SIEMENS

Data sheet 3NP1163-1BC10



SENTRON, fuse switch disconnector 3NP1, 3-pole, NH3, 630 A, for 60mm 8US busbar system, screw connection, cover level 32/70 mm

Model				
product brand name	SENTRON			
Busbar design	busbar thickness 5 or 10 mm			
Design of the load switch / Strip form	No			
Type of the driving mechanism / motor drive	No			

General technical data				
Number of poles		3		
Size of disconnecting link		3 and 2		
Size of fuse link		NH2, NH3		
Continuous current / at 35 °C / rated value	Α	630		
Let-through current / with closed switch / maximum permissible	kA	60		
cut-off value I**2t,max. / 500 V	A²-s	5 400 000		
Power factor				
● at AC-22 B		0.65		
• at AC-23 B		0.35		
with capacitive load		-0.25		
circuit-breaker / Design		3NP11		
Mechanical service life (switching cycles) / typical		1 000		

Protection class IP	Fuse system		LV HRC fuse
Insulation voltage / rated value	Voltage		
Surge voltage resistance / rated value Protection class Protection class IP • with closed switch / with cover or cable lug cover • with closed switch / without cover or cable lug cover • with closed switch / without cover or cable lug cover • on the front • open Power loss [V] • for rated value of the current / at AC / in hot operating state / per pole • maximum V 48 Electricity Continuous current • rated value • at 40 °C / rated value • at 45 °C / rated value • at 55 °C / rated value • at 55 °C / rated value • at 55 °C / rated value A 530 Let-through current / let / maximum permissible Operating voltage • at AC / rated value / maximum • at DC / rated value / maximum • at 500 V / maximum		V	690
Protection class Protection cl	Power factor / at AC-21 B	_	0.95
Protection class IP • with closed switch / with cover or cable lug cover • with closed switch / without cover or cable lug cover • with closed switch / without cover or cable lug cover • with closed switch / without cover or cable lug cover • with closed switch / without cover or cable lug cover • with closed switch / without cover or cable lug liP30 Power loss [W] • for rated value of the current / at AC / in hot operating state / per pole • maximum W	Surge voltage resistance / rated value	kV	8
with closed switch / with cover or cable lug cover with closed switch / without cover or cable lug cover on the front topen IP40 IP40 IP20 Dissipation Power loss [W] for rated value of the current / at AC / in hot operating state / per pole maximum W 48 Electricity Continuous current rated value A 630 at 40 °C / rated value A 610 at 45 °C / rated value A 555 at 55 °C / rated value A 550 Let-through current / with high-speed activation / maximum permissible A00 V Sourcet (Irange V	Protection class		
Cover With closed switch / without cover or cable lug cover On the front IP40 IP20	Protection class IP		
with closed switch / without cover or cable lug cover on the front open	with closed switch / with cover or cable lug		IP40
Cover On the front IP40 IP20			
● on the front ● open IP40 ■ open IP20 Dissipation Power loss [W] ● for rated value of the current / at AC / in hot operating state / per pole ● maximum W 48 Electricity Continuous current ● rated value A 630 ■ at 40 °C / rated value A 610 ■ at 45 °C / rated value A 575 ■ at 55 °C / rated value A 555 ■ at 55 °C / rated value A 530 ■ at 45 °C / rated value A 550 ■ at 55 °C / rated value A 530 ■ at 55 °C / rated value A 530 ■ at 55 °C / rated value A 530 ■ at 55 °C / rated value A 600 ■ at 40 °C / rated value A 530 ■ at 55 °C / rated value A 530 ■ at 55 °C / rated value A 600 ■ at 55 °C / rated value A 600 ■ at 55 °C / rated value A 600 ■ at 55 °C / rated value / with high-speed activation / maximum permissible ■ 400 °V A 600 000 ■ at 500 °V A 600 000 ■ at AC / rated value / maximum V 690 ■ at AC / rated value / maximum V 440 ■ at DC / rated value / maximum V 440 ■ at DC / rated value / maximum V 440 ■ at 400 °V / maximum A 72 ■ at 500 °V / maximum A 55	-		IP30
● open IP20 Dissipation Power loss [W] ● for rated value of the current / at AC / in hot operating state / per pole ● maximum W 48 Electricity Continuous current ● rated value ● at 40 °C / rated value ● at 45 °C / rated value ● at 45 °C / rated value ● at 45 °C / rated value ● at 55 °C / rated value ■ at 55 °C / rated value ■ A 530 Let-through current / with high-speed activation / maximum permissible Let-through current / lc / maximum permissible ● 400 ∨ ● 500∨ cut-off value ***2t,max. / 400 ∨ Main circuit Operating voltage ● at AC / rated value / maximum ● at DC / rated value / maximum V 690 • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 ∨ / maximum A 72 • at 500 ∨ / maximum A 55			ID 40
Dissipation	• on the front		
Power loss [W]	• open		IP20
• for rated value of the current / at AC / in hot operating state / per pole • maximum W 48 Electricity Continuous current • rated value • at 40 °C / rated value • at 45 °C / rated value • at 45 °C / rated value • at 55 °C / rated value • at 55 °C / rated value A 555 • at 55 °C / rated value A 530 Let-through current / with high-speed activation / maximum permissible Let-through current / lc / maximum permissible • 400 V A 60 000 cut-off value I**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage • at AC / rated value / maximum • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 550 V / maximum A 55	Dissipation		
Part	Power loss [W]		
● maximum W 48 Electricity Continuous current • rated value A 630 • at 40 °C / rated value A 610 • at 45 °C / rated value A 575 • at 55 °C / rated value A 555 • at 55 °C / rated value A 530 Let-through current / with high-speed activation / maximum permissible KA 50 Let-through current / Ic / maximum permissible A 60 000 • 400 V A 60 000 • 500V A 60 000 cut-off value **2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage • at AC / rated value / maximum V 690 • at DC / rated value / maximum V 440 • at DC / rated value / maximum V 440 • at 400 V / maximum A 72 • at 500 V / maximum A 55	• for rated value of the current / at AC / in hot	W	16
Continuous current	operating state / per pole		
Continuous current • rated value	• maximum	W	48
	Electricity		
at 40 °C / rated value at 45 °C / rated value at 50 °C / rated value at 50 °C / rated value at 55 °C / rated value at 55 °C / rated value A 555 at 55 °C / rated value A 530 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible • 400 V • 500V A 60 000 cut-off value 1**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage • at AC / rated value / maximum • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 500 V / maximum A 555	Continuous current		
• at 45 °C / rated value • at 50 °C / rated value • at 50 °C / rated value • at 55 °C / rated value • at 50 °C / rated value • at 50 °C / rated value • at 50 °C / rated value • at 500 V • at 500 V • at 60 000 • at AC / rated value / maximum • at AC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at 500 V / maximum	• rated value	Α	630
at 50 °C / rated value at 55 °C / rated value A 530 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 V 500V A 60 000 cut-off value I**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage at AC / rated value / maximum at DC / rated value / maximum at DC / rated value / maximum v 440 Operating current / with capacitive load at 400 V / maximum A 72 at 500 V / maximum A 555	• at 40 °C / rated value	Α	610
at 55 °C / rated value A 530 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 V 500V A 60 000 cut-off value I**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage at AC / rated value / maximum at DC / rated value / maximum at DC / rated value / maximum v 440 Operating current / with capacitive load at 400 V / maximum A 72 at 500 V / maximum A 55	• at 45 °C / rated value	Α	575
Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible • 400 V • 500V cut-off value I**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage • at AC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 500 V / maximum A 55	• at 50 °C / rated value	Α	555
Main circuit V 690 Operating voltage V 440 • at DC / rated value / maximum V 440 • at DC / rated value / maximum V 440 • at DC / rated value / maximum V 440 • at DC / rated value / maximum V 450 • at 500 V / maximum A 72 • at 500 V / maximum A 55	• at 55 °C / rated value	Α	530
Let-through current / Ic / maximum permissible 400 V A 60 000 • 500V A 60 000 cut-off value I**2t,max. / 400 V A²-s 5 400 000 Main circuit Operating voltage • at AC / rated value / maximum V 690 • at DC / rated value V 440 • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 500 V / maximum A 55	• •	kA	50
Cut-off value I**2t,max. / 400 V A²·s 5 400 000 Main circuit Operating voltage 690 • at AC / rated value / maximum V 440 • at DC / rated value / maximum V 440 Operating current / with capacitive load A 72 • at 500 V / maximum A 55	• 400 V		
Main circuit Operating voltage • at AC / rated value / maximum • at DC / rated value • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 500 V / maximum A 55	• 500V	Α	60 000
Operating voltage • at AC / rated value / maximum • at DC / rated value • at DC / rated value • at DC / rated value / maximum V 440 Operating current / with capacitive load • at 400 V / maximum A 72 • at 500 V / maximum A 55	cut-off value I**2t,max. / 400 V	A²·s	5 400 000
 at AC / rated value / maximum at DC / rated value at DC / rated value / maximum 440 at DC / rated value / maximum 440 Operating current / with capacitive load at 400 V / maximum at 500 V / maximum A 55 	Main circuit		
at DC / rated value at DC / rated value / maximum V 440 Operating current / with capacitive load at 400 V / maximum A 72 at 500 V / maximum A 55	Operating voltage		
at DC / rated value / maximum Operating current / with capacitive load at 400 V / maximum A 72 at 500 V / maximum A 55	• at AC / rated value / maximum	V	690
Operating current / with capacitive load • at 400 V / maximum • at 500 V / maximum A 72 A 55	• at DC / rated value	V	440
 at 400 V / maximum at 500 V / maximum A 55 	• at DC / rated value / maximum	V	440
• at 500 V / maximum A 55	Operating current / with capacitive load		
	• at 400 V / maximum	Α	72
Auxiliary circuit	● at 500 V / maximum	Α	55
- Textiliary on our	Auxiliary circuit		

Number of CO contacts / for auxiliary contacts		0
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		
Main switch		No
switch disconnector		Yes
EMERGENCY OFF switch		No
• safety switch		Yes
maintenance/repair switch		Yes
Product details		
Product feature / interlock		Yes
Product component		
Trip indicator		No
Phase failure monitoring		No
undervoltage release		No
 undervoltage release with leading contact 		No
Product feature / sealable		Yes
Product extension		
Auxiliary switch		Yes
optional		
— locking capability		Yes
— motor drive		No
 — Phase failure monitoring 		Yes
— fuse monitoring		Yes
— Voltage trigger		No
 Overvoltage protection monitoring 		Yes
Product function		
Product function		
• fuse monitoring		No
Overvoltage protection monitoring		No
Short circuit		
Conditional short-circuit current (Iq)		
• rated value	kA	50
 at AC / at 500 V / with high-speed activation / rated value 	kA	50
 at AC / at 690 V / with high-speed activation / rated value 	kA	50
 with closed switch / at AC / at 500 V / rated value 	kA	100

• with closed switch / at AC / at 690 V / rated value	kA	100	
Connections			
Arrangement of electrical connectors / for main current circuit		other	
Connectable conductor cross-section / for main contacts			
• single or multi-stranded / minimum	mm²	120	
single or multi-stranded / maximum	mm²	300	
• stranded / minimum	mm²	120	
• stranded / maximum	mm²	300	
Tightening torque / with screw-type terminals			
• minimum	N·m	10	
• maximum	N·m	12	
Type of electrical connection / for main current circuit		screw-type terminals	
Mechanical Design			
Height	mm	306	
Width	mm	249.4	
Depth	mm	160.5	
Mounting type			
• floor mounting		No	
• front mounting		No	
 front mounting with 4-hole attachment 		No	
 front mounting with central attachment 		No	
rail mounting		Yes	
Busbar center-to-center spacing	mm	60	
Net weight	kg	6.84	
Environmental conditions			
Degree of pollution		3	
Ambient temperature			
during operation / minimum	°C	-25	
during operation / maximum	°C	55	
during storage / minimum	°C	-50	
during storage / maximum	°C	80	
Certificates			
Equipment marking			
• acc. to DIN EN 61346-2		Q	
• acc. to DIN EN 81346-2		Q	

General Product Approval

Declaration of Conformity

Test Certificates









spezielle Prüfbescheinigunge n

Typprüfbescheinigu ng/Werkszeugnis

Shipping Approval







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/3NP11631BC10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

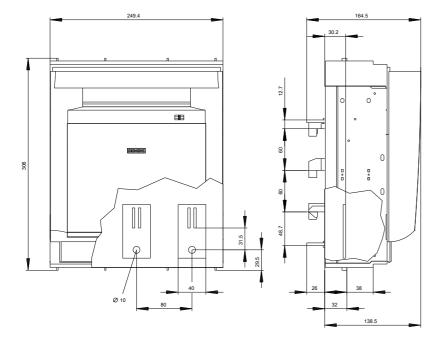
http://support.automation.siemens.com/WW/view/en/3NP11631BC10/all

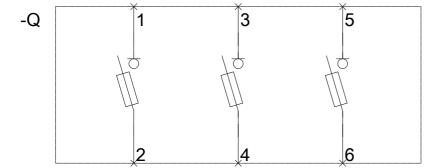
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP11631BC10

CAx-Online-Generator

http://www.siemens.com/cax

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





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