

SWITCH-DISCONNECTOR 16A, FRAME SIZE 1, 3-POLE FRONT
OPERATING LEFT BASIC UNIT WITHOUT HANDLE BOX
TERMINAL



Model	
Product brand name	SENTRON
Product designation	3KD switch disconnector
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 disconnector	1
Electrical endurance (switching cycles)	
at AC-23 A / at 690 V / at 50/60 Hz	6 000
at DC-23 A / at 440 V	1 500
I²t value / with closed switch / for combination switch + fuse / at 500 V / maximum	13 300 A ² ·s
I²t value / with closed switch / for combination switch + fuse / at 400 V / maximum	13 300 A ² ·s

• I_{2t} value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	13 700 A ² ·s
• I_{2t} value / of the fuse / at 500 V / maximum permissible	26 505 A ² ·s
• I_{2t} value / of the gG fuse / at 690 V / maximum permissible	24 005 A ² ·s
circuit-breaker / Design	3KD1
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	0.1 W
• with conventional rated thermal current / per device	0.3 W
• for rated value of the current / at AC / in hot operating state / per pole	0.1 W
• maximum	0.3 W

Electricity

Operating current	
• at AC-21 A / at 400 V / maximum	16 A
• at AC-21 A / at 500 V / maximum	16 A
• at AC-21 A / at 690 V / maximum	16 A

• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	16 A
• at DC-23 A / at 440 V / rated value / maximum	16 / 3
• at DC-22 A / at 440 V / rated value / maximum	16 / 3
• at DC-21 A / at 440 V / rated value / maximum	16 / 3
Current / at AC / rated value	16 A
Continuous current	
• rated value	16 A
• at 40 °C / rated value	16 A
• at 45 °C / rated value	16 A
• at 50 °C / rated value	16 A
• at 55 °C / rated value	16 A
• at 60 °C / rated value	16 A
• at 65 °C / rated value	16 A
• at 70 °C / rated value	16 A
Continuous current / at DC / rated value	16 A
Let-through current / of the fuse / at 500 V / maximum permissible	8 135 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	8 805 A
Let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	7 500 A
• for combination switch + fuse / at 400 V / maximum permissible	7 000 A
• for combination switch + fuse / at 500 V / maximum permissible	7 000 A
Short-time current resistance (I_{cw})	
• at 690 V AC/440 V DC / limited to 1 s / rated value	3 kA
Main circuit	
Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	7.5 kW

• 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	7.5 kW 11 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 • switch disconnecter • EMERGENCY OFF switch • safety switch • maintenance/repair switch	Yes Yes Yes Yes Yes
Product details	
Product feature / interlock	No
Product component	
• Trip indicator • Voltage trigger • undervoltage release • undervoltage release with leading contact	No No No No
Product extension	
• Auxiliary switch • optional — motor drive — Voltage trigger	Yes No 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 • for switch disconnecter / without fuse link / rated value / minimum	7 kA 7 kA
Conditional short-circuit current / with line-side fuse protection	
• at 500 V / by gG fuse / rated value	100 kA
Short-time current resistance (I_{cw}) / limited to 1 s / rated value	3 kA

Connections

- | | |
|--|--------------------------------|
| • Type of connectable conductor cross-sections / for copper conductor / solid | 1x (1 ... 16 mm ²) |
| • Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing | 1x (1 ... 35 mm ²) |
| • Type of connectable conductor cross-sections / for copper conductor / stranded | 1x (6 ... 35 mm ²) |

Type of electrical connection

- | | |
|----------------------------|--------------|
| • for main current circuit | Box terminal |
|----------------------------|--------------|

Mechanical Design

Height	119 mm
Width	94 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	No
• front mounting with central attachment	No
• rail mounting	Yes
Net weight	720 g

Environmental conditions

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

Certificates

Equipment marking

- | | |
|--------------------------|---|
| • acc. to DIN EN 61346-2 | Q |
| • acc. to DIN EN 81346-2 | Q |

General Product Approval

Declaration of Conformity



[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=3KD1630-2ME10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD1630-2ME10-0>

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

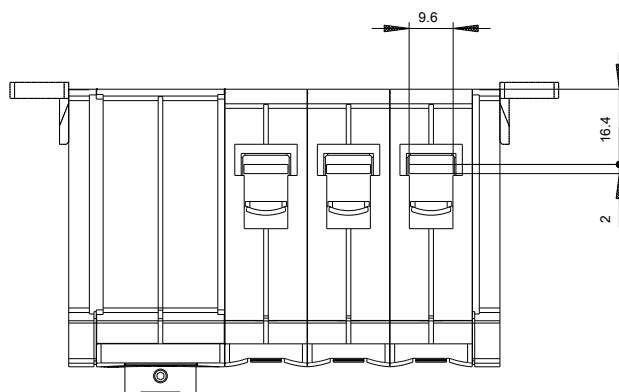
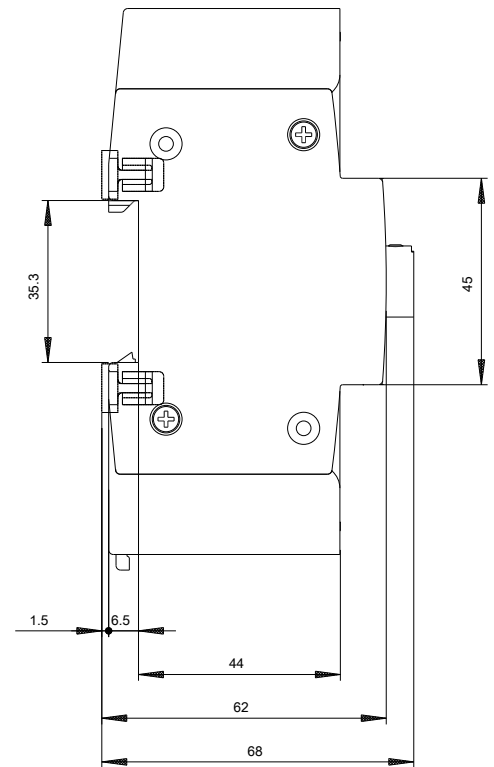
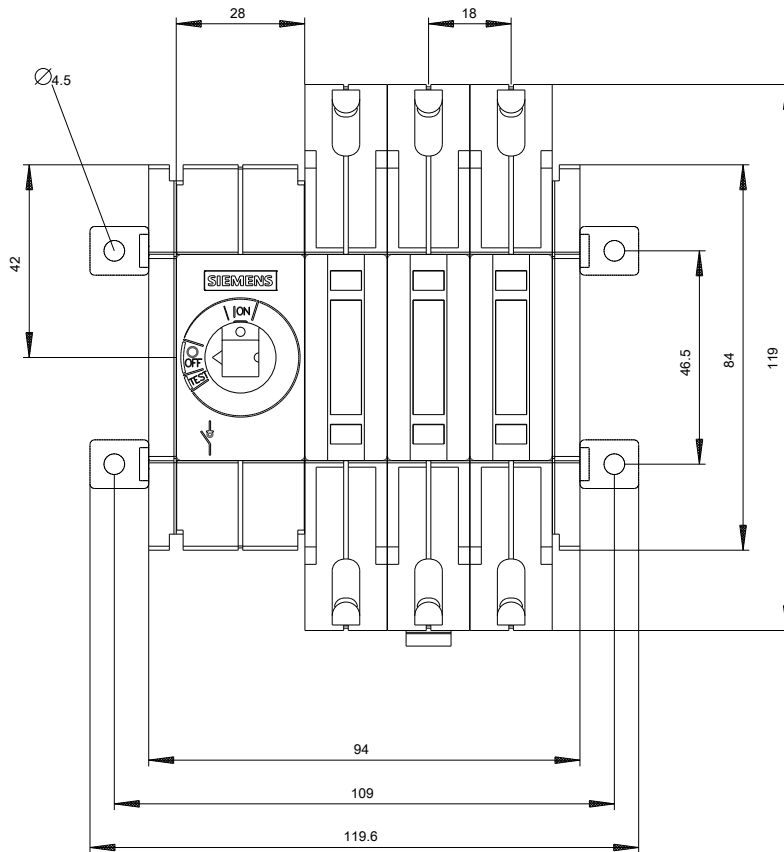
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD1630-2ME10-0

CAX-Online-Generator

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

Tender specifications

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



-Q

