



digital monitoring relay speed monitoring from 0.1 to 6000 r/min overshoot and undershoot supply voltage 24 ... 240 V AC/DC, 50 .. 60 Hz ON delay and tripping delay 0.1..999.9 s 2 changeover contacts screw terminal

product brand name	SIRIUS
product designation	Speed monitoring relay with digital setting
design of the product	monitoring of speed, external power supply with auxiliary voltage
product type designation	3UG5
<b>General technical data</b>	
product function	RPM monitoring relay
design of the display	LCD
insulation voltage	
<ul style="list-style-type: none"> <li>for overvoltage category III according to IEC 60664 <ul style="list-style-type: none"> <li>with degree of pollution 2 rated value</li> <li>with degree of pollution 3 rated value</li> </ul> </li> </ul>	690 V 690 V
degree of pollution	3
type of voltage of the control supply voltage	AC/DC
protection class IP	
<ul style="list-style-type: none"> <li>of the enclosure</li> <li>of the terminal</li> </ul>	IP20 IP20
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance according to IEC 60068-2-6	f = 4 ... 5,81 Hz, dmax = 15 mm; f = 5,81 ... 500 Hz, Amax = 20 m/s <sup>2</sup> ; 10 cycles
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
thermal current of the switching element with contacts maximum	5 A
Substance Prohibittance (Date)	06/01/2023
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
Weight	0.19 kg
<b>Product Function</b>	
product function	
<ul style="list-style-type: none"> <li>standstill monitoring</li> <li>rotation speed monitoring</li> <li>adjustable open/closed-circuit current principle</li> <li>manual RESET</li> </ul>	No Yes Yes Yes
suitability for use safety-related circuits	No
<b>Control circuit/ Control</b>	
control supply voltage at AC	
<ul style="list-style-type: none"> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> </ul>	24 ... 240 V 24 ... 240 V
control supply voltage at DC rated value	24 ... 240 V
operating range factor control supply voltage rated value at DC	

<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>Measuring circuit</b>	
<b>measurable line frequency</b>	50 ... 60 Hz
<b>adjustable operating delay time</b>	0 ... 999.9 s
<b>adjustable response delay time</b>	
<ul style="list-style-type: none"> <li>when starting</li> </ul>	0 ... 999.9 s
<ul style="list-style-type: none"> <li>with lower or upper limit violation</li> </ul>	0 ... 999.9 s
<b>accuracy of digital display</b>	+/- 1 Digit
<b>Communication/ Protocol</b>	
protocol is supported IO-Link protocol	No
<b>Auxiliary circuit</b>	
number of CO contacts delayed switching	2
<b>Inputs/ Outputs</b>	
design of input feedback input	No
<b>number of outputs as contact-affected switching element</b>	
<ul style="list-style-type: none"> <li>safety-related <ul style="list-style-type: none"> <li>instantaneous contact</li> </ul> </li> </ul>	0
<b>ampacity of the output relay at AC-15</b>	
<ul style="list-style-type: none"> <li>at 230 V at 50/60 Hz</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 250 V at 50/60 Hz</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 400 V at 50/60 Hz</li> </ul>	3 A
<b>ampacity of the output relay at DC-13</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> </ul>	1 A
<ul style="list-style-type: none"> <li>at 125 V</li> </ul>	0.2 A
<ul style="list-style-type: none"> <li>at 250 V</li> </ul>	0.1 A
<b>operational current at 17 V minimum</b>	5 mA
<b>Galvanic isolation</b>	
<b>galvanic isolation</b>	
<ul style="list-style-type: none"> <li>between input and output</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the outputs</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the voltage supply and other circuits</li> </ul>	Yes
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	screw terminal
<ul style="list-style-type: none"> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>solid</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>for AWG cables solid</li> </ul>	1x (20 ... 12), 2x (20 ... 14)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>solid</li> </ul>	0.5 ... 4 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul>	0.5 ... 4 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>solid</li> </ul>	20 ... 12
<ul style="list-style-type: none"> <li>stranded</li> </ul>	20 ... 12
tightening torque with screw-type terminals	0.6 ... 0.8 N·m
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting
<b>height</b>	100 mm

<b>width</b>	22.5 mm
<b>depth</b>	90 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 0 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> </ul>	



**Ambient conditions**

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation -25 ... +60 °C</li> <li>• during storage -40 ... +80 °C</li> <li>• during transport -40 ... +80 °C</li> </ul>	

**Approvals Certificates**

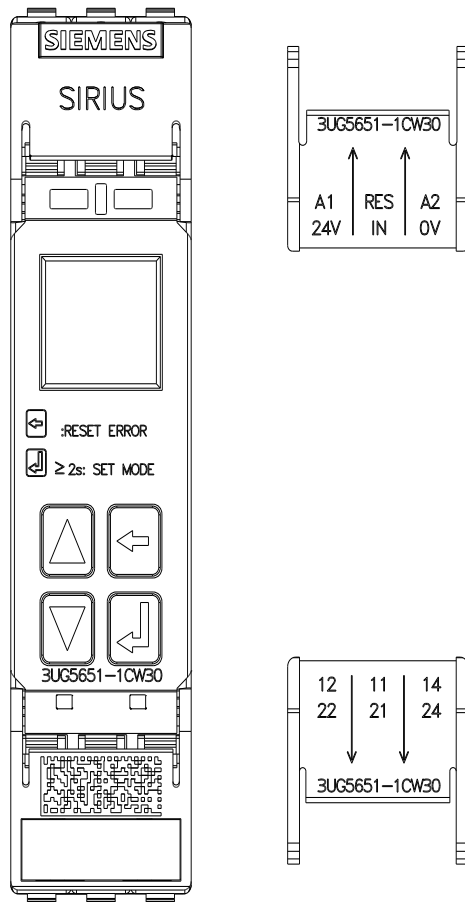
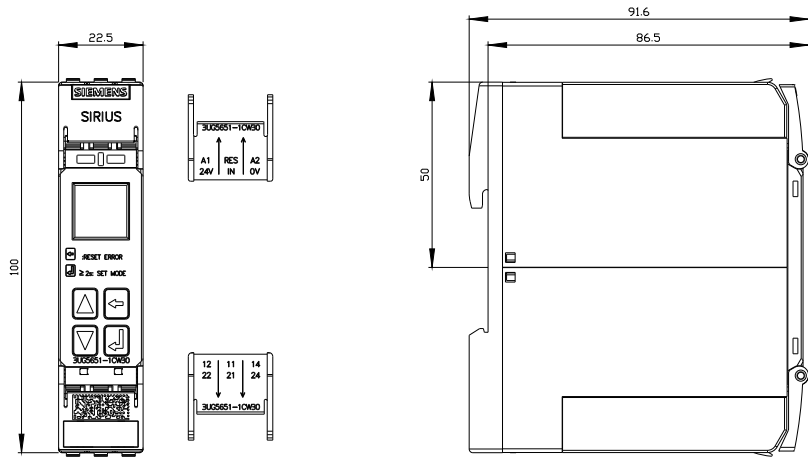
<b>General Product Approval</b>	<b>other</b>
   	<a href="#">Confirmation</a> 

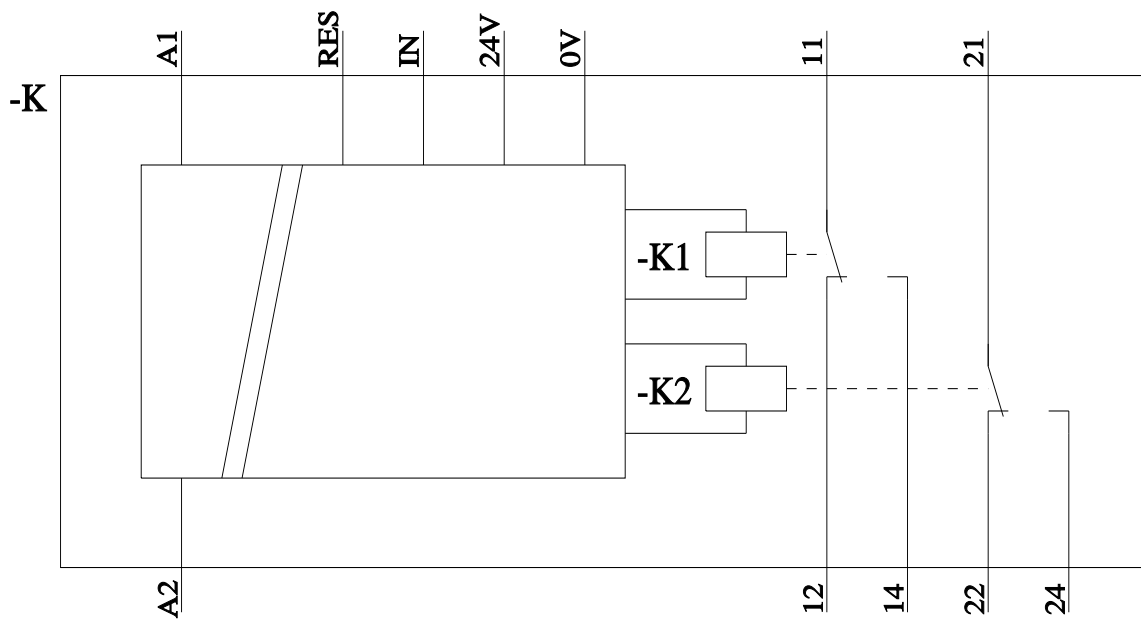
**Environment**



[Environmental Confirmations](#)

**Further information**

- Information on the packaging**  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- Information for data generation and storage**  
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
- 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=3UG5651-1CW30>
- Cax online generator**  
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG5651-1CW30>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3UG5651-1CW30>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG5651-1CW30&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG5651-1CW30&lang=en)





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