



K111D

FREQUENCY SIGNAL SPLITTER / DIVIDER WITH 2 INDEPENDENT OUTPUTS

Highlights

- **Power Supply:** 19,2..30 Vdc
- **Power Consumption:** < 25 mA
- **1-CH Input:** IEC1131 contact, Namur, PNP/NPN, reed, photocell
- **Max Input frequency:** 20 kHz,
- **Min 1 pulse each** 116'
- **2-CH Output:** PNP, BJT, Mosfet
- **Isolation:** 1,5 kVac
- **LED status indicators:** power supply, active threshold, error
- **Connections:** Spring clamps,
- **SMART SUPPLY** power system
- **Compact Dimension:** 93,1 x 102,5 x 6,2 mm [w x h x d]
- **Operating Temperature:** -20..+65°C
- **Settings:** DIP-switch, EASY SETUP (software)

K111D is a frequency divider (up to 256 pulses at input) with input signal repeater function. It has an isolated and stabilized power supply, front LED light for power and output status.

Galvanic isolation for signals from On / Off sensors is 1.500 V.

The instrument accepts several types of input signals up to 20 kHz, selectable for 2/3-wire sensors: NPN 12 / 24V, PNP, PNP 12 / 24V, photoelectric impulse, IEC 1131-1 contact, Namur, Reed. The 2 independent outputs are high-current PNP type (up to 200 mA) internally protected against short-circuiting.

They can also be configured into divider or repeater mode. The module is configurable from PC using S117P1 serial converter or DIP switch.



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K111D



FREQUENCY SIGNAL SPLITTER / DIVIDER WITH 2 INDEPENDENT OUTPUTS



TECHNICAL DATA

GENERAL DATA

Power supply	19,2..30 Vdc (direct) or by Smart Supply system
Power transducers	Yes, available voltage: 8V±0,6V, 12±1V, 22 V±2V, max current 22 mA
Hot swapping	Si
Max current consumption	< 25 mA
Max power consumption	500 mW
A/D conversion	14 bit
Rejection	50 - 60 Hz
Input filter	Enabled with programmable cut frequency
Isolation	1,5 kVac (2 ways, input // output)
Isolation technique	Digital / Optocoupler
Processing	32 bit floating point
Communication port	Nr.1 4 pin front connector, step 2,54 mm
Settings	Software (EASY SETUP), DIP switch
Protection degree	IP20
LED status indicators	Power supply, output status
Enclosure	PBT, black
Dimension	6,2x93,1x102,5 mm
Weight	45 g
Operating temperature	-20..+65°C
Connection	Clamp terminals / Bus
Mounting	35 mm DIN rail - IEC EN60175
Special functions	Divider / Repeater
Approvals	CE
Norms	EN 61000-6-4, EN 61010-6-2, EN 61010-1

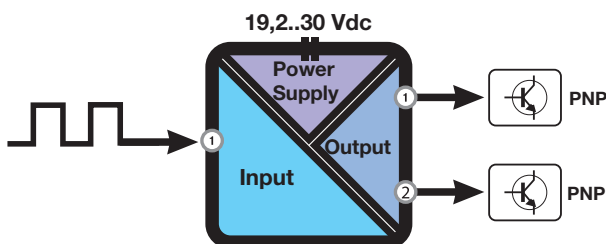
INPUT DATA

Channels	1
Type	Mechanical contact, IEC 1131.2 contact (type 1), Namur (DIN 19234, EN 60947-5-6), NPN / PNP (12 o 22 V) 2/3 wires, Reed, Photocell
Max voltage	±28 Vdc
Max frequency	20 kHz, min 1 pulse each 116'
Trip threshold	1,6..3 mA
Hysteresis	0,2 mA
Min active time	10µs

OUTPUT DATA

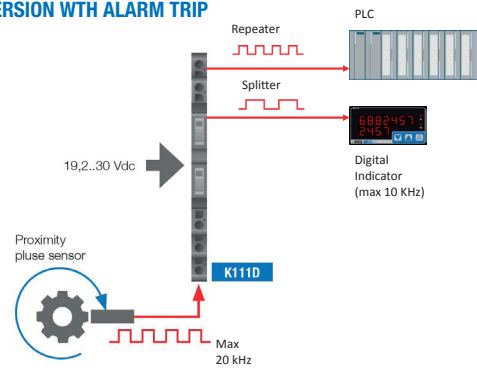
Channels	Nr.2 independent output protected against short circuit
Type	Divider or Repeater of PNP input
Max current	200 mA
Protection	Self resettable fuse
Max voltage	-30V continui, -50V impulsivi

ISOLATION / SIGNAL DIAGRAM

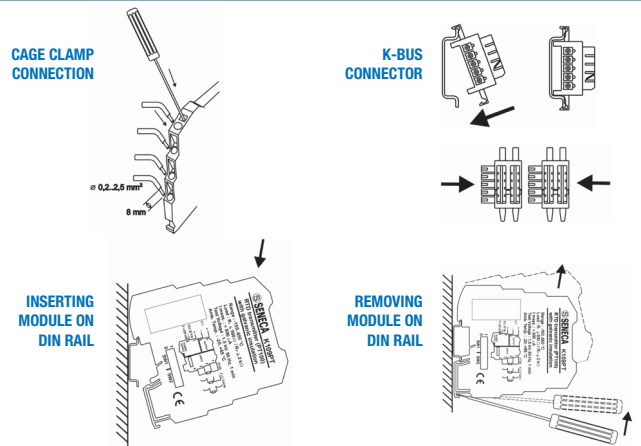


APPLICATION EXAMPLE

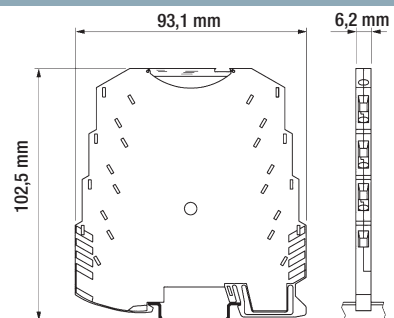
PULSE CONVERSION WITH ALARM TRIP



INSTALLATION



DIMENSION



ORDER CODES

Code	Description
K111D	Frequency Signal Splitter / Divider with 2 independent outputs

ACCESSORIES

EASY USB	USB - UART TTL converter
S117P1	RS232/USB, TTL/USB, RS485/USB asynchronous serial converter
K-SUPPLY	Redundant power supply module for K-Line modules
K-BUS	Expandable power supply connector

SOFTWARE

EASY SETUP	Plug&Play software suite for SENECA programmable instruments
EASY LP	Plug&Play software suite for loop powered devices