rated value at 670 °C / Rated value at 77 suitability 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 / initial value of I-trip / Foundation / Initial value of I-trip / Full-scale value of I-trip / Full-scal	Main circuit		
for DC / Rated value Operating current at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 65 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 67 °C / Rated value at 70 °C / Rated value A 75 at 70 °C / Rated value A 75 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 A 0	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 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 77 • 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 Suitabile parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 80 A 78 A 78 A 77 A 75 A 10 • for N-conductor protection / initial value A 0	• with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °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 Suitabile parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 80 A 80 A 78 A 77 A 77 A 74 A 74 A 74 A 74 A 10 of I-trip / Full-scale value A 0	• for DC / Rated value	V	500
at 50 °C / Rated value at 55 °C / Rated value at 60 °C / Rated value 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 Suitabile parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 80 A 78 A 77 A 78 A 77 A 75 A 74	Operating current		
at 55 °C / Rated value at 60 °C / Rated value At 60 °C / Rated value 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 for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value At 10 of I-trip / Full-scale value At 0	• at 40 °C / Rated value	Α	80
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 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 77 A 74 A 74	• at 50 °C / Rated value	Α	80
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 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 75 A 74 A 75 A 74	● at 55 °C / Rated value	Α	78
at 70 °C / Rated value A 74 Auxiliary circuit Number of CO contacts / for auxiliary contacts 0 Suitability Suitability for use Suitabile parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value A 74 74 74 74 74 A 74	• 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 A 0	• 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 O System protection A 10 A 0	• 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 0 System protection Adjustable parameters A 10 A 0	Auxiliary circuit		
Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0			0
Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 0	Suitability		
Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 10 O			system protection
 of I-trip / Full-scale value for N-conductor protection / initial value A 0 	Adjustable parameters		
• for N-conductor protection / initial value A 0	Adjustable response value current		
	• of I-trip / Full-scale value	Α	10
• for N-conductor protection / Full-scale value A 0	• for N-conductor protection / initial value	Α	0
	• for N-conductor protection / Full-scale value	Α	0
Adjustable response value current / of the current- A 1 dependent overload release / initial value	-	Α	1
Product details	Product details		
Product component			

Trip indicator		No
·		No
• display		No
Voltage trigger		
undervoltage release		No
undervoltage release with leading contact		No
Product property		
• for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and overload proof		
Product expansion / optional / motor drive		No
Troduct expansion repulsing relief		
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		3VA1080-2ED36-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	25
● at 415 V / Rated value	kA	16
• at 440 V / Rated value	kA	8
• at 500 V / Rated value	kA	5
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	25
• at 415 V / Rated value	kA	16
● at 440 V / Rated value	kA	8
• at 500 V / Rated value	kA	5
• at 690 V / Rated value	kA	5
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	52.5
• at 415 V / Rated value	kA	32
• 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		
. , , ,		

- 60			1 \(/ 1 \)	70 mm²)	
of the round conductor terminal / str			·	5 - 70 mm²)	
Type of electrical connection / for main cu	irrent 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	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/3VA10802ED360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA10802ED360AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA10802ED360AA0

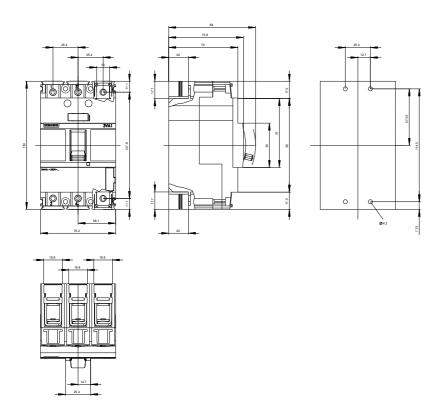
CAx-Online-Generator

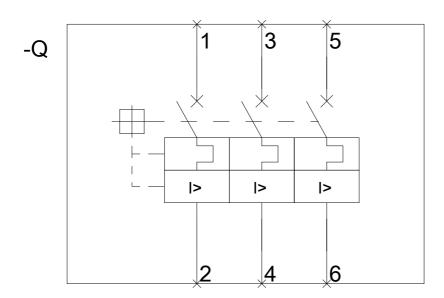
http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv

GL





last modified: 11.03.2015