SIEMENS

Data sheet 3NP1153-1BC10



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH2, 400A 60MM BUSBAR SYSTEM COVER LEVEL 32/70 MM FLAT CONNECTOR

Model	
product brand name	SENTRON
Product designation	Fuse switch disconnector
Design of the product	3-pole
Busbar design	busbar thickness 5 or 10 mm
Design of the operating mechanism	handle unit
Design of the load switch / Strip form	No
Type of the driving mechanism / motor drive	No

General technical data				
Number of poles		3		
Type of device		snap on mount on busbar system Siemens 8US 60 mm		
Size of disconnecting link		2 and 1		
Size of fuse link		NH1. NH2		
Continuous current / at 35 °C / Rated value	Α	400		
Let-through current / with closed switch / maximum permissible	kA	40		
cut-off value I**2t,max. / 500 V	A ² ·s	2 150 000		
I2t value / with closed switch / maximum permissible	kA2.s	2 150		
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		

Insulation voltage Rated value V 890	Fuse system		LV HRC fuse
Dower factor / at AC-21 B	Voltage		
Protection class Protection		V	690
Protection class P • 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 IP40 • open IP20 Dissipation Active power loss • maximum W 34 Electricity Continuous current • Rated value A 400 • at 40 °C / Rated value A 392 • at 50 °C / Rated value A 372 • at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible • 400 V A 40000 • 500V A 40000 cut-off value I*2t,max. / 400 V A²s 2 150 000 Main circuit Operating ourrent • for DC / Rated value / maximum V 440 Operating ourrent • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B /	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 • on the front • open Dissipation Active power loss • maximum W 34 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 • A 356 Let-through current / ic / maximum permissible Let-through current / ic / maximum permissible utuel through current / ic / maximum permissible • 400 V • 500V A 40 000 cut-off value I**2t,max. / 400 V A**s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum V 690 • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value • at AC-21 B / at 500 V / Rated value • at AC-21 B / at 500 V / Rated value • at AC-21 B / at 500 V / Rated value	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 with closed switch / without cover or cable lug cover on the front open			
Cover	Protection class IP		
cover	-		IP40
● on the front ● open P40 P20 P20	 with closed switch / without cover or cable lug 		IP30
● open IP20 Dissipation Active power loss ● maximum W 34 Electricity Continuous current ● Rated value A 400 • at 40 °C / Rated value A 400 • at 45 °C / Rated value A 392 • at 50 °C / Rated value A 372 • at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / lc / maximum permissible • 400 V A 40 000 • 500V A 40 000 cut-off value 1**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value	cover		
Dissipation Active power loss • maximum W 34 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 A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / lc / maximum permissible • 400 V • 500V A 40 000 cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum v 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 4500 V / Rated value • at AC-21 B / at 550 V / Rated value	• on the front		IP40
Active power loss	• open		IP20
	•		
Continuous current	Active power loss		
Continuous current • Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 45 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible • 400 V • 500V A 40 000 cut-off value I*2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum • with AC / Rated value / maximum V 690 • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value A 400 • 400 • 400 • 400 A 400	• maximum	W	34
Rated value A 400 at 40 °C / Rated value A 392 at 50 °C / Rated value A 392 at 50 °C / Rated value A 372 at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 ∨ 500∨ A 40 000 cut-off value I**2t,max. / 400 ∨ Main circuit Operating voltage with AC / Rated value / maximum V 690 for DC / Rated value / maximum V 440 Operating current at AC-21 B / at 400 ∨ / Rated value A 400 at AC-21 B / at 400 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400 at AC-21 B / at 500 ∨ / Rated value A 400	Electricity		
at 40 °C / Rated value at 45 °C / Rated value at 45 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible • 400 V • 500V A 40 000 cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum V 690 • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 400 V / Rated value A 400	Continuous current		
at 45 °C / Rated value at 50 °C / Rated value at 55 °C / Rated value at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 V 500V A 40 000 cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage with AC / Rated value / maximum for DC / Rated value / maximum v 440 Operating current at AC-21 B / at 400 V / Rated value at AC-21 B / at 500 V / Rated value at AC-21 B / at 500 V / Rated value at AC-21 B / at 500 V / Rated value A 400	Rated value	Α	400
at 50 °C / Rated value at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 V 500V A 40 000 cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage with AC / Rated value / maximum for DC / Rated value / maximum for DC / Rated value / maximum v 440 Operating current at AC-21 B / at 400 V / Rated value at AC-21 B / at 500 V / Rated value at AC-21 B / at 500 V / Rated value at AC-21 B / at 500 V / Rated value A 400	• at 40 °C / Rated value	Α	400
at 55 °C / Rated value A 356 Let-through current / with high-speed activation / maximum permissible Let-through current / Ic / maximum permissible 400 V A 40 000 500V A 40 000 cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage with AC / Rated value / maximum V 690 for DC / Rated value for DC / Rated value / maximum V 440 Operating current at AC-21 B / at 400 V / Rated value at AC-21 B / at 500 V / Rated value A 400 A 400 A 400 A 400 A 400 A 400	• at 45 °C / Rated value	Α	392
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 A 40 000 Cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum v 690 • for DC / Rated value / waximum v 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value A 400 A 400	• at 50 °C / Rated value	Α	372
maximum permissible Let-through current / Ic / maximum permissible ● 400 V A 40 000 ● 500V A 40 000 cut-off value I**2t,max. / 400 V Main circuit Operating voltage ● with AC / Rated value / maximum V 690 ● for DC / Rated value V 440 ● for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400	• at 55 °C / Rated value	Α	356
		kA	40
● 500V cut-off value I**2t,max. / 400 V A²-s 2 150 000 Main circuit Operating voltage ● with AC / Rated value / maximum ● for DC / Rated value ● for DC / Rated value / maximum V 440 Operating current ● at AC-21 B / at 400 V / Rated value A 400 ● at AC-21 B / at 500 V / Rated value A 400	Let-through current / Ic / maximum permissible		
cut-off value I**2t,max. / 400 V A²·s 2 150 000 Main circuit Operating voltage • with AC / Rated value / maximum • for DC / Rated value • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value	• 400 V	Α	40 000
Main circuit Operating voltage • with AC / Rated value / maximum • for DC / Rated value • for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value A 400	• 500V	Α	40 000
Operating voltage • with AC / Rated value / maximum • for DC / Rated value • for DC / Rated value / waximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value A 400	cut-off value I**2t,max. / 400 V	A²-s	2 150 000
 with AC / Rated value / maximum for DC / Rated value for DC / Rated value / waximum for DC / Rated value / maximum Operating current at AC-21 B / at 400 V / Rated value at AC-21 B / at 500 V / Rated value A 400 A 400 	Main circuit		
• for DC / Rated value	Operating voltage		
• for DC / Rated value / maximum V 440 Operating current • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 500 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value	• with AC / Rated value / maximum	V	690
Operating current • at AC-21 B / at 400 V / Rated value A 400 • at AC-21 B / at 500 V / Rated value A 400	• for DC / Rated value	V	440
 at AC-21 B / at 400 V / Rated value at AC-21 B / at 500 V / Rated value A 400 A 400 	• for DC / Rated value / maximum	V	440
• at AC-21 B / at 500 V / Rated value A 400	Operating current		
	• at AC-21 B / at 400 V / Rated value	Α	400
• at AC 21 B / at 600 V / Pated value A 400	• at AC-21 B / at 500 V / Rated value	Α	400
at AC-21 B / at 690 V / Rated value	• at AC-21 B / at 690 V / Rated value	Α	400
• at AC-22 B / at 400 V / Rated value A 400	• at AC-22 B / at 400 V / Rated value	Α	400
• at AC-22 B / at 500 V / Rated value A 400	• at AC-22 B / at 500 V / Rated value	Α	400

• at AC-22 B / at 690 V / Rated value	Α	400
• at AC-23 B / at 400 V / Rated value	Α	400
• at AC-23 B / at 500 V / Rated value	Α	315
• at AC-23 B / at 690 V / Rated value	Α	125
• at DC-21 B / at 240 V / Rated value / maximum	Α	400
• at DC-21 B / at 440 V / Rated value / maximum	Α	400
• at DC-22 B / at 240 V / Rated value / maximum	Α	400
• at DC-22 B / at 440 V / Rated value / maximum	Α	315
• at DC-23 B / at 240 V / Rated value / maximum	Α	250
• at DC-23 B / at 440 V / Rated value / maximum	Α	160
 with capacitive load / at 400 V / maximum 	Α	72
 with capacitive load / at 500 V / maximum 	Α	55
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 property / sealable		Yes
Product expansion		
Auxiliary switch		Yes
optional		
optional— locking capability		Yes
·		Yes No
— locking capability		
locking capability motor drive		No
— locking capability— motor drive— Phase failure monitoring		No Yes

Product function		
Product function		
• fuse monitoring		No
 Overvoltage protection monitoring 		No
Short circuit		
Conditional short-circuit current (Iq)		
Rated value	kA	80
 with AC / at 500 V / with high-speed activation / Rated value 	kA	80
 with AC / at 690 V / with high-speed activation / Rated value 	kA	50
 with closed switch / with AC / at 500 V / Rated value 	kA	100
 with closed switch / with AC / at 690 V / Rated value 	kA	100
Connections		
Arrangement of electrical connectors / for main		other
current circuit		
Connectable conductor cross-section / for main		
contacts	ma ma 2	25
single or multi-stranded / minimum	mm²	
single or multi-stranded / maximum	mm²	240
• stranded / minimum	mm²	25
• stranded / maximum	mm²	240
Tightening torque / with screw-type terminals		40
• minimum	N·m	10
• maximum	N·m	12
Type of electrical connection / for main current circuit		flat connector
Mechanical Design		
Height	mm	306
Width	mm	209.4
Depth	mm	155.9
mounting position		horizontally or vertically
Mounting type		busbar mounting
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

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 61346-2acc. to DIN EN 81346-2

General Product Approval

Declaration of Conformity









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Test Certificates

Shipping Approval

Special Test Certificate Type Test
Certificates/Test
Report







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/3NP11531BC10

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

http://support.automation.siemens.com/WW/view/en/3NP11531BC10/all

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

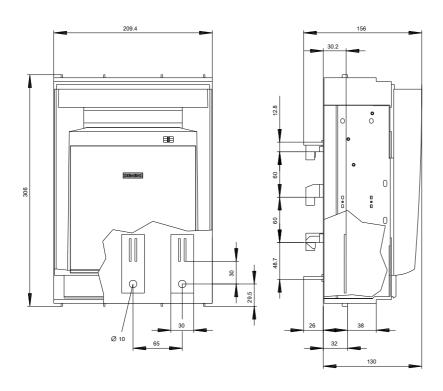
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP11531BC10

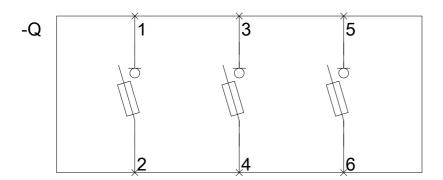
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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