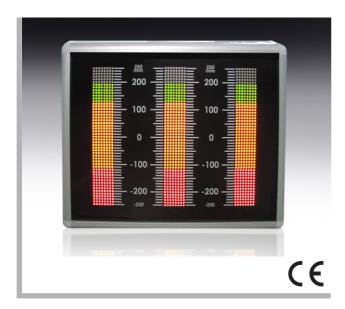


MEASURING PANELS WITH MULTICOLOUR **BARGRAPHS DB2 SERIES**



APPLICATION

Measuring panels with multicolour bargraphs have inputs destined to measure temperature and standard signal: d.c. voltage and d.c. current. The input can be also an RS-485 digital signal to connect transducers of physical quantities.

These panels can find application in various industrial fields, e.g. food industry, environmental engineering, weather stations.

They are destined to visualise measured quantities and evaluate change trends of supervised technological processes.

They can find application in automation systems where programmed controllers are installed.

Situated in a visible place, information helps in the efficient work of technological, logistic, sales and quality inspection teams.

These panels are offered with bargraphs where the read-out field can assume following colours: red, green and yellow. The colour change is defined in 5 thresholds.

DB2 measuring panels with multicolour bargraphs can co-operate with external measuring devices equipped with RS-485 interface with MODBUS protocol. It is possible to visualise technological processes, transmit messages from devices about the link state or the programmed quantity exceeding. The basic panel version includes two, three or four multicolour bargraphs. Inputs are the combination of 4 kinds of inputs: digital, Pt100, 4...20 mA and 0...10 V. After agreeing with the manufacturer it is possible to realise individual, custom-made projects.

SPECIFICATIONS

Power consumption:

- DB2-01 ≤ 60 VA - DB2-02 ≤ 70 VA - DB2-03 ≤ 110 VA

Read-out field:

- DB2-01 2 bargraphs, 51 three-coloured points - DB2-02 3 bargraphs, 51 three-coloured points - DB2-03 4 bargraphs, 51 three-coloured points

Communication:

- serial interface (DB2→PC) RS-485 or RS232

- serial interface

(DB2→ measuring device)

digital input RS-485 - protocol transmission MODBUS RTU

Reaction to decay and supply return presevation of

configuration data

Protection degree ensured

by the housing

depending on execution Dimensions

(acc. to table 1)

Environmental and rated operating conditions:

- working temperature 0... 23... 55°C - storage temperature -20... 75°C - humidity 25... 95%

- supply 100...230... 240 V a.c. - frequency 45...<u>50</u>...60 Hz - external magnetic field 0...40...400 A/m - working position dowolna

Standards fulfilled by the panels:

Electromagnetic compatibility:

EN 61000-6-2 - immunity - emission EN 61000-6-4 - resistance against supply decay EN 61000-6-2

Safety requirements:

acc. to EN 61010-1 standard

· insulation ensured by the housing basic insulation between circuits basic insulation category Ш pollution degree

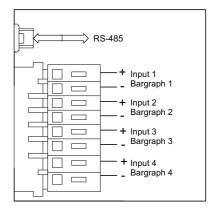
maximal phase-to-earth voltage 300 V for supply

50 V for interface circuit

ELECTRICAL CONNECTION

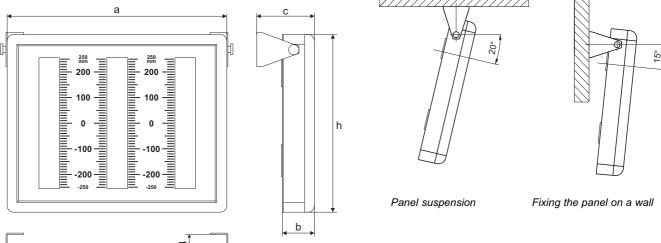
Two connection boxes are situated on the rear side of the panel. The upper box serves to connect the mains to the panel.

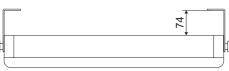
The lower box is destined to connect control signals and the PC computer in order to configure and monitor the panel.





EXTERNAL DIMENSIONS





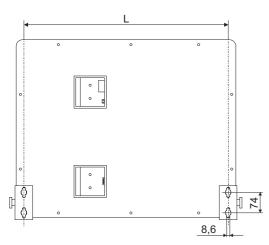


Table 1 Spacing of fixing Read-out Panel overal dimensions Panel type holes [mm] field $(\mathbf{a} \times \mathbf{b} \times \mathbf{c} \times \mathbf{h})$ [mm] (L) 01 2 bargraphs $449\times94,5\times168,5\times552$ 399 02 $649 \times 94,5 \times 168,5 \times 552$ 599 3 bargraphs 03 4 bargraphs $849 \times 94,5 \times 168,5 \times 552$ 799

Panel dimensions and arrangement of holes and fixing holders

ORDER EXAMPLES

The code: DB2 01 2 1 0 0 00 (Pt100, from 10 to 60oC) means:

DB2 - a measuring panel with multicolour bargraphs

01 - with 2 bargraphs

- 2 0...20 mA (0...100% range) input for the bargraph 1
- 1 Pt100 signal (10...60oC range)input for the bargraph 2
- without the channel 3
- 0 without the channel 4
- 00 standard execution

The given range is also the bargraph graduation.

Note: There is the possibility to order a measuring panel with an embedded light sensor. DB2 communication Interface —> PC RS-485, there is also the possibility to execute with the RS232 interface.

QUALITY PROCEDURES:

According to ISO 9001 and ISO 14001 international requirements. For more detailed information please write to or phone our Export Department

EXECUTION AND ORDER CODES

Measuring panel with multicolour bargraphs DB2	xx	х	х	х	x	×
Panel type:						
with 2 bargraphs	01					
with 3 bargraphs	02					
with 4 bargraphs						
on order	XX	J				
Bargraph 1 - Input type:						
Digital		. 0				
Pt100 *		1				
420 mA (range 0100%)						
010 V (range 0100%)		3				
Bargraph 2 - Input type:			_			
Digital			٥			
Pt100*						
420 mA (range 0100%)						
010 V (range 0100%)						
Bargraph 3 - Input type:				J		
Digital**				0		
Pt100*						
420 mA (range 0100%)						
010 V (range 0100%)						
					J	
Bargraph 4 - Input type:					•	
Digital**						
Pt100*						
420 mA (range 0100%)						
420 mA (range 0100%)					3	
420 mA (range 0100%) 010 V (range 0100%)					3	J

- * Define the measuring range in the order
- ** For the DB2-01 type, accept 0 for channels 3 and 4 for the DB-02,type, accept 0 for the channel 4