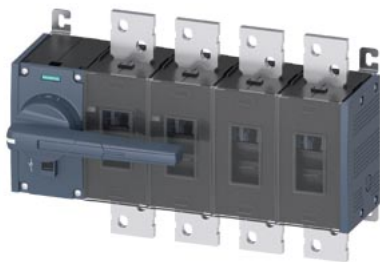


Switch disconnecter 1000 A, Size 5, 4-pole Front operating mechanism left
Complete unit with direct operating mechanism gray flat terminal



Model	
product brand name	SENTRON
product designation	3KD switch disconnecter
design of the product	Switch
display version / for switch position indicator manual operation	ON-OFF-TEST
design of the actuating element	Long rotary knob
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 (switching cycles) / typical	8 000
electrical endurance (switching 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 ² t value	
• with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	3 492 000 A ² ·s
• of the fuse / at 500 V / maximum permissible	19 000 000 A ² ·s
• of the gG/aM SITOR fuse / at 1000 V / maximum permissible	1 800 000 A ² ·s
position / of the switch operating mechanism	at the left end
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
Protection class	
protection class IP	IP00
protection class IP	
• with closed switch / with cover or cable lug cover	IP20

• on the front	IP00
Dissipation	
power loss [W]	
• with conventional rated thermal current / per pole	20 W
• with conventional rated thermal current / per device	80 W
• for rated value of the current / at AC / in hot operating state / per pole	20 W
Current	
operational current	
• at 35 °C / rated value	1 000 A
• at 40 °C / rated value	1 000 A
• at 45 °C / rated value	1 000 A
• at 50 °C / rated value	1 000 A
• at 55 °C / rated value	1 000 A
• at 60 °C / rated value	1 000 A
• at 65 °C / rated value	1 000 A
• at 70 °C / rated value	1 000 A
• at AC / rated value	1 000 A
• at AC-23 A / at 690 V / rated value	1 000 A
• at AC-23 A / at 500 V / rated value	1 000 A
• at AC-23 A / at 400 V / rated value	1 000 A
• at AC-22 A / at 1000 V / maximum	1 000 A
• at AC-22 A / at 690 V / rated value	1 000 A
• at AC-22 A / at 500 V / rated value	1 000 A
• at AC-22 A / at 400 V / rated value	1 000 A
• at AC-20 A / at 1000 V / maximum	1 000 A
• at AC-21 A / at 500 V / rated value	1 000 A
• at AC-21 A / at 690 V / rated value	1 000 A
• at DC-21 B / at 1000 V / rated value / maximum	1000 A / 4
continuous current / of upstream fuse / at 500 V and 690 V / rated value	2 000 A
continuous current / of upstream fuse / at 1000 V / rated value	1 890 A
operational current / at DC / rated value	1 000 A
let-through current / of the fuse / at 500 V / maximum permissible	176 400 A
let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	87 000 A
Main circuit	
operating power	
• at AC-23 A / at 500 V / rated value	710 kW
operational current / rated value	1 000 A
Auxiliary circuit	
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
Suitability	
suitability for use	
• main switch	Yes
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes
Product details	
product component	
• trip indicator	No
• voltage trigger	No

• undervoltage release	No
• undervoltage release with leading contact	No
product extension / auxiliary switch	Yes
product extension / optional	
• motor drive	No
• voltage trigger	No
Short circuit	
short-time withstand current (I _{cw}) / at 1000 V AC/440 V DC / limited to 1 s / rated value	55 kA
short-circuit current making capacity (I _{cm}) / for switch disconnector	
• at 1000 V AC / without fuse link / rated value / minimum	121 kA
• at DC 440 V / without fuse link / rated value / minimum	80 kA
• without fuse link / rated value / minimum	121 kA
conditional short-circuit current / with line-side fuse protection	
• at 415 V / by molded case circuit breaker / rated value	65 kA
• at 500 V / by gG fuse / rated value	100 kA
• at 690 V / by gG fuse / rated value	100 kA
Connections	
type of connectable conductor cross-sections / for aluminum conductor	
• stranded / with lug	1x (120 ... 300 mm ²), 2x (95 ... 300 mm ²)
type of connectable conductor cross-sections	
• with combination of Al conductor+switch	680A / 2x 300 mm ²
• for copper busbar	'2 x (60 x 10 mm ²)
type of connectable conductor cross-sections / for copper conductor	
• stranded / with lug / according to DIN 46234	1x (120 ... 240 mm ²), 2x (95 ... 240 mm ²)
• stranded / with lug / according to DIN 46235	1x (120 ... 240 mm ²), 2x (95 ... 240 mm ²)
type of electrical connection / for main current circuit	flat connector
Mechanical Design	
height	310 mm
width	472 mm
depth	212.5 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	21 560 g
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
General Product Approval	
Declaration of Conformity	

[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity	Marine / Shipping	other
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[Environmental Con-
firmations](#)

[Miscellaneous](#)

Further information

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=3KD5042-0RE10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD5042-0RE10-0>

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

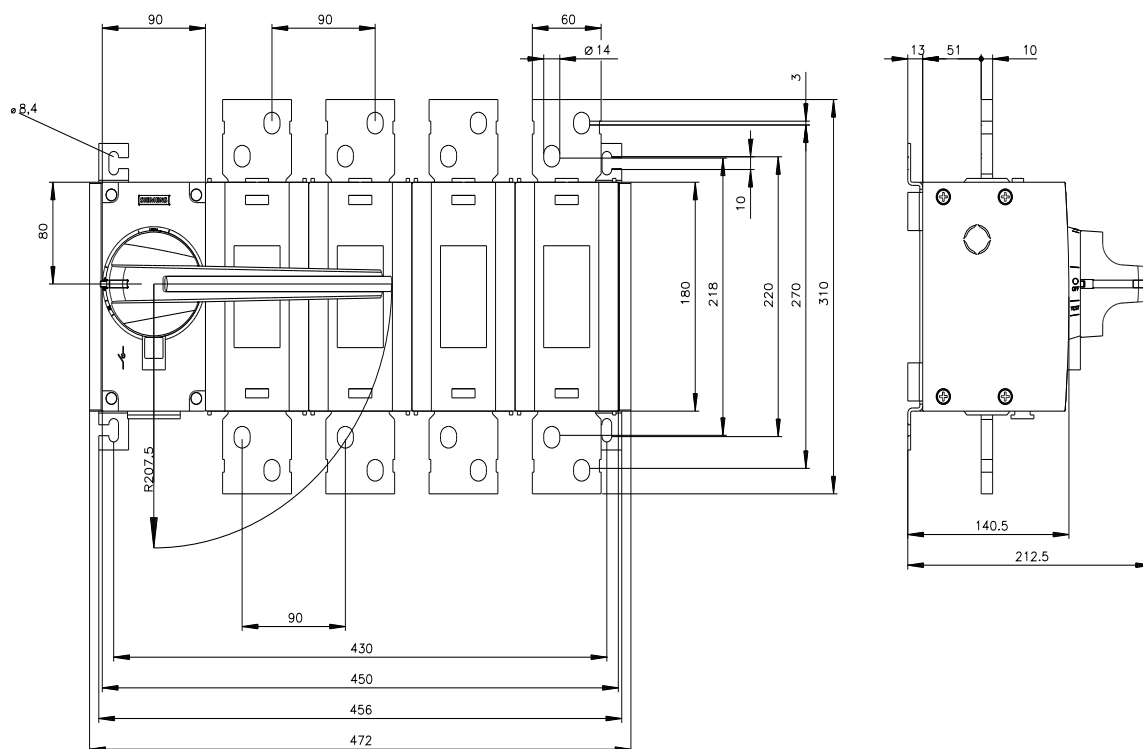
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD5042-0RE10-0

CAX-Online-Generator

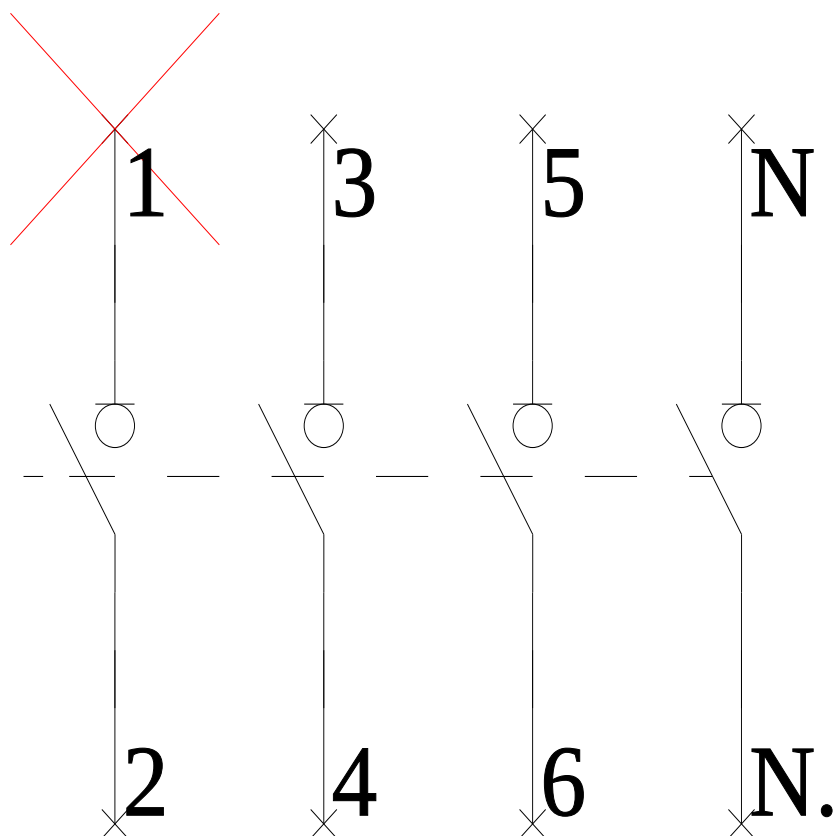
<http://www.siemens.com/cax>

Tender specifications

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



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