

Siemens  
EcoTech



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

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Speed monitoring relay with digital setting
<b>design of the product</b>	monitoring of speed, external power supply with auxiliary voltage
<b>product type designation</b>	3UG5
<b>General technical data</b>	
<b>product function</b>	RPM monitoring relay
<b>design of the display</b>	LCD
<b>insulation voltage</b>	
<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
<b>degree of pollution</b>	3
<b>type of voltage of the control supply voltage</b>	AC/DC
<b>protection class IP</b>	
<ul style="list-style-type: none"> <li>• of the enclosure</li> <li>• of the terminal</li> </ul>	IP20 IP20
<b>shock resistance according to IEC 60068-2-27</b>	sinusoidal half-wave 15g / 11 ms
<b>vibration resistance according to IEC 60068-2-6</b>	f = 4 ... 5,81 Hz, dmax = 15 mm; f = 5,81 ... 500 Hz, Amax = 20 m/s <sup>2</sup> ; 10 cycles
<b>mechanical service life (operating cycles) typical</b>	10 000 000
<b>electrical endurance (operating cycles) at AC-15 at 230 V typical</b>	100 000
<b>thermal current of the switching element with contacts maximum</b>	5 A
<b>Substance Prohibitance (Date)</b>	06/01/2023
<b>SVHC substance name</b>	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
<b>Net Weight</b>	0.185 kg
<b>Product Function</b>	
<b>product function</b>	
<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
<b>suitability for use safety-related circuits</b>	No
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	24 ... 240 V

<ul style="list-style-type: none"> <li>at 60 Hz rated value</li> </ul>	24 ... 240 V
<b>control supply voltage at DC rated value</b>	24 ... 240 V
<b>operating range factor control supply voltage rated value at DC</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 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</li> </ul>	
— instantaneous contact	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>	
mounting position	any
fastening method	screw and snap-on mounting
height	100 mm
width	22.5 mm
depth	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</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 0 mm  0 mm 0 mm 0 mm 0 mm 0 mm  0 mm 0 mm 0 mm 0 mm 0 mm
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C

**Approvals Certificates**

General Product Approval	other
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[Confirmation](#)



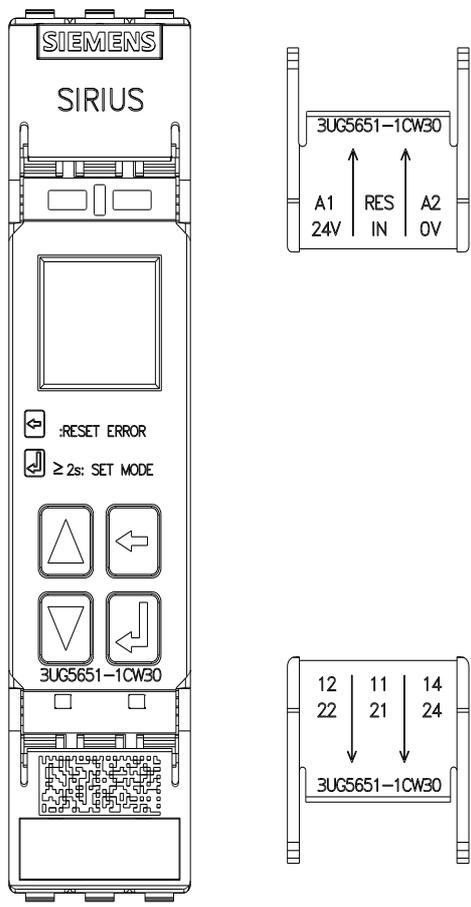
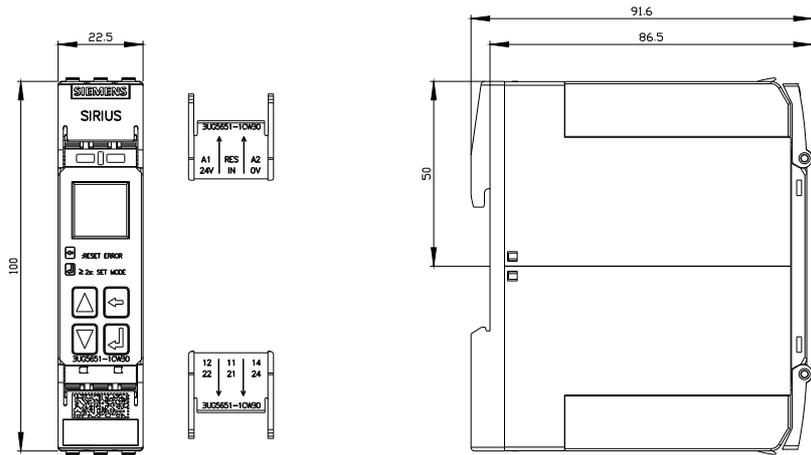
**Environment**

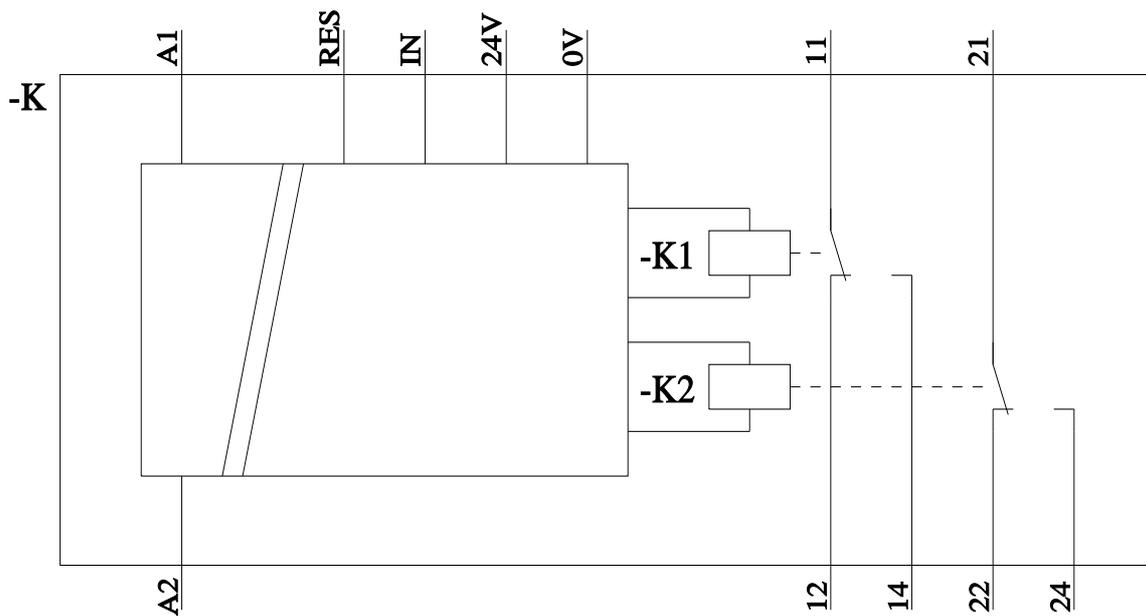


[Environmental Confirmations](#)

**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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