



SENTRON, switch disconnecter 3LD, main switch, 3-pole, Iu: 160 A, operating performance I at AC-23 A at 400 V: 75 kW, installation in distribution boards, knob-operated mechanism, black, handle direct at the switch

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	DIN-rail mounting
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	3
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	IP40
protection class IP on the front	IP40
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	160 A
• at AC-21 A at 240 V rated value	160 A
• at AC-21 A at 400 V rated value	160 A
• at AC-21 A at 440 V rated value	160 A
• at AC-23 A at 400 V rated value	132 A

<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-23 A at 240 V rated value</li> <li>• at AC-23 A at 400 V rated value</li> <li>• at AC-23 A at 440 V rated value</li> <li>• at AC-23 A at 690 V rated value</li> <li>• at AC-3 at 240 V rated value</li> <li>• at AC-3 at 400 V rated value</li> <li>• at AC-3 at 690 V rated value</li> </ul>	<p>132 kW</p> <p>132 kW</p> <p>132 kW</p> <p>45 kW</p> <p>35 kW</p> <p>50 kW</p> <p>37 kW</p>
<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> <li>• voltage trigger</li> </ul>	<p>No</p> <p>No</p>
<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>	4
<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> <li>• at 440 V for combination switch + gG fuse maximum</li> <li>• at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	<p>15 kA</p> <p>15 kA</p> <p>15 kA</p>
<b>I<sub>2t</sub> value with closed switch</b>	
<ul style="list-style-type: none"> <li>• at 240 V for combination switch + gG fuse maximum</li> <li>• at 440 V for combination switch + gG fuse maximum</li> <li>• at 690 V for combination switch + gG fuse maximum</li> </ul>	<p>185 kA<sup>2</sup>.s</p> <p>185 kA<sup>2</sup>.s</p> <p>185 kA<sup>2</sup>.s</p>
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit required</li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	<p>fuse gL/gG: 160 A</p> <p>fuse gL/gG: 10 A</p>
<b>operational current of upstream fuse rated value</b>	160 A
<b>according UL</b>	
<b>operational current at AC according to UL 508/UL 60947-4-1 rated value</b>	180 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>	75
<b>active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value</b>	50
<b>short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1</b>	10 kA

continuous current of upstream fuse according to UL rated value	200 A
type of fuse according to UL	RK5

### Connections

AWG number as coded connectable conductor cross section solid maximum	1
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for copper conductor</li> </ul>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	1x (16 ... 185mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1x (16...150mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	1x (16...185mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for auxiliary contacts</li> </ul>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	2x (0.75 ... 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
type of electrical connection	
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	box terminal
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	connection terminals

### Mechanical Design

height	169 mm
width	112 mm
depth	94 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
<ul style="list-style-type: none"> <li>• 4-hole front mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• front mounting with central attachment</li> </ul>	No
<ul style="list-style-type: none"> <li>• rail mounting</li> </ul>	No
Net Weight	2.161 kg

### Environmental conditions

ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	55 °C
ambient temperature during storage	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	55 °C

### Approvals Certificates

General Product Approval	other
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other	Environment
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[Confirmation](#)

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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>
- Information- and Downloadcenter (Catalogs, Brochures,...)  
<https://www.siemens.com/lowvoltage/catalogs>
- Industry Mall (Online ordering system)  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2330-0TK11>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3LD2330-0TK11>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2330-0TK11](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2330-0TK11)

CAX-Online-Generator

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

Tender specifications

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





