

SWITCH-DISCONNECTOR 80A, FRAME SIZE 2, 3-
POLE FRONT OPERATING LEFT BASIC UNIT
WITHOUT HANDLE FLAT TERMINAL INCL. PHASE
BARRIERS

Model		
product brandname		SENTRON
Product designation		Switching device
Design of the product		3KD switch disconnectors
Display version / for switch position indicator door-coupling rotary operating mechanism		ON-OFF
Design of the operating mechanism		without
Design of handle		without
Type of the driving mechanism / motor drive		No

General technical data		
Number of poles		3
Type of device		fixed mounting
Size of switch disconnector		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		1 500
• I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum	A²·s	135 600
• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	A²·s	135 600
• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	A²·s	178 300
• I2t value / with closed switch / at 690 V / for combination switch + aM fuse / maximum	A²·s	201 200
• I2t value / of the fuse / at 500 V / maximum permissible	A²·s	223 005
• I2t value / of the gG fuse / at 690 V / maximum permissible	A²·s	226 005
circuit-breaker / Design		3KD2
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 / 3
• with degree of pollution 3 / at DC / rated value / Note		440 / 3
Insulation voltage		
• rated value	V	1 000
Surge voltage resistance / rated value	kV	8
Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz	%	10

Protection class		
Protection class IP		IP00
Protection class IP		
• with closed switch / with cover or cable lug cover		IP20
• on the front		IP00

Dissipation		
Power loss [W]		
• with conventional rated thermal current / per pole	W	2

Electricity		
• Operating current / at AC-21 A / at 400 V / maximum	A	80
• Operating current / at AC-21 A / at 500 V / maximum	A	80
• Operating current / at AC-21 A / at 690 V / maximum	A	80
• Operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	A	80
• Operating current / at DC-23 A / at 440 V / rated value / maximum		80 / 3
• Operating current / at DC-23 A / at 220 V / rated value / maximum		80 / 2

• Operating current / at DC-22 A / at 440 V / rated value / maximum		80 / 3
• Operating current / at DC-22 A / at 220 V / rated value / maximum		80 / 2
• Operating current / at DC-21 A / at 440 V / rated value / maximum		80 / 3
• Operating current / at DC-21 A / at 220 V / maximum / Note		80 / 2
Continuous current		
• rated value	A	80
• at 40 °C / rated value	A	80
• at 45 °C / rated value	A	80
• at 50 °C / rated value	A	80
• at 55 °C / rated value	A	80
• at 60 °C / rated value	A	80
• at 65 °C / rated value	A	80
• at 70 °C / rated value	A	80
Continuous current / at DC / rated value	A	80
Let-through current / of the fuse / at 500 V / maximum permissible	A	18 005
Let-through current / of the gG fuse / at 690 V / maximum permissible	A	16 005
Let-through current / with closed switch		
• at 690 V / for combination switch + aM fuse / maximum permissible	A	17 600
• at 690 V / for combination switch + gG fuse / maximum permissible	A	18 700
• for combination switch + fuse / at 400 V / maximum permissible	A	17 900
• for combination switch + fuse / at 500 V / maximum permissible	A	17 900
Short-time current resistance (I_{cw})		
• limited to 1 s / rated value	kA	4
• at 690 V AC/440 V DC / limited to 1 s / rated value	kA	4

Main circuit

Operating power		
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	kW	37
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	kW	55
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	kW	75
Operating voltage		
• at AC / at 50/60 Hz / rated value	V	690

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 disconnecter		Yes
• EMERGENCY OFF switch		No
• 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	kA	12
• Short-circuit current making capacity (I _{cm}) / for switch disconnecter / without fuse link / rated value / minimum	kA	12
Conditional short-circuit current		
• with line-side fuse protection / at 500 V / by gG fuse / rated value	kA	100

Connections

• Type of connectable conductor cross-sections / for copper busbar		1x (20x3 mm ²)
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• Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234 • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235	1x(1070mm ²) 1x (2.5 ... 95mm ²), 2x (25 ... 50mm ²) 1x (25 ... 70mm ²), 2x (25 ... 50mm ²)
Type of electrical connection • for main current circuit	flat connector

Mechanical Design		
Height	mm	168
Width	mm	121
Depth	mm	68
Mounting position		any
Mounting type		Floor mounting and snap-on mounting to 35 mm standard mounting rail
Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting		No No Yes
Net weight	g	830

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

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

General Product Approval	Declaration of Conformity
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Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3KD2830-0NE10-0>

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

<http://support.automation.siemens.com/WW/view/en/3KD2830-0NE10-0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD2830-0NE10-0

CAX-Online-Generator

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

Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>

last modified:

10/14/2016