



SENTRON, Switch disconnecter 3LD, main switch, 4-pole,  $I_n=250$  A, Operating power / at AC-23 A at 400 V: 132 kW, floor mounting with door coupling, knob-operated mechanism, black, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	Switch disconnecter
design of the product	Main switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Floor mounting with door coupling
design of the actuating element	selector switch
color of the actuating element	black
design of handle	knob-operated mechanism, black
type of the driving mechanism motor drive	No
General technical data	
number of poles	4
size of switch disconnecter	5
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	6 000
operating frequency maximum	50 1/h
degree of pollution	3
Voltage	
insulation voltage rated value	690 V
surge voltage resistance rated value	8 kV
operating voltage	
• at AC rated value	690 V
operating frequency rated value	
• minimum	50 Hz
• maximum	60 Hz
Protection class	
protection class IP	IP65
degree of protection NEMA rating	1, 3R, 4X, 12
protection class IP on the front	IP65
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	36 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	250 A
• at AC-21 A at 240 V rated value	250 A
• at AC-21 A at 400 V rated value	250 A
• at AC-21 A at 440 V rated value	250 A

<ul style="list-style-type: none"> <li>at AC-23 A at 400 V rated value</li> </ul>	224 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>at AC-23 A at 240 V rated value</li> </ul>	75 kW
<ul style="list-style-type: none"> <li>at AC-23 A at 400 V rated value</li> </ul>	132 kW
<ul style="list-style-type: none"> <li>at AC-23 A at 440 V rated value</li> </ul>	132 kW
<ul style="list-style-type: none"> <li>at AC-23 A at 690 V rated value</li> </ul>	55 kW
<ul style="list-style-type: none"> <li>at AC-3 at 240 V rated value</li> </ul>	55 kW
<ul style="list-style-type: none"> <li>at AC-3 at 400 V rated value</li> </ul>	110 kW
<ul style="list-style-type: none"> <li>at AC-3 at 690 V rated value</li> </ul>	45 kW
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
<b>operating voltage of auxiliary contacts at AC maximum</b>	500 V
<b>continuous current of the auxiliary contact rated value</b>	10 A
insulation voltage of the auxiliary switch rated value	500 V
<b>Suitability</b>	
<b>suitability for use main switch</b>	Yes
<b>suitability for use switch disconnecter</b>	Yes
<b>suitability for use EMERGENCY OFF switch</b>	No
<b>suitability for use safety switch</b>	Yes
<b>suitability for use maintenance/repair switch</b>	Yes
<b>Product details</b>	
<b>product feature can be locked into OFF position</b>	Yes
<b>Accessories</b>	
<b>product extension optional</b>	
<ul style="list-style-type: none"> <li>motor drive</li> </ul>	No
<ul style="list-style-type: none"> <li>voltage trigger</li> </ul>	No
<b>number of connectable NC contacts for auxiliary contacts attachable maximum</b>	2
<b>number of connectable NO contacts for auxiliary contacts attachable maximum</b>	3
<b>number of connectable CO contacts for auxiliary contacts attachable maximum</b>	0
<b>number of bracket locks maximum</b>	3
<b>hasp thickness of the bracket locks</b>	4 ... 6 mm
<b>Short circuit</b>	
<b>conditional short-circuit current with line-side fuse protection</b>	
<ul style="list-style-type: none"> <li>at 690 V by gG fuse rated value</li> </ul>	50 kA
<b>let-through current with closed switch</b>	
<ul style="list-style-type: none"> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	15 kA
<ul style="list-style-type: none"> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	15 kA
<ul style="list-style-type: none"> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	15 kA
<b>I<sup>2</sup>t value with closed switch</b>	
<ul style="list-style-type: none"> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	557 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	557 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	557 kA <sup>2</sup> .s
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>for short-circuit protection of the main circuit required</li> </ul>	fuse gL/gG: 250 A
<ul style="list-style-type: none"> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
<b>operational current of upstream fuse rated value</b>	250 A
<b>according UL</b>	
<b>operational current at AC according to UL 508/UL 60947-4-1 rated value</b>	250 A
<b>operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value</b>	600 V
<b>active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value</b>	100
<b>active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value</b>	75
<b>short-time withstand current (SCCR) at 600 V according to</b>	10 kA

<b>UL 508/UL 60947-4-1</b>	
<b>continuous current of upstream fuse according to UL rated value</b>	200 A
<b>type of fuse according to UL</b>	RK5

### Connections

<b>AWG number as coded connectable conductor cross section solid maximum</b>	
•	1
•	4/0
<b>type of connectable conductor cross-sections for copper conductor</b>	
• solid	1x (16 ...185mm <sup>2</sup> )
• finely stranded with core end processing	1x (16...150mm <sup>2</sup> )
• stranded	1x (16...185mm <sup>2</sup> )
<b>type of connectable conductor cross-sections for auxiliary contacts</b>	
• solid	lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> )
• finely stranded with core end processing	lateral auxiliary switch 2x (0,75 ... 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>
• stranded	lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> )
<b>type of electrical connection</b>	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals

### Mechanical Design

<b>height</b>	169 mm
<b>width</b>	112 mm
<b>depth</b>	94 mm
<b>type of device</b>	fixed mounting
<b>fastening method</b>	Built-in unit fixed-mounted version
<b>fastening method</b>	
• 4-hole front mounting	Yes
• front mounting with central attachment	No
• rail mounting	No
<b>Net Weight</b>	3.264 kg

### Environmental conditions

<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	55 °C
<b>ambient temperature during storage</b>	
• minimum	-25 °C
• maximum	55 °C

### Approvals Certificates

<b>General Product Approval</b>	other
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other	Environment
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### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>





