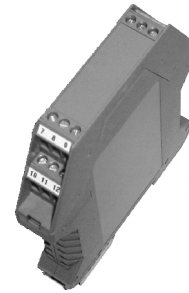


## ■ FREQUENCY DIVIDER MODEL FT 9002

### Highlights

- Adjustable Divider from 1 to 255
- Additional Divider 1, 2, 4, 8 and 16
- Different Input Voltage Levels Selecttable
- Isolated Output
- Low Power Consumption
- Small Dimensions



### General

The unit **FT 9002** is used for dividing input frequencies by a user adjustable frequency divider. There are one respectively two input channels provided. These input channels are optically isolated from the internal circuitry. By this way disturbances by a noisy environment are reduced.

One or both input channels can be used. If both input channels are applied, they must be 90 degrees out of phase. So incremental encoders can be connected to the two input channels.

One output channel is provided. The output channel has an open collector configuration.

### Isolated Digital Inputs

Configuration of the input channels:

- Input voltage: 5V, 12V, 24V and (optional) 48V (adjustable)
- Tolerance: a logical "0" will be recognized up to 20 % max. of the nominal input level. (e.g. up to 4,8V at an input level of 24V )  
A logical "1" will be recognized at +/- 20% of the nominal input level. (e.g. from 19,2V min. to 28,8V max. at an input level of 24V )
- Input current: 5 mA
- Input frequency: max.25 kHz respectively 50 kHz (other frequencies on request)

### Isolated Output

As output channel there is a collector-emitter path of an opto-coupler provided. The transistor can switch up to 30 V and 25 mA. The output channel is protected against overvoltage and spikes.

### Construction

The unit **FT 9002** is provided for DIN-rail mounting according to EN 50022.

### Power Supply

The unit is designed for power supply voltages of 5, 12 or 24V DC. The power supply input is isolated from all input and output channels. For details see ordering information.

### Specifications

<b>Input channels</b>	
Input voltage level	: 5V, 12V, 24V selectable : optional 48V
Input current per channel	: 5 mA source current
Input Frequency	: max. 50 kHz, one input : max. 25 kHz, both inputs
Tolerances of input level	: +/-20% of the nominal input
<b>Divider</b>	: 8-pole DIP, dividing by 1...255 : 5 Jumper, dividing by 1/2/4/8/16
<b>Output channel</b>	: isolated
Voltage	: max. 30 V
Current	: max. 25 mA
Frequency	: max. 25 kHz
<b>Power supply</b>	: see ordering information
Current	: max. 25 mA (24 VDC)
<b>Construction</b>	
CE	: 2014/30/EU, 2014/35/EU, 2011/65/EU+2015/863
Protection	: IP40
Mounting	: EN 50022
Operating temperature	: -5 to +55 °C
<b>Dimensions</b>	: 99 x 114,5 x 17,5

### Ordering Information

<b>FT 9002-</b>		
		<b>Special model</b>
	<b>0</b>	standard
	<b>1</b>	reserved
		<b>Input voltage</b>
	<b>0</b>	standard
	<b>1</b>	48 V
		<b>Power supply</b>
	<b>0</b>	18 ... 36 V DC, (standard)
	<b>1</b>	4,5 ... 9 V DC, (option)
	<b>2</b>	9V ... 18 V DC, (option)
	<b>3</b>	36 ... 48 V DC, (option)

