## 3SU1401-1BB20-3AA0-Z X90

**Data sheet** 



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

product designation product type designation General technical data  product component	product brand name	SIRIUS ACT
General technical data product component  • diode • lamp transformer • light source • light source • series resistor insulation voltage rated value • degree of pollution  type of voltage of the operating voltage • for actuation  AC/DC  • for actuation  surge voltage resistance rated value • for actuation  consumed current maximum  protection class IP • of the enclosure • for the enclosure • for free terminal  shock resistance • according to IEC 60068-2-7 • 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 BC rated value • at BC rated value • at Coracted value • at Coracted value relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relativ	product designation	LED module
product component  • clode • lamp transformer • light source • series resistor No insulation voltage rated value degree of pollution 3 type of voltage of the operating voltage • for actuation surge voltage resistance rated value Consumed current maximum 25 mA protection class IP • of the enclosure • of the terminal shock resistance • according to IEC 60088-2-27 • for railway applications according to EN 61373 vibration resistance • according to IEC 60088-2-6 • for railway applications according to EN 61373 category 1, Class B vibration resistance • according to IEC 60088-2-6 • for railway applications according to EN 61373 category 1, Class B vibration resistance • according to IEC 60088-2-6 • for railway applications according to EN 61373 category 1, Class B vibration resistance • 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  val V • at DC rated value  relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage type of electrical connection spring-loaded terminals type of electrical connection	product type designation	3SU1
• cliode     • lamp transformer     • light source     • series resistor     insulation voltage rated value     degree of pollution     3	General technical data	
• lamp transformer • light source • series resistor Insulation voltage rated value degree of pollution 320 V degree of pollution 3320 V degree of pollution 34	product component	
• 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 consumed current maximum 25 mA protection class IP • of the enclosure • of the terminal protection class IP • 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  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  vibration resistance • according to IEC 60068-2-6 • for railway applications according to EN 61373  vibration resistance • according to IEC 60068-2-7 • for railway applications according to EN 61373  vibration resistance • according to IEC 60068-2-7 • for railway applications according to EN 61373  vibration resistance • according to IEC 60068-2-7 • for railway applications according to EN 61373  vibration resistance • according to IEC 60068-2-7 • according to IEC 60068-2-7 • for railway applications according to EN 61373  vibration resistance • according to IEC 60068-2-7 • according to IEC	<ul><li>diode</li></ul>	Yes
• series resistor  insulation voltage rated value  degree of pollution  type of voltage of the operating voltage  • for actuation  AC/DC  surge voltage resistance rated value  consumed current maximum  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  • according to IEC 81346-2  • 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 — at 60 Hz rated value — at 60 Hz rated value — 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	<ul> <li>lamp transformer</li> </ul>	No
insulation voltage rated value  degree of pollution  type of voltage of the operating voltage  of or actuation  surge voltage resistance rated value  of the enclosure  of the terminal  protection class IP  of the terminal  iP20  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  category 1, Class B  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 or railway applications according to EN 61373  category 1, Class B  operating period typical  100 000 h  reference code according to IEC 81346-2  Substance Prohibitiance (Date)  operating voltage 1  at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 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	• light source	Yes
type of voltage of the operating voltage  of ror actuation  of voltage of the operating voltage  of ror actuation  AC/DC  surge voltage resistance rated value  consumed current maximum  protection class IP  of the enclosure  of the terminal  IP20  shock resistance  according to IEC 60068-2-27  of ror ailway 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 ror railway applications according to EN 61373  category 1, Class B  vibration resistance  according to IEC 60068-2-7  operating period typical  reference code according to IEC 81346-2  Publications according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage 1  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	series resistor	No
type of voltage of the operating voltage	insulation voltage rated value	320 V
of ractuation     surge voltage resistance rated value     consumed current maximum     protection class IP     of the enclosure     of the enclosure     of the terminal     IP20  shock resistance     oaccording to IEC 60068-2-27     of or railway applications according to EN 61373  vibration resistance     oaccording to IEC 60068-2-6     of or railway applications according to EN 61373  vibration resistance     oaccording 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)     og/01/2017  operating voltage 1     oat AC     — at 50 Hz rated value     at AC     — at 50 Hz rated value     oat DC rated value     oat DC rated value     relative positive tolerance of the operating voltage     relative negative tolerance of the operating voltage     relative negative tolerance of the operating voltage     inrush current maximum     2A  Connections/ Terminals type of electrical connection     spring-loaded terminals	degree of pollution	3
surge voltage resistance rated value  consumed current maximum  protection class IP  of the enclosure of the terminal IP20  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  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  operating period typical 100 000 h  reference code according to IEC 81346-2  Substance Prohibitance (Date) operating voltage 1 of at AC of at 50 Hz rated value of the rated value 24 V of at DC rated value 24 V of 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 syring-loaded terminals	type of voltage of the operating voltage	AC/DC
consumed current maximum  protection class IP  of the enclosure of the terminal IP20  shock resistance of railway applications according to EN 61373  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  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 of the operating voltage  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	• for actuation	AC/DC
protection class IP  of the enclosure of the terminal of the t	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     according 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  Pubstance 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  spring-loaded terminals  type of electrical connection  spring-loaded terminals	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	protection class IP	
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 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 25 %  relative negative tolerance of the operating voltage 30 %  Control circuit/ Control  inrush current maximum 2 A  Connections/ Terminals  type of electrical connection spring-loaded terminals	<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  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  P  Substance Prohibitance (Date)  operating voltage 1  at AC  at 50 Hz rated value  at 0C rated value  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  sinusoidal half-wave 15g / 11 ms  category 1, Class B  10 500 Hz: 5g  Cat	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     Onerating 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: 5g  Category 1, Class B  10 500 Hz: 5g  Category 1, Class B  24 V  24 V  24 V  24 V  24 V  24 V  25 %  relative negative tolerance of the operating voltage  25 %  relative negative tolerance of the operating voltage  30 %  Connections/ Terminals  type of electrical connection  spring-loaded terminals	shock resistance	
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  Substance Prohibitance (Date) 03/01/2017  operating voltage 1 at AC — at 50 Hz rated value — at 60 Hz rated value — at DC rated value 24 V at DC rated value 24 V  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 spring-loaded terminals	<ul><li>according to IEC 60068-2-27</li></ul>	sinusoidal half-wave 15g / 11 ms
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  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  100 500 Hz: 5g  Category 1, Class B  100 000 h  P  2003/01/2017  03/01/	<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     P Substance Prohibitance (Date)     operating voltage 1     operating voltage 1     oat AC     — at 50 Hz rated value     — at 60 Hz rated value     oat DC rated value     oat 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	vibration resistance	
operating period typical 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 DC rated value relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage 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  • 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  relative negative tolerance of the operating voltage  control circuit/ Control  inrush current maximum  inrush current maximum  2 A  Connections/ Terminals  type of electrical connection  spring-loaded terminals	<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
Substance Prohibitance (Date)  operating voltage 1  out AC  - at 50 Hz rated value  - at 60 Hz rated value  out 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  03/01/2017  24 V  24 V  25 %  30 %  Control circuit/ Control  inrush current maximum  2 A	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 25 %  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         — 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</li></ul>	Substance Prohibitance (Date)	03/01/2017
- 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 25 %  relative negative tolerance of the operating voltage 30 %  Control circuit/ Control  inrush current maximum 2 A  Connections/ Terminals  type of electrical connection spring-loaded terminals	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  30 %  Control circuit/ Control inrush current maximum  2 A  Connections/ Terminals type of electrical connection  spring-loaded terminals	• at AC	
<ul> <li>at DC rated value</li> <li>relative positive tolerance of the operating voltage</li> <li>relative negative tolerance of the operating voltage</li> <li>30 %</li> <li>Control circuit/ Control</li> <li>inrush current maximum</li> <li>2 A</li> <li>Connections/ Terminals</li> <li>type of electrical connection</li> <li>spring-loaded terminals</li> </ul>	<ul><li>— at 50 Hz rated value</li></ul>	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	<ul> <li>— at 60 Hz rated value</li> </ul>	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	25 %
inrush current maximum 2 A  Connections/ Terminals  type of electrical connection spring-loaded terminals	relative negative tolerance of the operating voltage	30 %
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	red	
light intensity	450 1 120 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		
of modules and accessories	Front plate mounting	
height	36 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)

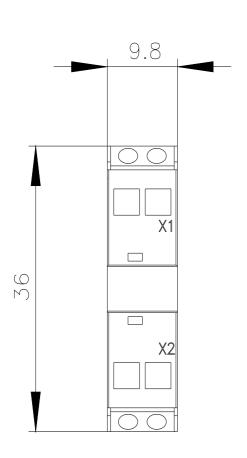
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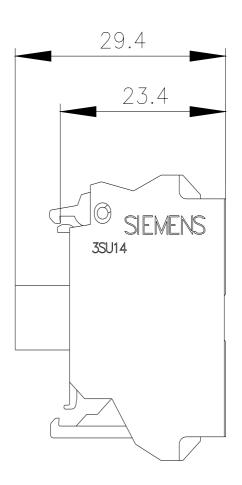
Cax online generator

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https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BB20-3AA0-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=3SU1401-1BB20-3AA0-Z X90&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1401-1BB20-3AA0-Z X90&lang=en</a>





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