Z-LINE

Z-104

DC Current / Voltage Frequency converter

Z-LINE

Pulses converters

CE

- INPUT: current 0..20, 4 . 20 mA
  voltage 0..5, 1..5, 0..10, 2..10 Vdc
- OUTPUT: on npn open-collector 30 Vdc 300 mA;
  reed relay 30 Vdc/sc 100 mA
- ACCURACY: 0,2%
- Galvanic isolation @ 3-way
- Screw-fit terminals removable
- Din rail mounting
- Power supply: 19..40 Vdc, 19..28 Vac

SENECA

TECHNICAL SPECIFICATIONS

Z104 – DC Current Voltage Frequency converter

ORDER CODE

Cod. Z104

ELECTRICAL

Power supply	10..40 Vdc (9..30 opt), 19..28 Vac 50..60Hz
Power consumption	Max 2,5 W
Galvanic Isolation	Power supply // input // output at 1500 Vac
Protections	Output // supply against impulse overvoltage 400W /ms .
Status indicators	power ON on front panel relay pick-up indicator on front panel;
Installation class	II
Pollution rating	2
IP Protection	IP 20

SIGNALS AND MEASUREMENT

Channels	N.1
Inputs	**Current:** 0 . 20 mA or 4 . 20 mA, both active and passive connection (100 ohm) Active connection : loop supplyvoltage approx. 15 Vdc **Voltage:** 0 . 5 Vdc, 1 . 5 Vdc, 0 . 10 Vdc and 2 . 10 Vdc, (1 Mohm)
Outputs	Npn open-collector transistor 30 Vdc 300 mA Reed-relay 30 Vdc-sc 100 mA Settable in the range 1 pulse every 2 hours to 10 KHz;
Accuracy	Setting error: 0,2% Temperature coefficient: 0,02% /°C Linearity error: 0,05%

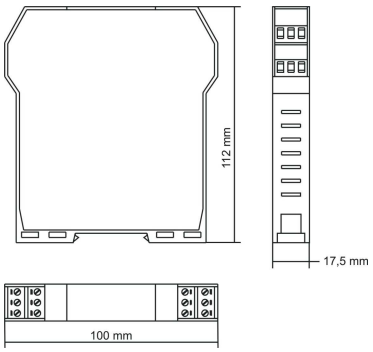
THERMOMECHANICS

Operating temperature	0..+55 °C
Humidity	30..90% a +40°C (non condensing)
Dimensions	17.5 x 100 x 112 mm (w x h x d)
Weight	150 g
Connections	Screw-fit removable terminals for wires up to 2.5 mm²
Mounting	35 mm DIN 46277

CONFIGURATION AND STANDARDS

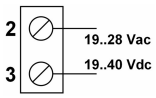
DIP Switch	-Input signal setup -Output signal setup (using a common digital tester)
Standard	EN50081-2 (electromagnetic emissions, industrial environment) EN50082-2 (electromagnetic immunity, industrial environment) EN61010-1 (safety)

DIMENSIONS



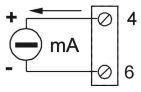
ELECTRICAL CONNECTIONS

Power supply

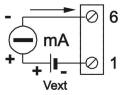


Inputs

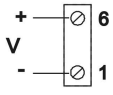
Current with internal loop power supply



Current with external power supply

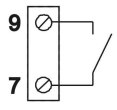


Voltage

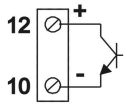


Outputs

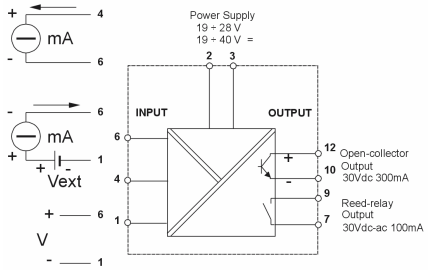
Reed-relay 30 Vdc-ac 100 mA



Npn open-collector 30 Vdc 300 mA

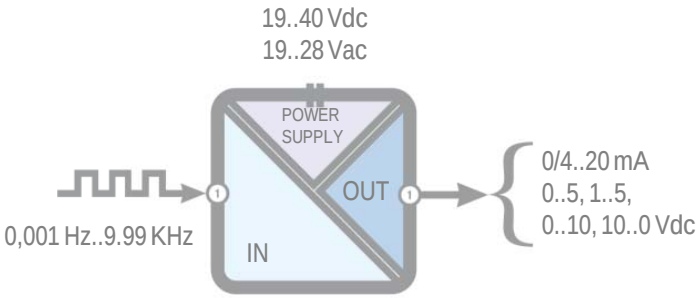


CIRCUIT DIAGRAM



Z111

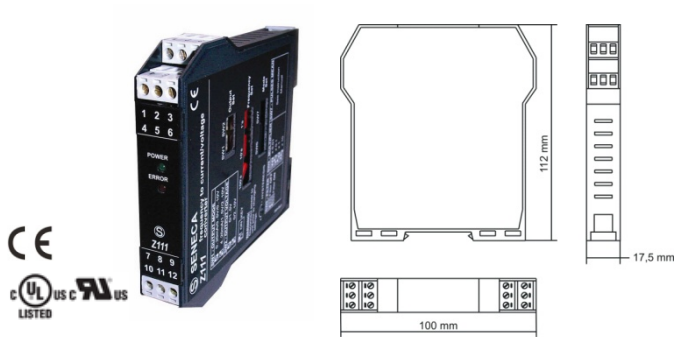
Frequency to DC Current / Voltage isolator/converter



- INPUT: Pulses: mechanical contact, reed , npn with 2 and 3 wires , pnp with 3 wires and 24V DC power supply, Namur, photoelectric, “HALL” sensor, and variable reluctance.
- Range of frequency: from 0,001 Hz to 9.99 KHz
- OUTPUT: current 0..20, 4..20 mA; voltage 0..5, 1..5, 0..10, 2..10 Vdc
- ACCURACY: 0,3%
- Galvanic isolation @ 3-way
- Screw-fit terminals removable
- Din rail mounting
- Power supply: 19..40 Vdc, 19..28 Vac

TECHNICAL DATA

Z111 – Frequency DC Current Voltage converter



ORDER CODE

Z111	Frequency to DC isolator / converter, 19..40Vdc, 19..28 Vac

SIMILAR PRODUCTS

K111	Isolated dual output frequency trip amplifier
K112	Universal digital coupler/isolator
Z104	DC to frequency isolator / converter
S104	DC to frequency isolator - converter
S111	Frequency to DC isolator - converter

GENERAL FEATURES

Power supply	19..40Vdc, 19..28 Vac
Channels	Nr 1 input / Nr 1 output
Accuracy	< 0,3% of full scale
Status indicators	- Power - Off scale
Galvanic Isolation	Power supply // input // output at 1500 Vac, digital
Hot swapping	Yes
Power consumption	2,5 W
Max frequency	9,99 KHz
Protections	Surges: 400W/ms. Loop supply short-circuit protected
Protection for inputs	Except current: 60V continuous; current 200mA continuous
IP Protection	IP 20
Humidity	30..90% a +40°C (not condensing)
Design	Terminal housing for mounting on 35 mm DIN 46277
Data memory	EEPROM for all configuration data; storage time: 10 years
DIP Switch	- Inputs signal setup - Output signal setup
Enclosure	"V0" self-extinguishing glass filled nylon case
Dimensions	17,5 x 100 x 112 mm (w x h x d)
Weight	140 g
Operating temperature	0..50 °C
Connections	Plug-in screw clamp terminal blocks, wires up to 2.5 mm^2
Mounting	35 mm DIN 46277
Standards	EN50081-2 EN50082-2 EN61010-1
Approvals	CE, UL-CSA

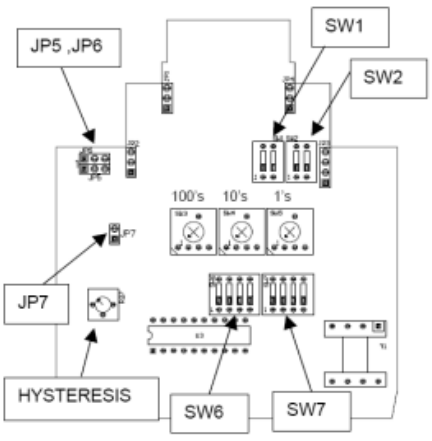
INPUT

Type	**Pulses**: mechanical contact, reed , npn with 2 and 3 wires , pnp with 3 wires and 24V DC power supply, Namur, photoelectric, "HALL" sensor, and variable reluctance. Frequency from 0,001 Hz to 9.99 KHz

OUTPUT

Type	**Current:** 0..20 mA, 4..20 mA, 20..0 mA e 20..4 mA Higher load resistance: 600 Ohm **Voltage:** 0..5 Vdc, 1..5 Vdc, 0..10 Vdc and 10..0 Vdc Lower load resistance: 2,5 KOhm

CIRCUIT DIAGRAM



APPLICATION EXAMPLE