SIEMENS

Data sheet 3UG4651-1AW30



Digital monitoring relay Speed monitoring from 0.1 to 2200 rpm Overshoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC 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	4 VA
— at 240 V maximum	9 VA
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 according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
reference code according to IEC 81346-2	К
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1
Product Function	
product function	
 standstill monitoring 	No
 rotation speed monitoring 	Yes
• error memory	Yes
 adjustable open/closed-circuit current principle 	Yes
 external reset 	Yes
• auto-RESET	Yes
manual RESET	Yes
suitability for use safety-related circuits	No
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	24 240 V
at 60 Hz rated value	24 240 V

* operating range factor control supply voltage rated value at De et al. (1997) and the state of		
poerating range factor control supply voltage rated value at C " intital value	control supply voltage at DC rated value	24 240 V
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61000-4-5 field-based interference according to IEC 61000-4-3 10 V/m		
		1 kV
electrostatic discharge according to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge	field-based interference according to IEC 61000-4-3	10 V/m
	electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge

Galvanic isolation	
galvanic isolation	
between input and output	Yes
between the outputs	No
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	without
Connections/ Terminals	
product component removable terminal for auxiliary and	Yes
control circuit	
type of electrical connection	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4 mm2), 2x (0.5 2.5 mm2)
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
 for AWG cables solid 	2x (20 14)
for AWG cables stranded	2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
AWG number as coded connectable conductor cross section	
• solid	20 14
• stranded	20 14
tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting
height	86 mm
width	22.5 mm
depth	102 mm
required spacing	
with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
 for grounded parts 	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— at the side	0 mm
— downwards	0 mm
• for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
Approvals Certificates	
General Product Approval	

ΣK



Confirmation







EMV Test Certificates Marine / Shipping



<u>KC</u>

Type Test Certificates/Test Report

Special Test Certificate





other

Confirmation

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3UG4651-1AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4651-1AW30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-1AW30

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4651-1AW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4651-1AW30/manual

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