## 3SU1401-2BB50-3AA0-Z X90

**Data sheet** 



LED module with integrated LED 24 V AC/DC, blue, spring-type terminal, for floor mounting, Z=50-unit packaging

product type designation product type designation general technical data  product component	product brand name	SIRIUS ACT
General technical data  product component  • diode • lamp transformer • light source • series resistor insulation voltage rated value degree of pollution 3  type of voltage of the operating voltage • for actuation  surge voltage resistance rated value 25 mA  protection class IP • of the enclosure • a cororing to IEC 60068-2-27 • for railway applications according to EN 61373  vibration resistance • a cororing to IEC 60068-2-6 • for railway applications according to EN 61373  vibration resistance • a cororing to IEC 60068-2-6 • for railway applications according to EN 61373  Category 1, Class B  vibration resistance • a cororing to IEC 60068-2-6 • for railway applications according to EN 61373  Category 1, Class B  vibration resistance • a cororing to IEC 81346-2  • a for railway applications according to EN 61373  Category 1, Class B  vibration resistance • a cororing to IEC 60068-2-6 • for railway applications according to EN 61373  Category 1, Class B  vibration resistance • a cororing to IEC 60068-2-6 • for railway applications according to EN 61373  Category 1, Class B  vibration resistance  • a coroling to IEC 60068-2-6 • for railway applications according to EN 61373  Category 1, Class B  vibration resistance  • a coroling to IEC 60068-2-6  • for railway applications according to EN 61373  Category 1, Class B  vibration resistance  • at AC  • at AC  • at AC  • at AC  • at Corolistic tolerance (Date)  03/01/2017  operating voltage 1 • at AC  • at 60 Hz rated value • at OC rated value  relative negative tolerance of the operating voltage  control circuit Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection	product designation	LED module
Product component   • diode	product type designation	3SU1
ilight source     ilight source     iseries resistor     No     insulation voltage rated value     degree of pollution     3     type of voltage of the operating voltage     insulation voltage resistance rated value     insulation voltage resistance rated value     insulation     insulation voltage     insulation     insulation voltage     insulation voltage     insulation     insulation     insulation voltage     insulation     insulation voltage     insulation     insulation voltage     insulation voltage     insulation     insulation voltage     insulation voltage     insulation voltage     insulation voltage     insulation     insulation voltage     insulation     insulation voltage     insulation     insulation voltage     insulation	General technical data	
• lamp transformer • light source • series resistor Insulation voltage rated value 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 25 mA protection class IP • of the enclosure • of the terminal IP20 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 period typical reference code according to IEC 81346-2 Substance Prohibitance (Date) • at AC — at 50 Hz rated value • at DC rated value relative positive tolerance of the operating voltage relative positive tolerance of the operating voltage type of electrical connection spring-loaded terminals type of electrical connection spring-loaded terminals type of electrical connection  source AC/DC AC/D	product component	
Iight source   Series resistor   No	<ul><li>diode</li></ul>	Yes
• series resistor  insulation voltage rated value  degree of pollution  320 V  degree of pollution  34 K/DC  • for actuation  surge voltage of the operating voltage • for actuation  AC/DC  surge voltage resistance rated value  of the enclosure • of the enclosure • of the terminal  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 period typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1 • at AC — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value — at 0 Hz rated valu	<ul> <li>lamp transformer</li> </ul>	No
insulation voltage rated value  degree of pollution  type of voltage of the operating voltage  of or actuation  AC/DC  surge voltage resistance rated value  4 kV  consumed current maximum  25 mA  protection class IP  of the enclosure  of the terminal  IP20  shock resistance  according to IEC 60068-2-27  for railway applications according to EN 61373  vibration resistance  according to IEC 60068-2-6  of or railway applications according to EN 61373  category 1, Class B  vibration resistance  according to IEC 60068-2-6  of railway applications according to EN 61373  category 1, Class B  operating period typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1  at AC  at 50 Hz rated value  at 60 Hz rated value  at C rated value  at C rated value  at D c rated value  24 V  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  control circuit/ Control  irrush current maximum  2A  Connections/ Terminals  type of electrical connection  spring-loaded terminals  type of electrical connection	• light source	Yes
degree of pollution  type of voltage of the operating voltage  • for actuation  • for actuation  AC/DC  surge voltage resistance rated value  consumed current maximum  25 mA  protection class IP  • of the enclosure  • of the terminal  IP20  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  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 period typical  100 000 h  reference code according to IEC 81346-2  P  Substance Prohibitance (Date)  operating voltage 1  • at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value  • at DC rate	series resistor	No
type of voltage of the operating voltage	insulation voltage rated value	320 V
• for actuation  surge voltage resistance rated value  consumed current maximum  25 mA  protection class IP  • of the enclosure  • of the enclosure  • of the terminal  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  vibration resistance  • according to IEC 80348-2-6  • for railway applications according to EN 61373  category 1, Class B  vibration resistance  • according to IEC 81346-2  • for railway applications according to EN 61373  category 1, Class B  operating period typical  reference code according to IEC 81346-2  P  Substance Prohibitance (Date)  operating voltage 1  • at AC  — at 50 Hz rated value  24 V  — at 60 Hz rated value  24 V  • at DC rated value  • at DC rated value  24 V  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  spring-loaded terminals	degree of pollution	3
surge voltage resistance rated value consumed current maximum 25 mA  protection class IP of the enclosure of the terminal shock resistance according to IEC 60068-2-27 of 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  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration resistance of railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373 category 1, Class B  vibration railway applications according to EN 61373	type of voltage of the operating voltage	AC/DC
consumed current maximum  protection class IP  of the enclosure of the terminal lP20  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 of railway applications according to EN 61373 category 1, Class B  vibration resistance according to IEC 60068-2-6 of railway applications according to EN 61373 category 1, Class B  operating period typical reference code according to IEC 81346-2 P Substance Prohibitance (Date) operating voltage 1 out AC at 50 Hz rated value at AC at 50 Hz rated value at DC rated value a	<ul><li>for actuation</li></ul>	AC/DC
protection class IP  of the enclosure of the terminal  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 for railway applications according to EN 61373  category 1, Class B  category 1, Class B  operating period typical for railway applications according to EN 61373  operating period typical for railway applications according to IEC 81346-2  Substance Prohibitance (Date) operating voltage 1  at AC  at 50 Hz rated value at 60 Hz rated value at Corated value at DC rated value 24 V  at DC rated value 24 V  at DC rated value 24 V  control circuit/ Control  inrush current maximum 2 A  Connections/ Terminals type of electrical connection  spring-loaded terminals	surge voltage resistance rated value	4 kV
of the enclosure     of the terminal     iP20  shock resistance     according to IEC 60068-2-27     of 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  vibration resistance     oaccording to IEC 60068-2-6     of railway applications according to EN 61373     Category 1, Class B  operating period typical     100 000 h  reference code according to IEC 81346-2     Substance Prohibitance (Date)     operating voltage 1     oat AC     — at 50 Hz rated value     — at 60 Hz rated value     at DC rated value     at DC rated value     at DC rated value     at DC rated value     category 1, Class B  03/01/2017  09000 h  24 V  relative positive tolerance of the operating voltage     relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of the operating voltage  relative negative tolerance of sperating voltage  relative negative	consumed current maximum	25 mA
of the terminal     shock resistance         oaccording to IEC 60068-2-27         of railway applications according to EN 61373         Category 1, Class B  vibration resistance         oaccording to IEC 60068-2-6         or railway applications according to EN 61373         category 1, Class B  vibration resistance         oaccording to IEC 60068-2-6         or 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)         oa/01/2017  operating voltage 1         oat AC	protection class IP	
shock resistance	<ul> <li>of the enclosure</li> </ul>	IP40
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 period typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1     at AC     — at 50 Hz rated value     — at 60 Hz rated value     at DC rated value     at DC rated value     relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage  control circuit/ Control inrush current maximum  according to IEC 81373  Category 1, Class B  10 500 Hz: 5g  Category 1, Class B  100 000 h  P  Category 1, Class B  100 000 h  Category 1, Class B  100 000 h  Category 1, Class B  100 000 h  Category 1, Class B  100 500 Hz: 5g  Category 1, Class B  100 500 Hz	of the terminal	IP20
• for railway applications according to EN 61373  vibration resistance     • according to IEC 60068-2-6     • for railway applications according to EN 61373  operating period typical reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage 1     • at AC     — at 50 Hz rated value     — at 60 Hz rated value     • at DC rated value     • at DC rated value relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage inrush current maximum      2 A  Connections/ Terminals type of electrical connection  Category 1, Class B  10 500 Hz: 5g Category 1, Class B  10 500 Hz  100 000 h  100 00 h	shock resistance	
vibration resistance  • according to IEC 60068-2-6  • for railway applications according to EN 61373  category 1, Class B  operating period typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1  • at AC  — at 50 Hz rated value — at 60 Hz rated value — at DC rated value  • at DC rated value  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  spring-loaded terminals  type of electrical connection	<ul><li>according to IEC 60068-2-27</li></ul>	sinusoidal half-wave 15g / 11 ms
according to IEC 60068-2-6     of railway applications according to EN 61373     operating period typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)     operating voltage 1     oat AC         — at 50 Hz rated value         — at 60 Hz rated value         • at DC rated value         • at DC rated value     relative positive tolerance of the operating voltage     relative negative tolerance of the operating voltage  Control circuit/ Control     inrush current maximum     ze A  Connections/ Terminals     type of electrical connection  100 000 h  100 000 h  24 V  24 V  24 V  24 V  26 V  27 V  28 V  29 W  20 W  Control circuit/ Control     inrush current maximum  20 A  Connections/ Terminals  spring-loaded terminals	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
of railway applications according to EN 61373     operating period typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)     operating voltage 1         • at AC             — at 50 Hz rated value             — at 60 Hz rated value             • at DC rated value             • at DC rated value             relative positive tolerance of the operating voltage     relative negative tolerance of the operating voltage     inrush current maximum	vibration resistance	
operating period typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1  • at AC  — at 50 Hz rated value — at 60 Hz rated value  • at DC rated value  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  100 000 h  100 000 h  2 P  03/01/2017  03/01/2017  04/04  24 V  24 V  24 V  24 V  20 %  Control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  spring-loaded terminals	<ul><li>according to IEC 60068-2-6</li></ul>	10 500 Hz: 5g
reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1  o at AC  — at 50 Hz rated value — at 60 Hz rated value  o at DC rated value  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  positive tolerance of the operating voltage  2 A	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
Substance Prohibitance (Date)  operating voltage 1  o at AC  — at 50 Hz rated value — at 60 Hz rated value 24 V  relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage  control circuit/ Control inrush current maximum 2 A  Connections/ Terminals type of electrical connection  spring-loaded terminals	operating period typical	100 000 h
operating voltage 1  • at AC  — at 50 Hz rated value — at 60 Hz rated value 24 V  • at DC rated value 24 V  relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage  Control circuit/ Control inrush current maximum 2 A  Connections/ Terminals type of electrical connection spring-loaded terminals	reference code according to IEC 81346-2	P
<ul> <li>at AC <ul> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> <li>at DC rated value</li> <li>at DC rated value</li> </ul> </li> <li>relative positive tolerance of the operating voltage</li> <li>relative negative tolerance of the operating voltage</li> <li>20 %</li> <li>relative negative tolerance of the operating voltage</li> <li>20 %</li> </ul> <li>Control circuit/ Control <ul> <li>inrush current maximum</li> <li>2 A</li> </ul> </li> <li>Connections/ Terminals</li> <li>type of electrical connection</li> <li>spring-loaded terminals</li>	Substance Prohibitance (Date)	03/01/2017
- at 50 Hz rated value - at 60 Hz rated value  ● at DC rated value  124 V  relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage  Control circuit/ Control inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  24 V  26 V  27 V  28 V  29 W  20	operating voltage 1	
- at 60 Hz rated value  • at DC rated value  24 V  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  20 %  Control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  spring-loaded terminals	• at AC	
● at DC rated value  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage  Control circuit/ Control  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  24 V  20 %  20 %  2 A	— at 50 Hz rated value	24 V
relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage  Control circuit/ Control inrush current maximum  2 A  Connections/ Terminals type of electrical connection  spring-loaded terminals	— at 60 Hz rated value	24 V
relative negative tolerance of the operating voltage  Control circuit/ Control inrush current maximum  2 A  Connections/ Terminals type of electrical connection spring-loaded terminals	at DC rated value	24 V
Control circuit/ Control inrush current maximum 2 A  Connections/ Terminals type of electrical connection spring-loaded terminals	relative positive tolerance of the operating voltage	20 %
inrush current maximum 2 A  Connections/ Terminals  type of electrical connection spring-loaded terminals	relative negative tolerance of the operating voltage	20 %
Connections/ Terminals type of electrical connection spring-loaded terminals	Control circuit/ Control	
type of electrical connection spring-loaded terminals	inrush current maximum	2 A
,	Connections/ Terminals	
type of connectable conductor cross-sections	type of electrical connection	spring-loaded terminals
	type of connectable conductor cross-sections	

<ul> <li>solid without core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 0.75 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>at AWG cables</li> </ul>	2x (24 16)
Lamp	
type of light source	LED
color of the light source	blue
light intensity	280 710 mcd
certificate of suitability	
• ATEX	No
• IECEx	No
Ambient conditions	
ambient temperature	
during operation	-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	
of modules and accessories	Floor mounting
height	36 mm
width	9.8 mm
depth	29.4 mm
suitability for integration	
plastic enclosure	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=3SU1401-2BB50-3AA0-Z X90

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-2BB50-3AA0-Z X90 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-2BB50-3AA0-Z X90

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1401-2BB50-3AA0-Z X90&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1401-2BB50-3AA0-Z X90&lang=en</a>

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