



Switch disconnecter 160 A, Size 2, 4-pole Front operating mechanism left
Complete unit with direct operating mechanism gray 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 actuating element	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 disconnecter	2
mechanical service life (switching cycles) / typical	15 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 500
• at DC-23 A / at 440 V	1 000
I ² t value	
• with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	19 815 A ² ·s
• of the fuse / at 500 V / maximum permissible	223 005 A ² ·s
• of the gG fuse / at 690 V / maximum permissible	226 005 A ² ·s
• of the gG/aM SITOR fuse / at 1000 V / maximum permissible	48 000 A ² ·s
• of the molded case circuit breaker / at 415 V / maximum permissible	560 000 A ² ·s
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
Protection class	
protection class IP	IP20

protection class IP	
- with closed switch / with cover or cable lug cover - on the front	IP20 IP20
Dissipation	
power loss [W]	
- with conventional rated thermal current / per pole - with conventional rated thermal current / per device - for rated value of the current / at AC / in hot operating state / per pole	4.6 W 18.4 W 4.6 W
Current	
operational current	
- at 35 °C / rated value - at 40 °C / rated value - at 45 °C / rated value - at 50 °C / rated value - at 55 °C / rated value - at 60 °C / rated value - at 65 °C / rated value - at 70 °C / rated value - at AC / rated value - at AC-23 A / at 690 V / rated value - at AC-23 A / at 500 V / rated value - at AC-23 A / at 400 V / rated value - at AC-22 A / at 1000 V / maximum - at AC-22 A / at 690 V / rated value - at AC-22 A / at 500 V / rated value - at AC-22 A / at 400 V / rated value - at AC-20 A / at 1000 V / maximum - at AC-21 A / at 500 V / rated value - at AC-21 A / at 690 V / rated value	160 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 125 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A
continuous current / of upstream fuse / at 500 V and 690 V / rated value	250 A
continuous current / of upstream fuse / at 1000 V / rated value	250 A
continuous current / of upstream molded case circuit breaker / at 415 V / rated value	160 A
operational current / at DC / rated value	160 A
let-through current / of the fuse / at 500 V / maximum permissible	25 700 A
let-through current / of the gG fuse / at 690 V / maximum permissible	29 500 A
let-through current / of the aM fuse / at 690 V / maximum permissible	32 900 A
let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	12 500 A
let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	22 500 A
short-time withstand current (I _{cw})	
at 400 V AC / limited to 0.15 s / rated value	15 kA
Main circuit	
operating power	
at AC-23 A / at 500 V / rated value	110 kW
operational current / rated value	160 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	0
number of NO contacts / for auxiliary contacts	0
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 1000 V AC/440 V DC / limited to 1 s / rated value	4 kA
short-circuit current making capacity (I _{cm}) / for switch disconnecter	
• at 400 V AC / without fuse link / rated value / minimum	30 kA
• at 1000 V AC / without fuse link / rated value / minimum	12 kA
• at DC 440 V / without fuse link / rated value / minimum	12 kA
• without fuse link / rated value / minimum	12 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 / with flexible busbar	3x (0.8x14 mm ²)
type of connectable conductor cross-sections	
• for copper busbar	'1 x (3 x 14 mm ²)
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (2.5 ... 16 mm ²)
• finely stranded / with core end processing	1x (2.5 ... 70 mm ²)
• stranded	1x (10 ... 70 mm ²)
type of electrical connection / for main current circuit	box terminal

Mechanical Design

height	126 mm
width	148 mm
depth	97 mm
fastening method	Screw fixing and standard rail mounting 35 mm
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	No
• rail mounting	Yes
mounting position	any
net weight	1 498 g

Environmental conditions

ambient temperature / during operation	
• minimum	-25 °C
• maximum	70 °C
ambient temperature / during storage	
• minimum	-50 °C

• maximum

80 °C

General Product Approval

Declaration of Conformity



[Miscellaneous](#)



[UK Declaration of Conformity](#)



Marine / Shipping

other



[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=3KD3442-2NE10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3442-2NE10-0>

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

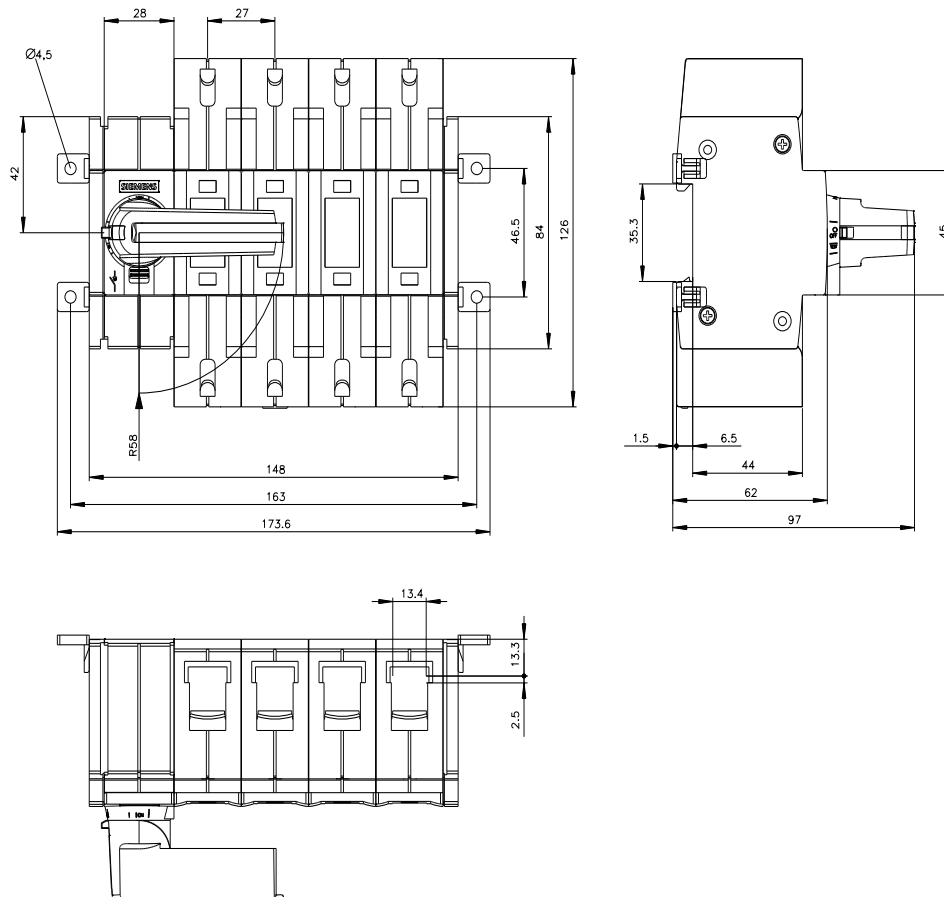
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3442-2NE10-0

CAX-Online-Generator

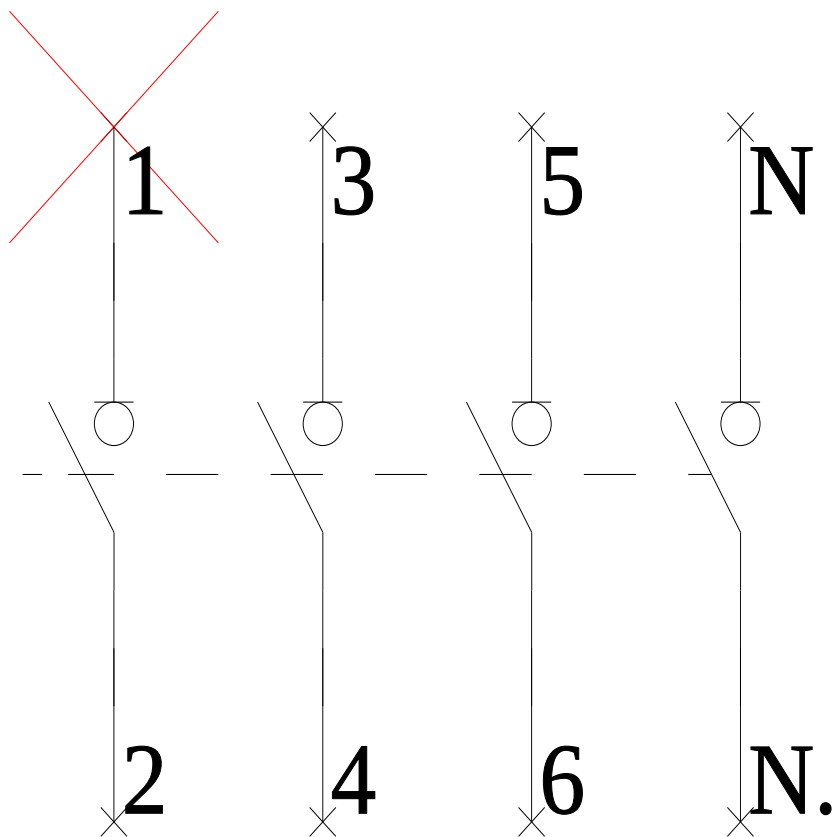
<http://www.siemens.com/cax>

Tender specifications

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



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