



basic switch for position switch 3SE51 metal enclosure, according to EN 50041, device connection 1 x (M20 x 1.5) 1 NO/1 NC quick 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	3SE5000-0CA00
• of the supplied empty enclosure with cover	3SE5112-0AA00
suitability for use safety switch	Yes
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 (Date)	07/01/2006
SVHC substance name	Imidazolidine-2-thione (2-imidazoline-2-thiol) CAS-No. 96-45-7
Net Weight	0.297 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	snap-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 mm ²), 2x (0.5 ... 0.75 mm ²)		
• finely stranded with core end processing	1x (0.5 ... 1.5 mm ²), 2x (0.5 ... 0.75 mm ²)		
• 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	other	Environment



[Type Test Certificates/Test Report](#)

[Confirmation](#)

[Environmental Confirmations](#)

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=3SE5112-0CA00>

Cax online generator

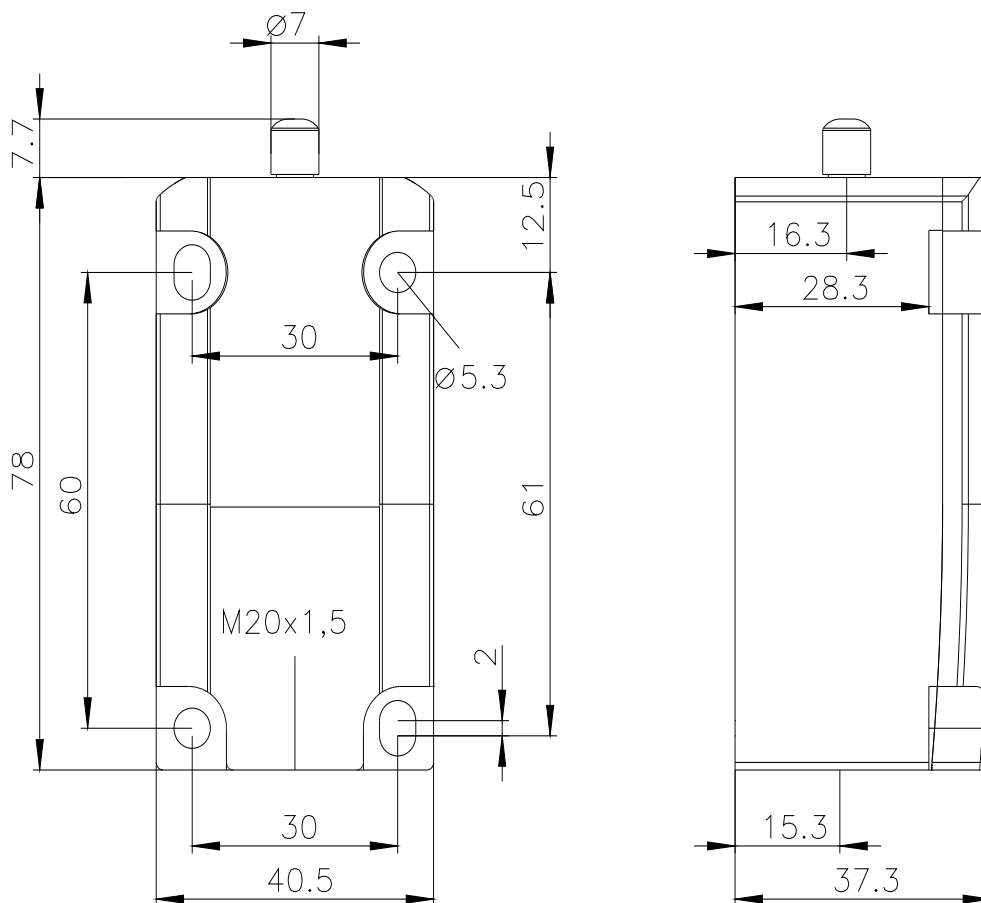
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SE5112-0CA00>

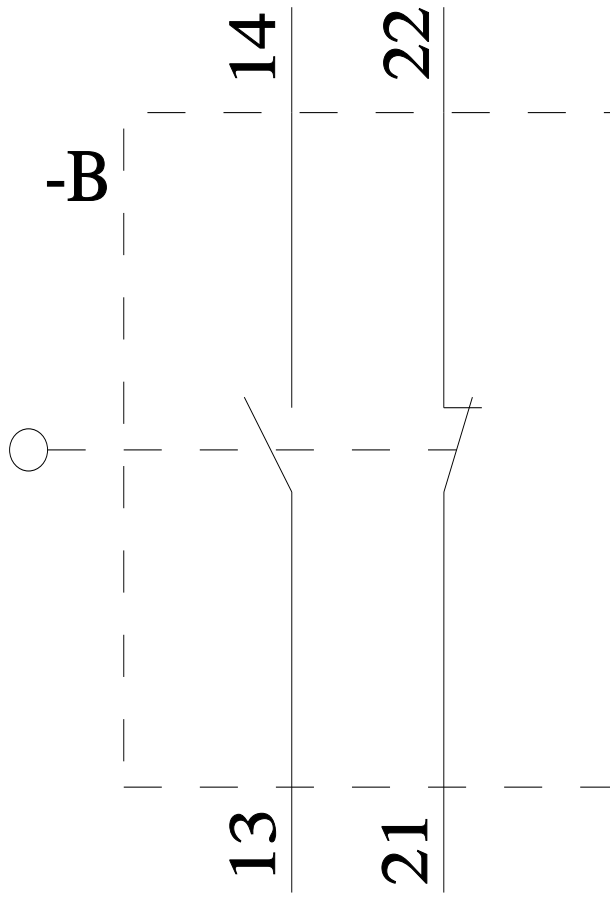
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SE5112-0CA00>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SE5112-0CA00&lang=en





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