## SIEMENS

## Data sheet

## 3SU1150-7BB88-1NA0-Z X90



Coordinate switch, 22 mm, round, metal shiny, black, 2 switch positions, vertical latching, with mechanical interlocking, in O position, with holder, 1 NO, 1 NO, screw terminal, Z=20-unit packaging

•	
product brand name	SIRIUS ACT
product designation	Coordinate switches
design of the product	Complete unit
product type designation	3SU1
product line	Metal, shiny, 22 mm
manufacturer's article number	
<ul> <li>of supplied contact module at position 2</li> </ul>	3SU1400-1AA10-1BA0
<ul> <li>of supplied contact module at position 4</li> </ul>	3SU1400-1AA10-1BA0
<ul> <li>of the supplied holder</li> </ul>	3SU1550-0BA10-0AA0
<ul> <li>of the supplied actuator</li> </ul>	3SU1050-7BB88-0AA0
Enclosure	
shape of the enclosure front	round
Actuator	
design of the actuating element	with mechanical interlocking
principle of operation of the actuating element	latching
direction of actuation	Vertical
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
number of contact modules	2
type of unlocking device	push-to-unlatch mechanism
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, high gloss
color of the front ring	silver
Holder	
material of the holder	Metal
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
of the terminal	IP20
shock resistance	
• acc. to IEC 60068-2-27	Sinusoidal half-wave 50g / 11 ms
vibration resistance	
• acc. to IEC 60068-2-6	10 500 Hz: 5g
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	10 000 000
contactors 3RT1015 to 3RT1026 typical	
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
<ul> <li>operating voltage at AC</li> </ul>	
— 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
	5 500 V
Power Electronics	
contact reliability	One maloperation per 100 million (17 V, 5 mA), one maloperation per 10 million (5 V, 1 mA)
Auxiliary circuit	
	Cilverelley
design of the contact of auxiliary contacts	Silver alloy
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	2
Connections/ Terminals	
type of electrical connection of modules and accessories	Screw-type terminal
type of connectable conductor cross-sections	
<ul> <li>solid with core end processing</li> </ul>	2x (0.5 0.75 mm²)
<ul> <li>solid without core end processing</li> </ul>	2x (1.0 1.5 mm²)
	2x (0.5 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2X (0.0 1.0 mm)
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	2x (1,0 1,5 mm <sup>2</sup> )
, , , , , , , , , , , , , , , , , , , ,	
• finely stranded without core end processing	2x (1,0 1,5 mm <sup>2</sup> )
<ul> <li>finely stranded without core end processing</li> <li>at AWG cables</li> </ul>	2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14)
finely stranded without core end processing     at AWG cables      tightening torque of the screws in the bracket     tightening torque for auxiliary contacts with screw-	2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m
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	2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m
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	2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
finely stranded without core end processing         at AWG cables         tightening torque of the screws in the bracket         etightening 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	2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
finely stranded without core end processing <ul> <li>at AWG cables</li> </ul> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures             <ul></ul></li></ul></li>	2x (1,0 1,5 mm <sup>2</sup> ) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> </ul> </li> </ul> </li> </ul>	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 %
finely stranded without core end processing <ul> <li>at AWG cables</li> </ul> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures             <ul></ul></li></ul></li>	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 %
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to</li> <li>service life acc. to</li> <li>State to the service life acc. to</li></ul></li></ul></li></ul>	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
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> </ul> </li> </ul></li></ul>	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
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screwtype terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient conditions</li> </ul> </ul></li> </ul> </li> </ul>	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
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque of the screws in the bracket</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque of the screws in the bracket</li> </ul> </li> <li>tightening torque of the screws in the bracket</li> <li>safety related data</li> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures             <ul> <li>with low demand rate acc. to SN 31920</li> <li>tailure rate [FIT] with low demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> </ul> </li> <li>Ambient conditions         <ul> <li>ambient temperature during operation</li> </ul> </li> </ul>	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
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient conditions</li></ul></li></ul></li></ul>	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 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screwtype terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient temperature during operation</li></ul></li></ul></li></ul>	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 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screwtype terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient conditions</li></ul></li></ul></li></ul>	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)
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque of the screws in the bracket</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque of the screws in the bracket</li> </ul> </li> <li>tightening torque of the screws in the bracket</li> <li>with low demand rate acc. to SN 31920</li> </ul> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient conditions         <ul> <li>ambient temperature during operation</li> <li>ambient temperature during storage</li> <li>environmental category during operation acc. to IEC 60721</li> </ul> </li> <li>Installation/ mounting/ dimensions         <ul> <li>fastening method</li> </ul> </li>	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 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no condensation in operation permitted for all devices behind front panel) front panel mounting
<ul> <li>finely stranded without core end processing         <ul> <li>at AWG cables</li> </ul> </li> <li>tightening torque of the screws in the bracket         <ul> <li>tightening torque for auxiliary contacts with screwtype terminals</li> </ul> </li> <li>Safety related data         <ul> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures                 <ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>failure rate [FIT] with low demand rate acc. to SN 31920</li> <li>T1 value for proof test interval or service life acc. to IEC 61508</li> <li>Ambient conditions</li></ul></li></ul></li></ul>	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 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95 %, no condensation in operation permitted for all devices behind front panel) front panel mounting Front plate mounting Front plate mounting

shape of the installation opening	round
mounting diameter	22.3 mm
positive tolerance of installation diameter	0.4 mm
mounting height	75.6 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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1150-7BB88-1NA0-Z X90

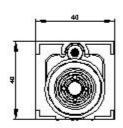
Cax online generator

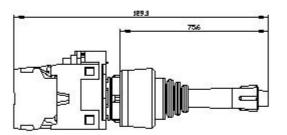
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1150-7BB88-1NA0-Z X90

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

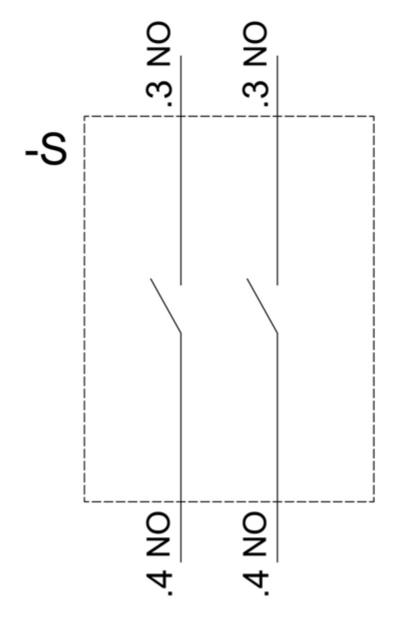
https://support.industry.siemens.com/cs/ww/en/ps/3SU1150-7BB88-1NA0-Z X90

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1150-7BB88-1NA0-Z X90&lang=en









last modified:

8/31/2020 🖸