DP-101S APPLICATION SPESIFIC DIGITAL METER

*** Input alternatives to suit the application**
*** Clear easy to read 4 digit LED display**
*** Additional optional functions if required**
*** Waterproof (IP 65) plastic enclosure**
*** Alternative DC supply voltage**
*** Practical, reliable, high quality design**

MEASUREMENT OPERATION FITTED TO THE NEED

The DP-101S forms a range of digital meters available in a number of models wit fixed inputs. They can be used for measurements of temperature, pressure, humidity, airflow, liqquid level etc. according to the sensor used, as well as voltage, current and resistance. Each meter is delivered with the type of input and display range pre-programmed according to customer order requirements. If it should become necessary , the meter may be reconfigured for a different type of measurement on site. In most cases the measuring sensor may also be situated in the same enclosure instead of having cable contact between the meter and the sensor

FULLY ADJUSTABLE ALARM OPERATION

As an option each meter may be ordered with two adjustable alarm limits. On meters with the alarm option, the front panel has numbered alarm setting push buttons.
The numerical values of both limits as well as direction of operation (uppr/lower limits), hysteresis values and alarm delays may be changed on site. The alarm operation may be obtained as either closing or opening relay contacts, which can be used for control operation or alarm transmission.. There are two alarm indicator lights on the front panel of the meter which show when the alarm condition is present.

ACTIVE CURRENT LOOP OUTPUT

The DP-101S meter may also be obtained with an optional 4 to 20 mA current output. This output may be programmed (scaled) to cover whole or part of the measurement range. With an active output, the meters own power supply provides the current loop with power.

PRACTICAL ´USE ANYWHERE´ METER

The DP-101S is constructed using a small and waterproof case. Thanks to its compact size and practical construction it is quick and easy to install where needed.
Input and output connections are made using screw connectors inside the meter. The normal power supply for the meter is 230V 50Hz mains voltage. But to make it usable in places where there is no mains supply (rtemote locations, trucks, boats) or when a battery back-up is required, an option is available to allow a 24 VDC power supply to be used.

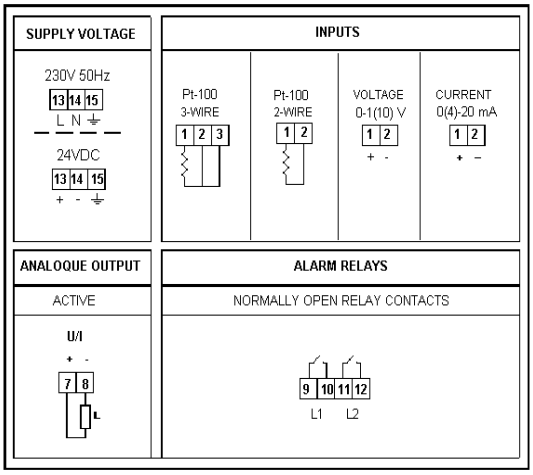
DISPLAY FILTERING, SELF CALIBRATION

The display follows changes in the measured value according to the precision required by display scaling and results are shown at maximum resolution. Sometimes sensitivity in relation to the measurement is too great (the last figure in the display may start oscillating), to prevent this the display may be programmed to show a filtered value (mean value of programmed number of successive samples). In order to maintain precision the meter has a continious self-calibrating system.

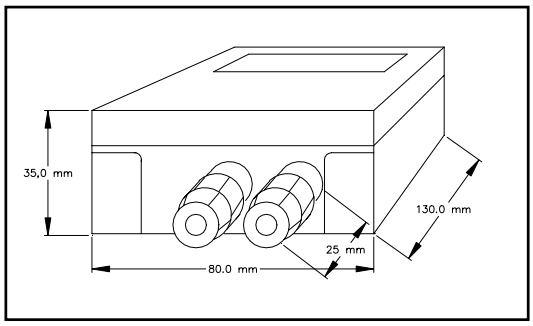
TECHNICAL INFORMATION

Display:	4 digit, 7-segment LED display character height 14 mm
Inputs:	Temperature → Pt-100 ohm RTD (2 or 3 wire) Other inputs → Voltage 0 - 0.1/1/10V Current 0/4 – 20 mA
Meas. speed:	> 5 measurements /second
Alarm limits: (option)	Two adjustable low-high limits, Relay outputs open/close contacts (230V 2A), Adjustable hysteresis values and alarm specific delays Front panel indication lights
Analogue output (option)	1) 4-20 mA current output, max. load 1 kohm / 48 V 2) 0-10 V voltage output
Filtering	- user programmable meanvalue filtering
Precision	0,1% of range ±1 number
Self calibration	Continuous
Operating temp.	0...+60 °C, dependence < 50 ppm/°C
Power supply:	230 V 50 Hz, ±10% or 24 VDC (option)

CONNECTIONS



CONSTRUCTION



ORDER INFORMATION

DP-101S - YY - L2 - X - P

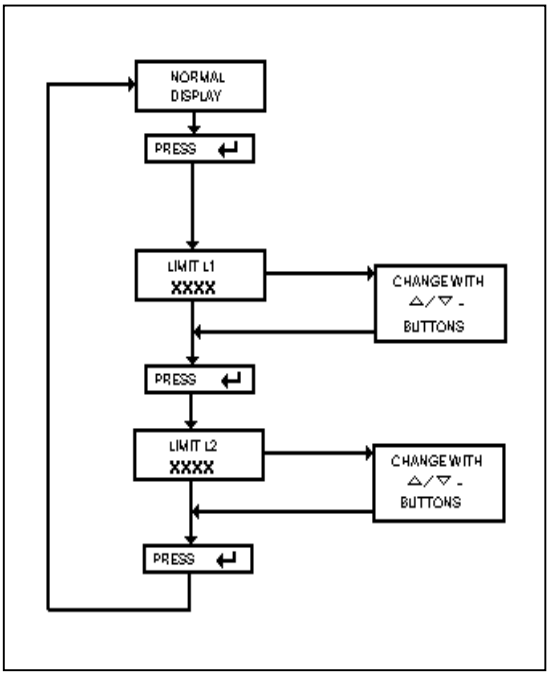
Power supply:
P230 = 230V 50Hz
P24AC = 24 VAC
P24DC = 24 VDC
P24IDC = 24 VDC (Isolated)

Analogue out:
V = Voltage 0-10 V
C = Current 4-20 mA

Alarm limits
2 relay outputs

Input
R = Pt-100 temp.
V01 = Voltage 0-1V
V10 = Voltage 0-10V
C420 = Current 4-20 mA
C020= Current 0-20 mA

ALARM LEVEL PROGRAMMING



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