SIEMENS

Data sheet 3KD2242-2ME10-0

Switch disconnector 32 A, Size 1, 4-pole Front operating mechanism left Complete unit with direct operating mechanism gray Box terminal

Model	
Product brand name	SENTRON
Product designation	3KD switch disconnector
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	4
Type of device	fixed mounting
Size of switch disconnector	1
Electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
• at DC-23 A / at 440 V	1 500
• I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum	34 100 $A^2 \cdot s$

• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	34 100 A²·s
• I2t value / with closed switch / at 415 V / for combination switch +molded case circuit breaker / maximum	187 000 A²·s
• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	41 190 A²·s
• I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	2 331 A²·s
• I2t value / of the fuse / at 500 V / maximum permissible	26 505 A²·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	24 005 A²·s
• I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	6 000 A²·s
• I2t value / of the molded case circuit breaker / at 415 V / maximum permissible	480 000 A²·s
Mechanical service life (switching cycles) / typical	15 000
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	III
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	8 kV

Supply voltage

Operating current / at AC / rated value	32 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	1 000 V

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	0.4 W
• with conventional rated thermal current / per device	1.6 W
• for rated value of the current / at AC / in hot operating state / per pole	0.4 W

Current

Operating current	
• at AC-23 A / at 690 V / rated value	32 A
• at AC-23 A / at 500 V / rated value	32 A
• at AC-23 A / at 400 V / rated value	32 A
• at AC-22 A / at 690 V / rated value	32 A
• at AC-22 A / at 500 V / rated value	32 A
• at AC-22 A / at 400 V / rated value	32 A
• at AC-20 A / at 1000 V / maximum	32 A
• at AC-21 A / at 400 V / rated value	32 A
• at AC-21 A / at 500 V / rated value	32 A
• at AC-21 A / at 690 V / rated value	32 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	32 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	32 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	32 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	32 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	32 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	32 A
Continuous current	
• rated value	32 A
• at 40 °C / rated value	32 A
• at 45 °C / rated value	32 A
• at 50 °C / rated value	32 A
• at 55 °C / rated value	32 A
• at 60 °C / rated value	32 A
• at 65 °C / rated value	32 A
• at 70 °C / rated value	32 A
Continuous current / of upstream fuse / at 500 V and 690 V / rated value	100 A
Continuous current / of upstream fuse / at 1000 V / rated value	100 A

Continuous current / of upstream molded case circuit breaker / at 415 V / rated value	100 A
Operating current / at DC / rated value	32 A
let-through current / of the fuse / at 500 V / maximum permissible	12 500 A
let-through current / of the gG fuse / at 690 V / maximum permissible	14 700 A
let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	4 700 A
let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	20 000 A
let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	11 500 A
• at 415 V / for combination switch +molded case circuit breaker / maximum permissible	12 400 A
• at 1000 V / for combination switch +gG/aM SITOR fuse / maximum permissible	5 057 A
• for combination switch + fuse / at 400 V / maximum permissible	13 100 A
• for combination switch + fuse / at 500 V / maximum permissible	13 100 A

Main circuit

Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	15 kW
• at AC-23 A / at 500 V / rated value	18.5 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	30 kW
Operating current / rated value	32 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	4
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0

Suitability

Suitability for use	
• Main switch	Yes
• switch disconnector	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 (Icw) / at AC 1000 V/DC 440 V / limited to 1 s / rated value	3 kA
Short-circuit current making capacity (Icm)	
• for switch disconnector / at 1000 V AC / without fuse link / rated value / minimum	7 kA
• for switch disconnector / at DC 440 V / without fuse link / rated value / minimum	7 kA
• for switch disconnector / without fuse link / rated value / minimum	7 kA
Conditional short-circuit current / with line-side fuse protection	
• at 415 V / by molded case circuit breaker / rated value	36 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	
• with flexible busbar	2x (0,8x9 mm²)
Type of connectable conductor cross-sections	
• for copper busbar	'1 x (2 x 9 mm²)
Type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1 ... 16 mm²)
• finely stranded / with core end processing	1x (1 ... 35 mm²)
• stranded	1x (6 ... 35 mm²)
Type of electrical connection	
• for main current circuit	box terminal

Mechanical Design

Height	119 mm
Width	112 mm
Depth	87 mm
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
Mounting position	any
Net weight	1 005 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

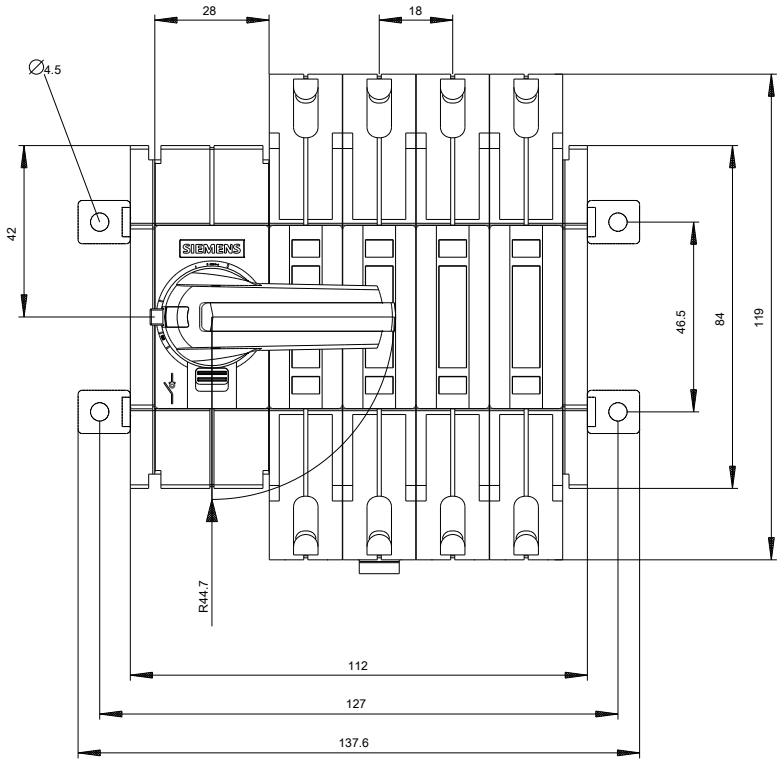
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3KD2242-2ME10-0

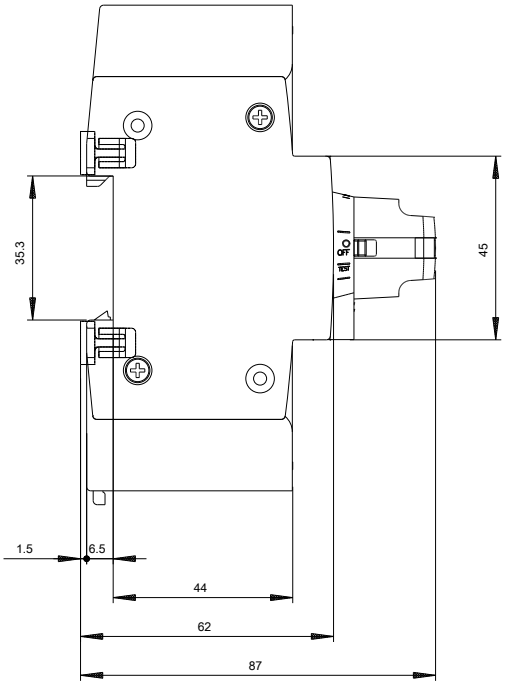
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KD2242-2ME10-0

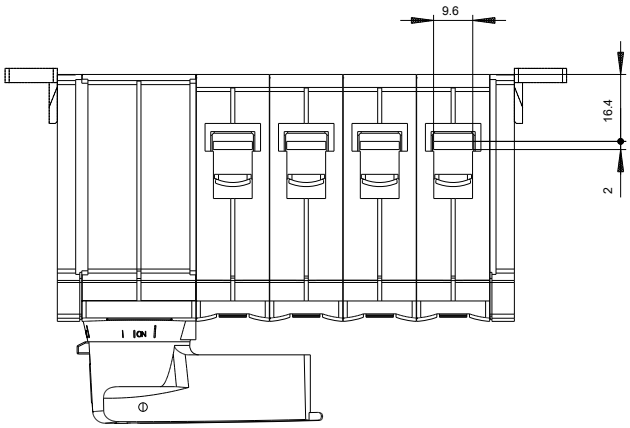
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD2242-2ME10-0

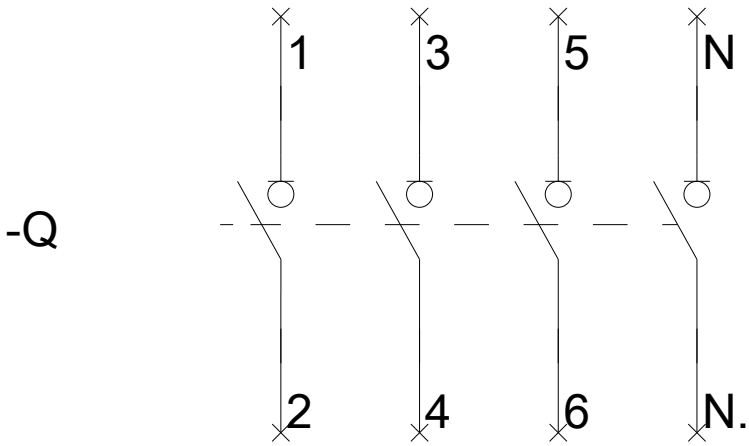
CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications









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