

SWITCH-DISCONNECTOR 160A, FRAME SIZE 2, 4-POLE FRONT
OPERATING LEFT BASIC UNIT WITHOUT HANDLE BOX
TERMINAL



Model	
product brandname	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 operating mechanism	Without handle
Type of the driving mechanism / motor drive	No
General technical data	
Number of poles	4
Type of device	fixed mounting
Size of switch disconnecter	2
Electrical endurance (switching cycles)	
at AC-23 A / at 690 V / at 50/60 Hz	1 500
at DC-23 A / at 440 V	1 000
I²t value / with closed switch / for combination switch + fuse / at 500 V / maximum	135 600 A ² ·s
I²t value / with closed switch / for combination switch + fuse / at 400 V / maximum	135 600 A ² ·s

• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	178 300 A ² ·s
• I2t value / with closed switch / at 690 V / for combination switch + aM fuse / maximum	201 200 A ² ·s
• I2t value / of the fuse / at 500 V / maximum permissible	223 005 A ² ·s
• 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	
• 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	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	
• with closed switch / with cover or cable lug cover	IP20
• on the front	IP20

Dissipation

Power loss [W]	
• with conventional rated thermal current / per pole	7 W

Electricity

• Operating current / at AC-21 A / at 400 V / maximum	160 A
• Operating current / at AC-21 A / at 500 V / maximum	160 A
• Operating current / at AC-21 A / at 690 V / maximum	160 A
• Operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A

• Operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A
• Operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• Operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	160 A
• Operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• Operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	125 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_{cs})	
• limited to 1 s / rated value	4 kA
• at 690 V AC/440 V DC / limited to 1 s / rated value	4 kA
Main circuit	
Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	90 kW
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	110 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	110 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

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 (I _{cm}) / for switch disconnecter / at 690 V AC/440 V DC / without fuse link / rated value / minimum	12 kA
• Short-circuit current making capacity (I _{cm}) / for switch disconnecter / without fuse link / rated value / minimum	12 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 copper conductor / solid	1x (2.5 ... 16 mm ²)
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Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing	1x (2.5 ... 70 mm²)
Type of connectable conductor cross-sections / for copper conductor / stranded	1x (10 ... 70 mm²)
Type of electrical connection for main current circuit	Box terminal

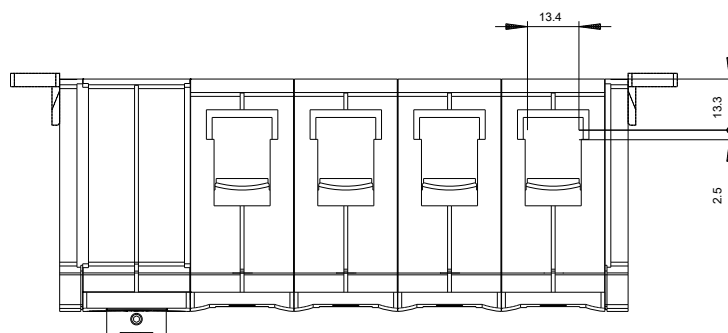
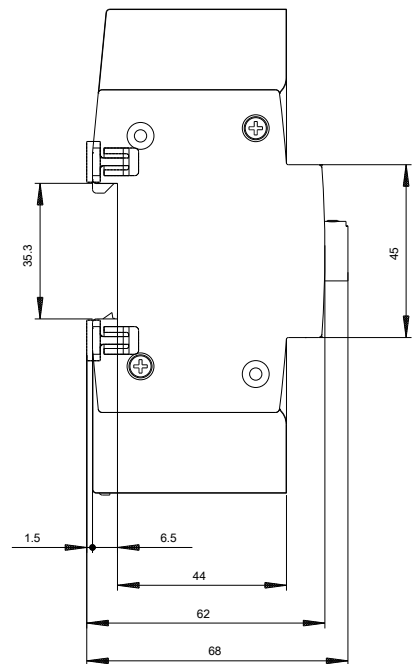
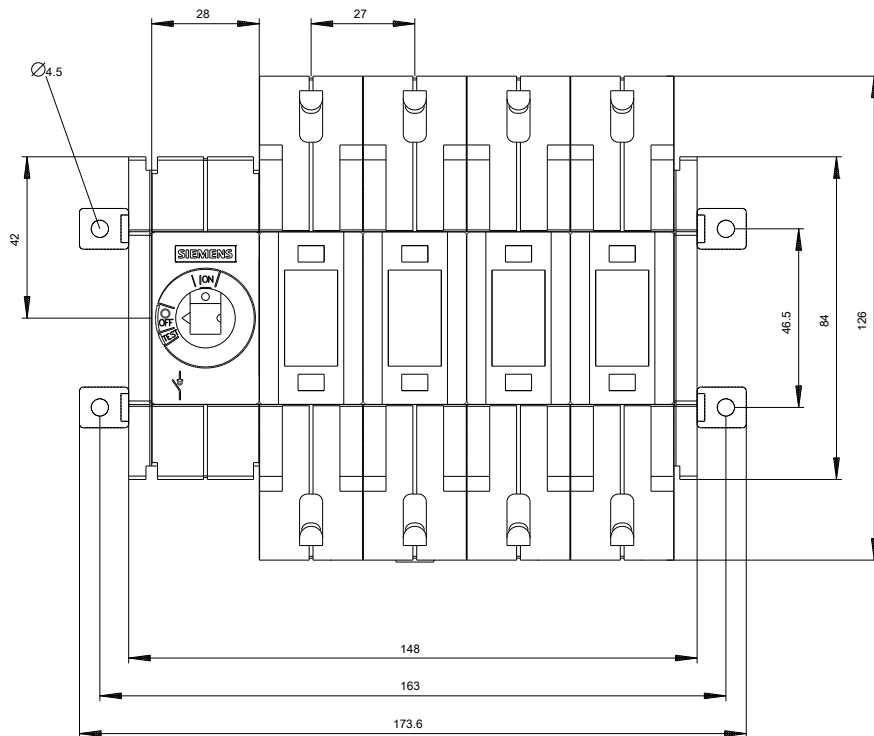
Mechanical Design	
Height	126 mm
Width	148 mm
Depth	68 mm
Mounting position	any
Mounting type	Screw fixing and standard rail mounting 35 mm
Mounting type - front mounting with 4-hole attachment - front mounting with central attachment - rail mounting	No No Yes
Net weight	1 200 g

Environmental conditions	
Degree of pollution	3
Ambient temperature - during operation / minimum - during operation / maximum - during storage / minimum - during storage / maximum	-25 °C 70 °C -50 °C 80 °C

Certificates	
Equipment marking - acc. to DIN EN 61346-2 - acc. to DIN EN 81346-2	Q Q

General Product Approval	Declaration of Conformity
 CCC  VDE	sonstig  EG-Konf.

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=3KD3440-2NE10-0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3KD3440-2NE10-0/all



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