## SIEMENS

## Data sheet

## 3SU1401-1BB60-1AA0-Z X90

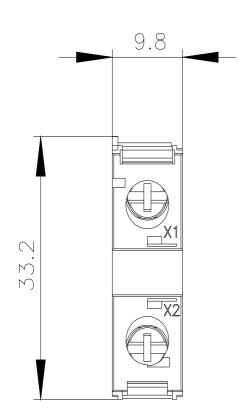


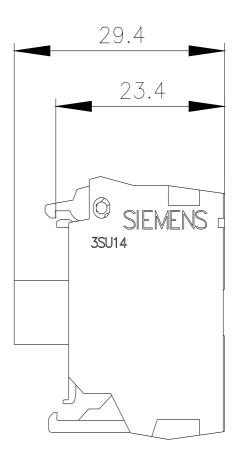
LED module with integrated LED 24 V AC/DC, white, screw terminal, for front plate mounting, Z=50-unit packaging

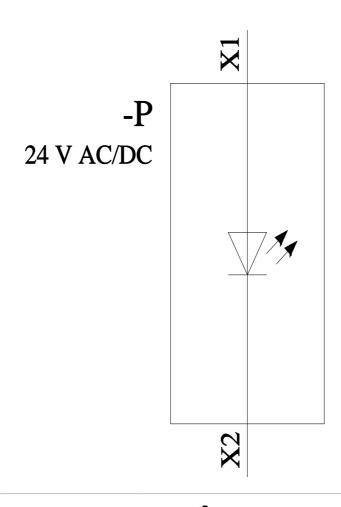
product brand name         SIRUS ACT           product designation         LED module           product type designation         SU1           Concort designation         SU1           Concort designation         SU1           General technical data         Yes           • clicicio         Yes           • indicio         Yes           • indicio         Yes           • indicio         Yes           • indicio         S20 V           • indicio voltage rated value         320 V           degres of politoin         3           type of voltage of the operating voltage         AC/DC           • of or actuation         AC/DC           • of or actuation         AC/DC           or actuation         IP40           or actuation         IP40           or actuation seconding to EN 61373         Category 1, Class B           or actuation resistance         In		
product type designation         3SU1           Genoral technical data	product brand name	SIRIUS ACT
Conneral technical data       product component       • diode       • lamp transformer       • light source       • series resistor       No       Insulation voltage rated value       320 V       degree of pollution       3       type of voltage of the operating voltage       • for actuation       AC/DC       surge voltage resistance rated value       4 kV       consumed current maximum       protection class IP       • of the enclosure       • of the enclosure       • according to IEC 60068-2-27       • for railway applications according to EN 61373       Category 1, Class B       • according to IEC 60068-2-6       • for railway applications according to EN 61373       Category 1, Class B       • of railway applications according to EN 61373       Category 1, Class B       • of railway applications according to EN 61373       Category 1, Class B       • operating period typical       • otor railway applications according to EN 61373       Category 1, Class B       • operating period typical       • otor railway applications according to EN 61373       Category 1, Class B       • otor railway applications according to EN 61373       Category 1, Class B       • otor railway a	product designation	LED module
product component	product type designation	3SU1
• diodeYes• lamp transformerNo• light sourceYes• light sourceYes• series resistorNoinsulation voltage rated value320 Vdegree of pollution3type of voltage of the operating voltageAC/DC• for actuationAC/DC• for actuationAC/DC• or actuationAC/DC• or actuationZS mAprotection class IPIP40• of the enclosureIP40• of the terminalIP20stock resistanceCategory 1, Class B• of the terminalCategory 1, Class Bvibration resistanceCategory 1, Class B• bror railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• or railway applications according to EN 61373Category 1, Class B• at AC• at AC• at AC• at AC	General technical data	
• lamp transformerNo• light sourceYes• series resistorNo• insultatio voltage rated value320 Vdegree of pollution3type of voltage of the operating voltageAC/DC• for actuationAC/DCsurge voltage resistance rated value4 kVconsumed current maximum25 mAprotection class IPIP40• of the enclosureIP40• of the enclosuresinusidial half-wave 15g / 11 ms• of the enclosurein source 15g / 11 ms• of the enclosuresinusidial half-wave 15g / 11 ms• for railway applications according to EK 60068-2-27sinusoidal half-wave 15g / 11 ms• for railway applications according to EK 61373Category 1, Class B• of the reminal10 500 Hz: 5g• for railway applications according to EK 61373Category 1, Class B• operating period typical100 000 h• fertence code according to EK 61373Category 1, Class B• operating period typical100 000 h• for railway applications (Date)24 V• at AC-• at AC24 V• at AC24 V• at AC24 V• at DC rated value24 V• at DC rated value24 V• at DC rated value20 %• at DC rated value20 % <th>product component</th> <th></th>	product component	
• light sourceYes• series resistorNoinsulation voltage rated value320 Vdegree of pollution3type of voltage of the operating voltageAC/DC• for actuationAC/DCsurge voltage resistance rated value4 kVconsumed current maximum25 mAprotection class IPIP40• of the enclosureIP40• of the enclosureCategory 1, Class B• for railway applications according to EN 61373Category 1, Class Bvibration resistance00000 h• for railway applications according to EN 61373Category 1, Class Boperating period typical100 000 h• for railway applications according to EN 61373Category 1, Class Boperating period typical00000 h• according to IEC 61068-2.5P• for railway applications according to EN 61373Category 1, Class Boperating period typical00000 h• actording to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017• at AC at 60 Hz rated value24 V- at 60 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value20 %Connection to the operating voltage20 %Connection to the operating voltage20 %Connections/ Terminalsyee of electrical connectiontype of connectionserv-type terminals	• diode	Yes
• series resistor         No           insulation voltage rated value         320 V           degree of pollution         3           type of voltage of the operating voltage         AC/DC           • for actuation         AC/DC           surge voltage resistance rated value         4 kV           consumed current maximum         25 mA           protection class IP         -           • of the enclosure         IP40           • of the terminal         IP20           • of the terminal         For activation saccording to IEC 60068-2-27           • in cacording 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 period typical         100 000 h           reference code according to IEC 61364-2         P           Substance Prohibitance (Dato)         03001/2017           operating voltage 1         -           • at AC         -           - at 60 Hz rated value         24 V           - at 0 Hz rated value         24 V	lamp transformer	No
Insulation voltage rated value     320 V       degree of pollution     3       type of voltage of the operating voltage     AC/DC       • for actuation     AC/DC       surge voltage resistance rated value     4 kV       consumed current maximum     25 mA       protection class IP	light source	Yes
degree of pollution         3           type of voltage of the operating voltage         AC/DC           • for actuation         AC/DC           surge voltage resistance rated value         4 kV           consumed current maximum         25 mA           protection class IP         IP40           • of the enclosure         IP40           • of the terminal         IP20           shock resistance         IP40           • according to IEC 60068-2-27         sinusoidal half-wave 15g / 11 ms           • according to IEC 60068-2-6         10 500 Hz: 5g           • for railway applications according to EN 61373         Category 1, Class B           operating voltage 1         100 000 h           reference code according to IEC 81346-2         P           Substance Prohibitance (Date)         03/01/2017           operating voltage 1         000 0h           • at AC         -           - at 60 Hz rated value         24 V           - at 60 Hz rated value         24 V           • at DC rated value         20 %           relative negative tolerance of the operating voltage         20 %           control circuit/ Control         20 %           relative negative tolerance of the operating voltage         20 %	series resistor	No
Type of voltage of the operating voltage     AC/DC       • for actuation     AC/DC       surge voltage resistance rated value     4 kV       consumed current maximum     25 mA       protection class IP     IP40       • of the enclosure     IP40       • of the terminal     IP20       shock resistance     inusoidal half-wave 15g / 11 ms       • 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     10 500 Hz: 5g       • according to IEC 60068-2-6     10 500 Hz: 5g       • for railway applications according to EN 61373     Category 1, Class B       operating voltage 1     100 000 h       reference code according to IEC 81346-2     P       Substance Prohibitance (Date)     03/01/2017       operating voltage 1     24 V       • at AC     24 V       • at AC     24 V       relative positive tolerance of the operating voltage     20 %       relative negative tolerance of the operating voltage     20 %       control circuit/ Control     24 N       relative negative tolerance of the operating voltage     20 %       control circuit// Control     2 A       connections/ Terminals     2 A       connections/ Terminals	insulation voltage rated value	320 V
• for actuation         AC/DC           surge voltage resistance rated value         4 kV           consumed current maximum         25 mA           protection class IP         IP40           • of the enclosure         IP40           • of the enclosure         IP40           • of the terminal         IP20           shock resistance         issocidal half-wave 15g / 11 ms           • or raliway applications according to EN 61373         Category 1, Class B           vibration resistance         isooidal half-wave 15g / 11 ms           • or raliway applications according to EN 61373         Category 1, Class B           operating to IEC 60068-2-6         10 500 Hz: 5g           • for raliway applications according to EN 61373         Category 1, Class B           operating period typical         100 000 h           reference code according to IEC 81346-2         P           Substance Prohibitance (Date)         03/01/2017           operating voltage 1         -           • at AC         -           - at 60 Hz rated value         24 V           - at 60 Hz rated value         24 V           • at AC         20 %           relative negative tolerance of the operating voltage         20 %           Control         20 %	degree of pollution	3
surge voltage resistance rated value         4 kV           consumed current maximum         25 mA           protection class IP         IP40           • of the enclosure         IP40           • of the terminal         IP20           shock resistance         IP20           • 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           opperating period typical         100 000 h           reference code according to IEC 81346-2         P           Substance Prohibitance (Date)         03/01/2017           operating voltage 1         • at AC           - at 50 Hz rated value         24 V           - at 60 Hz rated value         24 V           • at DC rated value         20 %           relative negative tolerance of the operating voltage         20 %           control         Z0 %           relative negative tolerance of the operating voltage         20 %           contool         Z0 %           contool         Z0 %      <	type of voltage of the operating voltage	AC/DC
consumed current maximum25 mAprotection class IPIP40• of the enclosureIP40• of the terminalIP20shock resistanceIP20• according to IEC 60068-2-27sinusoidal half-wave 15g / 11 ms• for railway applications according to EN 61373Category 1, Class Bvibration resistance0 500 Hz: 5g• according to IEC 60068-2-610 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 00 hreference code according to EN 61373Category 1, Class Boperating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 124 V• at AC at 60 Hz rated value24 V• at DC rated value24 V- at 60 Hz rated value24 V• at DC rated value20 %Control circuit/ Control20 %Inrush current maximum2 AConnectons/ Terminals2 Atype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	<ul> <li>for actuation</li> </ul>	AC/DC
protection class IP         IP40           • of the enclosure         IP20           shock resistance         IP20           shock resistance         sinusoidal half-wave 15g / 11 ms           • 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 period typical         100 000 h           reference code according to IEC 81346-2         P           Substance Prohibitance (Date)         030/12017           operating voltage 1         -           • at AC         -           - at 50 Hz rated value         24 V           - at 50 Hz rated value         24 V           - at DC rated value         20 %           relative negative tolerance of the operating voltage         20 %           control circuit/ Control         -           inrush current maximum         2 A           Connections/ Terminals         screw-type terminals	surge voltage resistance rated value	4 kV
• of the enclosureIP40• of the terminalIP20shock resistanceIP20• according to IEC 60068-2-27Sinusoidal half-wave 15g / 11 ms• of trailway applications according to EN 61373Category 1, Class Bvibration resistanceI• according to IEC 60068-2-610 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 124 V• at AC24 V- at 50 Hz rated value24 V- at 50 Hz rated value24 Vsubtive tolerance of the operating voltage20 %20 %Control Circuit/ ControlInrush current maximum2 AControl circuit/ ControlScrew-type terminalstype of electrical connectionscrew-type terminals	consumed current maximum	25 mA
• of the terminalIP20shock resistance-• according to IEC 60068-2-27sinusoidal half-wave 15g / 11 ms• for railway applications according to EN 61373Category 1, Class Bvibration resistance-• according to IEC 60068-2-610 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 00 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 1-• at AC at 50 Hz rated value24 V- at 60 Hz rated value24 V- at 60 Hz rated value20 %relative negative tolerance of the operating voltage20 %relative negative tolerance of the operating voltage20 %control circuit/ Control2Atype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	protection class IP	
shock resistance         sinusoidal half-wave 15g / 11 ms           • 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 period typical         100 000 h           reference code according to IEC 81346-2         P           Substance Prohibitance (Date)         03/01/2017           operating voltage 1         -           • at AC         -           - at 50 Hz rated value         24 V           - at 60 Hz rated value         24 V           • at DC rated value         20 %           relative negative tolerance of the operating voltage         20 %           Control circuit/ Control         2A           Inrush current maximum         2 A           Connections/ Terminals         screw-type terminals	• of the enclosure	IP40
• according to IEC 60068-2-27sinusoidal half-wave 15g / 11 ms• for railway applications according to EN 61373Category 1, Class Bvibration resistance10 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 124 V• at CO24 V- at 50 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value20 %relative negative tolerance of the operating voltage20 %control circuit/ Control2 Ainrush current maximum2 Atype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	of the terminal	IP20
• for railway applications according to EN 61373Category 1, Class Bvibration resistance	shock resistance	
vibration resistance       10 500 Hz: 5g         • for railway applications according to EN 61373       Category 1, Class B         operating period typical       100 000 h         reference code according to IEC 81346-2       P         Substance Prohibitance (Date)       03/01/2017         operating voltage 1       0         • at AC       -         - at 50 Hz rated value       24 V         - at 60 Hz rated value       24 V         relative positive tolerance of the operating voltage       20 %         relative negative tolerance of the operating voltage       20 %         Control circuit/ Control       2 A         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals         type of electrical connection       screw-type terminals	<ul> <li>according to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms
• according to IEC 60068-2-610 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Boperating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 1-• at AC at 50 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value24 Vrelative positive tolerance of the operating voltage20 %control circuit/ Control20 %Control circuit/ Controlinrush current maximum2 AConnections/ Terminalstype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
• for railway applications according to EN 61373Category 1, Class Boperating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 1• at AC• at AC24 V- at 50 Hz rated value24 V- at 60 Hz rated value24 Veat AC control circuit/ control20 %relative negative tolerance of the operating voltage20 %control circuit/ Control20 %control circuit/ Control2 Atype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	vibration resistance	
operating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 1	<ul> <li>according to IEC 60068-2-6</li> </ul>	10 500 Hz: 5g
reference code according to IEC 81346-2       P         Substance Prohibitance (Date)       03/01/2017         operating voltage 1       -         • at AC       -         - at 50 Hz rated value       24 V         - at 60 Hz rated value       24 V         • at DC rated value       24 V         • at DC rated value       24 V         relative positive tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       24 N         type of electrical connection       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
Substance Prohibitance (Date)       03/01/2017         operating voltage 1       -         • at AC       -         - at 50 Hz rated value       24 V         - at 60 Hz rated value       24 V         • at DC rated value       24 V         • at DC rated value       20 %         relative positive tolerance of the operating voltage       20 %         control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	operating period typical	100 000 h
operating voltage 1       • at AC         - at 50 Hz rated value       24 V         - at 60 Hz rated value       24 V         • at DC rated value       20 %         relative positive tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals         type of electrical connection       screw-type terminals	reference code according to IEC 81346-2	Р
• at AC24 V- at 50 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value24 V• at DC rated value24 Vrelative positive tolerance of the operating voltage20 %Control circuit/ Control20 %inrush current maximum2 A2 A20 %Control circuit/ Controlinrush current maximum2 AConnections/ Terminalstype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	Substance Prohibitance (Date)	03/01/2017
- at 50 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value24 Vrelative positive tolerance of the operating voltage20 %relative negative tolerance of the operating voltage20 %Control circuit/ Control20 %inrush current maximum2 A2 AConnections/ Terminalstype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals	operating voltage 1	
at 60 Hz rated value     24 V       • at DC rated value     24 V       relative positive tolerance of the operating voltage     20 %       relative negative tolerance of the operating voltage     20 %       Control circuit/ Control     20 %       inrush current maximum     2 A       Connections/ Terminals     2 A       type of electrical connection     screw-type terminals       type of connectable conductor cross-sections     screw-type terminals	• at AC	
• at DC rated value       24 V         relative positive tolerance of the operating voltage       20 %         relative negative tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       z         type of electrical connection       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	— at 50 Hz rated value	24 V
relative positive tolerance of the operating voltage       20 %         relative negative tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       20 %         type of electrical connection       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	— at 60 Hz rated value	24 V
relative negative tolerance of the operating voltage       20 %         Control circuit/ Control       2 A         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals         type of electrical connection       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	• at DC rated value	24 V
Control circuit/ Control       2 A         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals         type of electrical connection       screw-type terminals         type of connectable conductor cross-sections       screw-type terminals	relative positive tolerance of the operating voltage	20 %
inrush current maximum     2 A       Connections/ Terminals        type of electrical connection     screw-type terminals       type of connectable conductor cross-sections	relative negative tolerance of the operating voltage	20 %
Connections/ Terminals       type of electrical connection       type of connectable conductor cross-sections	Control circuit/ Control	
type of electrical connection         screw-type terminals           type of connectable conductor cross-sections         screw-type terminals	inrush current maximum	2 A
type of connectable conductor cross-sections	Connections/ Terminals	
	type of electrical connection	screw-type terminals
• solid with core end processing 2x (0.5 0.75 mm <sup>2</sup> )	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)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (1,0 1,5 mm²)
• for AWG cables	2x (18 14)
tightening torque with screw-type terminals	0.8 0.9 N·m
Lamp	
type of light source	LED
color of the light source	white
light intensity	900 1 400 mcd
certificate of suitability	
	Ne
• ATEX	No
• IECEx	No
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%, no condensation in operation permitted)
Installation/ mounting/ dimensions	
fastening method	
<ul> <li>of modules and accessories</li> </ul>	Front plate mounting
height	33.2 mm
width	9.8 mm
depth	29.4 mm
suitability for integration	
plastic enclosure	Yes
metal enclosure	Yes
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	
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https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1401-1BB60-1AA0-Z X90 Cax online generator	
cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1BB60-1AA0-Z X90	
Service&Support (Manuals, Certificates, Characteristics, FAQ	•
https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BB60	0-1AA0-Z X90
Image database (product images, 2D dimension drawings, 3D http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SI	

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