

Charge Amplifier DACU 820

Features

- Multi-range charge amplifier for industrial application
- 4 selectable ranges channel 1
3 fixed ranges 100'000 pC - 500'000 pC
1 variable range 100'000 pC - 500'000 pC
- 4 fixed ranges channel 2
4 fixed ranges 2'000 pC - 20'000 pC
- Adjustable limit value with switching output
- Peak value and test function
- Serial RS 232 interface

Electrical Data

Voltage supply	10...40 VDC
Capacity draw	< 1,5 W ⁽¹⁾
Measuring range channel 1	$\pm 100'000 \dots 500'000$ pC
Measuring range channel 2	$\pm 2'000 \dots 20'000$ pC
Output signal	± 10 V
Characteristic curve deviation	< 1 % FS
Linearity	< 0,02 % FS
Output offset	< ± 5 mV
Noise voltage	< 5 mVpp (0,1 Hz... 100 kHz) ⁽²⁾
Output impedance	10 Ω
Reset operate offset	< ± 10 mV
Drift	< 0,03 pC/s at 23 °C ⁽³⁾
Frequency range (-3 dB)	0...20 kHz ⁽⁴⁾
Control input	± 5 V... ± 45 V, galv. separated
Switching output	max. 45 V, max. 100 mA galv. separated

⁽¹⁾ < 55 mA at 24 V

⁽²⁾ < 20 mVpp in the 2000 pC range

⁽³⁾ DACU at least 30 min attached to operational voltage

⁽⁴⁾ @ 2'000 pC...100'000 pC; > 2 kHz @ 500'000 pC

All specifications at ambient temperature (23°C $\pm 2^\circ$ C)

Mechanical Data

Control connection	25 pin D-Sub
Sensor connection	BNC male
Enclosure material	Aluminum die cast

Environmental Conditions

Operating temp. range	-5...+60 °C
Storage temperature	-20...+80 °C
Protection class	IP 40
EMC	EN 61000-6-2 immunity EN 61000-6-4 emission



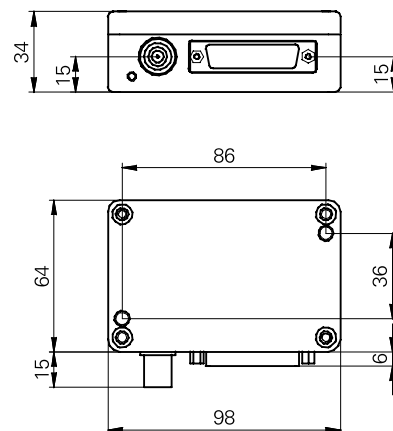
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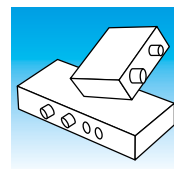
DACU 820-2.0-500BS

Included

- Mounting screws 2 pcs. M4 x 16

Dimensions (mm)

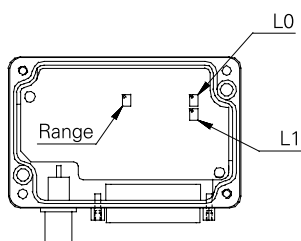




Electrical Connections D-Sub 25

Pin	Function
1	Signal out CH1
2	Peak out
3	Level 1 (In or Out)
4	Level 0 (In or Out)
5	Range B1 (CH2)
6	Range B0 (CH2)
7	Range A1 (CH1)
8	Range A0 (CH1)
9	Supply GND
10	+Supply
11	Code 2
12	Code 0
13	Code Supply +
14	Signal GND
15	Alarm 1 (CH1)
16	Alarm 0 (CH1)
17	RX
18	TX
19	Com Logic Input
20	Operate
21	80% Test
22	Supply GND
23	Signal out CH2
24	Code 1
25	Com Logic Output (Alarm)

Control Elements



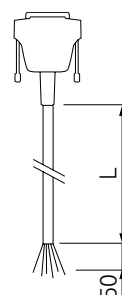
Range	Adjustment of variable range
L0	Adjustment of value 1. The limit switch voltage can be set with the potentiometer and has to be measured at pin 4. Alternatively a voltage can be supplied as well.
L1	Adjustment limit value 2. ditto, pin 3 only

Measuring Range Selection

Range CH1		Measuring Range
A1	A0	pC/10V
0	0	500'000
0	1	200'000
1	0	100'000
1	1	100'000...500'000
Range CH2		
B1	B0	
0	0	20'000
0	1	10'000
1	0	5'000
1	1	2'000

Accessories

Connecting cable with open end



Length (L)

5 m

Order code

DZCS 05/DACU 8