

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



Model	
Product brand name	SETRON
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 operating mechanism	Without handle
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
Electrical endurance (switching cycles)	
• at AC-23 A / at 690 V / at 50/60 Hz	1 000
• at DC-23 A / at 440 V	1 000
I ² t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	3 687 500 A ² ·s

• with closed switch / for combination switch + fuse / at 400 V / maximum	3 687 500 A ² ·s
• with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 450 000 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
circuit-breaker / Design	3KD4
Mechanical service life (switching cycles) / typical	8 000
Position / of the switch operating mechanism	at the left end
Overvoltage category	IV

Voltage

Operating voltage / with current paths in series	
• with degree of pollution 2 / at DC / rated value / Note	440 V / 3
• with degree of pollution 3 / at DC / rated value / Note	440 / 3
Insulation voltage	
• rated value	1 000 V
Surge voltage resistance / rated value	12 kV
Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz	10 %
Current / at AC / rated value	500 A

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

Current

Operating current	
• at AC-21 A / at 400 V / maximum	500 A
• at AC-21 A / at 500 V / maximum	500 A
• at AC-21 A / at 690 V / maximum	500 A

• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	500 A
• at DC-23 A / at 440 V / rated value / maximum	500 / 3
• at DC-23 A / at 220 V / rated value / maximum	500 / 2
• at DC-22 A / at 440 V / rated value / maximum	500 / 3
• at DC-22 A / at 220 V / rated value / maximum	500 / 2
• at DC-21 A / at 440 V / rated value / maximum	500 / 3
• at DC-21 A / at 220 V / maximum	500 / 2
Continuous current	
• rated value	500 A
• at 40 °C / rated value	500 A
• at 45 °C / rated value	500 A
• at 50 °C / rated value	500 A
• at 55 °C / rated value	500 A
• at 60 °C / rated value	500 A
• at 65 °C / rated value	500 A
• at 70 °C / rated value	500 A
Continuous current / at DC / rated value	500 A
Let-through current / of the fuse / at 500 V / maximum permissible	65 521 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	54 005 A
Let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	54 500 A
• for combination switch + fuse / at 400 V / maximum permissible	61 600 A
• for combination switch + fuse / at 500 V / maximum permissible	61 600 A
Short-time current resistance (I _{cw})	
• at 690 V AC/440 V DC / limited to 1 s / rated value	30 kA

Main circuit

Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	250 kW
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	355 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	500 kW
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V

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	Yes
• safety switch	Yes
• 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
• optional	
— motor drive	No
— Voltage trigger	No

Short circuit	
Short-circuit current making capacity (Icm)	
• for switch disconnecter / at 690 V AC/440 V DC / without fuse link / rated value / minimum	63 kA
• for switch disconnecter / without fuse link / rated value / minimum	63 kA

Conditional short-circuit current / with line-side fuse protection	
• at 500 V / by gG fuse / rated value	100 kA

Connections	
• Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug	1x (25 ... 240 mm²), 2x (25 ... 240 mm²)
• Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235	1x (25 ... 240 mm²), 2x (25 ... 240 mm²)
Type of electrical connection	
• for main current circuit	flat connector

Mechanical Design	
Height	235 mm
Width	260 mm
Depth	110 mm
Mounting type	screw fixing
Mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	No
Mounting position	any
Net weight	7 300 g

Environmental conditions	
Ambient temperature	
	-25 ... +70 °C
	-50 ... +80 °C

Certificates	
Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval	Declaration of Conformity	Shipping Approval	other
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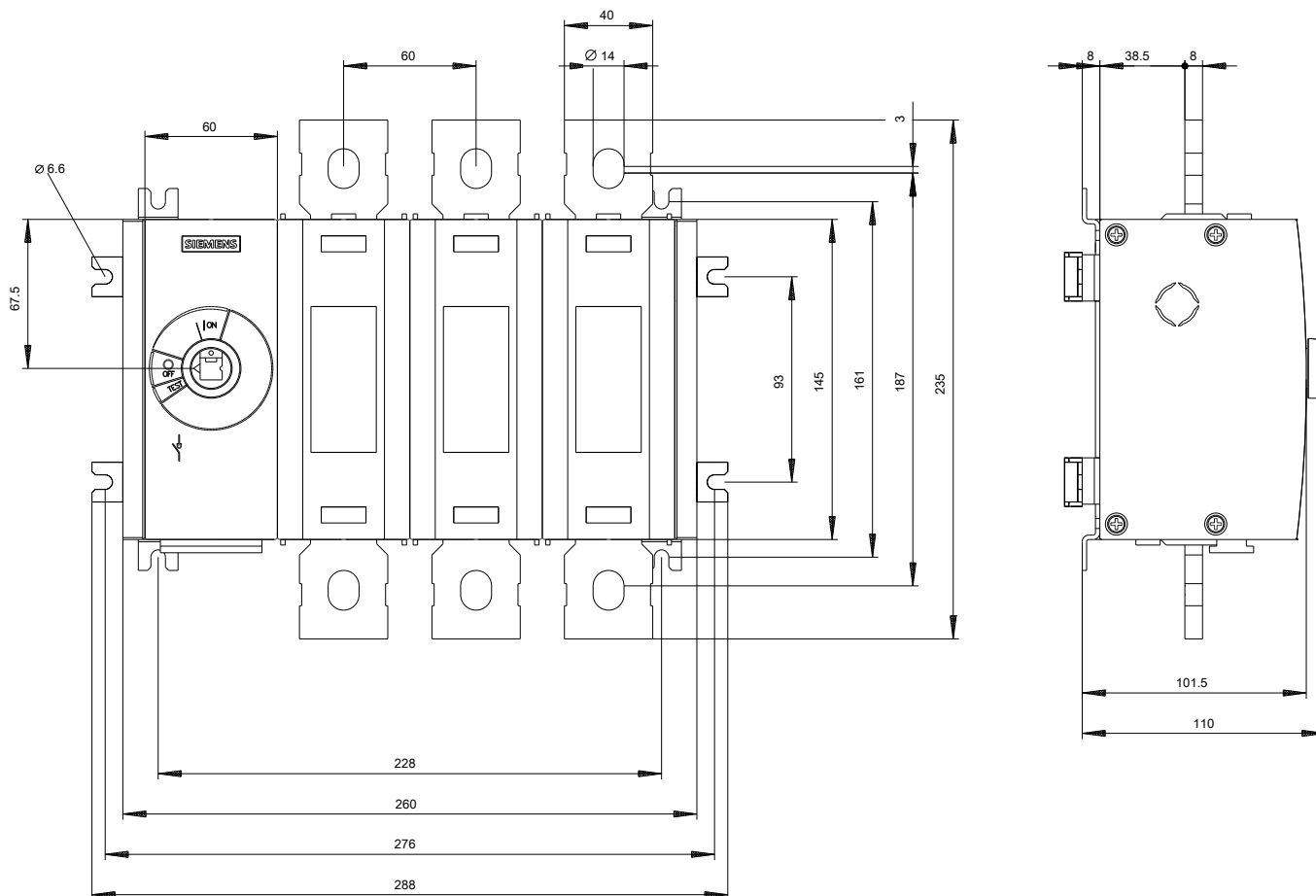


[Miscellaneous](#)

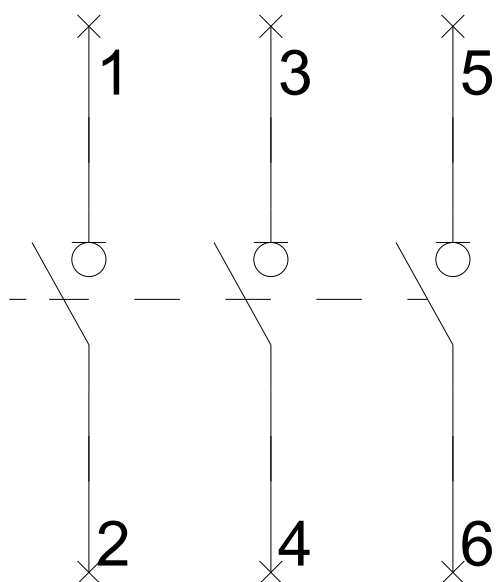


[Miscellaneous](#)

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=3KD4430-0QE10-0	



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