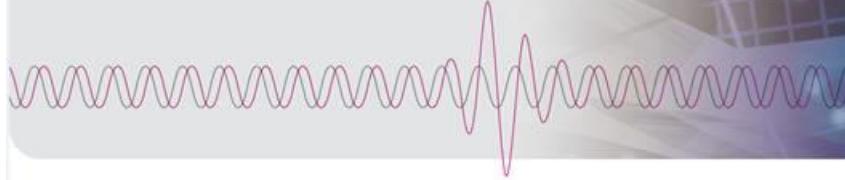


# ARTES RC3 .

## SPECIFICATIONS



**Applications** Highly precise, portable measuring system for functional tests on various types of protection equipment. Three voltage and three current outputs allow three-phase tests on static and digital protection relays. The device can be operated and controlled either with a PC and the ARTES testing software or alternatively by means of the built-in control panel equipped with a high-resolution, resistive 5" touch screen, function keys and a jog wheel.

**Sources** All signals can be set separately and independently of one another as regards phase, amplitude and frequency. The output quantities of the current and voltage amplifiers are monitored by means of internal feedback measurements. If the output quantities do not agree with the setpoint values, a warning is issued to this effect. All outputs also have overload and short-circuit protection.

|                        |                                      |  |
|------------------------|--------------------------------------|--|
| <b>General</b>         | Frequency range<br>Transient signals | DC...3 kHz<br>DC...4 kHz   |
|                        | Frequency resolution                 | 0.001 Hz   |
|                        | Frequency accuracy                   | Error < 0.01%  |
|                        | Phase angle                          | 0...360°   |
|                        | Phase resolution                     | 0.001°   |
|                        | Phase accuracy                       | Error < 0.05° <sup>1)</sup>  |
| <b>Voltage outputs</b> | 3-phase (L-N)<br>1-phase (L-L)       | 3 x 0...300 V / 100 VA <sup>3)</sup><br>1 x 0...600 V / 150 VA <sup>3)</sup> |
|                        | Resolution<br>Accuracy               | 10 mV<br>Error < 0.05% <sup>1),2)</sup><br>< 0.05% <sup>1)</sup>             |
| <b>Current outputs</b> | 3-phase<br>1-phase                   | 3 x 0...16 A / 40 VA <sup>3)</sup><br>1 x 0...32 A / 80 VA <sup>3)</sup>     |
|                        | Resolution<br>Accuracy               | 1 mA<br>Error < 0.05% <sup>1),2)</sup><br>< 0.05% <sup>1),2)</sup>           |
| <b>DC output</b>       | Output range<br>Output power         | 12...260 VDC<br>50 W, max. 2 A   |
|                        | Accuracy<br>Protection               | Error < 5%<br>Overload and short-circuit protection                          |

**Binary inputs** The binary inputs are configurable for measuring dry or wet contacts.

|                       |                           |   |
|-----------------------|---------------------------|---|
| <b>Binary inputs</b>  | Number                    | 4   |
|                       | Response threshold        | 24...300 VDC, or potential-free contact   |
|                       | Max. measurement duration | unlimited   |
|                       | Sampling rate             | 8 kHz   |
|                       | Protection                | Transient protection, polarity protection and galvanic isolation via opto-couplers                |
| <b>Binary outputs</b> | <b>Relay</b>              | Number  |
|                       |                           | 2   |
|                       | AC switching capacity     | 0...250 VAC, 8 A, resistive load  |
|                       | DC switching capacity     | 0...300 VDC, $I_{max} = 8 A$ , 50 W   |
|                       | Protection                | Potential-free and galvanically isolated output relays<br>Operation via software or function keys |

<sup>1)</sup> For the frequency range of 10...100 Hz

<sup>2)</sup> Of range

<sup>3)</sup> For symmetrical output quantities, supply voltage 230 VAC, 50 Hz

**Complete system** ARTES RC3 is housed in an extremely robust and resistant hard shell case. All interfaces and plugs for connecting the unit under test are well protected inside the case. A cable compartment integrated in the case lid also offers sufficient space for the cable set included in the scope of delivery.

|                                    |                         |  |
|------------------------------------|-------------------------|--|
| <b>Operation</b>                   | PC                      | ARTES 5 testing software for Windows® 7/8/10/11  |
|                                    | Stand-alone             | 5" touch screen, high-resolution, resistive<br>6 function keys and a jog wheel                                 |
| <b>Connections/<br/>interfaces</b> | Measurement connections | 4 mm safety sockets  |
|                                    | Interfaces              | USB, 3 x Ethernet  |
|                                    | Status LEDs             | Indication of active current and voltage outputs and of the<br>status of the binary inputs and outputs by LEDs |
| <b>Supply<br/>voltage</b>          | Rated voltage           | 100...265 VAC, 47...63 Hz / 120...265 VDC  |
|                                    | Wattage                 | 1000 W   |
| <b>Construction</b>                | Housing                 | Hard shell case in accordance with ATA 300, ASTM D-4169,<br>MIL-STD-810F                                       |
|                                    | Protection              | IP67 (closed)  |
|                                    | Dimensions (W x H x D)  | 505 x 257 x 409 mm   |
|                                    | Weight                  | 15.8 kg  |
| <b>Environment</b>                 | Operating temperature   | 0...50°C   |
|                                    | Storage temperature     | -20...60°C   |
|                                    | Relative humidity       | 5...90%, non-condensing  |
| <b>Generic<br/>standards</b>       | Safety                  | EN 61010-1, 150 V CAT IV; 300 V CAT III; 600 V CAT II  |
|                                    | EMC                     | EN 61326-1   |
|                                    | EMC emissions           | EN 61000-6-4   |
|                                    | Susceptibility          | EN 61000-6-2   |