

Switch disconnecter 160 A, Size 2, 3-pole Front operating mechanism center Basic unit without handle Box terminal



Model	
Product brand name	SETRON
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	3
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
• I _{2t} value / with closed switch / for combination switch + fuse / at 500 V / maximum	135 600 A ² ·s
• I _{2t} value / with closed switch / for combination switch + fuse / at 400 V / maximum	135 600 A ² ·s

• I_{2t} value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	178 300 A ² ·s
• I_{2t} value / with closed switch / at 690 V / for combination switch + aM fuse / maximum	201 200 A ² ·s
• I_{2t} value / of the fuse / at 500 V / maximum permissible	223 005 A ² ·s
• I_{2t} 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	after the first pole
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	4.6 W
• with conventional rated thermal current / per device	13.8 W
• for rated value of the current / at AC / in hot operating state / per pole	4.6 W

Electricity

Operating current	
• at AC-21 A / at 400 V / maximum	160 A
• at AC-21 A / at 500 V / maximum	160 A
• at AC-21 A / at 690 V / maximum	160 A

• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A
• 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 (Icw)	

- 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

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
- 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 (Icm)

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

Mechanical Design

Height	126 mm
Width	121 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	850 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

Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval	Declaration of Conformity	Shipping Approval
 VDE	Miscellaneous  EG-Konf.	 LRS

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=3KD3430-2NE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3430-2NE20-0>

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

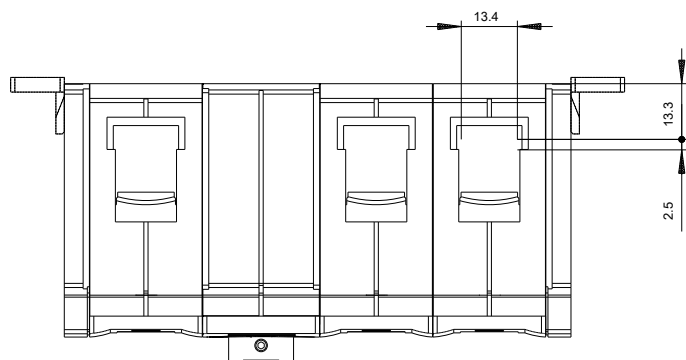
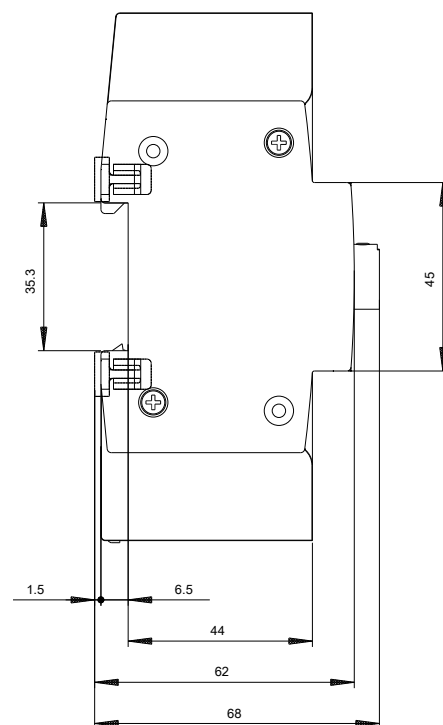
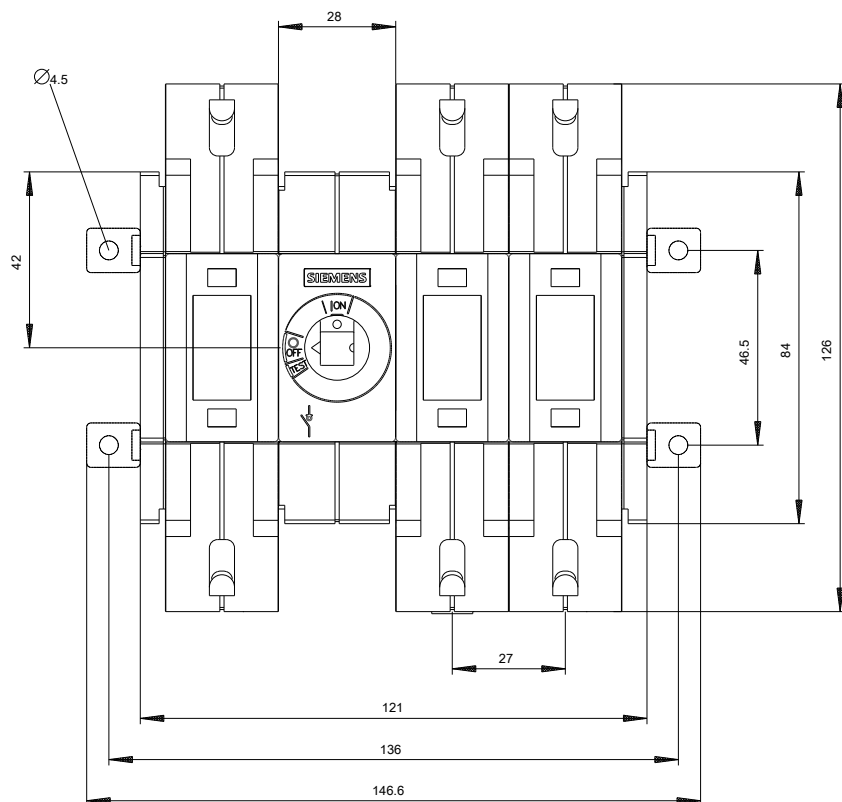
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3430-2NE20-0

CAX-Online-Generator

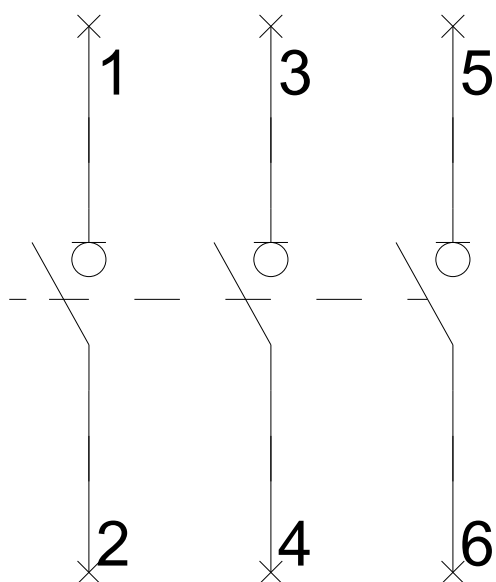
<http://www.siemens.com/cax>

Tender specifications

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



-Q



-CR

