



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	3SE5000-0BA00
• of the supplied empty enclosure with cover	3SE5112-0AA00
General technical data	
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	30 g / 11 ms
vibration resistance according to IEC 60068-2-6	0.35 mm/5 g
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 (day/month/year)	07/01/2006
SVHC substance name	Imidazolidine-2-thione (2-imidazoline-2-thiol) CAS-No. 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
Ambient conditions	
ambient temperature	
• during operation	-25 ... +85 °C
• during storage	-40 ... +90 °C
explosion protection category for dust	none
Main circuit	
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
operational current at AC-15	
• 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
operational current at DC-13	
• 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
Enclosure	
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
Drive Head	
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)
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw fixing
Connections/ Terminals	
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
Communication/ Protocol	
design of the interface	without
Safety related data	
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
ISO 13849	
device type according to ISO 13849-1	3
IEC 61508	
safety device type according to IEC 61508-2	A
Approvals Certificates	
General Product Approval	Test Certificates



[Type Test Certificates/Test Report](#)

other

Environment

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

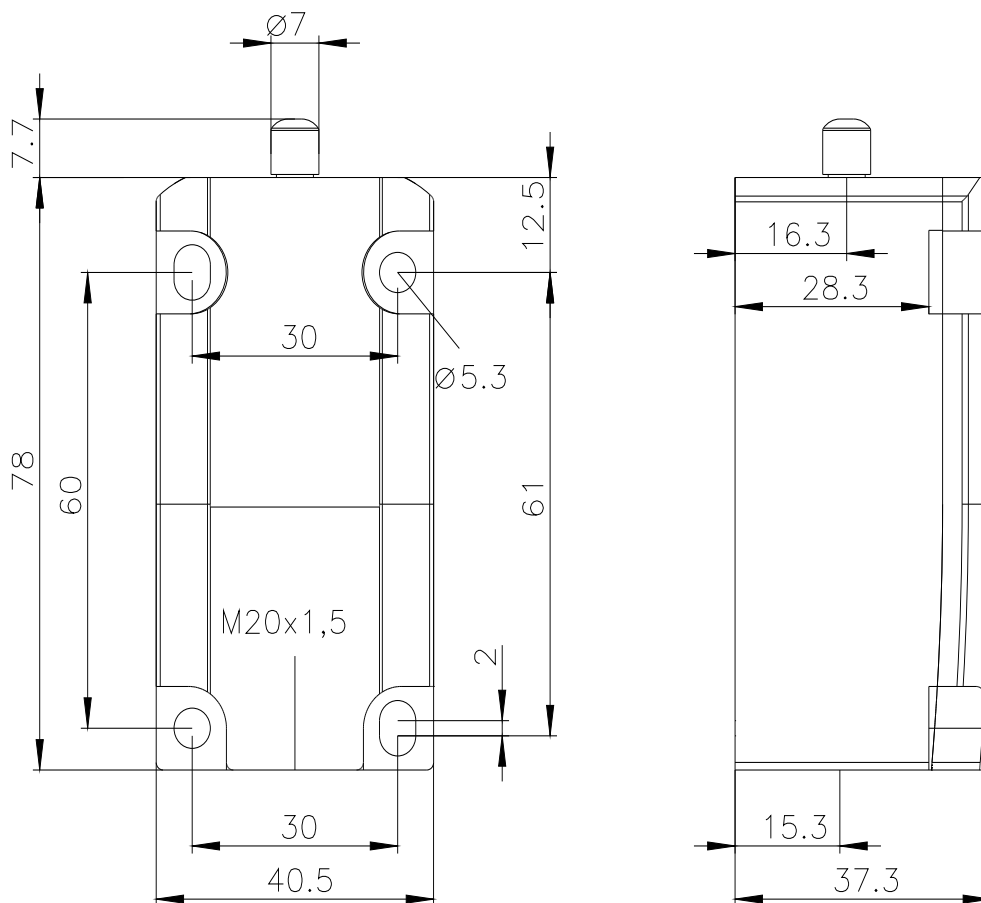
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SE5112-0BA00>

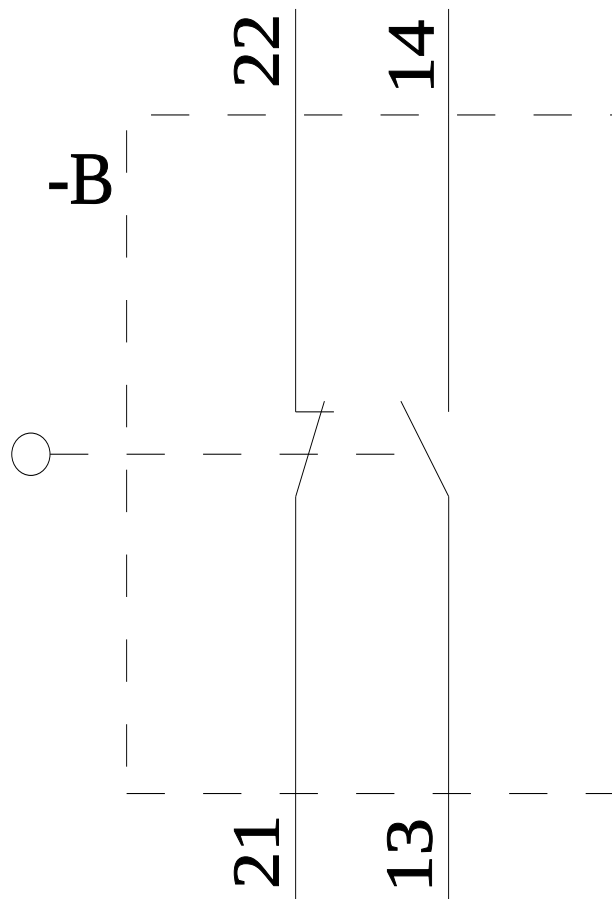
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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





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