



Basic switch for position switch 3SE51 Metal enclosure, according to EN 50041 1x (M20x 1.5) 1 NO/1 NC slow-action contacts without actuator head

product brand name	SIRIUS
product designation	Mechanical safety switches
product type designation	3SE5
manufacturer's article number	
• of the supplied switching contacts	<a href="#">3SE5000-0BA00</a>
• of the supplied empty enclosure with cover	<a href="#">3SE5112-0AA00</a>
suitability for use safety switch	Yes
<b>General technical data</b>	
product function positive opening	Yes
insulation voltage rated value	400 V
degree of pollution	class 3
surge voltage resistance rated value	6 kV
protection class IP	IP66/IP67
shock resistance	
• according to IEC 60068-2-27	30g / 11 ms
vibration resistance according to IEC 60068-2-6	0.35 mm/5g
mechanical service life (operating cycles) typical	15 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
thermal current	10 A
reference code according to IEC 81346-2	B
continuous current of the C characteristic MCB	1 A; for a short-circuit current smaller than 400 A
continuous current of the quick DIAZED fuse link	10 A; for a short-circuit current smaller than 400 A
continuous current of the DIAZED fuse link gG	6 A
active principle	mechanical
repeat accuracy	0.05 mm
Substance Prohibitance (Date)	07/01/2006
SVHC substance name	Imidazolidine-2-thione (2-imidazoline-2-thiol) - 96-45-7
Net Weight	0.307 kg
minimum actuating force in directions of actuation	20 N
length of the sensor	85.7 mm
width of the sensor	40 mm
<b>Ambient conditions</b>	
ambient temperature	
• during operation	-25 ... +85 °C
• during storage	-40 ... +90 °C
explosion protection category for dust	none
<b>Main circuit</b>	
design of the switching contact	mechanical
operating frequency rated value	50 ... 60 Hz

number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
<b>operational current at AC-15</b>	
• at 24 V rated value	6 A
• at 125 V rated value	6 A
• at 240 V rated value	6 A
• at 400 V rated value	4 A
<b>operational current at DC-13</b>	
• at 24 V rated value	3 A
• at 125 V rated value	0.55 A
• at 250 V rated value	0.27 A
• at 400 V rated value	0.12 A
<b>Enclosure</b>	
design of the housing	block, narrow
material of the enclosure	metal
coating of the enclosure	cathodic dip coating
design of the housing according to standard	Yes
<b>Drive Head</b>	
design of the actuating element	Other, without, basic switch
design of the switching function	Positive opening with appropriate positive opening actuator head
circuit principle	slow-action contacts
number of switching contacts safety-related	1
cable entry type	1x (M20 x 1.5)
<b>Installation/ mounting/ dimensions</b>	
mounting position	any
fastening method	screw fixing
<b>Connections/ Terminals</b>	
type of electrical connection	screw terminal
type of connectable conductor cross-sections	
• solid	1x (0.5 ... 1.5 mm²), 2x (0.5 ... 0.75 mm²)
• finely stranded with core end processing	1x (0.5 ... 1.5 mm²), 2x (0.5 ... 0.75 mm²)
• for AWG cables solid	1x (20 ... 16), 2x (20 ... 18)
• for AWG cables stranded	1x (20 ... 16), 2x (20 ... 18)
design of the interface for safety-related communication	without
<b>Communication/ Protocol</b>	
design of the interface	without
<b>Safety related data</b>	
product function suitable for safety function	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
• with low demand rate according to SN 31920	20 %
• with high demand rate according to SN 31920	20 %
B10 value with high demand rate according to SN 31920	10 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
<b>ISO 13849</b>	
device type according to ISO 13849-1	3
<b>Approvals Certificates</b>	
General Product Approval	
Test Certificates	



[Type Test Certificates/Test Report](#)

other	Environment
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[Confirmation](#)



[Environmental Confirmations](#)

#### 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/ic10>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SE5112-0BA00>

##### Cax online generator

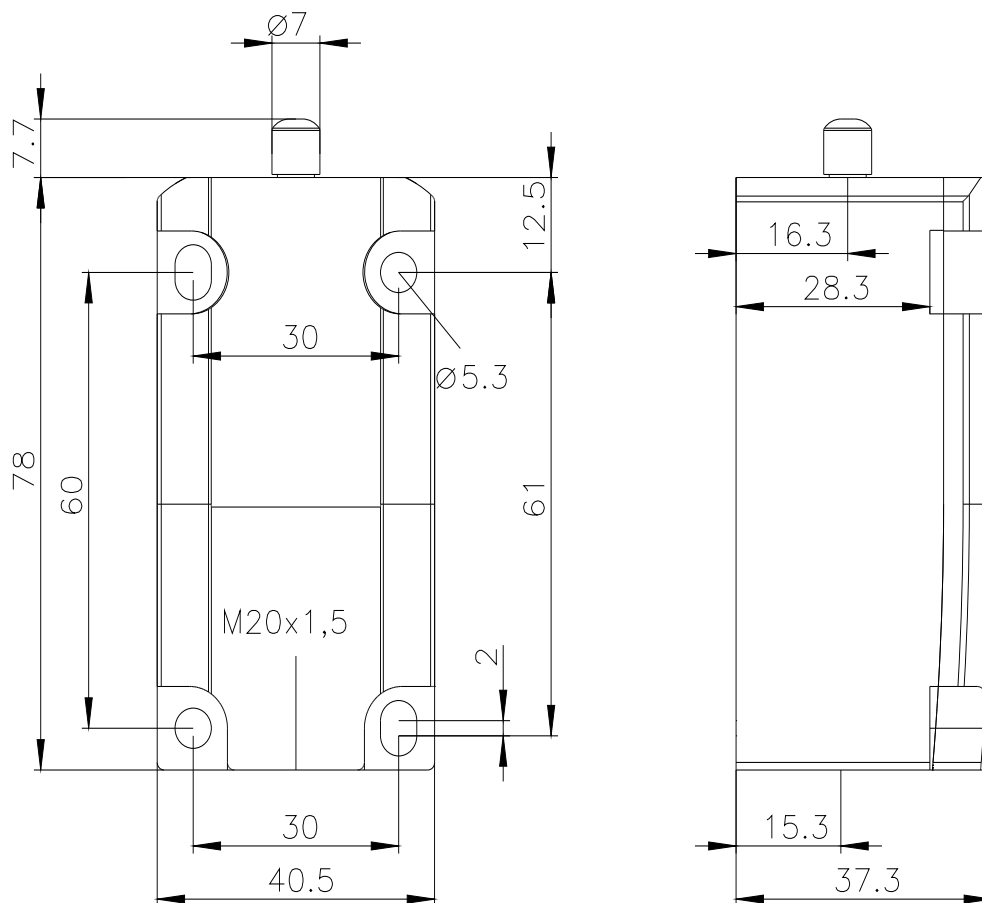
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SE5112-0BA00>

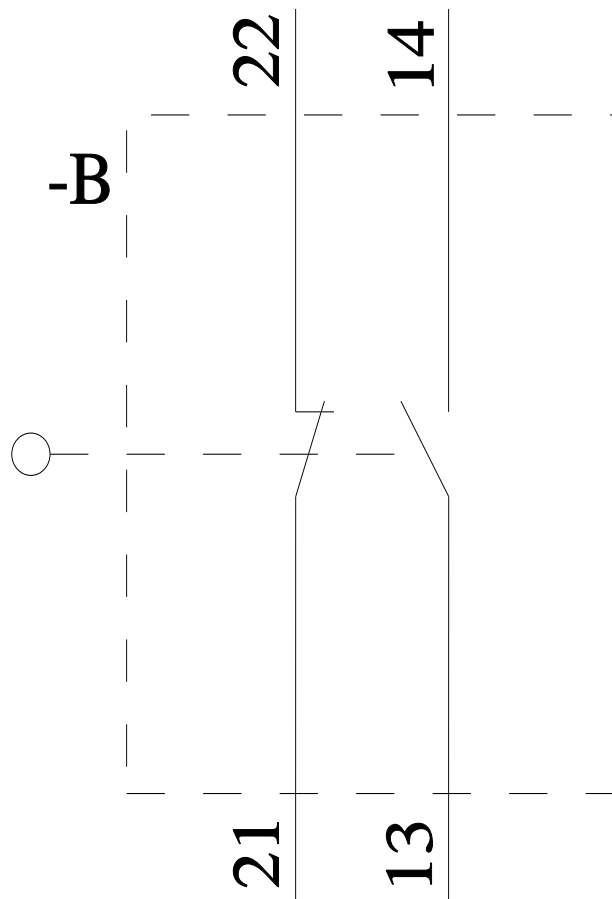
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SE5112-0BA00>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3SE5112-0BA00&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SE5112-0BA00&lang=en)





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