# **SIEMENS**

## **Data sheet**



Coordinate switch, 22 mm, round, plastic with metal front ring, black, 4 switch positions, momentary contact type, without mechanical interlocking, in O position, with holder, 1 NO, 1 NO, 1 NO, 1 NO, screw terminal, Z=20-unit packaging

design of the product	Coordinate switches Complete unit
	Complete unit
product type designation 3	
product type decignation	3SU1
product line P	Plastic with metal front ring, matt, 22 mm
manufacturer's article number	
• of supplied contact module at position 1	3SU1400-1AA10-1BA0
• of supplied contact module at position 2	3SU1400-1AA10-1BA0
• of supplied contact module at position 3	3SU1400-1AA10-1BA0
• of supplied contact module at position 4	3SU1400-1AA10-1BA0
• of the supplied holder 3	3SU1550-0BA10-0AA0
• of the supplied actuator	3SU1030-7AF10-0AA0
nclosure	
shape of the enclosure front	ound
ctuator	
design of the actuating element	vithout mechanical interlock
principle of operation of the actuating element	nomentary contact type
direction of actuation h	norizontal / vertical
product extension optional light source	No
color of the actuating element b	olack
material of the actuating element p	plastic
shape of the actuating element	Extended handle
outer diameter of the actuating element 3	30.5 mm
number of contact modules 4	1
number of switching positions 4	
Maximum deflection angle [°] 3	30°
ront ring	
product component front ring Y	/es
design of the front ring h	nigh
material of the front ring	Metal, matt
color of the front ring	sand gray
older	
material of the holder	Plastic
eneral technical data	
product function positive opening	No
insulation voltage rated value 5	500 V
degree of pollution 3	3
type of voltage of the operating voltage	AC/DC
surge voltage resistance rated value 6	6 kV
protection class IP	P65, IP67

a of the terminal	ID20
of the terminal	IP20
shock resistance	sinusoidal half ways 15a / 11 mg
according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance	40 500 Hz: 50
• according to IEC 60068-2-6	10 500 Hz: 5g
operating frequency maximum	2 400 1/h
mechanical service life (operating cycles)	500.000
as operating period per direction of actuation typical	500 000
electrical endurance (operating cycles) typical	10 000 000
electrical endurance (operating cycles) with contactors 3RT1015 to 3RT1026 typical	10 000 000
thermal current	10 A
reference code according 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
Substance Prohibitance (Date)	10/01/2014
operating voltage	
• at AC	
— at 50 Hz rated value	5 500 V
— at 60 Hz rated value	5 500 V
at DC rated value	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	
design of the contact of auxiliary contacts	Silver alloy
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	4
Connections/ Terminals	
type of electrical connection of modules and accessories	Screw-type terminal
type of connectable conductor cross-sections	
The or commercially community of 033-320110113	
solid with core end processing	2x (0.5 0.75 mm²)
	2x (0.5 0.75 mm²) 2x (1.0 1.5 mm²)
solid with core end processing	
<ul><li>solid with core end processing</li><li>solid without core end processing</li></ul>	2x (1.0 1.5 mm²)
<ul><li>solid with core end processing</li><li>solid without core end processing</li><li>finely stranded with core end processing</li></ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²)
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²)
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14)
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> </ul> tightening torque of the screws in the bracket	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m
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solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920     proportion of dangerous failures	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920     proportion of dangerous failures     with low demand rate according to SN 31920	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m
solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920     proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 250 000
solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920     proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920     suith high demand rate according to SN 31920     failure rate [FIT] with low demand rate according to SN 31920	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 250 000
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 250 000
solid with core end processing     solid without core end processing     finely stranded with core end processing     finely stranded without core end processing     for 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 according to SN 31920     proportion of dangerous failures         with low demand rate according to SN 31920         with high demand rate according to SN 31920         awith high demand rate according to SN 31920         failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 250 000 20 % 20 % 100 FIT
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage environmental category during operation according to IEC	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -25 +70 °C -40 +80 °C 3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95%, no
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage environmental category during operation according to IEC 60721	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m 250 000 20 % 20 % 100 FIT
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage environmental category during operation according to IEC 60721  Installation/ mounting/ dimensions	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures         <ul> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> </ul> </li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>environmental category during operation according to IEC 60721</li> <li>Installation/ mounting/ dimensions</li> <li>fastening method</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 20 % 100 FIT  -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>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>environmental category during operation according to IEC 60721</li> <li>Installation/ mounting/ dimensions</li> <li>fastening method</li> <li>of modules and accessories</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 20 % 100 FIT  -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 plate mounting Front plate mounting
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures         <ul> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> </ul> </li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>environmental category during operation according to IEC 60721</li> <li>Installation/ mounting/ dimensions</li> <li>fastening method</li> <li>of modules and accessories</li> <li>height</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 20 % 100 FIT  -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 plate mounting Front plate mounting Front plate mounting 40 mm
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures <ul> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> </ul> </li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> <li>ambient temperature <ul> <li>during operation</li> <li>during storage</li> </ul> </li> <li>environmental category during operation according to IEC 60721</li> <li>Installation/ mounting/ dimensions</li> <li>fastening method <ul> <li>of modules and accessories</li> </ul> </li> <li>height</li> <li>width</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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 plate mounting Front plate mounting Front plate mounting 40 mm 40 mm
<ul> <li>solid with core end processing</li> <li>solid without core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables</li> <li>tightening torque of the screws in the bracket</li> <li>tightening torque for auxiliary contacts with screw-type terminals</li> <li>Safety related data</li> <li>B10 value with high demand rate according to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>Ambient conditions</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>environmental category during operation according to IEC 60721</li> <li>Installation/ mounting/ dimensions</li> <li>fastening method</li> <li>of modules and accessories</li> <li>height</li> <li>width</li> <li>shape of the installation opening</li> </ul>	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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 plate mounting Front plate mounting 40 mm 40 mm round
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage  environmental category during operation according to IEC 60721  Installation/ mounting/ dimensions  fastening method     of modules and accessories  height width  shape of the installation opening mounting diameter	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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 plate mounting Front plate mounting Front plate mounting 40 mm 40 mm round 22.3 mm
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage environmental category during operation according to IEC 60721  Installation/ mounting/ dimensions  fastening method     of modules and accessories height width shape of the installation opening mounting diameter positive tolerance of installation diameter	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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 plate mounting Front plate mounting 40 mm 40 mm round 22.3 mm 0.4 mm
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     for 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 according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920  with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  Ambient conditions  ambient temperature     during operation     during storage  environmental category during operation according to IEC 60721  Installation/ mounting/ dimensions  fastening method     of modules and accessories  height width  shape of the installation opening mounting diameter	2x (1.0 1.5 mm²) 2x (0.5 1.5 mm²) 2x (1,0 1,5 mm²) 2x (18 14) 1 1.2 N·m 0.8 1 N·m  250 000  20 % 20 % 100 FIT  -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 plate mounting Front plate mounting Front plate mounting 40 mm 70 mm

# Certificates/ approvals

#### **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3SU1130-7AF10-1QA0-Z X90

Cax online generator

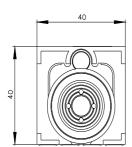
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1130-7AF10-1QA0-Z X90

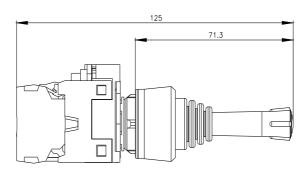
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

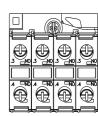
https://support.industry.siemens.com/cs/ww/en/ps/3SU1130-7AF10-1QA0-Z X90

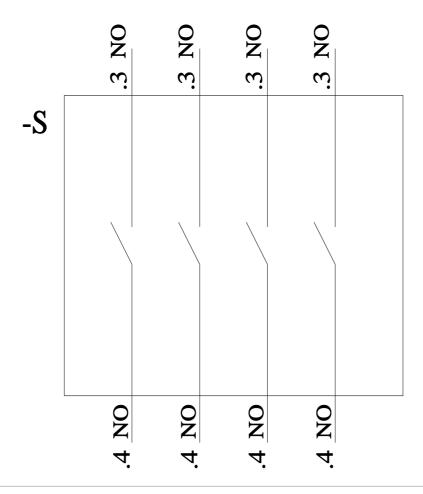
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1130-7AF10-1QA0-Z X90&lang=en









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