SIEMENS

product brand name

Data sheet 3UG4651-1AA30

SIRIUS



Digital monitoring relay Speed monitoring from 0.1 to 2200 rpm 0vershoot and undershoot Supply voltage: 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit ON delay 1 to 900 s Tripping delay 0.1 to 99.9 s Hysteresis 0.1 to 99 rpm 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3051

product brand name	SIRIUS				
product designation	Speed monitoring relay with digital setting				
product type designation	3UG4				
General technical data					
product function	RPM monitoring relay				
design of the display	LCD				
 apparent power consumption at AC 					
— at 24 V maximum	2.5 V·A				
insulation voltage					
 for overvoltage category III according to IEC 60664 					
 — with degree of pollution 3 rated value 	300 V				
degree of pollution	3				
type of voltage of the control supply voltage	AC/DC				
surge voltage resistance rated value	4 kV				
protection class IP	IP20				
shock resistance acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms				
mechanical service life (switching cycles) typical	10 000 000				
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000				
reference code acc. to IEC 81346-2	K				
relative repeat accuracy	_ 1 %				
Substance Prohibitance (Date)	01.05.2012 00:00:00				
Product Function	,				
suitability for use safety-related circuits	No				
product function					
 rotation speed monitoring 	Yes				
 standstill monitoring 	No				
• error memory	Yes				
 adjustable open/closed-circuit current principle 	Yes				
 external reset 	Yes				
auto-RESET	Yes				
manual RESET	Yes				
Control circuit/ Control	,				
control supply voltage at AC					
at 50 Hz rated value	24 24 V				
at 60 Hz rated value	24 24 V				
control supply voltage at DC					
rated value	24 24 V				
operating range factor control supply voltage rated					

value at DC	
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	1.1
full-scale value	0.8
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	1.1
full-scale value	0.8
Measuring circuit	
measurable line frequency	50 60 Hz
adjustable response delay time	
when starting	1 900 s
 with lower or upper limit violation 	0.1 99.9 s
buffering time in the event of power failure minimum	10 ms
accuracy of digital display	+/- 1 Digit
Precision	
relative metering precision	10 %
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
operating frequency with 3RT2 contactor maximum	5 000 1/h
Inputs/ Outputs	
design of input feedback input	No
number of outputs as contact-affected switching element	
 for signaling function 	
 instantaneous contact 	0
 delayed switching 	1
safety-related	
 delayed switching 	0
— instantaneous contact	0
number of outputs as contact-less semiconductor switching element	
for signaling function	
delayed switching	0
instantaneous contact	0
safety-related	
 delayed switching 	0
— instantaneous contact	0
Outputs	
ampacity of the output relay at AC-15	
• at 250 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	4 A
Electromagnetic compatibility	
conducted interference	
due to burst acc. to IEC 61000-4-4	2 kV
 due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge

galvanic Isolation • between input and output • between the outputs No Safety related data Safety related total Screw-type terminals Yes Screw-type terminals Yes Screw-type terminals 1x (0.5 25 mm²), 2x (0.5 25 mm²) 1x (0.5 25 mm²), 2x (0.5 25 mm²) 2x (2014) Safety standed with core end processing Safety related to the safety of the s	Galvanic isolation							
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Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

other

Railway

Special Test Certificate





<u>Confirmation</u> <u>V</u>

Vibration and Shock

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=3UG4651-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4651-1AA30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-1AA30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4651-1AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-1AA30/manual

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