

Digital Indicator DS 48/24 E



The indicator is suitable for measuring direct voltage or direct current. The units are installed in a rugged plastic housing and can be integrated into all conventional grid systems. The indication value can be matched to the measuring signal by using the potentiometer at the rear of the instrument.

Technical data

Readout

Display
Seven-segment display; 10 mm high
Colour red or green

Maximum reading
 ± 1999 or ± 9999 digit

Sign
automatic (-), no positive sign
(no sign for 9999 digit max. reading)

Overload display
by flashing „000“ or „0000“,
the decimal point display remains

Decimal point
internally selectable via solder jumpers

Display activation
internally selectable via solder jumpers, retrace blanking
display or display storage (not electrically isolated from
measuring input)

Power supply

Direct voltage
24 V (18...32 V) electrically isolated from measuring circuit

Alternating voltage
24 V ($\pm 10\%$), 48...62 Hz, electrically isolated from
measuring circuit

Current drain
approx. 1 W (VA)

Measuring input

Method
dual-slope, conversion rate 2.5/s

Measuring ranges DC
0... 2 V
0...10 V
0...20 V
0...20 mA
4...20 mA

Measuring range alarms

Voltage measurement
range final value ≥ 200 mV, ≤ 50 V DC

Current measurement
range final value ≥ 0.2 mA, ≤ 200 mA

Input resistance
approx. 1 M Ω for voltage measurement
approx. 100 Ω for current measurement (standard range)

Deviations

Linearity
0.05 % of range final value ± 1 digit (at 23 °C)

Temperature coefficient
0.05 %/10 °C

Suppression of parasitic voltage
SMR > 40 dB (50 Hz)
CMR > 100 dB (0/50 Hz)

General and safety data

Electromagnetic compatibility
to EN 55011/EN 50082-1
Class A

Low-voltage regulation to EN 61010-1 met

Environmental capability

Operating temperature range
0...50 °C

Transport and storage temperature
-40...+75 °C

Relative humidity
max. 75 %, no condensation

Case and mounting

Dimensions
48 mm \times 24 mm \times 135 mm

Installed depth
130 mm panel depth

Panel cutout
43.5^{+0.3} mm \times 19^{+0.3} mm

Mounting
Panel or rack
(H&B-Unibloc, Mauell, Subklev, Siemens)

Material
plastic

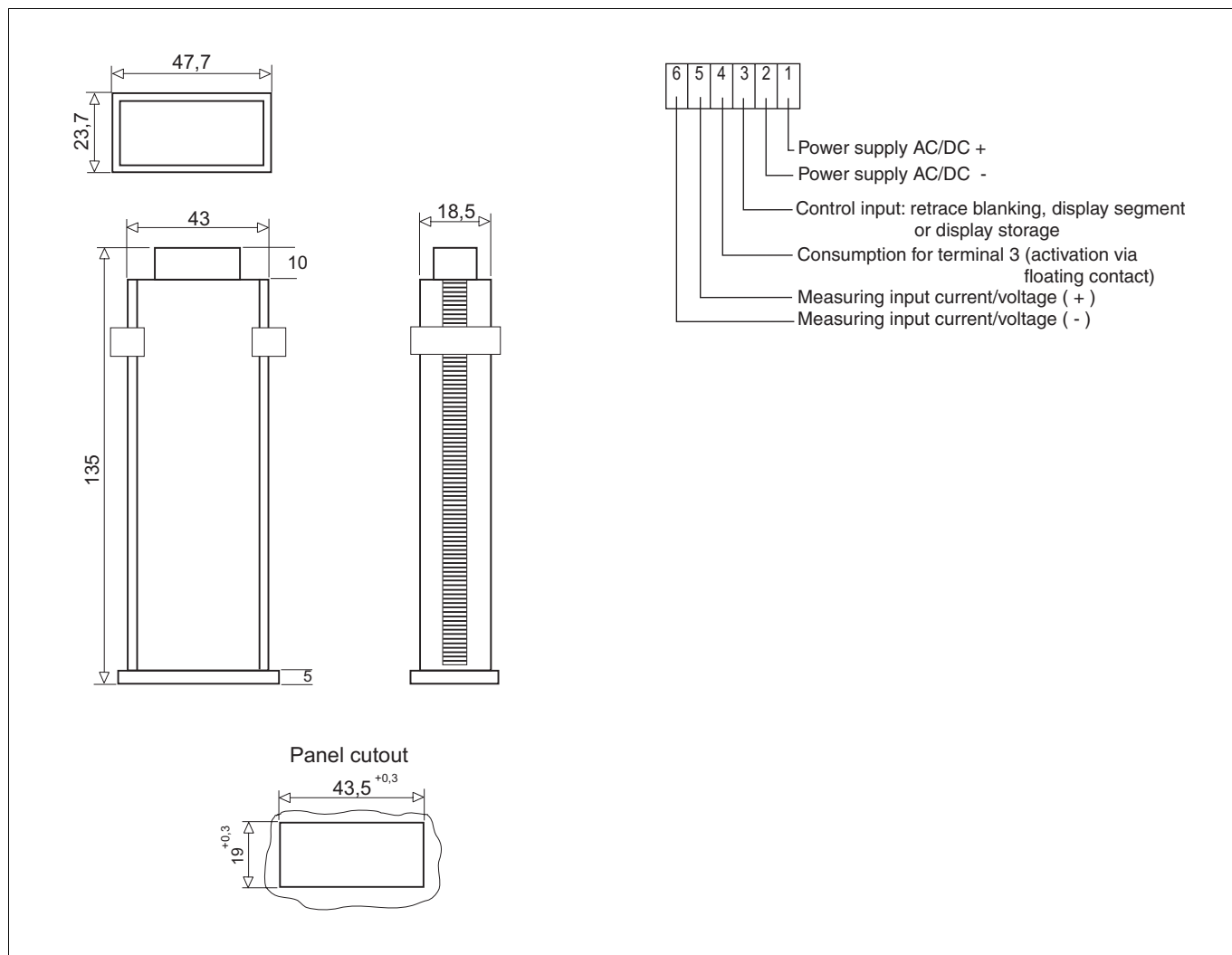
Technical data

Front panel colour
 black (optionally grey)
 Connection
 screw terminals for max. 1.5 mm²
 Type of protection
 case IP 50
 terminals IP 20
 Weight
 approx. 100 g

Terminal layout

Terminal 1: power supply AC/+ DC
 Terminal 2: power supply AC/- DC
 Terminal 3: depending on internal solder jumper:
 segment test, retrace blanking display
 or display storage
 Terminal 4: consumption for terminal 3
 (activated via floating contact)
 Terminal 5: measuring input +
 Terminal 6: measuring input -

Dimensional and connection diagrams (dimensions in mm)



Ordering information												
						Catalog No.				Code		
Digital indicator DS 48/24 E						V33144A-				0 0		
Measuring input												
0...2 V						1						
0...20 V						2						
0...20 mA						5						
4...20 mA						6						
other						0						
Maximum reading												
1999 digit						1						
9999 digit						2						
Decimal point position												
0.000						1						
00.00						2						
000.0						3						
without						0						
Power supply												
24 V DC						1						
24 V AC						3						
Display control												
Display storage						1						
Retrace blanking display						2						
Segment test						5						
without						0						
Specialities												
other measuring range (consider alarm data)						(clear text)				326		
Display range other than measuring range						(clear text)				361		
(state assignment of input to display)												
Dimension according to table						(clear text)				368		
Dimension as required (max. 5 characters)						(clear text)				369		
green LED										556		
special lettering (max. 10 characters)						(clear text)				566		
Bezel grey RAL 7037										568		
Rack mounting												
H&B Unibloc										571		
Mauell										572		
Operating Manual¹⁾												
German										Z1Y		

¹⁾ 1 copy in German included in the basic supply; no specification required; extra Operating Manuals must be paid (please specify number)

Dimensional labelling													
	Code		Code		Code		Code		Code		Code		Code
none	400	kW	406	A	412	MN	418	m ³	424	N	430	ppm	436
V	401	MW	407	mA	413	%	419	g	425	bar	431	K	437
mV	402	Ω	408	μA	414	‰	420	kg	426	m/min	432	l/h	438
kV	403	mΩ	409	°C	415	cm	421	t	427	U/min	433	t/h	439
mW	404	kΩ	410	°∠	416	mm	422	m ³ /h	428	δ	434	Hz	440
W	405	MΩ	411	kN	417	m	423	ph	429	mbar	435		

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