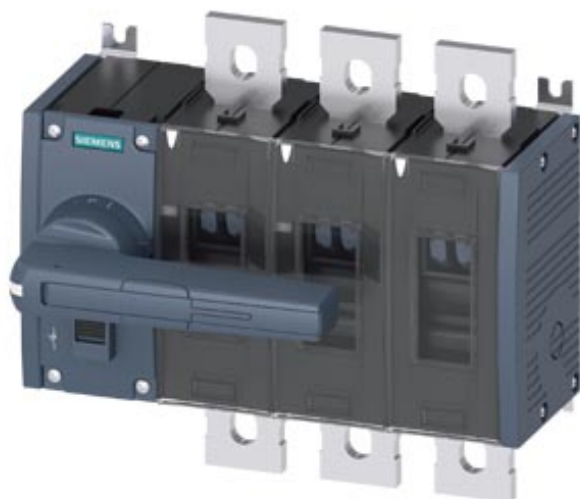


Switch disconnecter 500 A, Size 4, 3-pole Front operating mechanism left Complete unit with direct operating mechanism gray flat terminal



Model	
Product brand name	SETRON
Product designation	3KD switch disconnecter
Design of the product	Switch
Display version / for switch position indicator manual operation	ON-OFF-TEST
Design of the operating mechanism	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	3
Type of device	fixed mounting
Size of switch disconnecter	4
Electrical endurance (switching 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 / for combination switch + fuse / at 500 V / maximum	15 125 000 A ² ·s

• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	15 125 000 A ² ·s
• I2t value / with closed switch / at 415 V / for combination switch +molded case circuit breaker / maximum	11 550 000 A ² ·s
• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	7 810 000 A ² ·s
• I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	647 250 A ² ·s
• I2t value / of the fuse / at 500 V / maximum permissible	5 400 005 A ² ·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	3 760 005 A ² ·s
• I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	520 000 A ² ·s
• I2t value / of the molded case circuit breaker / at 415 V / maximum permissible	16 000 000 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 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
Current / at AC / rated value	500 A
Operating voltage	
• at AC / at 50/60 Hz / 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]	
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• 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-23 A / at 690 V / rated value	500 A
• at AC-23 A / at 500 V / rated value	500 A
• at AC-23 A / at 400 V / rated value	500 A
• at AC-22 A / at 690 V / rated value	500 A
• at AC-22 A / at 500 V / rated value	500 A
• at AC-22 A / at 400 V / rated value	500 A
• at AC-20 A / at 1000 V / maximum	500 A
• at AC-21 A / at 400 V / rated value	500 A
• at AC-21 A / at 500 V / rated value	500 A
• at AC-21 A / at 690 V / rated value	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-20 A / at 1000 V / maximum	500 A / 1
• at DC-23 A / at 440 V / rated value / Note	500 A / 3
• at DC-23 A / at 220 V / rated value / Note	500 A / 2
• at DC-22 A / at 440 V / rated value / Note	500 A / 3
• at DC-22 A / at 220 V / rated value / Note	500 A / 2
• at DC-21 A / at 440 V / rated value / Note	500 A / 3
• at DC-21 A / at 220 V / rated value	500 A / 2
• at 45 °C / rated value	500 A

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 / of upstream fuse / at 500 V and 690 V / rated value	1 000 A
Continuous current / of upstream fuse / at 1000 V / rated value	1 000 A
Continuous current / of upstream molded case circuit breaker / at 415 V / rated value	1 000 A
Operating current / at DC / rated value	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 permissible	90 600 A
Let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	43 000 A
Let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	72 500 A
Let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	67 950 A
• at 415 V / for combination switch +molded case circuit breaker / maximum permissible	62 750 A
• at 1000 V / for combination switch +gG/aM SITOR fuse / maximum permissible	31 210 A
• for combination switch + fuse / at 400 V / maximum permissible	92 800 A
• for combination switch + fuse / at 500 V / maximum permissible	92 800 A

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 / rated value	355 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	500 kW
Operating 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 disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

Product details

Product feature / interlock	Yes
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 AC 1000 V/DC 440 V / 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
• for switch disconnecter / at DC 440 V / without fuse link / rated value / minimum	42.6 kA
• for switch disconnecter / 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 mm²), 2x (25 ... 240 mm²)
Type of connectable conductor cross-sections	

• for copper busbar	'1 x (40 x 10 mm²), 2 x (40 x 5 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

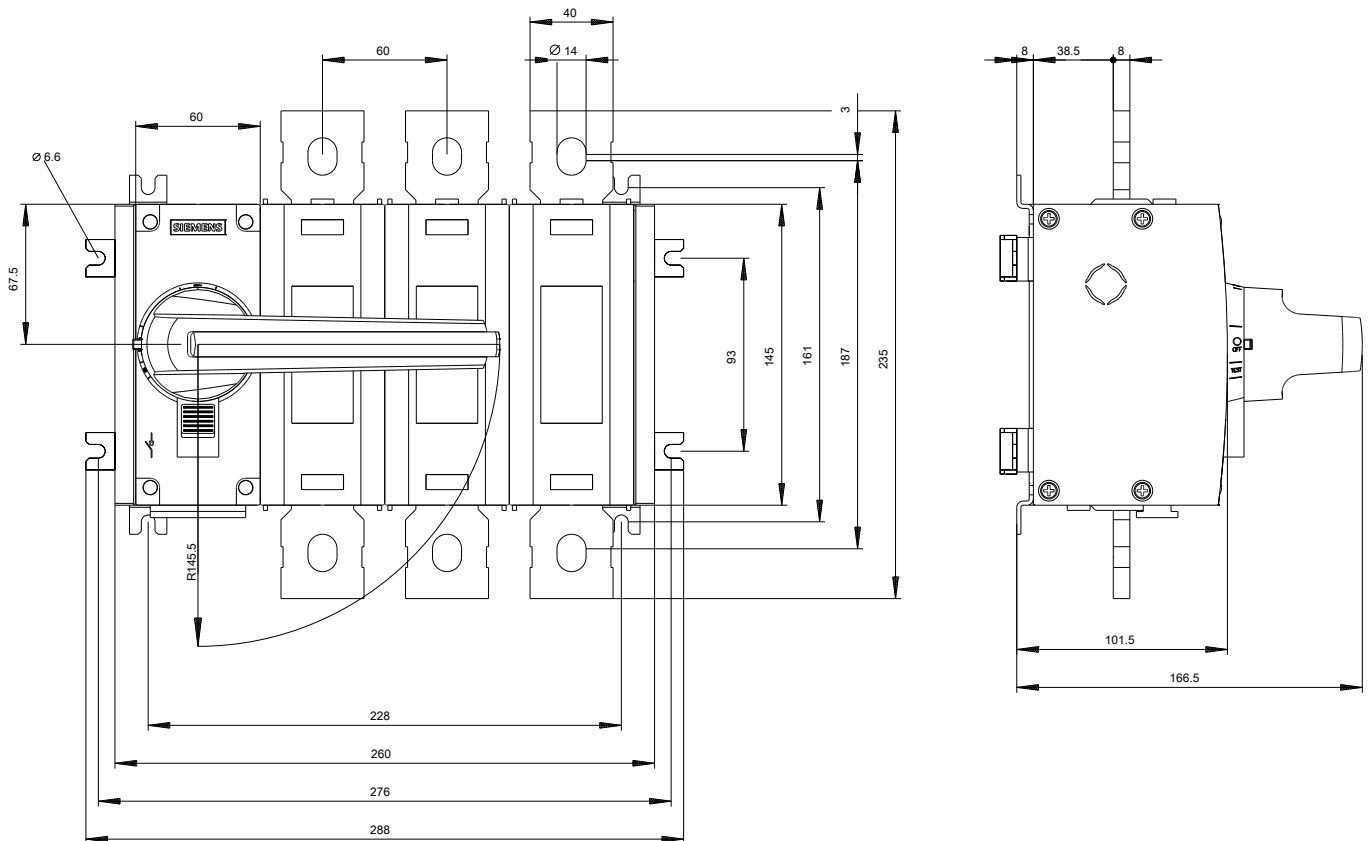
Mechanical Design	
Height	235 mm
Width	260 mm
Depth	166.5 mm
Mounting type	screw fixing
Mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	No
Mounting position	any
Net weight	7 520 g

Environmental conditions	
Ambient temperature / during operation	
• minimum	-25 °C
• maximum	70 °C
Ambient temperature / during storage	
• minimum	-50 °C
• maximum	80 °C

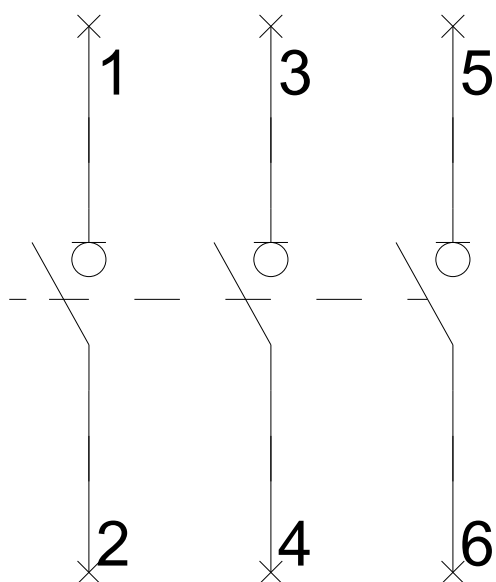
Certificates	
Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval	Declaration of Conformity	Shipping Approval	other
 CCC  VDE Miscellaneous	 EG-Konf.	 LRS 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=3KD4432-0QE10-0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KD4432-0QE10-0



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