## **SIEMENS**

## **Data sheet**



LED module with integrated LED 6-24 V AC/DC, amber, spring-type terminal, for front plate 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	product designation	LED module
product component  • diode • 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 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 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 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 60068-2-6 • for railway applications according to EN 61373 Category 1, Class B  vibration resistance • according to IEC 81346-2  p Substance Prohibitance (Date)  operating voltage • at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value — at 60 Hz rated value  • at DC rated value  • at DC rated value • for 24 V  • at DC rated value  relative positive tolerance of the operating voltage  relative negative tolerance of ste operating vo	product type designation	3SU1
• diode     • lamp transformer     • laight source     • series resistor     No insulation voltage rated value     degree of pollution     3     type of voltage of the operating voltage     • for actuation     AC/DC     surge voltage resistance rated value     • for actuation     AC/DC surge voltage resistance rated value     • for actuation     AC/DC surge voltage resistance rated value     • for actuation     AC/DC surge voltage resistance rated value     • according to 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     Operating period typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)     operating voltage     • at AC     — at 50 Hz rated value     • at DC rated value     relative positive tolerance of the operating voltage     relative negative tolerance of	General technical data	
Implementation of the properties of the terminal properties of the terminal protection of terminals of the terminal protection o	product component	
Series resistor   No	• diode	Yes
Series resistor  Insulation voltage rated value  degree of pollution  320 V  degree of pollution  AC/DC  For actuation  AC/DC  Surge voltage resistance rated value  of the enclosure  of the terminal  shock resistance  according to IEC 60068-2-27  of or railway applications according to EN 61373  vibration resistance  according to IEC 60068-2-6  of railway applications according to EN 61373  category 1, Class B  operating period typical  reference code according to IEC 81346-2  Substance Pohibitance (Date)  operating voltage  at AC  — at 50 Hz rated value  — at 60 Hz rated value  at DC rated value  at DC rated value  at DC rated value  felative 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  SUDA 22 V  ACIDC  AC/DC  AC/D	<ul> <li>lamp transformer</li> </ul>	No
insulation voltage rated value  degree of pollution  3  type of voltage of the operating voltage  • for actuation  Surge voltage resistance rated value  • for actuation  AC/DC  surge voltage resistance rated value  4 kV  consumed current maximum  30 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  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  • at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value  • at DC rated value  • at D	• light source	Yes
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  30 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  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 60068-2-6  for railway applications according to EN 61373  Category 1, Class B  operating period typical  reference code according to IEC 81346-2  Publications a	<ul> <li>series resistor</li> </ul>	No
type of voltage of the operating voltage	insulation voltage rated value	320 V
of ractuation	degree of pollution	3
surge voltage resistance rated value consumed current maximum 30 mA  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 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 81346-2 P Substance Prohibitance (Date) operating period typical reference code according to IEC 81346-2 P Substance Prohibitance (Date) operating voltage at AC - at 50 Hz rated value - at 60 Hz rated value - at 60 Hz rated value - at 0 Hz value - at 0	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  vibration resistance according to IEC 81346-2 Departing period typical reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage at AC at 50 Hz rated value at C at 50 Hz rated value at DC rated val	<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 at AC  at 50 Hz rated value at 60 Hz rated value at DC rated value at	surge voltage resistance rated value	4 kV
of the enclosure     of the terminal     iP20  shock resistance     oaccording to IEC 60068-2-27     of 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  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     oat AC     — at 50 Hz rated value     — at 60 Hz rated value     oat DC rated value     oat DC rated value     eat DC rated value     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 inrush current maximum  2 A  Connections/ Terminals type of electrical connection  spring-loaded terminals	consumed current maximum	30 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         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	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     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  spring-loaded terminals  spring-loaded terminals  spring-loaded terminals	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     • 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  source (Date)  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  operating period typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage  • 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  100 500 Hz: 5g  Category 1, Class B  10 500 Hz: 5g  Category 1, Class B  100 500 Hz: 5g  Category 1, Class B  03/01/2017	<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     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     z 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
of railway applications according to EN 61373      operating period typical     reference code according to IEC 81346-2  Substance Prohibitance (Date)  operating voltage     o at AC     — at 50 Hz rated value     — at 60 Hz rated value     o at DC rated value     o 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  Spring-loaded terminals  type of electrical connection  Category 1, Class B  100 000 h  P  03/01/2017  P  03/01/2017  6 24 V  6 24 V  6 24 V  20 %  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  Substance Prohibitance (Date)  operating voltage  • 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  Z A  Connections/ Terminals  type of electrical connection  100 000 h  P  03/01/2017  03/01/	<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  • at AC  — at 50 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  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>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
Substance Prohibitance (Date)       03/01/2017         operating voltage       6 24 V         — at 50 Hz rated value       6 24 V         — at 60 Hz rated value       6 24 V         • at DC rated value       6 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       spring-loaded terminals	operating period typical	100 000 h
operating voltage  • at AC  — at 50 Hz rated value  — at 60 Hz rated value  • at DC rated value  • at DC rated value  felative positive 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	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> <li>at DC rated value</li> <li>at DC rated value</li> </ul> </li> <li>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</li> </ul>	Substance Prohibitance (Date)	03/01/2017
- at 50 Hz rated value 6 24 V - at 60 Hz rated value 6 24 V  • at DC rated value 6 24 V  relative positive tolerance of the operating voltage 20 %  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	operating voltage	
- at 60 Hz rated value 6 24 V  • at DC rated value 6 24 V  relative positive tolerance of the operating voltage 20 %  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 6 24 V  relative positive tolerance of the operating voltage 20 %  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 50 Hz rated value	6 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  20 %  2 A  spring-loaded terminals	<ul> <li>at 60 Hz rated value</li> </ul>	6 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	6 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	

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<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)
• at AWG cables	2x (24 16)
Lamp	
type of light source	LED
color of the light source	amber
light intensity	450 1 120 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	Front plate 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=3SU1401-1BG00-3AA0-Z X90

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1BG00-3AA0-Z X90 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BG00-3AA0-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=3SU1401-1BG00-3AA0-Z X90&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1401-1BG00-3AA0-Z X90&lang=en</a>

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