



SERIES: DB18

- 4-DIGIT, 14 mm HIGH LED DISPLAY
- 50-DOT BARGRAPH, 5 mm WIDTH
- mA OR VOLTAGE OUTPUT (OPTION)
- 2 ON/OFF RELAY OUTPUTS (OPTION)
- 2 OPEN COLLECTOR OUTPUTS (OPTION)
- RS232 OR RS485 INTERFACE (OPTION)
- TIMER COUNTING THE TIME FROM LAST RESET (96 DAYS & 0.1 S ACC.)



INTRODUCTION

Indumart *DB18 Series* Bargraph Indicators accept standard current, voltage, RTD or thermocouple signals and display the value of the input in engineering units on its 50-dot bargraph and its 4-digital LED indicators. They may be used to control the process via their two relays (electro-mechanical or Solid State) or two open collector NPN transistors. They may convert the input signal into mA or voltage output (retransmission), and also have optional RS232 or RS485 digital interface. They are intended for both simple and industrial applications and for applications destined to work in computer systems.

The device software allows programming of the display range, alarm value and type, and various nonlinear input-to-display transformations. The measurement unit on the front panel display may be specified from the available parameters by the user.

In addition to applications in various processes, it can serve as limit comparator, two- or three-state ON/OFF controller, or motorized valve ON/OFF duplex controller. The DB18 Series is widely applicable in power plants.

Input Type	Range	Unit
Linear Voltage	0...10 V	°C, %, kPa, MPa, Bar, mbar
Linear Current	0...20 mA	kg/cm ² , mmHg, m, cm, mm
Linear Current	4...20 mA	kg, kg/s, t, m ³ , m ³ /h, t/h, l, l/s, pH, V, mV, mA, Ω, ms, μs and other on request
Pt-100	-200...800	°C
Thermocouple "J"	-100...900°C	°C
Thermocouple "K"	0...1200°C	°C
Thermocouple "S"	0...1600°C	°C
Other on Request †	as requested	°C

† Other inputs such as linear voltage up to 40 VDC, linear current up to 40 mA, Pt-10, Pt50, Pt500, Pt1000, Cu50, Cu100, and thermocouples not mentioned in the above table may also be ordered.

SPECIFICATIONS

Input	See the Input tables
Accuracy	0.4% of the span
Bargraph Display	240° arc
Bargraph Segments	50 LED segments
Bargraph Range	0...100%, Programmable
Digital Display	4-digit LED; 14 mm high
Digital Indication Range	-1999...+9999, up to 3 decimal
Digital Display Range	Programmable
Decimal Point Position	Programmable
Nonlinear Transformation	Up to 6 conversion modules
Analogue Output	Input retransmission;
Current	0/4...20 mA
Voltage	0...2 V, 0...5 V, 0...10 V
Analogue Output Range	Programmable
Relay Outputs	5 A / 250 V; NO/NC contact
Relay Signal Display	2 LEDs signaling of alarm
Solid State Relay (SSR)	1A / 250 VAC
Open Collector Outputs	NPN, 40 mA / 40 V
Output for Ext. SSR	12(24) V / 50 mA
Supply Voltage	110 VAC, 230 VAC, 24 VDC/AC 90...250 VAC or VDC
Power Consumption	< 6 VA
Digital Interface	RS232 or RS485
Output Function	Network, operator station
Temperature Drift	0.005% FS / 1°C
Cold Junction Comp.	Automatic, ±1°C
Ambient Condition	-10...+65°C; < 85% RH
Front Panel Seal	IP54
Case Material	Hard plastics
Mounting	Panel mount
Dimensions	96 x 96 x 120 mm (H x W x D)
Weight	< 0.65 kg

ORDER CODES

Model **DB18-** -

INPUT

4...20 mA
0...20 mA
0...2 V
0...5 V
0...10 V
Pt100
T/C "J"
T/C "K"
T/C "S"
Other (please specify)

1
2
3
4
5
6
7
8
9
Z

POWER SUPPLY

110 VAC
230 VAC
24 VDC/AC
90...250 VAC/DC

1
2
3
4

RELAY OUTPUT

None
Relay NO/NC
SSR
Open Collector NPN
External SSR

0
1
2
3
4

RETRANSMISSION OUTPUT

Without Analogue Output
4...20 mA
0...20 mA
0...2 V
0...5 V
0...10 V
Other on Request (please specify)

0
1
2
3
4
5
Z

DIGITAL INTERFACE

None
RS232
RS485

0
1
2

NONLINEAR TRANSFORMATION

None
Horizontal Cylinder
Lying Cylinder Tank
Standing Cylinder Tank
Standing Conical Tank
Spherical Tank
Square Root
Other on Request (please specify)

0
1
2
3
4
5
6
Z



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