

Charge Amplifier DACU 800

Features

- Multi-range charge amplifier for industrial application
- 14 selectable ranges
- 13 fixed ranges 100 pC - 1'000'000 pC
- 1 variable range 100 pC - 1'000'000 pC
- Adjustable limit value with switching output
- Peak value
- RS 232 serial interface

Electrical Data

Voltage supply	15...35 VDC
Current draw	< 70 mA
Measuring range	$\pm 100 \dots 1'000'000$ 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) < 30 mVpp at 100 pC range
Output impedance	10 Ω
Reset operate offset	electronically compensated
Drift	< 0,03 pC/s ⁽²⁾
Frequency range (-3 dB)	0...20 kHz ⁽¹⁾
Control input	± 5 V... ± 45 V, galv. separated
Switching output	max. 45 V, max. 100 mA galv. separated

⁽¹⁾ @ 100 pC...1'000'000 pC; > 2 kHz @ 1'000'000 pC

⁽²⁾ DACU at least 30 min. attached to operational voltage

All specifications at ambient temperature (23°C \pm 2°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



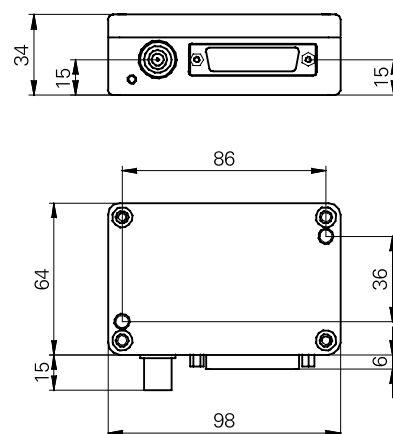
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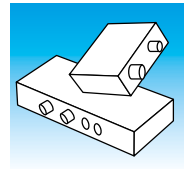
DACU 800-0.1-1K0BS

Included

- Mounting screws 2 pcs. M4 x 16

Dimensions (mm)

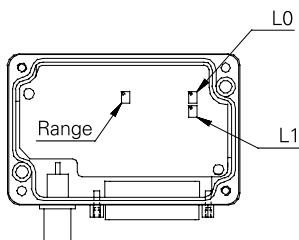




Electrical Connections D-Sub 25

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

Control Elements



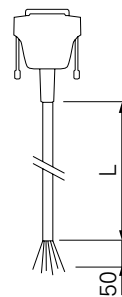
Range	Adjustment of variable range
L0	Adjustment of value 1. The limit switch voltage can be set with the potentiometer and has to be measured at pin 4. Alternatively a voltage can be supplied as well.
L1	Adjustment limit value 2. ditto, pin 3 only

Measuring Range Selection

Range				Measuring range
3	2	1	0	pC/10V
0	0	0	0	1'000'000
0	0	0	1	500'000
0	0	1	0	200'000
0	0	1	1	100'000
0	1	0	0	50'000
0	1	0	1	20'000
0	1	1	0	10'000
0	1	1	1	5'000
1	0	0	0	2'000
1	0	0	1	1'000
1	0	1	0	500
1	0	1	1	200
1	1	0	0	100
1	1	0	1	100'000...1'000'000
1	1	1	0	10'000...100'000
1	1	1	1	100...10'000

Accessories

Connecting cable with open end



Length(L)	Order code
5 m	DZCS 05/DACU 8