

Bargraph indicator

BA 4824, BA 7224, BA 9624

Voltage - current - resistance (potentiometer)

Features

- Input 0/4...20mA, 0/2...10V and potentiometer
- LED red or green (other colours on request)
- 13, 23 or 33 LED segments
- Vertical or horizontal format available
- Overflow indicator (positive and negative)
- Range adjustable from 50 ... 200%
- Supply voltage 24V AC/DC with isolation
- Plug-in screw terminals



General information

Mono-colour bargraph displays can be used for monitoring analog trend indication. The small cases are suitable for installation in control units and panel boards.

There are several input versions available, even a multi-purpose device for standardized input signals (0/4...20 mA, 0/2...10 V) and resistance sensors (0...1 kΩ /100 kΩ). The configuration is easily done by 4 DIP-switches.

Technical data

Power supply

Supply voltage	: 24V AC/DC +/-20%,
Frequency	: 47...63Hz
Current consumption [mA]	
BA4824	: ≤ 60
BA7224	: ≤75
BA9624	: ≤90
Test voltage	: 500 V
Working temperature	: -10...+50° C (14 ... 122 °F)
Accuracy	: ≤ 0.5 % +/- 1 segment
Temperature coefficient	: ≤ 100 ppm/K
Supply voltage error	: 0.1 % in range 19,2 ... 28,8 V AC/DC
CE-conformity	: EN55022, IEC61000-4-2/4/11

Input

Voltage input	: $R_i = 4 \text{ k}\Omega/\text{V}$, max. 3 times rated voltage, max. 48 V
Current input	: $R_i \leq 0.5 \text{ }\Omega/\text{A}$, max. 3 times rated current multi-purpose device $R_i=125 \text{ }\Omega$
Resistance input	: $R_i \geq 10 \text{ M}\Omega$, reference voltage 2.5 V, max. 5 mA load

Bargraph display

BA4824	: 13 segments (11 segments + 2 overload)
BA7224	: 23 segments (21 segments + 2 overload)
BA9624	: 33 segments (31 segments + 2 overload)

Colour	: red or green
Bar size	: 2x5 mm
Segment grid	: 0.1" = 2.54 mm

Case

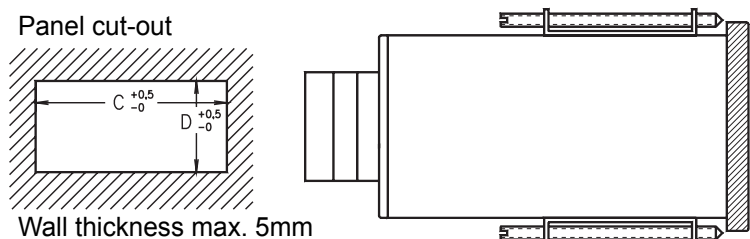
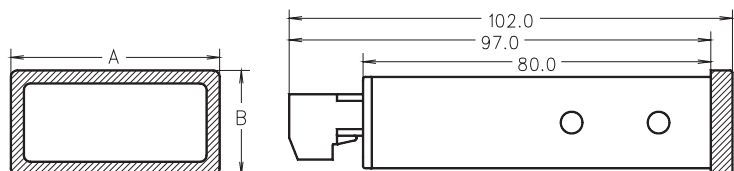
: slide-in case, according to DIN 43700, Material Noryl SE1 GFN2

Weight	BA4824	: 75 g
	BA7224	: 100 g
	BA9624	: 125 g

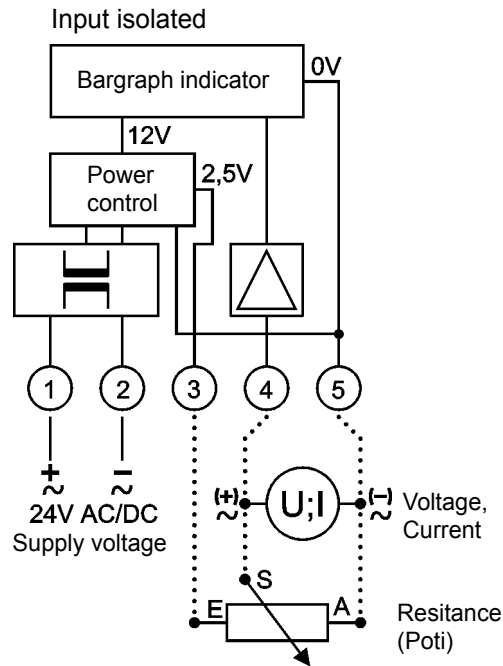
Protection	: front IP54 (IP65 optional), terminals IP 20 finger safe acc. German BGV A3
Connection	: plug-in screw terminals, max. 1.5 mm ² wire

Dimensions

	A	B	C	D
BA4824	48	24	44	21
BA7224	72	24	68	21
BA9624	96	24	92	21



Connection diagram



Device configuration

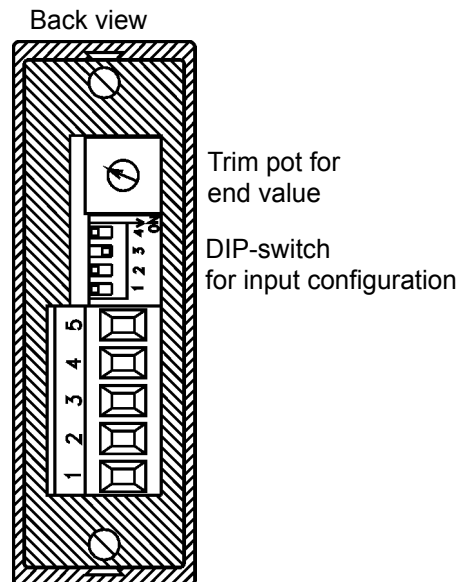
Adjustment poti and configuration switch (multi-purpose device only) are placed on the back side of the BA7224 and BA9624. The adjustment poti of the BA4824 is placed at the left side of the device, the configuration switch behind the back panel.

Measuring input

(multi purpose device only)

Input	S1	S2	S3	S4
0 ... 2.5 V DC	ON	OFF	OFF	OFF
2 ... 10 V DC	OFF	OFF	ON	ON
0 ... 10 V DC	OFF	OFF	ON	OFF*
4 ... 20 mA	OFF	ON	OFF	ON
0 ... 20 mA	OFF	ON	OFF	OFF
0 ... 1/100 k Ω	OFF	OFF	OFF	OFF

*State of delivery



Adjustment

The bargraph can be set to full scale in the range of 50 % to 200 % of the specified input signal by adjustment poti. For example: Input configuration may be 0...10 V DC, the display can be adjusted to full scale in the range of 5...20 V DC input level.

Scaling

A standard 0 ... 100 % face plate is provided with each meter. Customized face plates with special scaling on request.

Ordering code

BA 1. - 2. - 3. - 4. - 5. - 6. - 7.

1. Device type

4824 13 segments
7224 23 segments
9624 33 segment

2. Mounting

1 vertical
2 horizontal

3. Bargraph color

1 red
2 green

4. Supply voltage

2 24 V AC/DC with isolation

5. Input signal

0 industry standard signal
custom signals on request

6. Measuring range scale 0 ... 100 %

10 industry standard signal
custom face plate on request

7. Protection

1 IP 54
2 IP 65