



DIGITAL MONITORING RELAY CURRENT MONITORING, 22.5MM FROM 0.05 TO 10A AC/DC OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: AC/DC 24V DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT STARTUP AND INTERF. PEAK DELAY 0.1 TO 20S HYSTERESIS 0.01 TO 5A 1 CO CONTACT W. OR W/O ERROR LOG SPRING-LOADED CONNECTION

|                                                                                                   |    |                          |
|---------------------------------------------------------------------------------------------------|----|--------------------------|
| <b>Product function</b>                                                                           |    | Current monitoring relay |
| <b>Measuring circuit:</b>                                                                         |    |                          |
| <b>Number of poles / for main current circuit</b>                                                 |    | 1                        |
| <b>Type of current / for monitoring</b>                                                           |    | AC/DC                    |
| <b>Measurable current</b><br>• for AC                                                             | A  | 0.05 ... 15              |
|                                                                                                   | mA | 50 ... 15,000            |
| <b>Measurable line frequency</b>                                                                  | Hz | 40 ... 500               |
| <b>Adjustable response current</b><br>• 1<br>• 2                                                  | A  | 0.5 ... 10               |
|                                                                                                   | A  | 0.5 ... 10               |
| <b>Adjustable response delay time</b><br>• when starting<br>• with lower or upper limit violation | s  | 0.1 ... 20               |
|                                                                                                   | s  | 0.1 ... 20               |
| <b>Adjustable switching hysteresis for measured current value</b>                                 | mA | 10 ... 5,000             |
| <b>Stored energy time / at mains power cut / minimum</b>                                          | ms | 10                       |
| <b>Operating voltage</b><br>• rated value                                                         | V  | 24 ... 24                |
| <b>Response time / maximum</b>                                                                    | ms | 450                      |
| <b>Relative metering precision</b>                                                                | %  | 5                        |
| <b>Precision of digital display</b>                                                               |    | +/-1 digit               |

|                                                    |      |     |
|----------------------------------------------------|------|-----|
| Relative temperature-related measurement deviation | %    | 5   |
| Temperature drift per °C                           | %/°C | 0.1 |
| Relative repeat accuracy                           | %    | 1   |

| General technical details:                                                                                          |    |                                             |
|---------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------|
| Design of the display                                                                                               |    | LCD                                         |
| Product function                                                                                                    |    |                                             |
| • overcurrent recognition of 1 phase                                                                                |    | Yes                                         |
| • overcurrent recognition of 3 phases                                                                               |    | No                                          |
| • undercurrent recognition of 1 phase                                                                               |    | Yes                                         |
| • undercurrent recognition of 3 phases                                                                              |    | No                                          |
| • overcurrent recognition DC                                                                                        |    | Yes                                         |
| • undercurrent recognition DC                                                                                       |    | Yes                                         |
| • current window recognition DC                                                                                     |    | Yes                                         |
| • reset external                                                                                                    |    | Yes                                         |
| • self-reset                                                                                                        |    | Yes                                         |
| • 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 supply voltage                                                                                 |    | AC/DC                                       |
| Supply voltage / 1                                                                                                  |    |                                             |
| • at 50 Hz / for AC / rated value                                                                                   | V  | 24                                          |
| • at 60 Hz / for AC / rated value                                                                                   | V  | 24                                          |
| • for DC / rated value                                                                                              | V  | 24                                          |
| 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                                       |
| 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                                         |
| Maximum permissible voltage for safe disconnection                                                                  |    |                                             |

|                                                   |    |             |
|---------------------------------------------------|----|-------------|
| • between control and auxiliary circuit           | V  | 300         |
| • between auxiliary circuit and auxiliary circuit | V  | 300         |
| <b>Degree of pollution</b>                        |    | 3           |
| <b>Ambient temperature</b>                        |    |             |
| • during operating                                | °C | -25 ... +60 |
| • during storage                                  | °C | -40 ... +85 |
| • during transport                                | °C | -40 ... +85 |
| <b>Galvanic isolation</b>                         |    |             |
| • between entrance and outlet                     |    | Yes         |
| • between the outputs                             |    | Yes         |
| • between the voltage supply and other circuits   |    | No          |

| <b>Mechanical design:</b>                                |    |                         |
|----------------------------------------------------------|----|-------------------------|
| <b>Width</b>                                             | mm | 22.5                    |
| <b>Height</b>                                            | mm | 94                      |
| <b>Depth</b>                                             | mm | 91                      |
| <b>mounting position</b>                                 |    | any                     |
| <b>Distance, to be maintained, to earthed part</b>       |    |                         |
| • forwards                                               | mm | 0                       |
| • backwards                                              | mm | 0                       |
| • sideways                                               | mm | 0                       |
| • upwards                                                | mm | 0                       |
| • downwards                                              | mm | 0                       |
| <b>Distance, to be maintained, to the ranks assembly</b> |    |                         |
| • forwards                                               | mm | 0                       |
| • backwards                                              | mm | 0                       |
| • sideways                                               | mm | 0                       |
| • upwards                                                | mm | 0                       |
| • downwards                                              | mm | 0                       |
| <b>Distance, to be maintained, conductive elements</b>   |    |                         |
| • forwards                                               | mm | 0                       |
| • backwards                                              | mm | 0                       |
| • sideways                                               | mm | 0                       |
| • upwards                                                | mm | 0                       |
| • downwards                                              | mm | 0                       |
| <b>Type of mounting</b>                                  |    | snap-on mounting        |
| <b>Design of the electrical connection</b>               |    |                         |
| • for auxiliary and control current circuit              |    | spring-loaded terminals |
| • for main current circuit                               |    | spring-loaded terminals |

|                                                        |  |                                     |
|--------------------------------------------------------|--|-------------------------------------|
| <b>Product function</b>                                |  | Yes                                 |
|                                                        |  | Yes                                 |
| <b>Type of the connectable conductor cross-section</b> |  | 2x (0.25 ... 1.5 mm <sup>2</sup> )  |
|                                                        |  | 2 x (0.25 ... 1.5 mm <sup>2</sup> ) |
|                                                        |  | 2x (0.25 ... 1.5 mm <sup>2</sup> )  |
|                                                        |  | 2x (24 ... 16)                      |
|                                                        |  | 2x (24 ... 16)                      |
|                                                        |  |                                     |

| Outputs:                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|
| <b>Number of NO contacts / delayed switching</b>                                                                                                                                                                                                                                                                                                                                                                                                             |     | 0          |
| <b>Number of NC contacts / delayed switching</b>                                                                                                                                                                                                                                                                                                                                                                                                             |     | 0          |
| <b>Number of change-over switches / delayed switching</b>                                                                                                                                                                                                                                                                                                                                                                                                    |     | 1          |
| <b>Current carrying capacity</b>                                                                                                                                                                                                                                                                                                                                                                                                                             |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |            |
| <ul style="list-style-type: none"> <li>• of output relay</li> <li>• at AC-15 <ul style="list-style-type: none"> <li>• at 250 V / at 50/60 Hz</li> <li>• at 400 V / at 50/60 Hz</li> </ul> </li> <li>• at DC-13 <ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 125 V</li> <li>• at 250 V</li> </ul> </li> <li>• for permanent overcurrent / maximum permissible</li> <li>• for overcurrent duration &lt; 1 s / maximum permissible</li> </ul> | A   | 3          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 3          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 1          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 0.2        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 0.1        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 15         |
| <b>Operating current / at 17 V / minimum</b>                                                                                                                                                                                                                                                                                                                                                                                                                 | A   | 0.0050     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A   | 4          |
| <b>Continuous current / of the DIAZED fuse link of the output relay</b>                                                                                                                                                                                                                                                                                                                                                                                      | A   | 5          |
| <b>Thermal current / of the contact-affected switching element / maximum</b>                                                                                                                                                                                                                                                                                                                                                                                 | A   |            |
| <b>Mechanical operating cycles as operating time / typical</b>                                                                                                                                                                                                                                                                                                                                                                                               |     | 10,000,000 |
| <b>Electrical operating cycles as operating time / at AC-15 / at 230 V / typical</b>                                                                                                                                                                                                                                                                                                                                                                         |     | 100,000    |
| <b>Operating cycles / with 3RT2 contactor / maximum</b>                                                                                                                                                                                                                                                                                                                                                                                                      | 1/h | 5,000      |

| Certificates/approvals: |
|-------------------------|
|-------------------------|

| General Product Approval                                                                 |                                                                                           |                                                                                          | EMC                                                                                         | Test Certificates                        |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------|
| <br>CCC | <br>GOST | <br>UL  | <br>C-TICK | <a href="#">Special Test Certificate</a> |
| Shipping Approval                                                                        |                                                                                           |                                                                                          | other                                                                                       |                                          |
| <br>DNV | <br>GL   | <br>LRS | <a href="#">Declaration of Conformity</a>                                                   | <a href="#">other</a>                    |

#### 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:

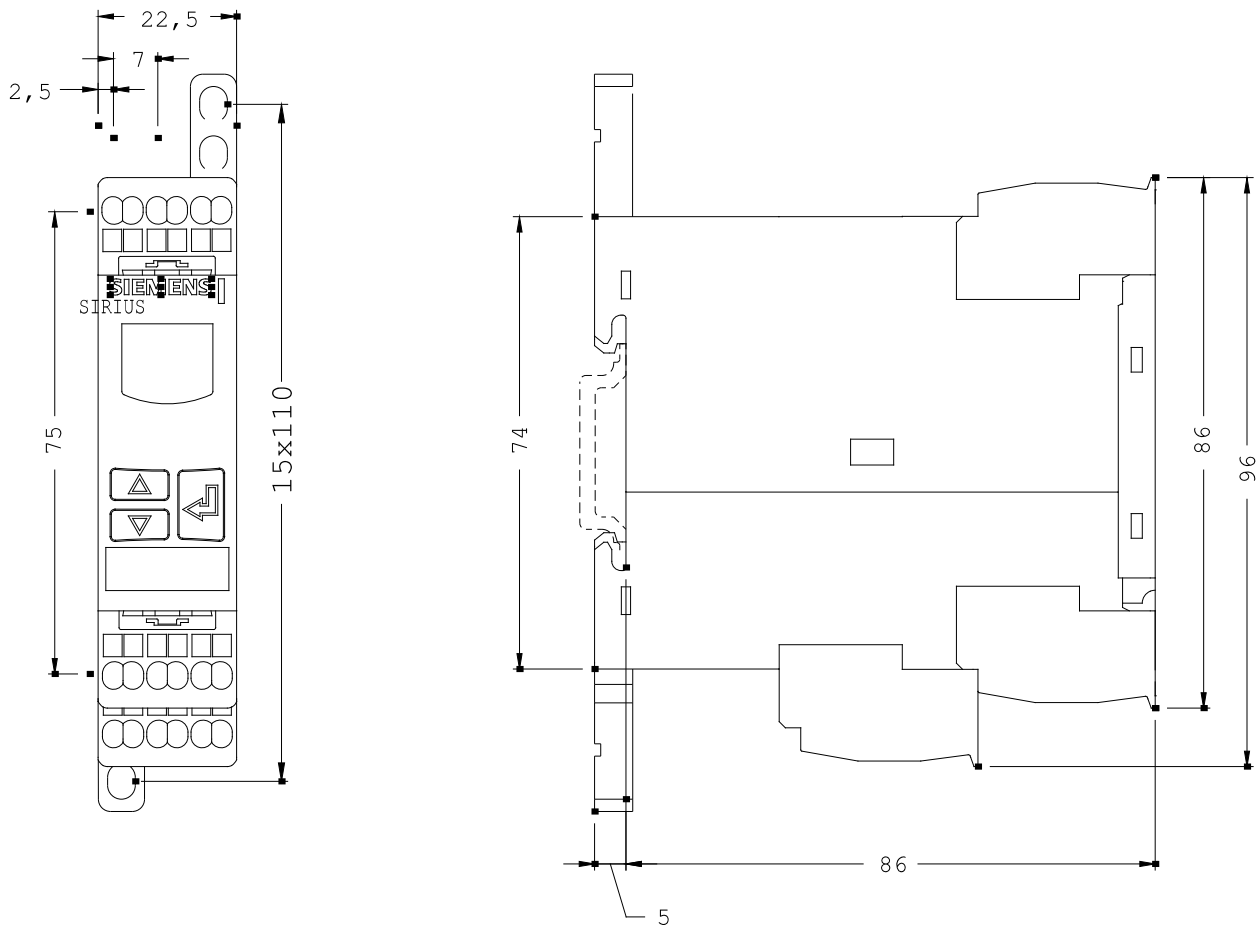
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3UG4622-2AA30/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3UG4622-2AA30](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4622-2AA30)



last change:

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