

Siemens  
EcoTech



Illuminated pushbutton, 22 mm, round, plastic, red, pushbutton, flat, momentary contact type, with holder, 1 NC, LED module with integrated LED 24 V AC/DC, screw terminal



product brand name	SIRIUS ACT
product designation	Illuminated pushbuttons
design of the product	Complete unit
product type designation	3SU1
product line	Plastic, black, 22 mm
manufacturer's article number	
• of supplied contact module at position 1	<a href="#">3SU1400-1AA10-1CA0</a>
• of supplied LED module	<a href="#">3SU1401-1BB20-1AA0</a>
• of the supplied holder	<a href="#">3SU1550-0AA10-0AA0</a>
• of the supplied actuator	<a href="#">3SU1001-0AB20-0AA0</a>
number of command points	1
Actuator	
design of the actuating element	Button, flat
principle of operation of the actuating element	momentary contact type
product extension optional light source	Yes
color of the actuating element	red
material of the actuating element	plastic
shape of the actuating element	round
outer diameter of the actuating element	29.45 mm
number of contact modules	1
Front ring	
product component front ring	Yes
design of the front ring	Standard
material of the front ring	plastic
color of the front ring	black
Holder	
material of the holder	Plastic
Display	
number of LED modules	1
General technical data	
product function positive opening	Yes
product component light source	Yes
insulation voltage rated value	320 V
degree of pollution	3
type of voltage of the operating voltage	AC/DC
surge voltage resistance rated value	4 kV

<b>protection class IP</b>	IP66, IP67, IP69(IP69K)
protection class IP of the terminal	IP20
<b>degree of protection NEMA rating</b>	1, 2, 3, 3R, 4, 4X, 12, 13
<b>shock resistance</b> <ul style="list-style-type: none"> <li>• according to IEC 60068-2-27</li> <li>• for railway applications according to EN 61373</li> </ul>	sinusoidal half-wave 15g / 11 ms Category 1, Class B
<b>vibration resistance</b> <ul style="list-style-type: none"> <li>• according to IEC 60068-2-6</li> <li>• for railway applications according to EN 61373</li> </ul>	10 ... 500 Hz: 5g Category 1, Class B
<b>operating frequency maximum</b>	3 600 1/h
<b>mechanical service life (operating cycles) typical</b>	3 000 000
electrical endurance (operating cycles) typical	10 000 000
<b>thermal current</b>	10 A
<b>reference code according to IEC 81346-2</b>	S
<b>continuous current of the C characteristic MCB</b>	10 A; for a short-circuit current smaller than 400 A
<b>continuous current of the quick DIAZED fuse link</b>	10 A
<b>continuous current of the DIAZED fuse link gG</b>	10 A
<b>Substance Prohibitance (Date)</b>	10/01/2014
<b>SVHC substance name</b>	Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
<b>Net Weight</b>	55 g
<b>operating voltage</b> <ul style="list-style-type: none"> <li>• at AC <ul style="list-style-type: none"> <li>— at 50 Hz rated value</li> <li>— at 60 Hz rated value</li> </ul> </li> <li>• at DC rated value</li> </ul>	5 ... 500 V 5 ... 500 V 5 ... 500 V
<b>Power Electronics</b>	
<b>contact reliability</b>	One maloperation per 100 million (17 V, 5 mA), one maloperation per 10 million (5 V, 1 mA)
<b>Supply voltage</b>	
type of voltage of the supply voltage of the light source	AC/DC
<b>supply voltage of the light source at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>	24 V 24 V
supply voltage 1 of the light source at DC rated value	24 V
<b>Control circuit/ Control</b>	
<b>inrush current of LED module maximum</b>	2 A
<b>Auxiliary circuit</b>	
<b>design of the contact of auxiliary contacts</b>	Silver alloy
<b>number of NC contacts for auxiliary contacts</b>	1
<b>number of NO contacts for auxiliary contacts</b>	0
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b> <ul style="list-style-type: none"> <li>• of modules and accessories</li> </ul>	screw terminal Screw-type terminal
<b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <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>	2x (0.5 ... 0.75 mm²) 2x (1.0 ... 1.5 mm²) 2x (0.5 ... 1.5 mm²) 2x (1.0 ... 1.5 mm²) 2x (18 ... 14)
<b>tightening torque of the screws in the bracket</b>	1 ... 1.2 N·m
tightening torque with screw-type terminals	0.8 ... 0.9 N·m
<b>Lamp</b>	
<b>type of light source</b>	LED
<b>color of the light source</b>	red
<b>light intensity</b>	450 ... 1 120 mcd
<b>Safety related data</b>	
product function suitable for safety function	Yes
<b>test wear-related service life necessary</b>	Yes

<b>proportion of dangerous failures</b>	
• with low demand rate according to SN 31920	20 %
• with high demand rate per NC contact according to SN 31920	20 %
<b>B10 value with high demand rate according to SN 31920</b>	3 000 000
<b>failure rate [FIT] with low demand rate per NC contact according to SN 31920</b>	100 FIT
<b>ISO 13849</b>	
<b>device type according to ISO 13849-1</b>	3
<b>IEC 61508</b>	
<b>safety device type according to IEC 61508-2</b>	Type A
T1 value for proof test interval or service life according to IEC 61508	20 a

#### Ambient conditions

<b>ambient temperature</b>	
• during operation	-25 ... +70 °C
• during storage	-40 ... +80 °C
environmental category during operation according to IEC 60721	3M6, 3S2, 3B2, 3K6 (with relative air humidity of 10 ... 95%, no condensation in operation permitted for all devices behind front panel)

#### Environmental footprint

Environmental Product Declaration (EPD)	Yes
global warming potential [CO2 eq] total	0.787 kg
global warming potential [CO2 eq] during manufacturing	0.566 kg
global warming potential [CO2 eq] during operation	0.235 kg
global warming potential [CO2 eq] after end of life	-0.015 kg
Siemens Eco Profile (SEP)	Siemens EcoTech

#### Installation/ mounting/ dimensions

<b>fastening method</b>	front plate mounting
• of modules and accessories	Front plate mounting
<b>height</b>	40 mm
<b>width</b>	30 mm
<b>shape of the installation opening</b>	round
<b>mounting diameter</b>	22.3 mm
<b>positive tolerance of installation diameter</b>	0.4 mm
<b>mounting height</b>	11 mm
<b>installation width</b>	29.5 mm
<b>installation depth</b>	49.7 mm

#### Approvals Certificates

General Product Approval	Test Certificates
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[Special Test Certificate](#)

Test Certificates	Maritime application	other
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[Type Test Certificates/Test Report](#)



other	Environment
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[Confirmation](#)



[Environmental Conformations](#)

#### 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=3SU1102-0AB20-1CA0>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1102-0AB20-1CA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3SU1102-0AB20-1CA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3SU1102-0AB20-1CA0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1102-0AB20-1CA0&lang=en)



