

Converter SSI 9001/SSI 9002 for Encoders with SSI-Interface**Characteristics**

- Input Synchron Serial Interface SSI
- Master/Slave-Mode
- Free Scaling and zero definition
- SSI 9001, 2 alarm relays and analog output 0(2) - 10 V or 0(4) - 20 mA
- SSI 9001, 4 alarm relays
- Housing for DIN rail mounting EN 50 022
- Plug-In screw terminals
- Option: RS 485 interface

**Parameters of encoder**

- Binary or gray code
 - Singelturm/Multiturn
 - Direction of rotation
 - Master/Slave-Mode
- Master: clock for reading data of encoder is generated internal by the SSI 9001
- Slave: clock for reading data of encoder is generated by an external instrument

SSI signal inputs

- Data input, receiver RS 422/485
- Clock output, driver RS 422/485
- Clock input, receiver RS 422/485

Analog output (SSI 9001)

The analog output is provided with a current output and a voltage output. Both outputs are isolated from the further electronic.

- Scaleable (zero/offset and final value)
- Output 0(2) - 10 V or 0(4) - 20 mA
- Data source: direct encoder, MIN or MAX value

Software functions

- Programming of encoder datas
- Scalingfactor
- Zero point adjustment
- Direction of rotation
- Offset value
- Incremental measurement
- Display test and display hold (Latch)
- MIN/MAX value detection
- Auto-Reset for MIN/MAX value
- Setting of alarm points during measurement

Push button functions

The three push buttons at the front could be programmed for performing the following functions:

- No function
- Displaying encoder data, MIN or MAX value
- Resetting the MIN/MAX value
- Zero adjustment
- Reset zero adjustment
- Manual alarm reset
- Display test and display hold

Digital input channels

The both digital input channels are low activ and can be programmed to following functions::

- No function
- Displaying encoder data, MIN or MAX value
- Zero adjustment
- Reset zero adjustment
- Manual alarm reset
- Display test and display hold

Alarm outputs

Two alarm outputs (SSI 9001) or four alarm outputs (SSI 9002) with free allocation allows the monitoring of production operation.

Programmable parameters:

- Alarm point and hysteresis
- Relay function (high or low alarm)
- Alarm response time (fall off and put on time)
- Data source: direct encoder, MIN or MAX value

Option Serial Interface

The unit can be provided with an serial interface RS 485 for data communication.

Electrical Data

SSI signal input	singleturn or multiturn
Resolution	10 .. 25 bit
Code	binary or gray
Data input	receiver RS 422/485
Clock input	receiver RS 422/485
Clock output	driver RS 422/485
Master mode	
Clock frequency	internal 100 kHz or 200 kHz
Conversion rate	approx. 28 values per sec
Slave mode	
Clock frequency	extern, max. 125 kHz
Conversion rate	approx. 28 values per sec
Digital inputs	2, programmable function
Logic	NPN, max. 30 V
Alarm outputs	2 (4) Relays (programmable as opened contacte or closed contact)
Signaling	2 LEDs at the front
Switch voltage	250 V AC / 250 V DC
Switch current	5 A AC / 5 A DC
Switch power	750 VA / 100 W
Analog output	resolution 16 bit
Accuracy	± 0,2% of final valuet
Voltage	0(2) - 10 V, max. 10 mA
Current	0(4) - 20 mA; max. 500 Ω
Isolation voltage	3 kV / 1 min
Power supply voltage DC	18 .. 36 V DC
Isolation voltage	500 V / 1 min
Power consumption	DC 200 mA

Mechanical Datas

Display	6 decades, 8 mm, red Decimal point programmable preliminary zero suppression - sign at negative values
Operation, keyboard design	front membrane with push buttons
Case	Rail mounting EN 50 022
Dimensions (B x H x T)	67,5 x 75 x 105 mm
Weight	ca. 300 g
Connection	Plug-In screw terminal

Environmental conditions

Operating temperature	0 .. 50 °C
Storage temperature	-20 .. 70 °C
Humidity	< 80 %, not-condensing
Protection	protective class II
Field of application	class 2, overvoltage protection II
CE	in conform with 89/336/EWG NSR 73/23/EWG

Ordering Information SSI 9001

SSI 9001 -	0	0
		Reserve
		Front design
	0	No logo
		Power supply
	0	5 V DC, ±10%, isolated
	1	12 V DC, ±10, isolated
	2	18.. 36 V DC, isolated
		Option RS 485 Interface
	0	Without Serial Interface RS 485
	1	With Serial Interface RS 485

Ordering Information SSI 9002

SSI 9002 -	0	0
		Reserve
		Front design
	0	No logo
		Power supply
	0	5 V DC, ±10%, isolated
	1	12 V DC, ±10, isolated
	2	18.. 36 V DC, isolated
		Option RS 485 Interface
	0	Without Serial Interface RS 485
	1	With Serial Interface RS 485

Dimensions and Mounting

