## **SIEMENS**

Data sheet 3NP1153-1DA10



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH2, 400 A, for assembly and installation on mounting plate, flat terminal, cover level 70  $\,\mathrm{mm}$ 

Model		
product designation	3NP1 fuse switch disconnector	
design of the safety monitoring	Without	
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	For assembly and installation on mounting plate	
size of disconnecting link	2 and 1	
size of fuse link	NH1, NH2	
let-through current with closed switch maximum	40 kA	
mechanical service life (operating cycles) typical	1 000	
12t value with closed switch maximum	2 150 kA2.s	
power factor		
• at AC-22 B	0.65	
• at AC-23 B	0.35	
with capacitive load	-0.25	
fuse system	LV HRC fuse	
degree of pollution	3	
Voltage		
insulation voltage		
rated value	690 V	
<ul> <li>with degree of pollution 3 at AC rated value</li> </ul>	690 V	
<ul> <li>with degree of pollution 2 at AC rated value</li> </ul>	1 000 V	
power factor at AC-21 B	0.95	
surge voltage resistance rated value	8 kV	
operational current		
<ul> <li>at 35 °C rated value</li> </ul>	400 A	
• at 40 °C rated value	400 A	
• at 45 °C rated value	392 A	
• at 50 °C rated value	372 A	
• at 55 °C rated value	356 A	
• at AC-21 B at 240 V rated value	400 A	
• at AC-21 B at 400 V rated value	400 A	
• at AC-21 B at 500 V rated value	400 A	
• at AC-21 B at 690 V rated value	400 A	
• at AC-22 B at 240 V rated value	400 A	
• at AC-22 B at 400 V rated value	400 A	
• at AC-22 B at 500 V rated value	400 A	
• at AC-22 B at 690 V rated value	400 A	

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<ul> <li>at AC-23 B at 690 V rated value</li> </ul>	125 A
• at AC-23 B at 500 V rated value	315 A
• at AC-23 B at 400 V rated value	400 A
• at AC-23 B at 240 V rated value	400 A
• at DC-21 B at 120 V rated value	400 A
• at DC-21 B at 240 V rated value	400 A
• at DC-21 B at 440 V rated value	400 A
• at DC-22 B at 120 V rated value	400 A
• at DC-22 B at 240 V rated value	400 A
• at DC-22 B at 440 V rated value	315 A
• at DC-23 B at 120 V rated value	250 A
• at DC-23 B at 240 V rated value	250 A
• at DC-23 B at 440 V rated value	160 A
let-through current with high-speed activation maximum permissible	40 kA
operating voltage	
<ul> <li>at AC rated value maximum</li> </ul>	690 V
<ul> <li>at DC rated value</li> </ul>	440 V
at DC rated value maximum	440 V
Protection class	
protection class IP	
<ul> <li>with closed switch with cover or cable lug cover</li> </ul>	IP40
<ul> <li>with closed switch without cover or cable lug cover</li> </ul>	IP30
• open	IP20
Dissipation	
power loss [W]	
<ul> <li>with conventional rated thermal current without fuse per pole</li> </ul>	14 W
<ul> <li>with conventional rated thermal current without fuse per device</li> </ul>	42 W
<ul> <li>for rated value of the current at AC in hot operating state per pole</li> </ul>	48 W
of the fuse per fuse maximum	34 W
Main circuit	
operational current	
operational current  • rated value	400 A
•	400 A 72 A
• rated value	
<ul><li>rated value</li><li>with capacitive load at 400 V rated value</li></ul>	72 A
<ul> <li>rated value</li> <li>with capacitive load at 400 V rated value</li> <li>with capacitive load at 500 V rated value</li> </ul>	72 A
<ul> <li>rated value</li> <li>with capacitive load at 400 V rated value</li> <li>with capacitive load at 500 V rated value</li> </ul> Auxiliary circuit	72 A 55 A
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts	72 A 55 A 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts	72 A 55 A 0 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts	72 A 55 A 0 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability	72 A 55 A 0 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability suitability for use	72 A 55 A 0 0 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability for use     main switch	72 A 55 A 0 0 0
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability or use     main switch     switch disconnector	72 A 55 A  0 0 0 No Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch	72 A 55 A 0 0 0 0 0 No Yes No
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch	72 A 55 A  0 0 0 Ves No Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch	72 A 55 A  0 0 0 Ves No Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability or use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details	72 A 55 A  0 0 0 Ves No Yes Yes Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  Suitability  suitability  suitability or use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring	72 A 55 A  0 0 0 Ves No Yes Yes Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  Suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component	72 A 55 A  0 0 0 Ves No Yes Yes Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release	72 A 55 A  0 0 0 Ves No Yes Yes Yes Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product details  product component     undervoltage release     undervoltage release with leading contact	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes
rated value     with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability  suitability or use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release     undervoltage release with leading contact  product feature sealable	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes
with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  Suitability  suitability  suitability  suitability or use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release     undervoltage release with leading contact  product feature sealable  product extension auxiliary switch	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes
with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  suitability  suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release     undervoltage release with leading contact  product extension auxiliary switch  product extension optional	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes Yes  No No No No No No No No Yes Yes
with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Suitability  suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release     undervoltage release with leading contact  product feature sealable  product extension auxiliary switch  product extension optional     locking capability	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes  Yes  Yes
with capacitive load at 400 V rated value     with capacitive load at 500 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  suitability  suitability  suitability for use     main switch     switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product function phase failure monitoring  product component     undervoltage release     undervoltage release with leading contact  product feature sealable  product extension auxiliary switch  product extension optional     locking capability     phase failure monitoring	72 A 55 A  0 0 0 0 No Yes No Yes Yes Yes  Yes  Yes  Yes

Product function	
product function overvoltage protection monitoring	No
Short circuit	
conditional short-circuit current (Iq)	
<ul> <li>at AC at 240 V with high-speed activation rated value</li> </ul>	80 kA
at AC at 500 V with high-speed activation rated value	80 kA
at AC at 690 V with high-speed activation rated value	50 kA
with closed switch at AC at 240 V rated value	100 kA
with closed switch at AC at 500 V rated value	100 kA
with closed switch at AC at 690 V rated value	100 kA
Connections	
arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
solid or stranded minimum	25 mm²
<ul> <li>solid or stranded maximum</li> </ul>	240 mm²
stranded minimum	25 mm²
stranded maximum	240 mm²
tightening torque with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	34 x 18 mm
type of connection technology	Flat terminal
Mechanical Design	
height	306 mm
width	209.4 mm
depth	130 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
rail mounting	No
mounting position	horizontal/vertical
net weight	4.21 kg
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C
Certificates	
reference code according to IEC 81346-2	Q
Approvals Certificates	
General Product Approval	

General Product Approval





Confirmation







**General Product Approval** 

**Test Certificates** 

Marine / Shipping

Miscellaneous



Type Test Certificates/Test Report

Special Test Certificate





other Environment

<u>Miscellaneous</u> <u>Confirmation</u> <u>Environmental Con-</u> <u>Environmental Con-</u>

Information on the packaging

com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1153-1DA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1153-1DA10

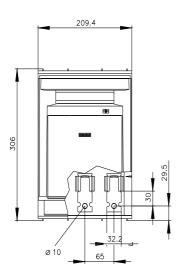
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1153-1DA10">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1153-1DA10</a>

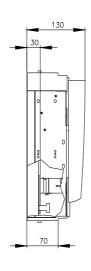
**CAx-Online-Generator** 

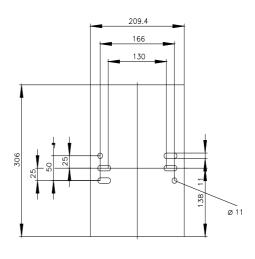
http://www.siemens.com/cax

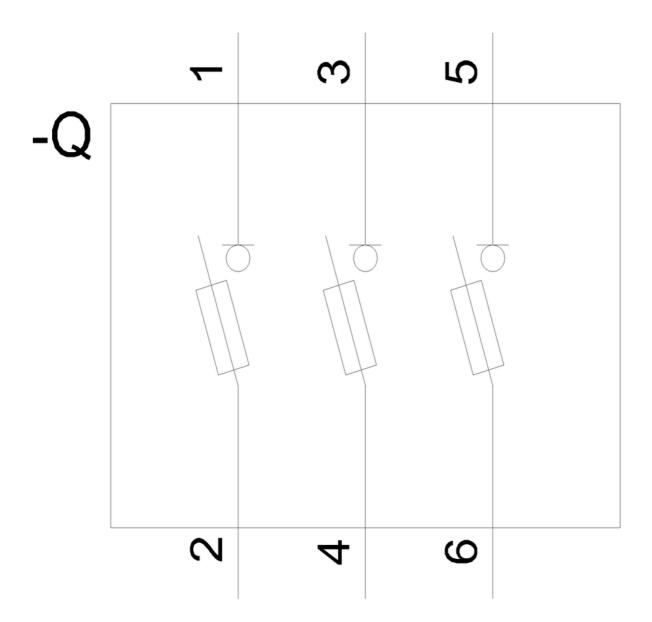
**Tender specifications** 

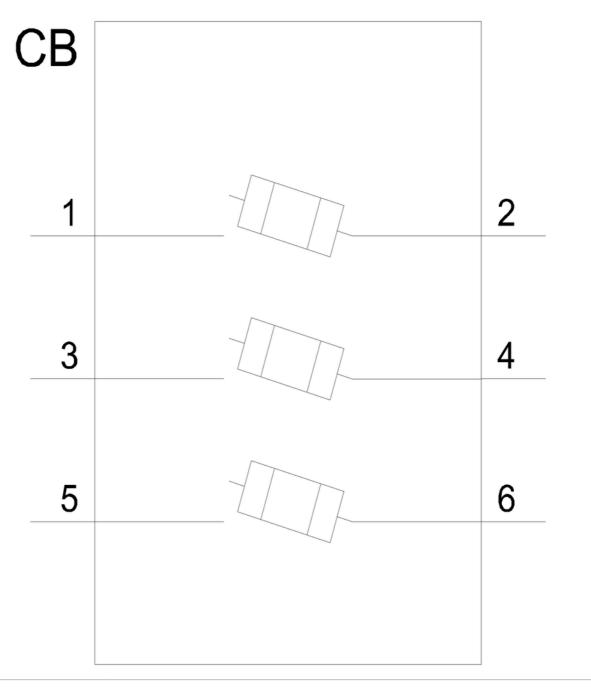
http://www.siemens.com/specifications











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