

DIGITAL MONITORING RELAY VOLTAGE MONITORING, 22.5MM FROM 0.1 TO 60V AC/DC OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: AC/DC 24V DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT INTERF. PEAK DELAY 0.1 TO 20S HYSTERESIS 0.1 TO 30V 1 CO CONTACT W. OR W/O ERROR LOG SPRING-LOADED CONNECTION

Product function	Voltage monitoring relay
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Measuring circuit:

Type of voltage / for monitoring		AC/DC
Number of poles / for main current circuit		1
Measurable line frequency	Hz	500 ... 40
Measurable voltage • for AC	V	0.1 ... 60
Adjustable voltage range	V	0.1 ... 60
Adjustable response delay time • with lower or upper limit violation	s	0.1 ... 20
Response time / maximum	ms	450
Relative metering precision	%	5
Precision of digital display		+/-1 digit
Relative temperature-related measurement deviation	%	0.1
Relative repeat accuracy	%	1

General technical details:

Design of the display	LCD
Product function	
• tension window recognition of 1 phase	Yes
• tension window recognition of 3 phases	No
• tension window recognition DC	Yes
• overvoltage recognition of 1 phase	Yes
• overvoltage recognition of 3 phases	No
• overvoltage recognition DC	Yes
• undervoltage recognition of 1 phase	Yes
• undervoltage recognition of 3 phases	No
• undervoltage recognition DC	Yes
• reset external	Yes

<ul style="list-style-type: none"> • self-reset 		Yes
<ul style="list-style-type: none"> • open-circuit or closed-circuit current principle 		Yes
Starting time / after the control supply voltage has been applied	ms	1,000
Type of voltage / of the controlled supply voltage		AC/DC
Control supply voltage		
<ul style="list-style-type: none"> • at 50 Hz / at AC <ul style="list-style-type: none"> • rated value 	V	24 ... 24
<ul style="list-style-type: none"> • at 60 Hz / at AC <ul style="list-style-type: none"> • rated value 	V	24 ... 24
<ul style="list-style-type: none"> • for DC <ul style="list-style-type: none"> • rated value 	V	24 ... 24
Operating range factor control supply voltage rated value		
<ul style="list-style-type: none"> • at 50 Hz <ul style="list-style-type: none"> • for AC 		0.85 ... 1.15
<ul style="list-style-type: none"> • at 60 Hz <ul style="list-style-type: none"> • for AC 		0.85 ... 1.15
<ul style="list-style-type: none"> • for DC 		0.85 ... 1.15
Impulse voltage resistance / rated value	kV	4
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Maximum permissible voltage for safe disconnection		
<ul style="list-style-type: none"> • between control and auxiliary circuit 	V	300
<ul style="list-style-type: none"> • between auxiliary circuit and auxiliary circuit 	V	300
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value	V	690
Ambient temperature		
<ul style="list-style-type: none"> • during operating 	°C	-25 ... +60
<ul style="list-style-type: none"> • during storage 	°C	-40 ... +85
<ul style="list-style-type: none"> • during transport 	°C	-40 ... +85

Design of the electrical isolation		Safe isolation
Galvanic isolation		
• between entrance and outlet		Yes
• between the outputs		Yes
• between the voltage supply and other circuits		No
Mechanical operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

Mechanical design:		
Width	mm	22.5
Height	mm	94
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
Type of mounting		snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection		spring-loaded terminals
Type of the connectable conductor cross-section		
• solid		2x (0.25 ... 1.5 mm ²)
• finely stranded		
• with wire end processing		2 x (0.25 ... 1.5 mm ²)

- without wire end processing
- for AWG conductors
 - solid
 - stranded

2x (0.25 ... 1.5 mm²)

2x (24 ... 16)

2x (24 ... 16)

Outputs:

Number of NO contacts / delayed switching		0
Number of NC contacts / delayed switching		0
Number of change-over switches / delayed switching		1
Operating current / at 17 V / minimum	mA	5
Continuous current / of the DIAZED fuse link of the output relay	A	4
Thermal current / of the contact-affected switching element / maximum	A	5

Certificates/approvals:

General Product Approval



CCC



GOST



UL

EMC



C-TICK

Test Certificates

[Special Test Certificate](#)

Shipping Approval



DNV



GL



LRS

other

[Declaration of Conformity](#)

[other](#)

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

Cax online generator:

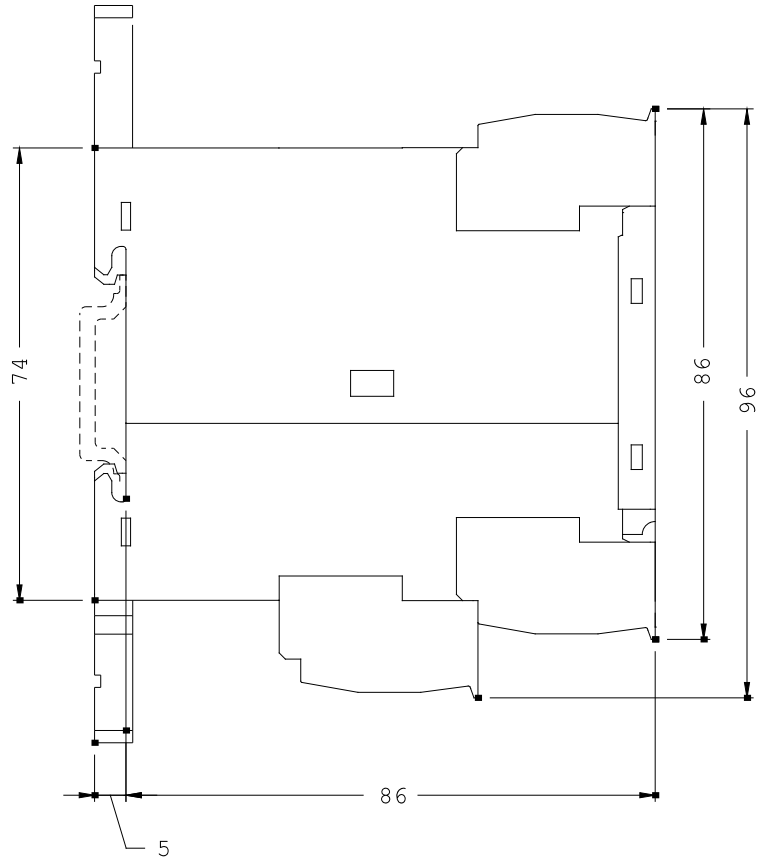
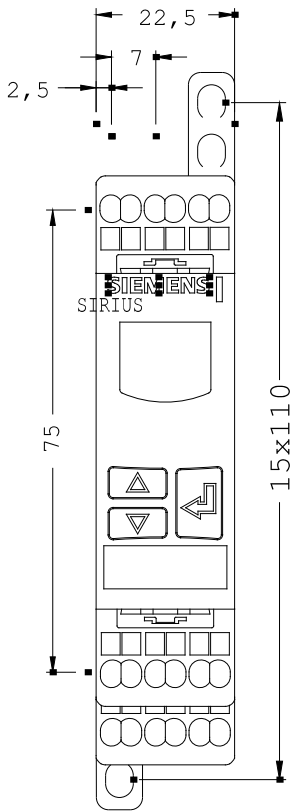
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WWW/view/en/3UG4631-2AA30/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4631-2AA30



last change:

Feb 18, 2013