

Description

The pulse summator AD-IS 106 GVF adds pulses arriving at six 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: $O = \text{output}$, $I = \text{input}$, $F = \text{factor}$, $D = \text{divisor}$
 $O = (I1*(F1/D1)) + (I2*(F2/D2)) + (I3*(F3/D3)) + (I4*(F4/D4)) + (I5*(F5/D5)) + (I6*(F6/D6))$

Application

Adding of any quantity signals, such as through-flows or energy. Application example of energy balance: I1: 1000 Imp/kWh, I2: 10 Imp/kWh, I3: 1 Imp/kWh, I4: 300 Imp/kWh, I5: 10 Imp/kWh, I6: 5000 Imp/kWh, O: 100 Imp/kWh



Specific characteristics

- 6 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 33 mm construction width
- screw terminals can be pulled off
- can be parameterized via PC (AD-Studio)

Business data

Order number

AD-IS 106 GVF	relay output
AD-IS 106 GVFO	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. 2,2 W / 3,3 VA

Housing

Dimensions (WxHxD)	33x110x134 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	205 g
Manner of fastening	DIN rail 35mm (EN 50022)

Environmental conditions

Ambient temperature	-10 ... 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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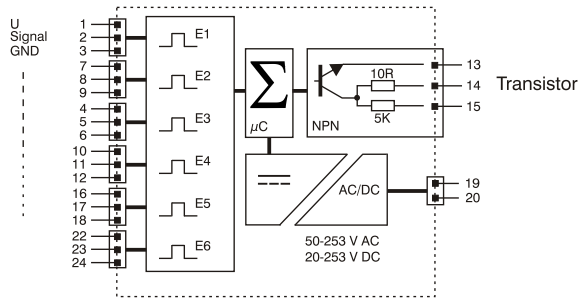
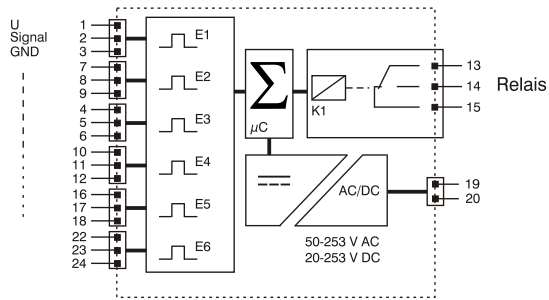
Galvanic isolation, test voltages

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

