Data sheet

SIEMENS



LED module with integrated LED 24-240 V AC/DC, yellow, spring-type terminal, for front plate mounting, Z=50-unit packaging

3SU1401-1BH30-3AA0-Z X90

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 surge voltage resistance rated value consumed current maximum protection class IP of the terminal shock resistance according to IEC 60068-2-27 of the terminal shock 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 rarilway 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 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 valu	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 • 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 • do the enclosure • of the enclosure • of the terminal Shock resistance • according to IEC 60068-2-27 • for rallway applications according to EN 61373 vibration resistance • according to IEC 60068-2-6 • for rallway 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	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 20 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 80068-2-6 • 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 the operating voltage relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage	product component	
Series resistor No	diode	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 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 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 control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection surge, or and	 lamp transformer 	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 20 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-B • for railway applications according to EN 61373 Category 1, Class B vibration resistance • according to IEC 60068-2-B • for railway applications according to EN 61373 Category 1, Class B vibration resistance • according to IEC 81346-2 Publishance 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 r	• light source	Yes
degree of pollution type of voltage of the operating voltage of or actuation AC/DC surge voltage resistance rated value consumed current maximum 20 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 Posubstance Prohibitance (Date) operating voltage at AC at 50 Hz rated value at AC at 60 Hz rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection	 series resistor 	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 20 mA protection class IP of the enclosure of the terminal shock resistance according to IEC 60068-2-27 in 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 category 1, Class B category 1, Class B conerating period typical 100 000 h reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage at AC —at 50 Hz rated value —at 60 Hz rated value 24 240 V —at 60 Hz rated value 24 240 V eat DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	type of voltage of the operating voltage	AC/DC
consumed current maximum protection class IP of the enclosure of the terminal shock resistance according to IEC 60068-2-27 of ror railway applications according to EN 61373 vibration resistance according to IEC 60068-2-6 of ror railway applications according to EN 61373 category 1, Class B vibration resistance of ror railway applications according to EN 61373 category 1, Class B vibration resistance of ror 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 of AC at 50 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 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	for actuation	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 category 1, Class B operating period typical for railway applications according to IEC 81346-2 Substance Prohibitance (Date) operating voltage at AC at 50 Hz rated value at Charted value at DC rated value at	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 Substance Prohibitance (Date) operating voltage oat AC — at 50 Hz rated value — 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 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 3 A Connections/ Terminals type of electrical connection spring-loaded terminals type of electrical connection spring-loaded terminals	consumed current maximum	20 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 reference code according to IEC 81346-2 P Substance Prohibitance (Date) oavilate	protection class IP	
shock resistance	 of the enclosure 	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 according to IEC 81373 Category 1, Class B 10 500 Hz: 5g Category 1, Class B 100 000 h P O3/01/2017 O3/01/2017 24 240 V - at AC - at 50 Hz rated value 24 240 V - at 90 Hz rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage spring-loaded terminals type of electrical connection 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 3 A Connections/ Terminals type of electrical connection South Hz: 50 10 500 Hz: 5g 10 500 Hz: 5	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 3 A Connections/ Terminals type of electrical connection 100 500 Hz: 5g Category 1, Class B 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/2017 03/01/201	according to IEC 60068-2-27	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 inrush current maximum 3 A Connections/ Terminals type of electrical connection 10 500 Hz: 5g Category 1, Class B 100 000 h 100 000 h 000 N	 for railway applications according to EN 61373 	Category 1, Class B
• for railway applications according to EN 61373 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 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 3 A Connections/ Terminals type of electrical connection Spring-loaded terminals 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 3 A Connections/ Terminals type of electrical connection 100 000 h P 100 000 h P 03/01/2017 03/01/2017 03/01/2017 24 240 V 24 240 V 24 240 V 20 % 30 % Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	according to IEC 60068-2-6	10 500 Hz: 5g
reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage • at AC — at 50 Hz rated value — at 60 Hz rated value 24 240 V • at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	 for railway applications according to EN 61373 	Category 1, Class B
Substance Prohibitance (Date) operating voltage ● at AC — at 50 Hz rated value — at 60 Hz rated value 24 240 V ● at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage relative regative tolerance of the operating voltage inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	operating period typical	100 000 h
operating voltage • at AC — at 50 Hz rated value — at 60 Hz rated value 24 240 V • at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	reference code according to IEC 81346-2	P
 at AC at 50 Hz rated value at 60 Hz rated value at DC rated value at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage Tolerative of the operating voltage 30 % Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals 	Substance Prohibitance (Date)	03/01/2017
- at 50 Hz rated value - at 60 Hz rated value • at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	operating voltage	
- at 60 Hz rated value • at DC rated value 24 240 V relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection 24 240 V 20 % 30 % 30 %	• 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 inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	— at 50 Hz rated value	24 240 V
relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	— at 60 Hz rated value	24 240 V
relative negative tolerance of the operating voltage 30 % Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	at DC rated value	24 240 V
Control circuit/ Control inrush current maximum 3 A Connections/ Terminals type of electrical connection spring-loaded terminals	relative positive tolerance of the operating voltage	20 %
inrush current maximum 3 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	3 A
	Connections/ Terminals	
type of connectable conductor cross-sections	type of electrical connection	spring-loaded terminals
	type of connectable conductor cross-sections	

 solid without core end processing 	2x (0.25 1.5 mm²)
 finely stranded with core end processing 	2x (0.25 0.75 mm²)
 finely stranded without core end processing 	2x (0.25 1.5 mm²)
 at AWG cables 	2x (24 16)
Lamp	
type of light source	LED
color of the light source	yellow
light intensity	900 1 400 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=3SU1401-1BH30-3AA0-Z X90

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1BH30-3AA0-Z X90 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BH30-3AA0-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=3SU1401-1BH30-3AA0-Z X90&lang=en

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