## **SIEMENS**

## **Data sheet**



key-operated switch Siemens, 22 mm, round, plastic, special lock, with 2 keys, 3 switch positions I-O-II, latching, actuating angle  $2x45^\circ,\,10:30h/12h/13:30h,$  key removal I+II

product designation design of the product product type designation product extension optional light source No a of the actuating element which is a ctuating element silver material of the actuating element shape of the actuating element shape of the actuating element which is a ctuating element which is a ctuating element shape of the actuating element yes, smm number of switching positions switch position for key distraction actuating angle clockwise front ring element silver  ### Actuation ### A	product brand name	SIRIUS ACT
product type designation product line Plastic, black, 22 mm  Actuator  principle of operation of the actuating element product extension optional light source color • of the actuating element material of the actuating element silver material of the actuating element silver material of the actuating element shape of the actuating element very couter diameter of the actuating element number of switching positions syswitch position for key distraction actuating angle • clockwise • anticlockwise • anticlockwise olock make Siemens  Front ring product component front ring design of the front ring material of the front ring plastic color of the front ring color of the front ring degree of protection NEMA rating shock resistance • according to IEC 60068-2-8 • for railway applications according to EN 61373 vibration resistance • according to IEC 60068-2-6 • for railway applications according to EN 61373 operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2014	product designation	Key-operated switches
product line Plastic, black, 22 mm  Actuator  principle of operation of the actuating element product extension optional light source No  of the actuating element silver material of the actuating element Material element Materi	design of the product	Actuating/signaling element
Actuator  principle of operation of the actuating element product extension optional light source of the actuating element material of the actuating element silver material of the actuating element shape of the actuating element wetal shape of the actuating element shape of the actuating element shape of the actuating element very diameter of the actuating element switch josition for key distraction actuating angle clockwise shape of the actuating element switch position for key distraction actuating angle clockwise shape of the foot ring stemans front ring product component front ring yes design of the front ring standard material of the front ring color of the front ring black  General technical data protection class IP of the terminal degree of protection NEMA rating shock resistance according to IEC 60068-2-27 of or railway applications according to EN 61373 vibration resistance according to IEC 60068-2-6 of railway applications according to EN 61373 category 1, Class B operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2014	product type designation	3SU1
principle of operation of the actuating element product extension optional light source color  of the actuating element silver material of the actuating element shape of the actuating shape of the actuating shape of the actuating element shape of the actuating shape of the actuation shape of the actuating	product line	Plastic, black, 22 mm
product extension optional light source  color  of the actuating element shape of the actuating element number of switching positions 3 switch position for key distraction actuating angle clockwise anticlockwise anticlockwise anticlockwise selection front ring product component front ring design of the front ring material of the front ring color of the front ring black  General technical data protection class IP of the terminal degree of protection NEMA rating shock resistance according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms category 1, Class B vibration resistance according to IEC 60068-2-6 for railway applications according to EN 61373 Category 1, Class B  operating frequency maximum nechnical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2014	Actuator	
color  • of the actuating element material of the actuating element shape of the actuating element cuter diameter of the actuating element number of switching positions switch position for key distraction actuating angle clockwise anticlockwise 45° anticlockwise 45° anticlockwise block make Siemens  Front ring product component front ring design of the front ring material of the front ring plastic color of the front ring protection class IP of the terminal degree of protection NEMA rating shock resistance according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms er or railway applications according to EN 61373 Category 1, Class B  vibration resistance according to IEC 60068-2-6 of or railway applications according to EN 61373 Category 1, Class B  operating frequency maximum nechanical service life (switching cycles) typical reference code according to IEC 81346-2 S Substance Prohibitance (Date)  Silver  metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver metal silver silv	principle of operation of the actuating element	latching, 2x45° (10:30 h/12 h/13:30 h)
of the actuating element material of the actuating element shape of the actuating element voluter diameter of the actuating element number of switching positions switch position for key distraction actuating angle clockwise clockwise design of the front ring material of the front ring material of the front ring material of the front ring product component front ring material of the front ring protection class IP of the terminal degree of protection NEMA rating shock resistance eaccording to IEC 60068-2-27 e for railway applications according to EN 61373 operating requency maximum mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)	product extension optional light source	No
material of the actuating element shape of the actuating element outer diameter of the actuating element number of switching positions switch position for key distraction actuating angle • clockwise • anticlockwise • anticlockwise lock make Siemens  Front ring product component front ring design of the front ring color of the front ring color of the front ring protection class IP of the terminal degree of protection NEMA rating shock resistance • according to IEC 60068-2-6 • according to IEC 60068-2-6 • for railway applications according to EN 61373 operating requency maximum mechanical service If fer switching cylor on the special service Ife (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)  Substance Prohibitance (Date)	color	
shape of the actuating element outer diameter of the actuating element number of switching positions 3 switch position for key distraction actuating angle • clockwise • anticlockwise • anticlockwise  • anticlockwise  • anticlockwise  front ring product component front ring design of the front ring material of the front ring color of the front ring protection class IP • of the terminal protection class IP • of the terminal lP20 degree of protection NEMA rating shock resistance • according to IEC 60068-2-27 • for railway applications according to EN 61373 vibration resistance • according to IEC 60068-2-6 • for railway applications according to EN 61373 operating frequency maximum mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)	of the actuating element	silver
outer diameter of the actuating element     29.5 mm       number of switching positions     3       switch position for key distraction     I+II       actuating angle     45°       e clockwise     45°       e anticlockwise     Iock make       Front ring       Yes       design of the front ring       Gesign of the front ring       design of the front ring       glastic       color of the front ring       black       General technical data       Protection class IP       e of the terminal     IP20       degree of protection NEMA rating     1, 2, 3, 3R, 4, 4X, 12, 13       shock resistance       e according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       e for railway applications according to EN 61373     Category 1, Class B       vibration resistance       e according to IEC 60068-2-6     10 500 Hz: 5g       e for railway applications according to EN 61373     Category 1, Class B       operating frequency maximum     1 800 1/h       mechanical service life (switching cycles) typical     1 000 000       reference code according to IEC 81346-2     S       Substance	material of the actuating element	metal
number of switching positions switch position for key distraction actuating angle	shape of the actuating element	Key
switch position for key distraction  actuating angle  clockwise  anticlockwise  anticlockwise  anticlockwise  actuating angle  anticlockwise  actuating angle  anticlockwise  actuating angle  anticlockwise  actuating angle  45°  lock make  Siemens  Front ring  product component front ring  gestimaterial of the front ring  plastic  color of the front ring  plastic  color of the front ring  general technical data  protection class IP  of the terminal  degree of protection NEMA rating  shock resistance  according to IEC 60068-2-27  of or railway applications according to EN 61373  vibration resistance  according to IEC 60068-2-6  of or railway applications according to EN 61373  operating frequency maximum  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)	outer diameter of the actuating element	29.5 mm
actuating angle  • clockwise • anticlockwise 15c	number of switching positions	3
clockwise     anticlockwise     A5°     anticlockwise     Iock make     Siemens  Front ring  product component front ring     design of the front ring     material of the front ring     plastic     color of the front ring     black  General technical data  protection class IP     of the terminal     lego     degree of protection NEMA rating     shock resistance     according to IEC 60068-2-27     of or railway applications according to EN 61373  vibration resistance     according to IEC 60068-2-6     or railway applications according to EN 61373  operating frequency maximum     nechanical service life (switching cycles) typical     reference code according to IEC 81346-2  Substance Prohibitance (Date)  10/01/2014	switch position for key distraction	I+II
e anticlockwise lock make Siemens  Front ring  product component front ring design of the front ring material of the front ring color of the front ring black  General technical data  protection class IP e of the terminal lP20 degree of protection NEMA rating shock resistance e according to IEC 60068-2-27 e for railway applications according to EN 61373 vibration resistance e according to IEC 60068-2-6 e for railway applications according to EN 61373 category 1, Class B  vibration resistance e according to IEC 60068-2-6 e for railway applications according to EN 61373 category 1, Class B  operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2014	actuating angle	
lock make  Front ring  product component front ring  design of the front ring  material of the front ring  color of the front ring  plastic  color of the front ring  black  General technical data  protection class IP  of the terminal  degree of protection NEMA rating  shock resistance  o according to IEC 60068-2-27  of or railway applications according to EN 61373  vibration resistance  of or railway applications according to EN 61373  category 1, Class B  vibration resistance  of or railway applications according to EN 61373  category 1, Class B  operating frequency maximum  1 800 1/h  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)	<ul><li>clockwise</li></ul>	45°
Front ring  product component front ring  design of the front ring  material of the front ring  color of the front ring  plastic  black  General technical data  protection class IP  of the terminal  degree of protection NEMA rating  shock resistance  according to IEC 60068-2-27  for railway applications according to EN 61373  operating frequency maximum  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Yes  Standard  Yes  Standard  Yes  Standard  Yes  Standard  Pres  Standard  Ples  Standard  Pres	<ul> <li>anticlockwise</li> </ul>	45°
product component front ring design of the front ring material of the front ring color of the front ring plastic color of the front ring black  General technical data protection class IP of the terminal degree of protection NEMA rating shock resistance according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms for railway applications according to EN 61373 vibration resistance according to IEC 60068-2-6 for railway applications according to EN 61373 category 1, Class B  vibration resistance according to IEC 60068-2-6 for railway applications according to EN 61373 category 1, Class B  operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)	lock make	Siemens
design of the front ring material of the front ring color of the front ring black  General technical data  protection class IP of the terminal degree of protection NEMA rating shock resistance according to IEC 60068-2-27 for railway applications according to EN 61373 vibration resistance according to IEC 60068-2-6 for railway applications according to EN 61373 category 1, Class B  vibration frequency maximum for railway applications according to EN 61373 category 1, Class B  operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)  1 IP66, IP67, IP69(IP69K) IP20 IP69, IP69(IP69K) IP20 Category 1, Class B IP20 Category 1, Class B IP20 Category 1, Class B IP20 IP66, IP67, IP69(IP69K) IP69, IP69(IP69K) IP69,	Front ring	
material of the front ring black  General technical data  protection class IP  of the terminal IP20  degree of protection NEMA rating 1, 2, 3, 3R, 4, 4X, 12, 13  shock resistance  o according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms  of or railway applications according to EN 61373 Category 1, Class B  vibration resistance  o according to IEC 60068-2-6 10 500 Hz: 5g  of or railway applications according to EN 61373 Category 1, Class B  operating frequency maximum 1 800 1/h  mechanical service life (switching cycles) typical 1 000 000  reference code according to IEC 81346-2 S  Substance Prohibitance (Date) 10/01/2014	product component front ring	Yes
color of the front ring  General technical data  protection class IP  of the terminal  degree of protection NEMA rating  shock resistance  according to IEC 60068-2-27  of tor railway applications according to EN 61373  vibration resistance  according to IEC 60068-2-6  of tor railway applications according to EN 61373  category 1, Class B  vibration resistance  of ror railway applications according to EN 61373  category 1, Class B  operating frequency maximum  1 800 1/h  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)	design of the front ring	Standard
Protection class IP of the terminal lP20 degree of protection NEMA rating 1, 2, 3, 3R, 4, 4X, 12, 13 shock resistance of according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms of or railway applications according to EN 61373 category 1, Class B vibration resistance of according to IEC 60068-2-6 of or railway applications according to EN 61373 category 1, Class B operating frequency maximum 1 800 1/h mechanical service life (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date)  IP66, IP67, IP69(IP69K) IP20  I D66, IP67, IP69(IP69K) I D69 IP20  Category 1, Class B  Category 1, Class B  Operating frequency maximum 1 800 1/h I 000 000 I 1 000 000 I 000 000 I 000 000 I 000 000 I 000 000	material of the front ring	plastic
protection class IP	color of the front ring	black
● of the terminal  degree of protection NEMA rating  1, 2, 3, 3R, 4, 4X, 12, 13  shock resistance  ● according to IEC 60068-2-27  ● for railway applications according to EN 61373  vibration resistance  ● according to IEC 60068-2-6  ● for railway applications according to EN 61373  Category 1, Class B  vibration resistance  ● according to IEC 60068-2-6  ● for railway applications according to EN 61373  Category 1, Class B  operating frequency maximum  1 800 1/h  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  1 0/01/2014	General technical data	
degree of protection NEMA rating  1, 2, 3, 3R, 4, 4X, 12, 13  shock resistance  according to IEC 60068-2-27 sinusoidal half-wave 15g / 11 ms  for railway applications according to EN 61373 Category 1, Class B  vibration resistance  according to IEC 60068-2-6 10 500 Hz: 5g  for railway applications according to EN 61373 Category 1, Class B  operating frequency maximum 1 800 1/h  mechanical service life (switching cycles) typical 1 000 000  reference code according to IEC 81346-2 S  Substance Prohibitance (Date) 10/01/2014	protection class IP	IP66, IP67, IP69(IP69K)
shock resistance	of the terminal	IP20
<ul> <li>according to IEC 60068-2-27</li> <li>for railway applications according to EN 61373</li> <li>vibration resistance</li> <li>according to IEC 60068-2-6</li> <li>for railway applications according to EN 61373</li> <li>for railway applications according to EN 61373</li> <li>Category 1, Class B</li> <li>operating frequency maximum</li> <li>1 800 1/h</li> <li>mechanical service life (switching cycles) typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>sinusoidal half-wave 15g / 11 ms</li> <li>Category 1, Class B</li> <li>10 500 Hz: 5g</li> <li>10 500 Hz: 5g</li> <li>20 category 1, Class B</li> <li>1000 000</li> </ul>	degree of protection NEMA rating	1, 2, 3, 3R, 4, 4X, 12, 13
for railway applications according to EN 61373      vibration resistance         according to IEC 60068-2-6         for railway applications according to EN 61373         Category 1, Class B          operating frequency maximum	shock resistance	
vibration resistance	<ul><li>according to IEC 60068-2-27</li></ul>	sinusoidal half-wave 15g / 11 ms
<ul> <li>according to IEC 60068-2-6</li> <li>for railway applications according to EN 61373</li> <li>Category 1, Class B</li> <li>operating frequency maximum</li> <li>1 800 1/h</li> <li>mechanical service life (switching cycles) typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2014</li> </ul>	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
● for railway applications according to EN 61373  Category 1, Class B  operating frequency maximum  1 800 1/h  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Category 1, Class B  1 800 1/h  1 000 000  reference code according to IEC 81346-2  S  10/01/2014	vibration resistance	
operating frequency maximum  1 800 1/h  mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  1 800 1/h  1 000 000  reference code according to IEC 81346-2  S	<ul><li>according to IEC 60068-2-6</li></ul>	10 500 Hz: 5g
mechanical service life (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  1 000 000  S  10/01/2014	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
reference code according to IEC 81346-2 S Substance Prohibitance (Date) 10/01/2014	operating frequency maximum	1 800 1/h
Substance Prohibitance (Date) 10/01/2014	mechanical service life (switching cycles) typical	1 000 000
	reference code according to IEC 81346-2	S
Safety related data	Substance Prohibitance (Date)	10/01/2014
ourory rotation data –	Safety related data	

B10 value with high demand rate according to SN 31920	300 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	20 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	20 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
Ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +70 °C
during storage	-40 +80 °C
environmental category during operation according to IEC 60721	3M6, 3S2, 3B2, 3C3, 3K6 (with relative air humidity of 10 95%)
Installation/ mounting/ dimensions	
height	29.5 mm
width	29.5 mm
shape of the installation opening	round
mounting diameter	22.3 mm
positive tolerance of installation diameter	0.4 mm
mounting height	61 mm
installation width	29.5 mm
installation depth	25.4 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=3SU1000-5BL41-0AA0-Z Y01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1000-5BL41-0AA0-Z Y01
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3SU1000-5BL41-0AA0-Z Y01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3SU1000-5BL41-0AA0-Z Y01&lang=en

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