

**Description**

The pulse summator AD-IS 102 GVC adds pulses arriving at two inputs and gives out sum-proportional pulses via its relay or transistor outputs. During this, the input pulses can be ready in any sequence and also at the same time. Each input can be assessed freely, this way differently assessed pulses can also be added. For evaluation of the inputs only whole number factors or divisors are possible. Mechanical contacts, NAMUR transmitter, active signals and semi-conductor switches can be connected and evaluated. The device can be parameterized by the customer via the optional PC configuration software AD-Studio, however, it can also be delivered preset. The inputs and outputs as well as the power pack are galvanic separated with high insulation. The transfer function of the device is:  $O = (I1*(F1/D1)) + (I2*(F2/D2))$  O = output, I = input, F = factor, D = divisor

**Application**

Adding of any quantity signals, such as through-flows or energy. Application example of energy balance: Input 1: 1000 Imp/kWh, Input 2: 10 Imp/kWh, Output: 100 Imp/kWh

**Specific characteristics**

- 2 freely assessable impulse inputs
- relay output or transistor output
- integral wide-range power pack
- compatible with many types of transmitters
- max. input frequency 1 kHz
- only 18 mm construction width
- screw terminals can be pulled off
- can be parameterized via PC (AD-Studio)

**Business data****Order number**

AD-IS 102 GVC	relay output
AD-IS 102 GVCO	transistor output

**Technical specifications****Input**

NAMUR- transmitter	0 ... 1 kHz (analysis of the NAMUR values)
Mechanical contact	0 ... 10 Hz (debounced input - Please note: low input bandwidth)
Active voltage	0 ... 1 kHz (12 V or 24 V)
Semiconductor switch	0 ... 1 kHz (such as transistor / optocoupler)

**Relay output**

Max. load AC	250 V / 2 A (cos phi = 1)
Max. load DC	50 V / 1 A (resistive load)
Cycles AC- load	2 A (cos phi = 1): ca. 110000
Cycles DC- load	1 A (resistive load): ca. 100000
Pulse duration	0,5 ... 5 s

**Transistor output (optional)**

Max. load DC	30V / 50mA
Pulse duration	0,05 ... 5 s (50% duty cycle at high frequency)

**Supply**

Voltage range	20 ... 253 V DC / 50 ... 253 V AC
Power consumption	max. 1,5 W / 2,6 VA

**Housing**

Dimensions (WxHxD)	18x110x134 mm
Type of protection	IP 20
Connection method	detachable terminal clamp (2,5 mm <sup>2</sup> flex wire / 4 mm <sup>2</sup> one wire)
Bolting torque screw terminals	0,5 Nm
Weight	135 g
Manner of fastening	DIN rail 35mm (EN 50022)

**Environmental conditions**

Ambient temperature	0 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)

**EMC**

Product family standard	EN 61326
Emitted interference	EN 55011, CISPR11 Cl. B

**Electrical safety requirements**

Product family standard	EN 61010-1
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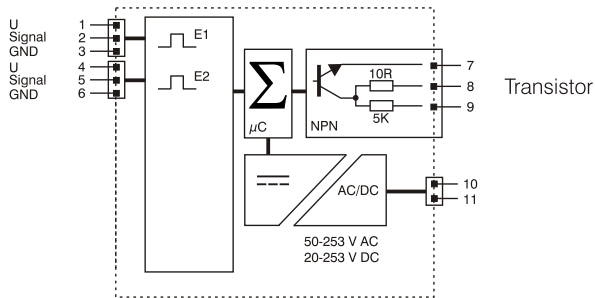
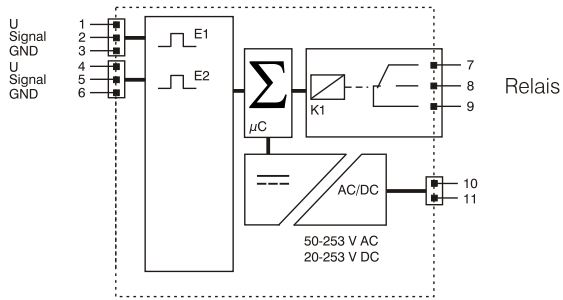
**Galvanic isolation, test voltages**

Input / output	3,75 kV (1 min.)
Signal / supply unit	3,75 kV (1 min.)

**Protection circuits**

Input	electrical surge protection
Power supply	electrical surge and reverse current protection
Relay output	no protection
Transistor output	electrical surge protection

## Block and wiring diagram



## Dimensions

