

Description

The pulse divider AD-IU 214 GVC detects pulses arriving the input and gives out divided pulses via its relay or transistor outputs. The input can be assessed freely. For evaluation of the input 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: $O = (I * (F1/D1))$ O = output, I = input, F = factor, D = divisor

Application

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

**Specific characteristics**

- freely assessable impulse input
- 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-IU 214 GVC	relay output
AD-IU 214 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 (ohmic load)
Cycles AC- load	2 A (cos phi = 1): ca. 110000
Cycles DC- load	1 A (ohmic 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 ² flex wire / 4 mm ² 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 thawing)

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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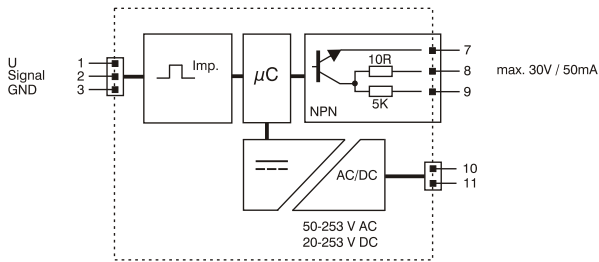
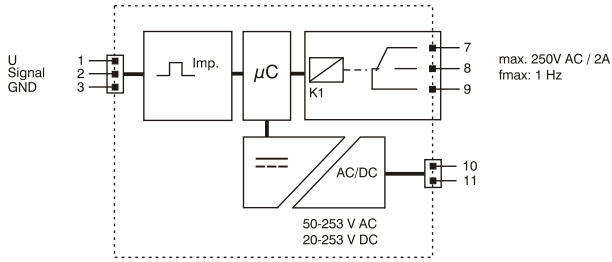
Galvanic isolation, test voltages

Input / output	4 kV (1 min.)
Signal / supply unit	4 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

