



Switch disconnector 500 A, Size 4, 3-pole Front operating mechanism center Basic unit without handle flat terminal

Model	
product brand name	SENTRON
product designation	3KD switch disconnector
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	3
type of device	fixed mounting
size of switch disconnector	4
mechanical service life (operating cycles) typical	8 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	1 000
• at DC-23 A at 440 V	1 000
I _{2t} value	
• with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum	647 250 A ² ·s
• of the fuse at 500 V maximum permissible	5 400 005 A ² ·s
• of the gG fuse at 690 V maximum permissible	3 760 005 A ² ·s
• of the gG/aM SITOR fuse at 1000 V maximum permissible	520 000 A ² ·s
• of the molded case circuit breaker at 415 V maximum permissible	16 000 000 A ² ·s
position of the switch operating mechanism	after the first 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
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	12 W
• with conventional rated thermal current per device	36 W
• for rated value of the current at AC in hot operating state per pole	12 W
Main circuit	
operating power	
• at AC-23 A at 500 V rated value	355 kW
operational current rated value	500 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 disconnector	Yes
• EMERGENCY OFF switch	Yes
• 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 (Icw) at 1000 V AC/440 V DC limited to 1 s rated value	30 kA
short-circuit current making capacity (Icm) for switch disconnector	
• at 1000 V AC without fuse link rated value minimum	80 kA
• at DC 440 V without fuse link rated value minimum	42.6 kA
• without fuse link rated value minimum	80 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 (25 ... 240 mm ²), 2x (25 ... 240 mm ²)
type of connectable conductor cross-sections	
• with combination of Al conductor+switch	500A / 2x 240 mm ²
• for copper busbar	'1 x (40 x 10 mm ²), 2 x (40 x 5 mm ²)
type of connectable conductor cross-sections for copper conductor	
• stranded with lug according to DIN 46234	1x (25 ... 240 mm ²), 2x (25 ... 240 mm ²)
• stranded with lug according to DIN 46235	1x (25 ... 240 mm ²), 2x (25 ... 240 mm ²)
type of electrical connection for main current circuit	flat connector
Mechanical Design	
height	235 mm
width	260 mm

depth	110 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	7 360 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](#)



EG-Konf.

Declaration of Conformity	Marine / Shipping	other	Environment
UKCA	Lloyd's Register	Miscellaneous	Confirmation
			Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.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=3KD4430-0QE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD4430-0QE20-0>

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

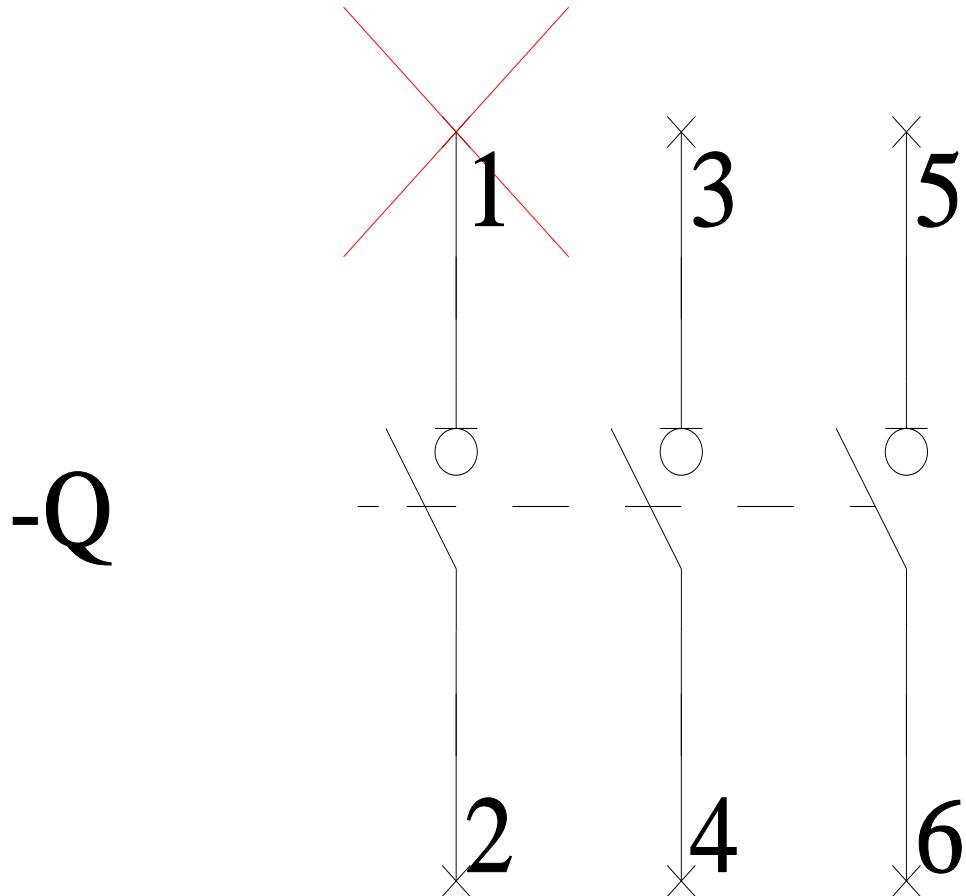
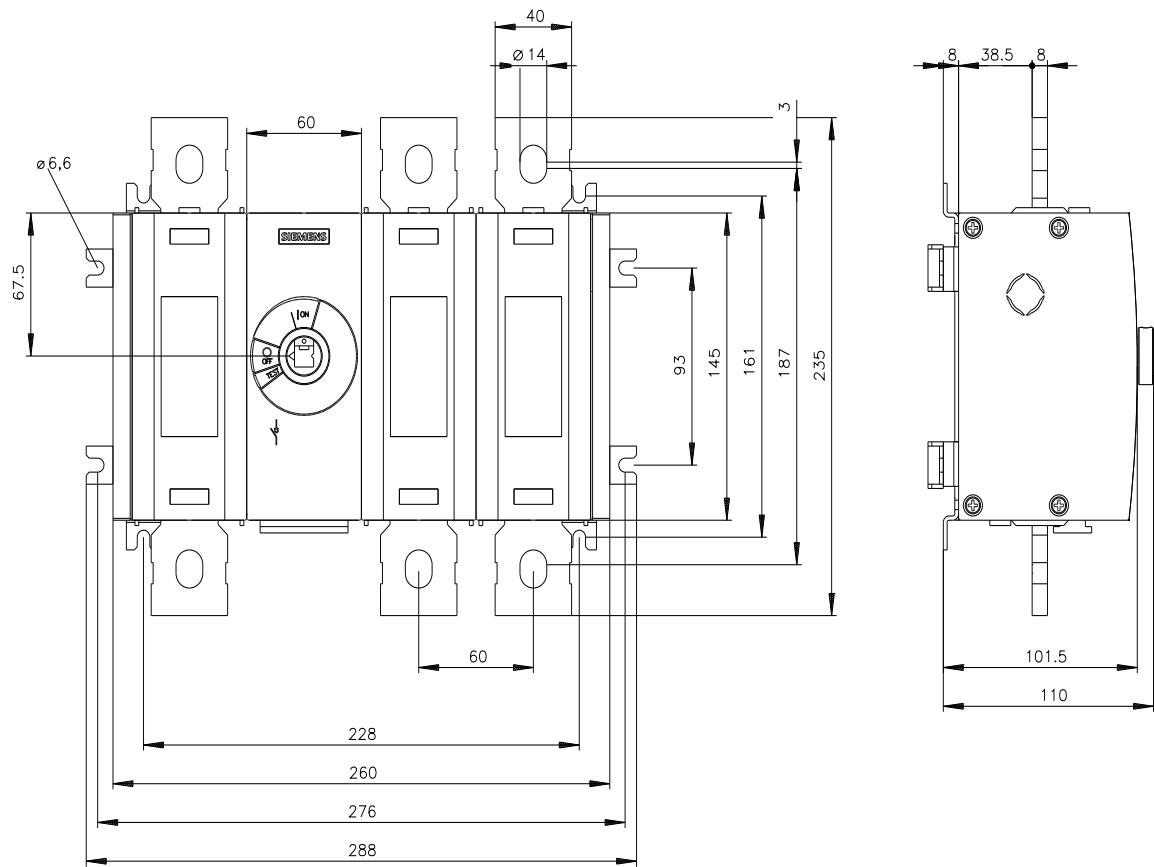
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD4430-0QE20-0

CAx-Online-Generator

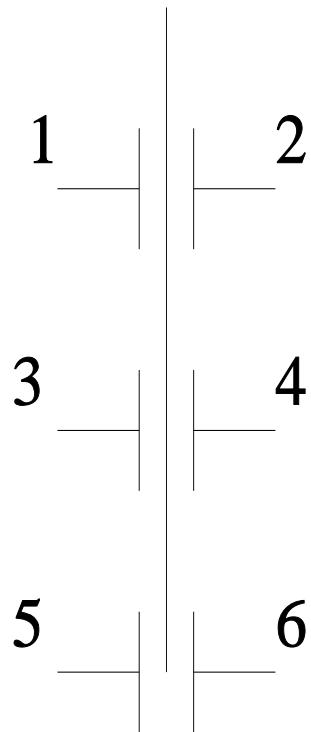
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Tender specifications

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



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