

SWITCH-DISCONNECTOR 2000A, FRAME SIZE 5, 4-POLE FRONT OPERATING CENTER BASIC UNIT WITHOUT HANDLE FLAT TERMINAL



Model	
product brand name	SENTRON
product designation	3KD switch disconnecter
design of the product	Switch
display version for switch position indicator door-coupling rotary operating mechanism	ON-OFF
design of the actuating element	Without handle
type of the driving mechanism	Front operating mechanism
type of the driving mechanism motor drive	No
General technical data	
number of poles	4
type of device	fixed mounting
size of switch disconnecter	5
mechanical service life (operating cycles) typical	8 000
electrical endurance (operating cycles)	
• at DC-21 A at 1000 V	100
• at AC-23 A at 690 V	500
• at DC-23 A at 440 V	500
I <sup>2</sup> t value	
• with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum	3 492 000 A <sup>2</sup> ·s
• of the fuse at 500 V maximum permissible	38 000 000 A <sup>2</sup> ·s
• of the gG/aM SITOR fuse at 1000 V maximum permissible	1 800 000 A <sup>2</sup> ·s
position of the switch operating mechanism	after the second pole
overvoltage in percent relative to the operating voltage at AC at 400, 500, 690 V at 50/60 Hz	10 %
overvoltage category	IV
degree of pollution	3
Voltage	
operating voltage with current paths in series	
• with degree of pollution 2 at DC rated value	440 V / 3
• with degree of pollution 3 at DC rated value	440 V / 3
insulation voltage	
• rated value	1 000 V
surge voltage resistance rated value	12 kV
operational current at AC-22 A at 1000 V maximum	1 600 A
let-through current of the fuse at 500 V maximum permissible	176 400 A
let-through current of the gG fuse at 690 V maximum permissible	127 000 A
Supply voltage	

operating voltage at AC rated value	1 000 V
<b>Protection class</b>	
protection class IP	IP00
protection class IP	
<ul style="list-style-type: none"> <li>with closed switch with cover or cable lug cover</li> </ul>	IP20
<ul style="list-style-type: none"> <li>on the front</li> </ul>	IP00
<b>Dissipation</b>	
power loss [W]	
<ul style="list-style-type: none"> <li>with conventional rated thermal current per pole</li> </ul>	80 W
<ul style="list-style-type: none"> <li>with conventional rated thermal current per device</li> </ul>	320 W
<ul style="list-style-type: none"> <li>for rated value of the current at AC in hot operating state per pole</li> </ul>	80 W
<b>Main circuit</b>	
operating power	
<ul style="list-style-type: none"> <li>at AC-23 A at 500 V rated value</li> </ul>	1 000 kW
operational current rated value	2 000 A
<b>Auxiliary circuit</b>	
number of connected NC contacts for auxiliary contacts	0
number of connected NO contacts for auxiliary contacts	0
number of connected CO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	8
number of NO contacts for auxiliary contacts	8
<b>Suitability</b>	
suitability for use main switch	Yes
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	Yes
suitability for use safety switch	Yes
suitability for use according to IEC 62626-1 safety switch	No
suitability for use maintenance/repair switch	Yes
<b>Product details</b>	
product feature interlock	No
product component	
<ul style="list-style-type: none"> <li>trip indicator</li> </ul>	No
<ul style="list-style-type: none"> <li>voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>undervoltage release with leading contact</li> </ul>	No
product extension auxiliary switch	Yes
product extension optional motor drive	No
product extension optional voltage trigger	No
<b>Short circuit</b>	
short-time withstand current (I <sub>cw</sub> ) at 1000 V AC/440 V DC limited to 1 s rated value	55 kA
short-circuit current making capacity (I <sub>cm</sub> ) for switch disconnecter	
<ul style="list-style-type: none"> <li>at 1000 V AC without fuse link rated value minimum</li> </ul>	121 kA
<ul style="list-style-type: none"> <li>at DC 440 V without fuse link rated value minimum</li> </ul>	80 kA
<ul style="list-style-type: none"> <li>without fuse link rated value minimum</li> </ul>	121 kA
conditional short-circuit current with line-side fuse protection	
<ul style="list-style-type: none"> <li>at 500 V by gG fuse rated value</li> </ul>	80 kA
<ul style="list-style-type: none"> <li>at 690 V by gG fuse rated value</li> </ul>	65 kA
<b>Connections</b>	
type of connectable conductor cross-sections for aluminum conductor	
<ul style="list-style-type: none"> <li>stranded with lug</li> </ul>	1x (120 ... 300 mm <sup>2</sup> ), 2x (95 ... 300 mm <sup>2</sup> )
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> <li>with combination of Al conductor+switch</li> </ul>	680A / 2x 300mm <sup>2</sup>
<ul style="list-style-type: none"> <li>for copper busbar</li> </ul>	3x (60x10 mm <sup>2</sup> )
type of connectable conductor cross-sections for copper conductor	
<ul style="list-style-type: none"> <li>stranded with lug according to DIN 46234</li> </ul>	1x (120 ... 240 mm <sup>2</sup> ), 2x (95 ... 240 mm <sup>2</sup> )

• stranded with lug according to DIN 46235	1x (120 ... 240 mm <sup>2</sup> ), 2x (95 ... 240 mm <sup>2</sup> )
type of electrical connection for main current circuit	flat connector

Mechanical Design	
height	310 mm
width	472 mm
depth	153 mm
fastening method	screw fixing
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	No
• rail mounting	No
mounting position	any
Net Weight	21.34 kg

Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	70 °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	



Miscellaneous



Test Certificates	other	Environment			
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[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

[Confirmation](#)

[Environmental Confirmations](#)

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Further information
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Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3KD5640-0RE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD5640-0RE20-0>

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

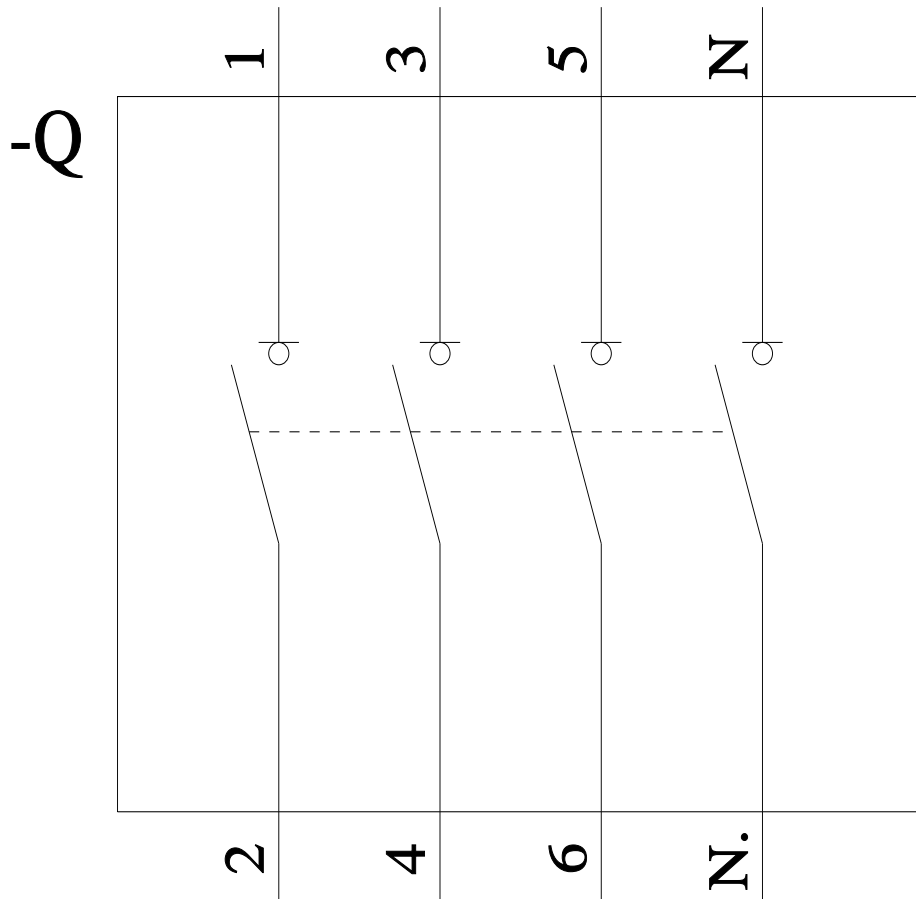
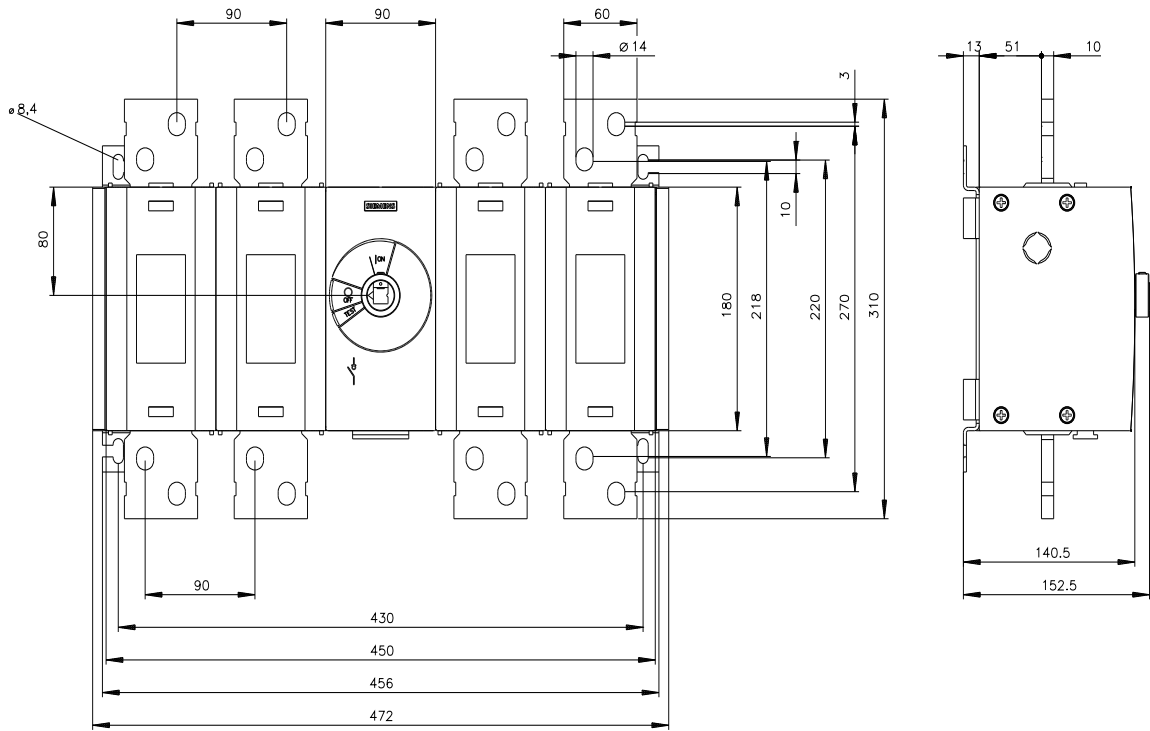
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3KD5640-0RE20-0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD5640-0RE20-0)

CAx-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



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