

Switch disconnecter 500 A, Size 4, 3-pole Side operating mechanism right 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	Side 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 disconnecter	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 ² t 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	at the right 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
operational current at AC-22 A at 1000 V maximum	500 A
let-through current of the fuse at 500 V maximum permissible	118 000 A
let-through current of the gG fuse at 690 V maximum	90 600 A

permissible	
Supply voltage	
operating voltage at AC rated value	1 000 V
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
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product feature interlock	No
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	30 kA
short-circuit current making capacity (I _{cm}) for switch disconnecter	
• 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	500 A / 2 x 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 • stranded with lug according to DIN 46235	1x (25 ... 240 mm ²), 2x (25 ... 240 mm ²) 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	271 mm
depth	112 mm
fastening method	screw fixing
fastening method	
• 4-hole front mounting • front mounting with central attachment • rail mounting	No No No
mounting position	any
net weight	7 449 g
Environmental conditions	
ambient temperature during operation	
• minimum • maximum	-25 °C 70 °C
ambient temperature during storage	
• minimum • maximum	-50 °C 80 °C
Certificates	
reference code according to IEC 81346-2	Q
Approvals Certificates	
General Product Approval	



[Confirmation](#)

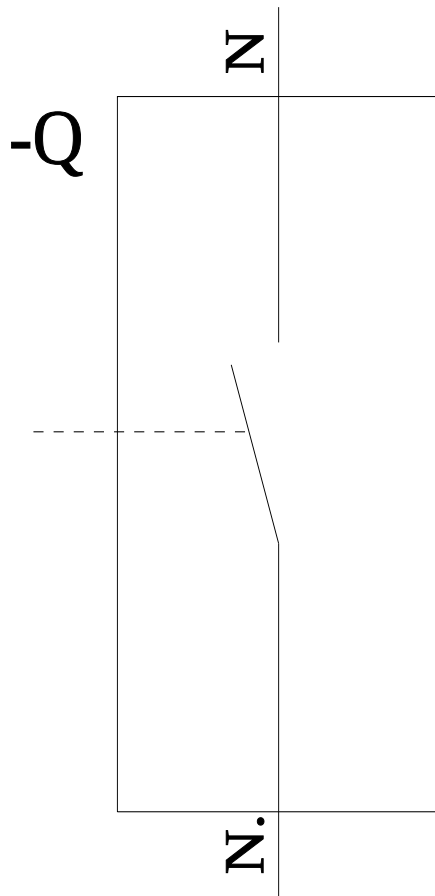
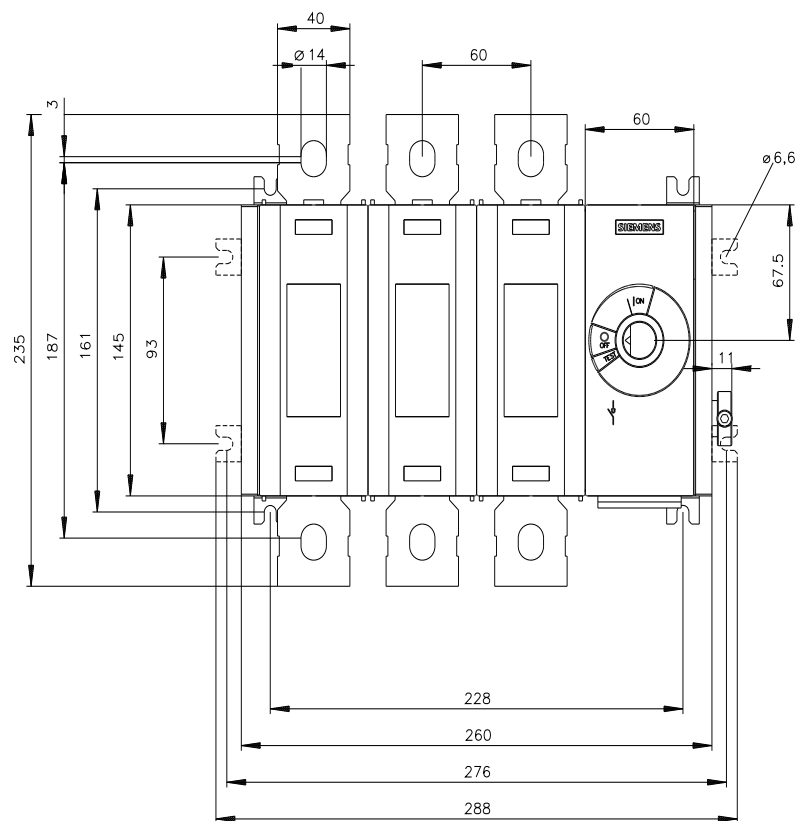
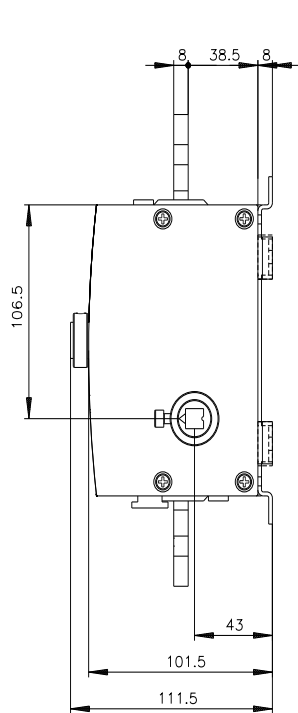


[Miscellaneous](#)

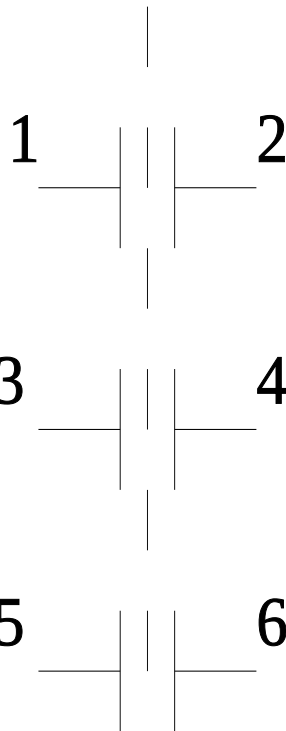
General Product Approval	Test Certificates	Marine / Shipping	other
	Type Test Certificates/Test Report		
		DNV	LRS
			Miscellaneous Confirmation

Environment	
Environmental Conformations	Environmental Conformations

Further information
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=3KD4434-0QE40-0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KD4434-0QE40-0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD4434-0QE40-0 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications



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