

Position displays

SSI display with SSI interface for absolute encoders

Display LCD, 8-digits, scalable

NA214



NA214 - SSI display

Technical data - electrical ratings

Voltage supply	85...265 VAC (50/60 Hz) 24 VDC \pm 10 %
Power consumption	7 VA, 5 W
Sensor supply	24 VDC \pm 10 % / 150 mA
Display	LCD-TFT, 2-lines, backlit, alphanumeric
Number of digits	8-digits
Digit height	10 mm (position value) 5 mm (operator guidance)
Function	Position display with relay outputs for an absolute measurand
Code	Gray or binary
Measuring principle	SSI format 1...31 bits
Input logic	NPN / PNP
Control inputs	3 inputs (Start, Stop, Reset)
Scaling factor	0.0000001...9.9999999
Data memory	>10 years in EEPROM
Outputs relay	Change-over contact, floating
Interface	RS485
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-3
Interference immunity	DIN EN 61000-6-2

Features

- Display LCD-TFT, 8 digits, with backlighting
- SSI format 1...31 bit, Gray or Binary code
- Master/Slave operation with max. clock frequency
1 MHz
- Free scaling and zero point definition
- 3 relay outputs
- Interface RS485

Description

NA214 SSI displays are recommended in conjunction with absolute encoders as well as measuring systems which provide SSI interface. The display readout can be adapted to the required measuring unit such as mm, inches, degrees, etc. Free parameterization of decimal points and zero point. Configurations with three relay outputs are available to master positioning tasks. Communication with master systems is via RS485 interface.

Technical data - mechanical design

Ambient temperature	0...+50 °C
Storage temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Connection	Plug-in screw terminal connector
Core cross-section	1.5 mm ²
Protection DIN EN 60529	IP 65 (face with seal)
Operation / keypad	Membrane with softkeys
Housing type	Built-in housing
Dimensions W x H x L	96 x 48 x 124 mm
Cutout dimensions	92 x 44 mm (-0.6)
Mounting depth	124 mm
Mounting	Clip frame for built-in housing
Weight approx.	350 g (AC), 250 g (DC)
Material	Housing: Makrolon 6485 (PC)

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Part number

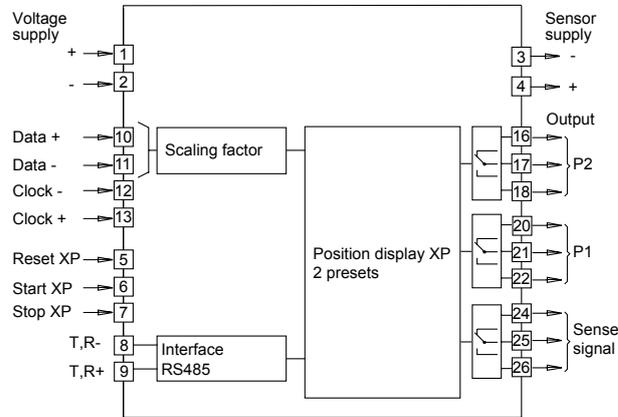
NA214. 1 AX01

Voltage supply
 2 85...265 VAC
 3 24 VDC

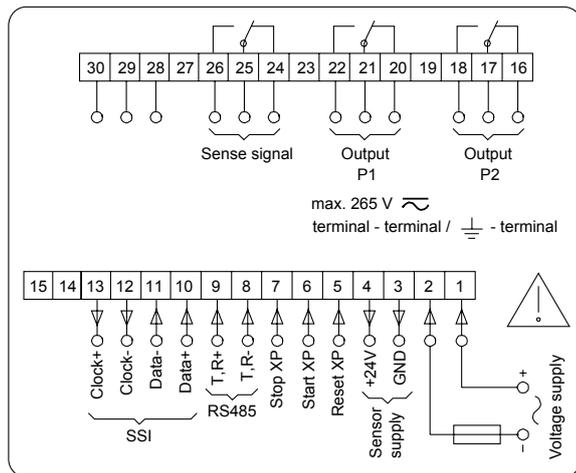
Outputs
 0 Without relay / without control input
 1 Three relay outputs

Interface
 1 RS485

Block circuit diagram



Connection diagram



Trigger level

SSI	Circuit
SSI-Clock	Optocoupler
SSI-Data	Linedriver RS485
Comparator inputs	Input circuit
Control inputs	NPN- / PNP-logic
Input level	Programmable
Input level Low	0...2 VDC
Input level High	3...40 VDC
Input resistance	3 kΩ
Relay outputs	Output circuit
Switching voltage max.	250 VAC / 110 VDC
Switching current max.	1 A
Switching capacity max.	150 VA / 30 W
Relay responding time	5 ms

Dimensions

