## SIEMENS

## Data sheet

## 3SU1401-1BB40-1AA0-Z X90

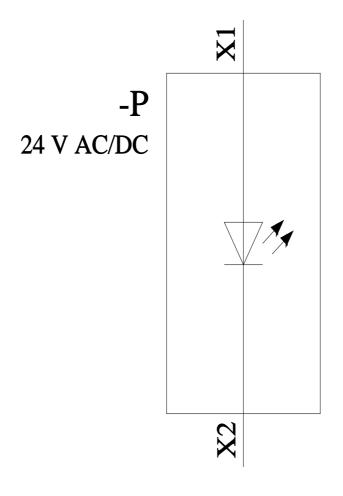


LED module with integrated LED 24 V AC/DC, green, screw terminal, for front plate mounting, Z=50-unit packaging

product brand name         SIRUS ACT           product type designation         LED module           product type designation         3SU1           General technical data	-	
product type designation     3SU1       General technical data	product brand name	SIRIUS ACT
General technical data       product component       • ilamp transformer       • lamp transformer       • light source       • series resistor       • no       • insulation voltage rated value       320 V       degree of pollution       3       type of voltage rated value       • for actuation       AC/DC       surge voltage resistance rated value       • for actuation       protection class IP       • of the enclosure       • of the enclosure       • of the enclosure       • according to IEC 60068-2-27       • sinusoidal half-wave 15g / 11 ms       • according to IEC 60068-2-27       • sinusoidal half-wave 15g / 11 ms       • according to IEC 60068-2-6       • 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 working to IEC 81346-2       Pustoance Prohibitance (Date)       0 avoid bite C fordibitance       • at AC       - at 60 Hz rated value       e at AC       - at 60 Hz rated value       e at AC       - at 60 Hz ra	product designation	LED module
product component     Yes       • diade     Yes       • linght source     No       • 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       • urge voltage resistance rated value     4 kV       consumed current maximum     25 mA       protection class IP     IP40       • of the enclosure     IP40       • 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       • according to IEC 81346-2     P       Substance Prohibitance (Date)     03/01/2017       operating vortage 1     • at AC       • at AC     24 V       • at AC     24 V       • at DC rated value     20 %       relative negative tolerance of the operati	product type designation	3SU1
• diodeYes• lamp transformerNo• 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 terminalIP20shock resistanceCategory 1, Class Bvibration resistanceCategory 1, Class Bvibration resistance10 500 Hz: 5g• for railway applications according to EN 61373Category 1, Class Bof the ransing to IEC 60068-2-510 500 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 DC rated value24 V• at DC rated value24 V• at DC rated value20 %relative negative tolerance of the operating voltage20 %connections/TerminalsZAConnections/Terminals2Atype of electrical connectionscrew-type terminals	General technical data	
• lamp transformer     No       • light source     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     IP40       • of the enclosure     IP40       • of the terminal     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       • oth 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       • porterting priod typical     100 000 h       reference code according to IEC 81346-2     P       Substance Prohibitance (Date)     03/01/2017       • at AC     -       • at DC rated value     24 V       • at DC rated value     24 V       • at DC rated value     24 V       • at DC rated value     20 %       Connections/ Terminals     2A	product component	
• light source     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       • for actuation     AC/DC       • for actuation     AC/DC       • of the operating voltage resistance rated value     4 kV       consumed current maximum     25 mA       protection class IP     IP40       • of the terminal     IP20       shock resistance     inusoidal half-wave 15g / 11 ms       • of the terminal     IP20       shock resistance     inusoidal half-wave 15g / 11 ms       • or or alway applications according to EN 61373     Category 1, Class B       • lor raliway applications according to EN 61373     Category 1, Class B       • according 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     iat AC       • at AC     -       • at OC rated value     24 V       • at DC rated value     24 V       • at DC rated value     24 V	• 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           shock resistance         -           • according to IEC 60068-2-27         sinusoidal half-wave 15g / 11 ms           • for rallway applications according to EN 61373         Category 1, Class B           vibration resistance         -           • according to IEC 60068-2-6         10 500 Hz: 5g           • for rallway 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 0C rated value         24 V           • at 0C rated value<	<ul> <li>lamp transformer</li> </ul>	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       IP40            • of the emolosure       IP40            • of the terminal       IP20         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 period typical       100 000 h         reference code according to IEC 81346-2       P         Substance Prohibitance (Date)       03/01/2017         operating voltage 1              • at OC              • at OC rated value       24 V            • at OC rated value       24 V            • at OC rated value       24 V </td <td>light source</td> <td>Yes</td>	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       isusoidal 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       0 500 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 50 Hz rated value         - at 50 Hz rated value       24 V         - at 60 Hz rated value       24 V         - at 60 Hz rated value       24 V         elative negative tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         Inrush current maximum       2A         Connac	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       isusoidal 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 period typical       10000 h         reference code according to IEC 81346-2       P         Substance Prohibitance (Date)       03/01/2017         operating voltage 1       03/01/2017         • at AC       24 V         • at DC rated value       20 %         relative negative tolerance of the operating voltage       20 %         control circuit/ Con	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 terminal       IP20         shock resistance       IP20         shock resistance       IP20         shock resistance       IP20         of r ailway applications according to EN 61373       Category 1, Class B         vibration resistance       I0 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       03/01/2017         • 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       Inrush current maximum         Inrush current maximum       2A         Connections/ Terminals       2A	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       inuscidal 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         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 DC rated value       24 V         • at DC rated value       20 %         Control circuit/ Control       20 %         Control circuit/ Control </td <td>type of voltage of the operating voltage</td> <td>AC/DC</td>	type of voltage of the operating voltage	AC/DC
consumed current maximum25 mAprotection class IPIP40• of the enclosureIP40• of the terminalIP20shock resistancesinusoidal half-wave 15g / 11 ms• 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 1 • at AC24 V- at 50 Hz rated value24 V- at 50 Hz rated value24 V- at 50 Hz rated value24 V- at 50 Hz rated value20 %control circuit/ Control20 %control circuit/ Control20 %control circuit/ Control2 Ainrush current maximum2 Aconnections/ Terminals2 A	for actuation	AC/DC
protection class IP       IP40         • of the enclosure       IP40         • of the terminal       IP20         shock resistance       isusoidal 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)       0301/2017         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       Inrush current maximum         inrush current maximum       2 A	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• 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 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 124 V- at 50 Hz rated value24 V- at 60 Hz rated value24 Vrelative positive tolerance of the operating voltage20 %control circuit/ Control20 %inrush current maximum2 AConnections/ Terminalsscrew-type terminals	consumed current maximum	25 mA
• of the terminalIP20shock resistancesinusoidal half-wave 15g / 11 ms• 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 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 Vetat V24 Vrelative positive tolerance of the operating voltage20 %control circuit/ Control20 %inrush current maximum2 AConnections/ Terminalsscrew-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       03/01/2017         • 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 negative tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       2 A	<ul> <li>of the enclosure</li> </ul>	IP40
• 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 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 Vcated value24 Vcated value24 V- at 60 Hz rated value20 %control circuit/ Control20 %control circuit/ Control2 Ainrush current maximum2 A2 AConnections/ Terminalstype of electrical connectionscrew-type terminals	of the terminal	IP20
• 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 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 Ve at DC rated value24 Vcated value20 %control circuit/ Control20 %control circuit/ Control2 Aconnections/ Terminals2 Atype of electrical connectionscrew-type terminals	shock resistance	
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 period typical       100 000 h         reference code according to IEC 81346-2       P         Substance Prohibitance (Date)       03/01/2017         operating voltage 1       03/01/2017         • at AC       24 V         at 50 Hz rated value       24 V         at 60 Hz rated value       24 V         e at DC rated value       24 V         i at DC rated value       24 V         control circuit/ Control       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       screw-type terminals	<ul> <li>according to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms
	<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 50 Hz rated value24 V- at 60 Hz rated value24 V• at DC rated value24 Ve at DC rated value24 Vfelative positive tolerance of the operating voltage20 %control circuit/ Control20 %inrush current maximum2 Aconnections/ Terminals2 A	vibration resistance	
operating period typical100 000 hreference code according to IEC 81346-2PSubstance Prohibitance (Date)03/01/2017operating voltage 103/01/2017• at AC24 V- at 50 Hz rated value24 V• at 60 Hz rated value24 V• at DC rated value24 Vfelative positive tolerance of the operating voltage20 %Control circuit/ Control20 %inrush current maximum2 AConnections/ Terminals24 Ntype of electrical connectionscrew-type terminals	<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         relative positive tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       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       24 V         relative positive tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       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       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       screw-type terminals	reference code according to IEC 81346-2	P
• 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         2 A	Substance Prohibitance (Date)	03/01/2017
- 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 AConnections/ Terminals2 Atype of electrical connectionscrew-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       screw-type terminals         type of electrical connection       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       screw-type terminals         type of electrical connection       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       screw-type terminals         type of electrical connection       screw-type terminals	— at 60 Hz rated value	24 V
relative negative tolerance of the operating voltage       20 %         Control circuit/ Control       20 %         inrush current maximum       2 A         Connections/ Terminals       2 x         type of electrical connection       screw-type terminals		24 V
Control circuit/ Control         inrush current maximum       2 A         Connections/ Terminals         type of electrical connection       screw-type terminals		20 %
inrush current maximum     2 A       Connections/ Terminals	relative negative tolerance of the operating voltage	20 %
Connections/ Terminals       type of electrical connection       screw-type terminals	Control circuit/ Control	
type of electrical connection screw-type terminals	inrush current maximum	2 A
	Connections/ Terminals	
type of connectable conductor cross-sections	type of electrical connection	screw-type terminals
	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)	
<ul> <li>at AWG cables</li> </ul>	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	green	
light intensity	900 1 400 mcd	
certificate of suitability		
• 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		
<ul> <li>plastic enclosure</li> </ul>	Yes	
metal enclosure	Yes	
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=3SU1401-1BB40-1AA0-Z X90		
Cax online generator http://support.automation.siemens.com/WW/CAXorder/defau	ult.aspx?lang=en&mlfb=3SU1401-1BB40-1AA0-Z X90	
Service&Support (Manuals, Certificates, Characteristics		

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BB40-1AA0-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=3SU1401-1BB40-1AA0-Z X90&lang=en



last modified:

3/9/2022 🖸