Data sheet

3SU1401-1BG20-1AA0-Z X90



LED module with integrated LED 6-24 V AC/DC, red, screw 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 81346-2 Substance Prohibitance (Date) operating voltage • at AC — at 50 Hz rated value — at 60 Hz r	product type designation	3SU1
• 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 AC/DC surge voltage resistance rated value • for actuation AC/DC surge voltage resistance rated value • for the operating voltage • 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 Operating voltage • at AC — at 50 Hz rated value • at DC rated value •	General technical data	
• lamp transformer • light source • series resistor Insulation voltage rated value degree of pollution 3 1ype of voltage of the operating voltage • 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 vibration resistance • according to IEC 60068-2-6 • for railway applications according to EN 61373 category 1, Class B operating period typical 100500 Hz: 5g Category 1, Class B operating period typical 100.000 h reference code according to IEC 81346-2 P Substance Prohibitance (Date) • at AC — at 50 Hz rated value • at DC rated value relative positive tolerance of the operating voltage rolative negative tolerance of the operating voltage rolative positive tolerance of the operating voltage rolative positive tolerance of the operating voltage rolative positive tolerance of the operating voltage rolative negative tolerance of the operating voltage rolative positive tolerance of the operating voltage rolative positive tolerance of the operating voltage rolative negative tolerance of the operating voltage	product component	
Series resistor No	• diode	Yes
Series resistor insulation voltage rated value degree of pollution 320 V AC/DC por otoltage of the operating voltage of or 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 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 operating period typical reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage at AC at 50 Hz rated value at DC raterd value at Connections/Terminals type of electrical connection	 lamp transformer 	No
insulation voltage rated value degree of pollution 3 type of voltage of the operating voltage • for actuation AC/DC • for actuation surge voltage resistance rated value 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-B • for railway applications according to EN 61373 Category 1, Class B operating period typical reference code according to IEC 81346-2 Publistance 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 Control circuit Control inrush current maximum 2A Connections/ Terminals type of electrical connection	• light source	Yes
degree of pollution type of voltage of the operating voltage of or actuation 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 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 vibration resistance according to IEC 81346-2 Pour according to IEC 81346-2 poperating voltage at AC at 50 Hz rated value at 6 24 V at 60 Hz rated value at 6 Dr ared value at Control Contro	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 of the enclosure of the enclosure of the terminal shock resistance of railway applications according to EN 61373 vibration resistance or for railway applications according to EN 61373 vibration resistance of railway applications according to EN 61373 vibration resistance of railway applications according to EN 61373 vibration resistance of railway applications according to EN 61373 vibration resistance of railway applications according to EN 61373 vibration resistance of railway applications according to EN 61373 category 1, Class B operating vol Hypical reference code according to IEC 81346-2 P Substance Prohibitance (Date) operating voltage of AC	degree of pollution	3
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 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 for 24 V at DC rated value felative 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 screw-type terminals	type of voltage of the operating voltage	AC/DC
consumed current maximum protection class IP of the enclosure of the terminal liP20 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 period typical reference code according to IEC 81346-2 Substance Prohibitance (Date) operating voltage of AC at 50 Hz rated value at AC at 50 Hz rated value of Lz at V at DC rated value of Lz at 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 screw-type 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 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 r	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 oat AC — at 50 Hz rated value — at 60 Hz rated value at DC rated value oat DC rated value oat DC rated value eat 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 relative negative tolerance of the operating voltage control circuit/ Control inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type 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 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	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 control circuit/ Control inrush current maximum z A Connections/ Terminals type of electrical connection sinusoidal half-wave 15g / 11 ms 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 10 500 Hz 10	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 control circuit/ Control inrush current maximum in formula in the stress of the operation of the operat	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 control circuit/ Control inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type terminals type of electrical connection	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 category 1, Class B operating period typical reference code according to IEC 81346-2 P 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 screw-type terminals type of electrical connection at 100 000 h	 for railway applications according to EN 61373 	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 • at AC — at 50 Hz rated value — at 60 Hz 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	vibration resistance	
operating period typical reference code according to IEC 81346-2 P Substance Prohibitance (Date) operating voltage • at AC	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 • 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 screw-type 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 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 regative tolerance of the operating voltage control circuit/ Control inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type 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 screw-type 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 at DC rated value at DC rated value 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 screw-type terminals 	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 screw-type 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 screw-type 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 screw-type 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 screw-type terminals	— at 60 Hz rated value	6 24 V
relative negative tolerance of the operating voltage Control circuit/ Control inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type terminals	at DC rated value	6 24 V
Control circuit/ Control inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type terminals	relative positive tolerance of the operating voltage	20 %
inrush current maximum 2 A Connections/ Terminals type of electrical connection screw-type 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	

 solid with core end processing 	2x (0.5 0.75 mm²)
 solid without core end processing 	2x (1.0 1.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (1,0 1,5 mm²)
at AWG cables	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	red
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	33.2 mm
width	9.8 mm
depth	29.4 mm
suitability for integration	
 plastic enclosure 	Yes
 metal enclosure 	Yes
Certificates/ approvals	
Further information	

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https://www.siemens.com/ic10

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1401-1BG20-1AA0-Z X90

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1BG20-1AA0-Z X90

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1BG20-1AA0-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=3SU1401-1BG20-1AA0-Z X90&lang=en

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