# **SIEMENS**

Data sheet 3NP1163-1BC12



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH3, 630A 60MM BUSBAR SYSTEM COVER LEVEL 32/70 MM FLAT CONNECTOR FUSE MONITORING ELECTRONIC, EFM 10

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 safety monitoring	electronic EFM 10
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		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	kA	60	
permissible			
cut-off value I**2t,max. / 500 V	A <sup>2</sup> ·s	5 400 000	
I2t value / with closed switch / maximum permissible	kA2.s	5 400	
Power factor			
● at AC-22 B		0.65	
● at AC-23 B		0.35	
with capacitive load		-0.25	
circuit-breaker / Design		3NP11	

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  48  Electricity  Continuous current Active 2 Rated value Active 3 A A A A A A A A A A A A A A A A A A	Mechanical service life (switching cycles) / typical		1 000
Insulation voltage / Rated value	Fuse system	_	LV HRC fuse
Insulation voltage / Rated value	V-ll-v-	_	
Power factor / at AC-21 B   Surge voltage resistance / Rated value   KV   8		V	690
Surge voltage resistance / Rated value   RV   8	-		
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 IP40  Protection Received Protection Protecti		k\/	
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    IP40   IP20   IP20   IP20   IP20   IP20   IP30   IP30   IP40   IP40	ourge voltage resistance / realed value	KV	0
with closed switch / with cover or cable lug cover     with closed switch / without cover or cable lug cover     • on the front     • open	Protection class		
Cover  • with closed switch / without cover or cable lug cover  • on the front • open    IP40 • open   IP20    IP20    IP20    IP30   IP20    IP30   I			
over	•		IP40
	• with closed switch / without cover or cable lug		IP30
● open IP20  Dissipation  Active power loss  ● 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 50 °C / Rated value A 555  ● at 50 °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 A*-s 5 400 000  Main circuit  Operating voltage  ● with AC / Rated value / minimum V 690  Operating current  ● at AC-21 B / at 400 V / Rated value A 630  ● at AC-22 B / at 400 V / Rated value A 630  ● at AC-22 B / at 400 V / Rated value A 630  ● at AC-22 B / at 500 V / Rated value A 630  ● at AC-22 B / at 500 V / Rated value A 630  ● at AC-22 B / at 500 V / Rated value A 630  ● at AC-22 B / at 500 V / Rated value A 630  ● at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630  • at AC-22 B / at 500 V / Rated value A 630	cover		
Dissipation  Active power loss  • maximum  W 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 / 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  A**s 5 400 000  Main circuit  Operating voltage  • with AC / Rated value / maximum  • with AC / Rated value / maximum  V 690  Operating current  • at AC-21 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 500 V / Rated value	• on the front		IP40
Active power loss	• open		IP20
Active power loss	Dissipation		
Continuous current			
Continuous current       Rated value       A       630         • at 40 °C / Rated value       A       610         • at 45 °C / Rated value       A       575         • at 50 °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       V       A       60 000         • 400 V       A       60 000       A       60 000         cut-off value  **2t,max. / 400 V       A²-s       5 400 000       5 400 000         Main circuit         Operating voltage         • with AC / Rated value / minimum       V       230         • with AC / Rated value / maximum       V       690         Operating current         • at AC-21 B / at 400 V / Rated value       A       630         • at AC-21 B / at 500 V / Rated value       A       630         • at AC-22 B / at 400 V / Rated value       A       630         • at AC-22 B / at 400 V / Rated value       A       630         • at AC-22 B / at 400 V / Rated value       A       630         • at AC-22 B / at 400 V / Rated value	• maximum	W	48
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 555     at 55 °C / Rated value     A 550  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible     400 ∨     500∨     A 60 000  cut-off value I**2t,max. / 400 ∨  A²·s 5 400 000  Main circuit  Operating voltage     with AC / Rated value / minimum     with AC / Rated value / maximum  Operating current     at AC-21 B / at 400 ∨ / Rated value     at AC-21 B / at 500 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 400 ∨ / Rated value     at AC-22 B / at 500 ∨ / Rated value     at AC-22	Electricity		
<ul> <li>at 40 °C / Rated value</li> <li>at 45 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>A 530</li> <li>Let-through current / with high-speed activation / maximum permissible</li> <li>400 V</li> <li>A 60 000</li> <li>Cut-off value I**2t,max. / 400 V</li> <li>A 60 000</li> <li>Cut-off value I**2t,max. / 400 V</li> <li>A 60 000</li> <li>Main circuit</li> <li>Operating voltage</li> <li>with AC / Rated value / minimum</li> <li>with AC / Rated value / maximum</li> <li>with AC / Rated value / Maximum</li> <li>A 630</li> <li>at AC-21 B / at 400 V / Rated value</li> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> </ul>	Continuous current		
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 530  Let-through current / with high-speed activation / maximum permissible     at 400 V     a 60 000     cut-off value I**2t,max. / 400 V  A 60 000  Cut-off value I**2t,max. / 400 V  A 60 000  Main circuit  Operating voltage     with AC / Rated value / minimum     with AC / Rated value / maximum     V 690  Operating current     at AC-21 B / at 400 V / Rated value     at AC-21 B / at 690 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 500 V / Rated value     at AC-22 B /	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  Are 5 400 000  Main circuit  Operating voltage     with AC / Rated value / minimum     with AC / Rated value / maximum     V 230  Operating current      at AC-21 B / at 400 V / Rated value     at AC-21 B / at 690 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 400 V / Rated value     at AC-22 B / at 500 V / Rated value     at	• 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  A**s 5 400 000  Main circuit  Operating voltage      * with AC / Rated value / minimum     * with AC / Rated value / maximum  Operating current      * at AC-21 B / at 400 V / Rated value     * at AC-21 B / at 690 V / Rated value     * at AC-22 B / at 400 V / Rated value     * at AC-22 B / at 500 V	• 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  A 60 000  Cut-off value I**2t,max. / 400 V  A²-s 5 400 000  Main circuit  Operating voltage  • with AC / Rated value / minimum • with AC / Rated value / maximum  V 690  Operating current  • at AC-21 B / at 400 V / Rated value • at AC-21 B / at 690 V / Rated value • at AC-22 B / at 400 V / Rated value • at AC-22 B / at 400 V / Rated value • at AC-22 B / at 400 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 400 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value • at AC-22 B / at 500 V / Rated value	• at 50 °C / Rated value	Α	555
Let-through current / Ic / maximum permissible	• at 55 °C / Rated value	Α	530
Let-through current / Ic / maximum permissible	Let-through current / with high-speed activation /	kA	50
	maximum permissible		
● 500V  cut-off value I**2t,max. / 400 V  A²-s 5 400 000  Main circuit  Operating voltage  ● with AC / Rated value / minimum  ● with AC / Rated value / maximum  V 690  Operating current  ● at AC-21 B / at 400 V / Rated value  ● at AC-21 B / at 500 V / Rated value  A 630  ● at AC-21 B / at 690 V / Rated value  A 630  ● at AC-22 B / at 400 V / Rated value  A 630  ● at AC-22 B / at 400 V / Rated value  A 630  ● at AC-22 B / at 400 V / Rated value  A 630  ● at AC-22 B / at 400 V / Rated value  A 630  ● at AC-22 B / at 500 V / Rated value  A 630	Let-through current / lc / maximum permissible		
Cut-off value I**2t,max. / 400 V  A²·s 5 400 000  Main circuit  Operating voltage  • with AC / Rated value / minimum  • with AC / Rated value / maximum  V 690  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 690 V / Rated value  • at AC-22 B / at 400 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value  • at AC-22 B / at 500 V / Rated value	• 400 V	Α	60 000
Main circuit         Operating voltage	• 500V	Α	60 000
Operating voltage	cut-off value I**2t,max. / 400 V	A²·s	5 400 000
<ul> <li>with AC / Rated value / minimum</li> <li>with AC / Rated value / maximum</li> <li>690</li> <li>Operating current</li> <li>at AC-21 B / at 400 V / Rated value</li> <li>at AC-21 B / at 500 V / Rated value</li> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> </ul>	Main circuit		
<ul> <li>with AC / Rated value / maximum</li> <li>Operating current</li> <li>at AC-21 B / at 400 V / Rated value</li> <li>at AC-21 B / at 500 V / Rated value</li> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> </ul>	Operating voltage		
Operating current         • at AC-21 B / at 400 V / Rated value       A       630         • at AC-21 B / at 500 V / Rated value       A       630         • at AC-21 B / at 690 V / Rated value       A       630         • at AC-22 B / at 400 V / Rated value       A       630         • at AC-22 B / at 500 V / Rated value       A       630	• with AC / Rated value / minimum	V	230
<ul> <li>at AC-21 B / at 400 V / Rated value</li> <li>at AC-21 B / at 500 V / Rated value</li> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> </ul>	<ul><li>with AC / Rated value / maximum</li></ul>	V	690
<ul> <li>at AC-21 B / at 500 V / Rated value</li> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> </ul>	Operating current		
<ul> <li>at AC-21 B / at 690 V / Rated value</li> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>A 630</li> <li>A 630</li> </ul>	• at AC-21 B / at 400 V / Rated value	Α	630
<ul> <li>at AC-22 B / at 400 V / Rated value</li> <li>at AC-22 B / at 500 V / Rated value</li> <li>A 630</li> </ul>	• at AC-21 B / at 500 V / Rated value	Α	630
● at AC-22 B / at 500 V / Rated value A 630	• at AC-21 B / at 690 V / Rated value	Α	630
	• at AC-22 B / at 400 V / Rated value	Α	630
• at AC-22 B / at 690 V / Rated value A 500	• at AC-22 B / at 500 V / Rated value	Α	630
	● at AC-22 B / at 690 V / Rated value	Α	500

• at AC-23 B / at 400 V / Rated value	Α	630
• at AC-23 B / at 500 V / Rated value	Α	500
• at AC-23 B / at 690 V / Rated value	Α	200
<ul> <li>with capacitive load / at 400 V / maximum</li> </ul>	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
<ul><li>switch disconnector</li></ul>		Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>		No
<ul><li>safety switch</li></ul>		Yes
maintenance/repair switch		Yes
Product details		
Product feature / interlock		Yes
Product component		
Trip indicator		Yes
<ul> <li>Phase failure monitoring</li> </ul>		No
undervoltage release		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property / sealable		Yes
Product expansion		
Auxiliary switch		Yes
• optional		
<ul> <li>locking capability</li> </ul>		Yes
— motor drive		No
<ul> <li>Phase failure monitoring</li> </ul>		Yes
— Voltage trigger		No
<ul> <li>Overvoltage protection monitoring</li> </ul>		Yes
Product function		
Product function		
• fuse monitoring		Yes
Overvoltage protection monitoring		No
Short circuit		
Conditional short-circuit current (Iq)		
Rated value	kA	50

<ul> <li>with AC / at 500 V / with high-speed activation / Rated value</li> </ul>	kA	50
<ul> <li>with AC / at 690 V / with high-speed activation / Rated value</li> </ul>	kA	50
<ul> <li>with closed switch / with AC / at 500 V / Rated value</li> </ul>	kA	100
<ul> <li>with closed switch / with AC / at 690 V / Rated value</li> </ul>	kA	100
Connections		
Arrangement of electrical connectors / for main current circuit		other
Connectable conductor cross-section / for main contacts		
<ul> <li>single or multi-stranded / minimum</li> </ul>	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		flat connector
Mechanical Design		
Mechanical Design  Height	mm	306
	mm mm	306 249.4
Height Width Depth		249.4 195.7
Height Width Depth mounting position	mm	249.4 195.7 horizontally or vertically
Height Width Depth mounting position Mounting type	mm	249.4 195.7
Height Width Depth mounting position Mounting type Mounting type	mm	249.4 195.7 horizontally or vertically busbar mounting
Height Width Depth mounting position Mounting type Mounting type  • floor mounting	mm	249.4 195.7 horizontally or vertically busbar mounting No
Height Width Depth mounting position Mounting type Mounting type	mm	249.4 195.7 horizontally or vertically busbar mounting  No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting	mm	249.4 195.7 horizontally or vertically busbar mounting No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting	mm	249.4 195.7 horizontally or vertically busbar mounting  No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting	mm	249.4 195.7 horizontally or vertically busbar mounting  No No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment	mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions	mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No No Yes
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing	mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No No O No O No No O No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions	mm mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No No Yes
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature	mm mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No No O No O No No O No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature • during operation / minimum	mm mm °C °C °C	249.4 195.7 horizontally or vertically busbar mounting  No No No No Yes 60
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature • during operation / minimum • during operation / maximum	mm mm	249.4 195.7 horizontally or vertically busbar mounting  No No No No Yes 60  -25 55

### **Equipment marking**

• acc. to DIN EN 61346-2

• acc. to DIN EN 81346-2

Q

Q

# **General Product Approval**

**Declaration of** Conformity













Т	es	t
_		

## **Shipping Approval**

#### Certificates

Type Test Certificates/Test Report









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/3NP11631BC12

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

automation.siemens.com/WW/view/en/3NP11631BC12/all

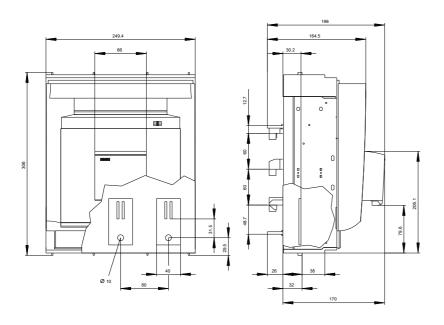
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP11631BC12">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP11631BC12</a>

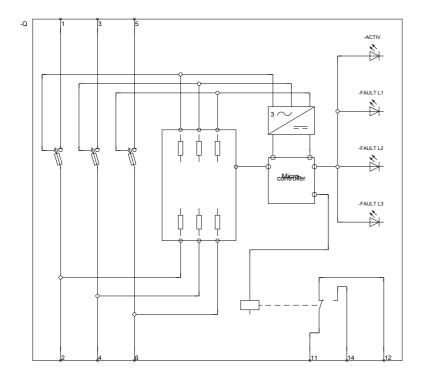
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015