

SWITCH-DISCONNECTOR 160A, FRAME SIZE 2, 3-POLE FRONT OPERATING LEFT COMPLETE ASSEMBLY DIRECT OPERATING MECHANISM GREY BOX 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 / motor drive	No
General technical data	
Number of poles	3
Type of device	fixed mounting
Size of switch disconnecter	2
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> at AC-23 A / at 690 V / at 50/60 Hz 	1 500
<ul style="list-style-type: none"> at DC-23 A / at 440 V 	1 000
<ul style="list-style-type: none"> I²t value / with closed switch / for combination switch + fuse / at 500 V / maximum 	135 600 A ² ·s
<ul style="list-style-type: none"> I²t value / with closed switch / for combination switch + fuse / at 400 V / maximum 	135 600 A ² ·s

<ul style="list-style-type: none"> • I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum 	178 300 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 690 V / for combination switch + aM fuse / maximum 	201 200 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the fuse / at 500 V / maximum permissible 	223 005 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the gG fuse / at 690 V / maximum permissible 	226 005 A ² ·s
circuit-breaker / Design	3KD3
Mechanical service life (switching cycles) / typical	15 000
Position / of the switch operating mechanism	at the left end
Overvoltage category	III

Voltage

Operating voltage / with current paths in series	
<ul style="list-style-type: none"> • with degree of pollution 2 / at DC / rated value / Note 	440 V / 3
<ul style="list-style-type: none"> • with degree of pollution 3 / at DC / rated value / Note 	440 / 3
Insulation voltage	
<ul style="list-style-type: none"> • rated value 	1 000 V
Surge voltage resistance / rated value	8 kV
Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz	10 %

Protection class

Protection class IP	IP20
Protection class IP	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP20
<ul style="list-style-type: none"> • on the front 	IP20

Dissipation

Power loss [W]	
<ul style="list-style-type: none"> • with conventional rated thermal current / per pole 	7 W

Electricity

Operating current	
<ul style="list-style-type: none"> • at AC-21 A / at 400 V / maximum 	160 A
<ul style="list-style-type: none"> • at AC-21 A / at 500 V / maximum 	160 A
<ul style="list-style-type: none"> • at AC-21 A / at 690 V / maximum 	160 A
<ul style="list-style-type: none"> • at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum 	160 A
<ul style="list-style-type: none"> • at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum 	160 A

• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• at DC-23 A / at 440 V / rated value / maximum	160 / 3
• at DC-23 A / at 220 V / rated value / maximum	160 / 2
• at DC-22 A / at 440 V / rated value / maximum	160 / 3
• at DC-22 A / at 220 V / rated value / maximum	160 / 2
• at DC-21 A / at 440 V / rated value / maximum	160 / 3
• at DC-21 A / at 220 V / maximum	160 / 2
Current / at AC / rated value	160 A
Continuous current	
• rated value	160 A
• at 40 °C / rated value	160 A
• at 45 °C / rated value	160 A
• at 50 °C / rated value	160 A
• at 55 °C / rated value	160 A
• at 60 °C / rated value	160 A
• at 65 °C / rated value	160 A
• at 70 °C / rated value	160 A
Continuous current / at DC / rated value	160 A
Let-through current / of the fuse / at 500 V / maximum permissible	18 005 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	16 005 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	17 600 A
• at 690 V / for combination switch + gG fuse / maximum permissible	18 700 A
• for combination switch + fuse / at 400 V / maximum permissible	17 900 A
• for combination switch + fuse / at 500 V / maximum permissible	17 900 A
Short-time current resistance (I_{cw})	
• at 690 V AC/440 V DC / limited to 1 s / rated value	4 kA

Main circuit

Operating power

<ul style="list-style-type: none"> • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 	90 kW
	110 kW
	110 kW
Operating voltage	
<ul style="list-style-type: none"> • 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

Suitability

Suitability for use	
<ul style="list-style-type: none"> • Main switch • switch disconnecter • EMERGENCY OFF switch • safety switch • maintenance/repair switch 	<p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p>

Product details

Product feature / interlock	Yes
Product component	
<ul style="list-style-type: none"> • Trip indicator • Voltage trigger • undervoltage release • undervoltage release with leading contact 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
Product extension	
<ul style="list-style-type: none"> • Auxiliary switch • optional <ul style="list-style-type: none"> — motor drive — Voltage trigger 	<p>Yes</p> <p>No</p> <p>No</p>

Short circuit

Short-circuit current making capacity (I_{cm})	
<ul style="list-style-type: none"> • for switch disconnecter / at 690 V AC/440 V DC / without fuse link / rated value / minimum • for switch disconnecter / without fuse link / rated value / minimum 	<p>12 kA</p> <p>12 kA</p>
Conditional short-circuit current / with line-side fuse protection	
<ul style="list-style-type: none"> • at 500 V / by gG fuse / rated value 	100 kA
Short-time current resistance (I_{cw}) / limited to 1 s / rated value	4 kA

Connections	
<ul style="list-style-type: none"> Type of connectable conductor cross-sections / for copper conductor / solid 	1x (2.5 ... 16 mm ²)
<ul style="list-style-type: none"> Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing 	1x (2.5 ... 70 mm ²)
<ul style="list-style-type: none"> Type of connectable conductor cross-sections / for copper conductor / stranded 	1x (10 ... 70 mm ²)
Type of electrical connection <ul style="list-style-type: none"> for main current circuit 	Box terminal

Mechanical Design	
Height	126 mm
Width	121 mm
Depth	97 mm
Mounting position	any
Mounting type	Screw fixing and standard rail mounting 35 mm
Mounting type <ul style="list-style-type: none"> front mounting with 4-hole attachment front mounting with central attachment rail mounting 	No No Yes
Net weight	850 g

Environmental conditions	
Degree of pollution	3
Ambient temperature <ul style="list-style-type: none"> during operation / minimum during operation / maximum during storage / minimum during storage / maximum 	-25 °C 70 °C -50 °C 80 °C

Certificates	
Equipment marking <ul style="list-style-type: none"> acc. to DIN EN 61346-2 acc. to DIN EN 81346-2 	Q Q

General Product Approval	Declaration of Conformity
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[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=3KD3432-2NE10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3432-2NE10-0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3432-2NE10-0

CAX-Online-Generator

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

Tender specifications

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



