

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.

General	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° ¹⁾
Voltage outputs	3-phase (L-N)	3 x 0...300 V / 100 VA ³⁾
	1-phase (L-L)	1 x 0...600 V / 150 VA ³⁾
	Resolution	10 mV
	Accuracy	Error < 0.05% ^{1),2)}
	THD	< 0.05% ¹⁾
Current outputs	3-phase	3 x 0...16 A / 40 VA ³⁾
	1-phase	1 x 0...32 A / 80 VA ³⁾
	Resolution	1 mA
	Accuracy	Error < 0.05% ^{1),2)}
	THD	< 0.05% ^{1),2)}
DC output	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

Binary outputs	Relay	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 Operation via software or function keys

¹⁾ For the frequency range of 10...100 Hz

²⁾ Of range

³⁾ 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.

Operation	PC	ARTES 5 testing software for Windows® 7/8/10/11
	Stand-alone	5" touch screen, high-resolution, resistive
		6 function keys and a jog wheel
Connections/ interfaces	Measurement connections	4 mm safety sockets
	Interfaces	USB, 3 x Ethernet
	Status LEDs	Indication of active current and voltage outputs and of the status of the binary inputs and outputs by LEDs
Supply voltage	Rated voltage	100...265 VAC, 47...63 Hz / 120...265 VDC
	Wattage	1000 W
Construction	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
Environment	Operating temperature	0...50°C
	Storage temperature	-20...60°C
	Relative humidity	5...90%, non-condensing
Generic standards	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