## SIEMENS

## Data sheet

## 3SU1130-7AA10-1NA0-Z Y12



Coordinate switch, 22 mm, round, plastic with metal front ring, black, 2 switch positions, horizontal latching, without mechanical interlocking, in O position, with holder, 1 NO, 1 NO, screw terminal, with laser labeling, lower case

product brand name	SIRIUS ACT
product designation	Coordinate switches
design of the product	Complete unit
product type designation	3SU1
product line	Plastic with metal front ring, matt, 22 mm
manufacturer's article number	
<ul> <li>of supplied contact module at position 1</li> </ul>	<u>3SU1400-1AA10-1BA0</u>
<ul> <li>of supplied contact module at position 3</li> </ul>	<u>3SU1400-1AA10-1BA0</u>
<ul> <li>of the supplied holder</li> </ul>	<u>3SU1500-0BA10-0AA0</u>
<ul> <li>of the supplied actuator</li> </ul>	<u>3SU1030-7AA10-0AA0</u>
Enclosure	
shape of the enclosure front	round
Actuator	
design of the actuating element	without mechanical interlock
principle of operation of the actuating element	latching
direction of actuation	horizontal
product extension optional light source	No
color of the actuating element	black
material of the actuating element	plastic
shape of the actuating element	Extended handle
outer diameter of the actuating element	30.5 mm
marking of the actuating element	Any inscription, text in lower case
number of contact modules	2
number of switching positions	2
Maximum deflection angle [°]	30°
Front ring	
product component front ring	Yes
design of the front ring	high
material of the front ring	Metal, matt
color of the front ring	sand gray
Holder	
material of the holder	Plastic
General technical data	
product function positive opening	No
insulation voltage rated value	500 V
degree of pollution	3
type of voltage of the operating voltage	AC/DC

surge voltage resistance rated value	6 kV
protection class IP	IP65, IP67
<ul> <li>of the terminal</li> </ul>	IP20
shock resistance	
• acc. to IEC 60068-2-27	Sinusoidal half-wave 50g / 11 ms
<ul> <li>for railway applications acc. to DIN EN 61373</li> </ul>	Category 1, Class B
vibration resistance	
• acc. to IEC 60068-2-6	10 500 Hz: 5g
<ul> <li>for railway applications acc. to DIN EN 61373</li> </ul>	Category 1, Class B
operating frequency maximum	3 600 1/h
mechanical service life (switching cycles)	
<ul> <li>as operating period per direction of actuation typical</li> </ul>	100 000
electrical endurance (switching cycles) typical	10 000 000
electrical endurance (switching cycles) with contactors 3RT1015 to 3RT1026 typical	10 000 000
thermal current	10 A
reference code acc. to IEC 81346-2	S
continuous current of the C characteristic MCB	10 A; for a short-circuit current smaller than 400 A
continuous current of the quick DIAZED fuse link	10 A
continuous current of the DIAZED fuse link gG	10 A
operating voltage at AC	
— at 50 Hz rated value	5 500 V
— at 60 Hz rated value	5 500 V
<ul> <li>operating voltage at DC rated value</li> </ul>	5 500 V
Power Electronics	
contact reliability	One maloperation per 100 million (17 V, 5 mA), one maloperation per 10
contact renability	million (5 V, 1 mA)
Auxiliary circuit	
design of the contact of auxiliary contacts	Silver alloy
number of NC contacts for auxiliary contacts	0
	0 2
number of NC contacts for auxiliary contacts	
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Connections/ Terminals	2
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> )
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections	2 Screw-type terminal
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> )
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded with core end processing	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> )
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing       • solid without core end processing         • finely stranded with core end processing       • finely stranded without core end processing         • at AWG cables       • at AWG cables	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14)
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded with core end processing	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> )
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14)
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         connections/Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 1,5 mm <sup>2</sup> ) 2x (18 1,5 mm <sup>2</sup> ) 0.8 1 N·m
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 1,5 mm <sup>2</sup> ) 2x (18 1,5 mm <sup>2</sup> ) 0.8 1 N·m
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number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 %
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         To value for proof test interval or service life acc. to IEC 61508	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 100 FIT
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient conditions	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1.0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 20 % 20 % 20 %
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient conditions         • ambient temperature during operation	2 Screw-type terminal 2x (0.5 0.75 mm²) 2x (1.0 1.5 mm²) 2x (1.0 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 100 FIT 20 y -25 +70 °C
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         • with low demand rate acc. to SN 31920         • with high demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient conditions         • ambient temperature during operation         • ambient temperature during storage	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 20 % 100 FIT 20 y -25 +70 °C -40 +80 °C
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient conditions         • ambient temperature during operation         • ambient temperature during storage         environmental category during operation acc. to IEC	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 20 % 20 % 100 FIT 20 y -25 +70 °C -40 +80 °C 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient temperature during operation         • ambient temperature during storage         environmental category during operation acc. to IEC 60721	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 20 % 100 FIT 20 y -25 +70 °C -40 +80 °C
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient conditions         • ambient temperature during operation         • ambient temperature during storage         environmental category during operation acc. to IEC 60721         Installation/ mounting/ dimensions	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 100 FIT 20 y -25 +70 °C -40 +80 °C 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no condensation in operation permitted for all devices behind front panel)
number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Connections/ Terminals         type of electrical connection of modules and accessories         type of connectable conductor cross-sections         • solid with core end processing         • solid without core end processing         • finely stranded with core end processing         • finely stranded without core end processing         • at AWG cables         tightening torque of the screws in the bracket         • tightening torque for auxiliary contacts with screw-type terminals         Safety related data         B10 value with high demand rate acc. to SN 31920         proportion of dangerous failures         • with low demand rate acc. to SN 31920         failure rate [FIT] with low demand rate acc. to SN 31920         T1 value for proof test interval or service life acc. to IEC 61508         Ambient temperature during operation         • ambient temperature during storage         environmental category during operation acc. to IEC 60721	2 Screw-type terminal 2x (0.5 0.75 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1.0 1.5 mm <sup>2</sup> ) 2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 100 000 20 % 20 % 20 % 20 % 100 FIT 20 y -25 +70 °C -40 +80 °C 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no

height	40 mm
width	40 mm
shape of the installation opening	round
mounting diameter	22.3 mm
positive tolerance of installation diameter	0.4 mm
mounting height	71.3 mm
installation width	30.5 mm
installation depth	53.7 mm
Certificates/ approvals	
Further information	

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

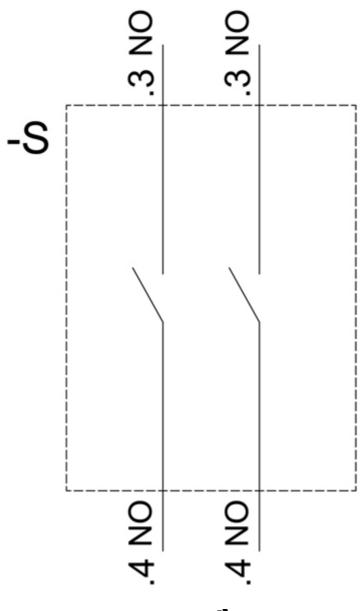
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Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1130-7AA10-1NA0-Z Y12

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3SU1130-7AA10-1NA0-Z Y12

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1130-7AA10-1NA0-Z Y12&lang=en



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