Absolute Code Counter
OC7171A-ABS

✓ Gray, Binary, EnDat, SSI
✓ Serial Data Inputs up to 64 Bits
✓ 4 Set Point Relay
✓ 6 Digit Display with Floating Point
✓ Two Analog Outputs
✓ Two Serial Output Ports
✓ Excitation for Sensors

OC7171A-ABS is a six digit counter for connection to absolute coded signals from resolvers or linear displaycement lineals with Gray or binary coding. The instrument is designed for precision positioning or angular measurements. Single Turn or Multi Turn sensors with up to 64 serial Bits RS485, SSI or EnDat coding can be connected.

The instrument features a correction signal generated from the keyboard which corrects errors due to possible mechanical position lost.

The Menu contains the selection of the Scaling constant, Preset, Set Point relays, two Analogue Outputs and two Serial Data Ports. Also the function as a position counter or angular counter can be set from the menu. The floating arithmetics permit nearly unlimited display readings. The programmed decimal point is automatically positioned as soon as the display arrives at full

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capacity. The display switches into exponential mode, e.g 1052E6 when the reading exceeds 999999 with decimal point after the last digit. .

POSITIONNING COUNTER

The counter function can be selected for Sigle Turn or Multi Turn Mode of resolvers or optical lineals for linear displacement measurements.

Single Turn Mode will be used for reading of the absolute coding within one revolution of the Single Turn Resolver. The display will increment between zero and the maximum value defined by the number of bits e.g. 4096 (12 bit).
Multi Turn Mode will be used for positionning applications with single turn resolver within more revolutions. The display position remains memorized then the power is switched-off.

Multi Turn Resolver with up to 32 Bits (16 Bit increments plus 16 Bit revolutions) can be connected. The mechanical position at the display remains memorized when the power is switched-off. When the power is switched-on again, the display reads the value defined by the coding from the resolver.

Optical lineals with SSI or EnDat with up to 64 Bits of coding can be connected to OC7171A-ABS. The data are asynchon read and the instrument automatically optimised for the resolver's system.

ANGULAR COUNTER

The absolute coded information from the single turn resolver can be evaluated between as angle 0 to 360°. The angular resolution is determined by the number of pulses from the resolver.

SPECIFICATIONS OC7171A-ABS

DISPLAY
0....±999999, 7 Segments red LED, 14.7 mm, with decimal point and sign.

INPUTS
TTL positive logik 5V C-MOS, protected to 28V.
Line Driver Eingang for serial dates.

PRESET
Additive display offset selectable from 0 to ±999999 with decimal point and sign. The Preset can be entered into the display with the front keys.

RESET
Reset of the display to zero with the front keys or external control signal 5 ... 24V

ANALOG OUTPUT (Option)
Voltage Output: ± 10V
Current Output: 0/4-20mA.
Resolution: 12 Bit.
Isolation: 250V RMS.

DATA PORTS (Option)
RS232 and RS485 (4 wire), 8 Bit, No Parity, 1 Start, 1 Stop, 600-19200bd,
Address 00-31 programmable.
Isolation 250V RMS.

EXCITATION
Instruments with AC Supply:
5-24V/40mA adjustable.
Option: 5VDC-600mA for Resolvers

SUPPLY
115/230V ±10%, 50-60Hz, 6VA.
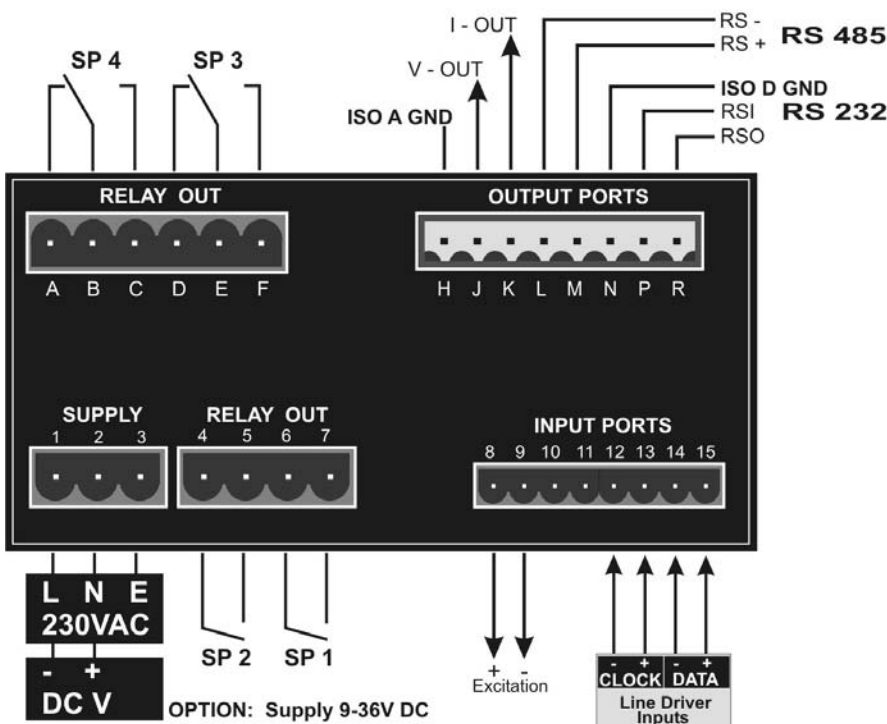Option: 18 - 36 V DC, 6 W.

CABINET
DIN 48x96mm, depth 100mm.
Panel cut-out 45x90 mm.
IP65 protection from the front.

TERMINALS
Plugable screw terminals.

TERMINALS