

# 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	DC...3 kHz
	Transient signals	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)	3 x 0...300 V / 75 VA <sup>3)</sup>
	1-phase (L-L)	1 x 0...600 V / 150 VA <sup>3)</sup>
	Resolution	13 mV
	Accuracy	Error < 0.05% <sup>1),2)</sup>
	THD	< 0.05% <sup>1)</sup>
<b>Current outputs</b>	3-phase	3 x 0...16 A / 40 VA <sup>3)</sup>
	1-phase	1 x 0...32 A / 80 VA <sup>3)</sup>
	Resolution	1 mA
	Accuracy	Error < 0.05% <sup>1),2)</sup>
	THD	< 0.05% <sup>1),2)</sup>
<b>DC output</b>	Output range	12...260 VDC
	Output power	50 W, max. 2 A
	Accuracy	Error < 5%
	Protection	Overload and short-circuit protection

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

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 <sub>max</sub> = 8 A, 50 W
		Protection	Potential-free and galvanically isolated output relays 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
	Stand-alone	5" touch screen, high-resolution, resistive 6 function keys and a jog wheel
<b>Connections/ interfaces</b>	Measurement connections	4 mm safety sockets
	Interfaces	USB, 3 x Ethernet, Wi-Fi
	Status LEDs	Indication of active current and voltage outputs and of the status of the binary inputs and outputs by LEDs
<b>Supply 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, 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 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