

■ SSI 3005 Display for encoders with SSI interface



Characteristics

- Input Synchron Serial Interface SSI
- Master/Slave-Mode
- Up to 1 MHz clock frequency
- LED-Display, red, 6 decades, 14 mm
- Display range -99999 .. 999999
- DIN Standard Case 96 x 48 mm
- Free scaling and zero definition
- Sensor supply
- 2 Alarm relays
- Plug-In screw Terminals

Encoder control

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

SSI signal inputs

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

Software functions

- Encoder adjustments
- Adjustable for encoder with 9-32 bits
- Bit programming for fir-tree data format
- Scaling factor
- 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
- Set point editing during normal measurement

Push button at the front

The three push buttons could be programmed to 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

These both input are low active and could be programmed to following functions:

- No function
- Displaying Encoder data, MIN or MAX value
- Resetting the MIN/MAX value
- Zero adjustment
- Reset zero adjustment
- Manual alarm reset
- Change of the displayed value: encoder value -> Max. value -> Min. value
- Display test and display hold

Accessory power supply (only at AC version)

Builtin power supply for encoders, 24 V DC/125 mA, isolated from the device electronic.

Alarm outputs

Two (Four as option *) free programmable relay alarm outputs. 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 analog output

The option analog output provides a current and a voltage output. Both outputs are isolated from the device electronic.

- scalable (offset and final value)
- Outputs 0(2) - 10 V or 0(4) - 20 mA
- Programmable to different data sources: encoder value, MIN value or MAX value

Option serial interface

For data communication or printing.

- RS 485
- RS 232 *
- Current-Loop, TTY *

* with RS232, Current-Loop resp. TTY and four alarm outputs the analogue output option is not possible.

Electrical Data

SSI signal input	singleturn or multiturn
Resolution	9 .. 31 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 1 MHz, 500 kHz, 200 kHz or 100 kHz
Conversion rate	approx. 28 values per sec
Slave mode	
Clock frequency	extern, max. 500 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 normally opened or normally closed)
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 value
Voltage	0(2) - 10 V, max. 10 mA
Current	0(4) - 20 mA; max. 500 Ω
Isolation voltage	3 kV / 1 min
Interfaces	RS 485, RS 232, TTY
Protocol	DIN 66 019 / ISO 1745
Isolation voltage	1,6 kV / 1 min
Power supply voltage AC	95 V to 250 V/AC
Isolation voltage	2,5 kV / 1 min
Power supply voltage DC	18 .. 36 V DC
Isolation voltage	500 V / 1 min
Power consumption	AC 9 VA, DC 70 mA
Accessory power supply (AC)	24 V DC / 125 mA (only at AC)
Isolation voltage	500 V / 1 min
Mechanical Datas	
Display	6 decades, 14 mm, red Decimal point programmable preliminary zero suppression - sign at negative values front membrane with push
Operation, keyboard design buttons	
Case	switch board mounting DIN
43700	
Dimensions (B x H x T)	96 x 48 x 141 mm
Depth	148 mm incl. screw terminal
Mounting	switch board mounting or mosaic-systems
Weight	ca. 400 g
Connection	Plug-In screw terminal

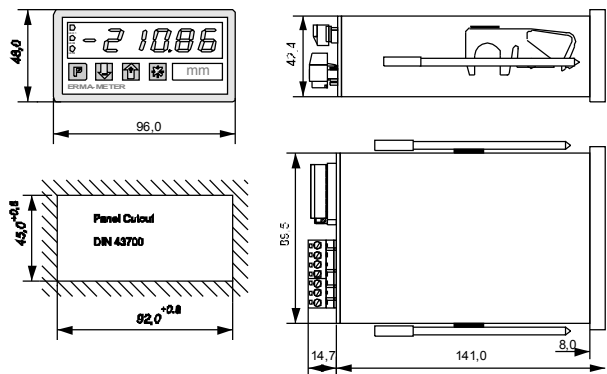
Environmental conditions

Operating temperature	0 .. 50 °C
Storage temperature	-20 .. 70 °C
Humidity	< 80 %, not-condensing
Protection	protective class II
Front protection	IP 54
Field of application	class 2, overvoltage protection II
CE in conform with 89/336/EWG	NSR 73/23/EWG

Ordering information

SSI 3005 -	
	Housing
0	Switch board
1	Panel clip
Front frame color	
0	Black
Front design	
0	ERMA-Meter logo
1	No logo
2	Customer defined logo
Power supply	
0	95 .. 250 V/AC
1	18 .. 36 V/DC, isolated
Option interface	
0	No interface
1	Interface RS 485
0 2	Interface RS 232
0 3	Interface TTY (Current-Loop)
Options	
0	No option
1	With analog output
4	Additional 2 alarm outputs

Switchboard Mounting



Panel Clip

