SIEMENS

Data sheet 3UG4651-2AA30



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 spring-type connection system

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 instead; Level (SIL) acc. to IEC 61908 Connections/ Terminals product component removable terminal for auxiliary and control circuit Vype of electrical connection • solid • inely stranded without core end processing • all AWG cables standed • at AWG cables standed • at AWG cables standed • linely stranded without core end processing • linely stranded without core end processing • all AWG cables standed • linely stranded without core end processing • linely stranded without core end proc	Galvanic isolation							
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Spring-loaded terminals Spring-loaded terminals		Yes	Vos					
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Type Test Certificates/Test Report

Test Certificates Marine / Shipping

other Railway

Special Test Certificate





Confirmation

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=3UG4651-2AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4651-2AA30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-2AA30

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4651-2AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-2AA30/manual

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