

FEATURES

- **Input, max. 20 kHz:**
2-wire proximity switch (NAMUR) or potential-free contact or reflecting light barrier or 24 V DC signal/ tacho generator
- **Output, simultaneously:**
1 optocoupler (max. 10 kHz),
1 relay (changer)
- **Parameterization without auxiliary power via PC-interface:**
- division/ multiplication factor
- wipe time, inverse, memory, etc.
- **Line monitoring**
- **Galvanic 3-way isolation**



FUNCTION

The Frequency Divider IV 7.10 MW is being used for binary signal transmission out of control circuits into signal circuits.

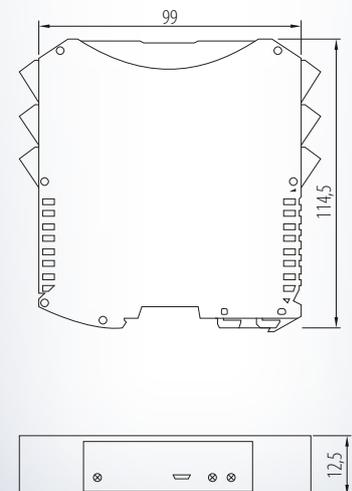
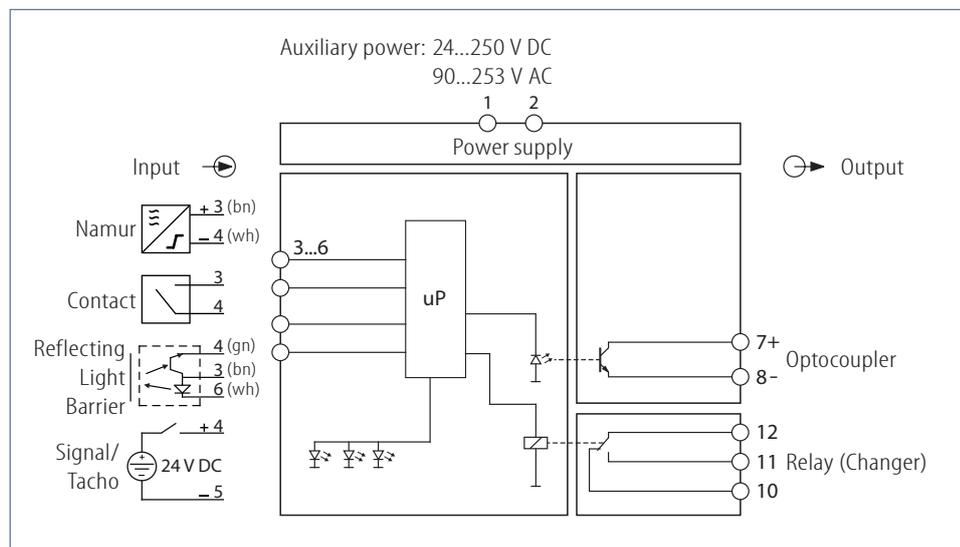
The activation has to be carried out by a 2-wire proximity switch according to EN 50227 (NAMUR) or potential-free contacts. A reflecting light barrier or a 24 V DC signal/ tacho generator can also be used for this.

A division and a multiplication factor can be set by KALIB-Software. These values are also used to calculate ratios, e.g. 2/ 3.

Additional functions such as wipe time, starting characteristics, input filter, pulse memory and limits for short circuit or wire break detection can be set.

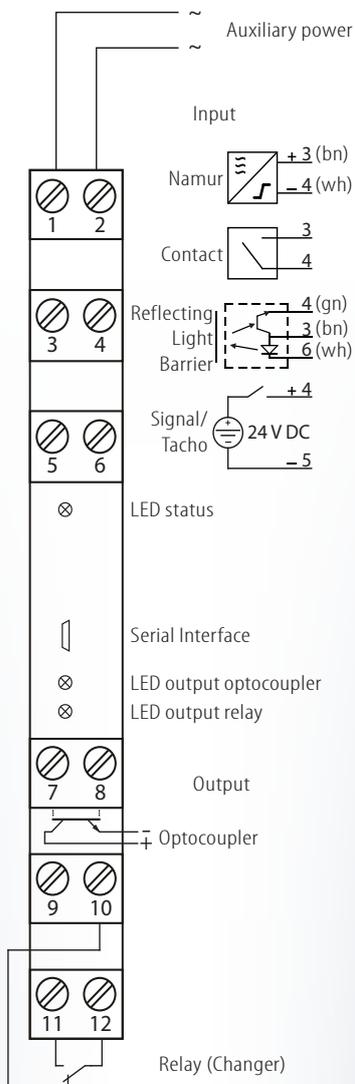
The simultaneous outputs can be parameterized separately and also be used as an alarm contact for wire break or short circuit.

The IV 7.10 MW has an optocoupler (max. 10 kHz) and a relay output (1 changer). At higher frequencies the relay can be deactivated via KALIB-Software.



IV 7.10 MW

Connection diagram:



Input:

Namur EN 50227 or potential free contact or reflecting light barrier:

maximum current:	$I_{max} = 8 \text{ mA}$
maximum voltage:	$U_{max} = 8 \text{ V}$
min. impulse duration:	$> 25 \mu\text{s}$ (default filter 1 ms, changeable via KALIB-Software)
connection:	terminal 3 +, 4 -

24 V DC signal/ tacho, connect.: terminal 4 +, 5 -

Output:

Optocoupler output:

load:	max. 50 V/ 50 mA/ <10 kHz
connection:	terminal 7+, 8-

Relay output:

load:	1 changer
connection:	max. 250 V AC/ 5 A
	common 12, normally closed 10, normally open 11

Adjustment:

The parameterization will be carried out for commissioning via KALIB-Software. For this you need a PC as well as the interface adapter **USB2/ USB-Simulator** with **KALIB-Software**.

Each output can be configured separately:

input filter:	off; 0,5 - 20 msec.	frequency input filter (factory setting: 1 ms)
multiplication factor:	1...30000	output = input * factor
division factor:	1...30000	output = input / factor
wire break limits:	10,00...46,99 %	adjustable in 0,02 % steps
short circuit limits:	52,99...94,99 %	adjustable in 0,02 % steps
mode:	off/ contin. pulse/ pulse contact*/ Namur wire break and short circuit/ pulse memory overflow (only relay)/ pulse failure/ impulse generator	
*wipe time ON:	0,002...30,000 sec.	adjustable in 1 msec. steps
*wipe time OFF:	0,002...30,000 sec.	adjustable in 1 msec. steps
*pulse memory:	2...10000 pulses	
extended functions:	inverse operation, start state (on/ off), start time (0...30 sec.)	

Display:

LED status:	green, active	input signals are in standard range, device ready for use
	green, flashing	Namur wire br. or short circ./ pulse mem. overfl./ pulse failure
LED's output:	yellow, active	output active

Environmental conditions:

Storage temperature:	-40...+70 °C
Operating temperature:	0...55 °C
Isolation voltage:	
1 kV eff. 1 sec.	input/ output
3,75 kV eff. 1 sec.	auxiliary power

Auxiliary power:

Wide range:	24...250 V DC
	90...253 V AC
	< 3 W
Influence of Aux. power:	< 0,1 %

Directive:

EMC Directive:	2014/30/EU*
Low Voltage Directive:	2014/35/EU
*minimum deviations possible during HF-radiation influence	

Mounting details:

Housing for top hat rail	
Type of protection:	IP 40 housing
	IP 20 clamps
Mounting rail fixed according to	EN 50022-35 x 7,5mm
Width:	12,5 mm
Weight:	100 g
Material:	Polyamide (PA)
Flammability class:	V0 (UL94)
Approval:	CE
Connection:	pluggable screw clamps
	≤ 2 x 2,5 mm ²

For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other.

Ordering information:

Type:	IV 7.10 MW wide range
Accessories:	USB2/ USB-Simulator with KALIB-Software

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