

- ✓ 5 Digit Display
- ✓ 16 Bit ADC
- ✓ 105 Linearizing Points
- ✓ Free scalable Display
- ✓ 0/4-20mA, 60mV to 300V
- ✓ DC Process Signals
- ✓ AC true RMS Measurements
- ✓ Potentiometer Input
- ✓ Ohm Measurements
- ✓ Pt-100, Thermistors
- ✓ Thermocouples J, K, E, S, B, T, R, N
- ✓ Two Output Relays



Model OC351-LIN is a 5 digit programmable controller with 16 Bit resolution. It is mainly designed for connection to process signals such as 0/4-20mA, 60mV to 300VDC or true RMS, RTD Sensors, Thermistors, Resistors, Thermocouples and other industrial signal sources.

By using the keyboard, the input signal can be assigned to any two desired display values, such as 4-20mA = 0-18500.

The menu contains two Set Points, setting of Filter, Tara, Sampling Rate, Display Resolution, Display Counting, and Password.

Linear signals can be calibrated and assigned to required display reading in two points by using the keypad.

Non linear signals can be linearized by using the front keypad in up to 105 points.

Two Set Points can be set within the entire display range. They activate two open collector transistors or two mechanical relays. Each set point has a programmable hysteresis and a selection of the relay status in alarm conditions.

Digital Filter can be used in noisy environments or for unstable signals and calculates the average value of the preselected number of measurements prior they arrive at the display. The filter constant can be set from OFF to 99.

Tara can be activated with the keyboard and force the display to zero. The Tara remains memorized also when the instrument is switched-off from the supply. The Tara can be canceled at any time and the display returns to follow the original input signal.

Pak and Hold memory measures and stores the maximum value the display achieves during the desired measuring period. By using the keyboard, the stored value can be recalled at the display.

Password can be used to protect the instrument from unauthorized operation.

Excitation for external sensors is isolated and selectable for 10V, 12V or 24V-40mA. Optional 1mA constant current output is available for special applications.

The instrument is enclosed in a 48x96mm DIN cabinet and powered from the mains or DC supply. The front is IP65.

SPECIFICATIONS OC351-LIN

INPUTS and RANGES

Voltage

± 60mV to 300V DC or true RMS

Current

0/4-20mA to 5A DC

or true RMS

Pt-100, 2, 3 or 4 terminals

Thermistors 2kΩ and 96kΩ

DIN Thermocouples

J, K, R, S, B, N, T, E.

Cold Junction

Compensation 0 - 99 °C.

Resistors

0-1 Ω to 0-100 kΩ.

2 or 4 terminals

Potentiometer

Excitation 1.25V

ACCURACY

DC Ranges

± (0.01% from value +1Digit)

True RMS

50Hz - 5 kHz: ± (0.1% from value + 2 Digits).

Temperature

* Pt-100/200: ± (1°C +1 Digit)

* T/C, Thermis: ± (2°C +1 Digit)

ADC

Resolution

16 Bit.

Sampling Rate

1-10 Measurements/sec.

selectable

Linearity

± (1 LSB + 1 Digit).

Temp. Coefficient

10 ppm/°C

TARA

The Tara sets the display to zero. The Tara remains memorized also when the supply is switched-off. The Tara can be cancelled and the display returns to the original value.

FILTER

Filter constants 0, 1 to 99 selectable with the keyboard.

SET POINT OUTPUTS

SP1, SP2 WITH Open Collector 60V-100mA or with two Relays 5A-230VAC.

DISPLAY

0 ... ± 99999, 7 Segments, red 14.7 mm with decimal points.

SUPPLY

Mains Supply:

115V/230V ± 10%, 48 - 60 Hz.

DC Supply 24V (Option)

CABINET

DIN 48x96x100 mm (HxWxD).

Panel cut-out 45 x 90.5 mm.

Pluggable screw terminals.

IP65 from the front.

EXCITATION

Supply fro external sensors:

10V, 12V, 24V / 40mA.

TEMPERATURE

Working: 0 ... 60 °C.

Storing: -10 ... 85 °C.

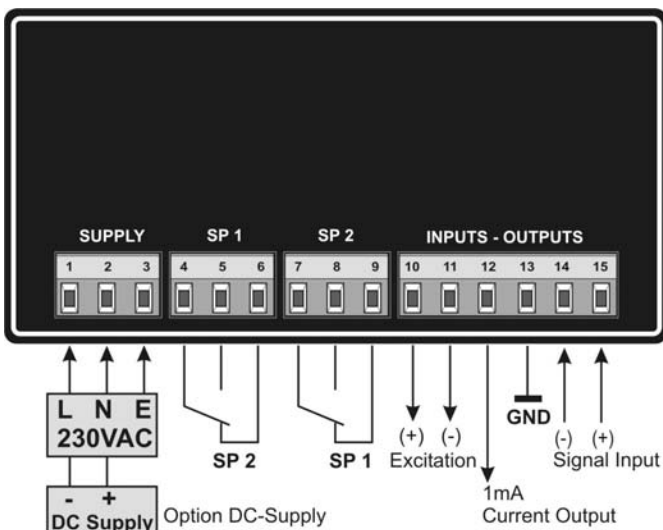
EMC

EN 61000-3-2+A12

EN 61000-4-2, 3, 4, 5, 8, 11

EN 550222, A1, A2

TERMINALS



TO ORDER

| OC351-LIN - X - X - X | | |
|----------------------------|---|----------------------------|
| | X | X |
| Supply 115VAC ----- | 1 | 1 --- Input DC-V |
| 230VAC ----- | 2 | 2 --- Input DC-I |
| 24VDC isolated ----- | 3 | 3 --- Input AC-V |
| 9-36VDC isolated ----- | 4 | 4 --- Input AC-I |
| | | 5 --- RTD-Thermometer |
| No Set Point Outputs ----- | 0 | 6 --- Thermocouples |
| Transistor Outputs ----- | 1 | 7 --- Resistor Measurement |
| Two Relays ----- | 2 | 8 --- Input Potentiometer |

LINEARIZING

Non linear signals can be linearized in up to 105 points with the keypad at the instruments front. Two consecutive linearizing points are automatically linear interpolated. The display values of the measured input signal can also be overwritten directly from the keypad. Linear signals can be displayed as non linear readings, non linear signals as linear readings or non linear signals as non linear readings.