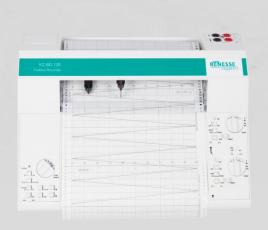


KZ BD11E/BD12E

Compact Flatbed Recorder



FEATURES

- Modern ergonometric design
- State of the art technology
- One or two channel
- Differential inputs
- Event marker per channel
- User selectable left and right zero-position
- Chart drive with home and grid function
- Electrical pen lift
- Remote control for chart drive
- Paper advance / rewind function

ABOUT

Formally manufactured by Kipp & Zonen, this line of instruments is based on a proven robust and reliable design that is recognised world-wide as being the standard in recording.

All models have differential inputs with constant impedance over all input ranged which allow for accurate measurements from almost any source.

The high sensitivity (up to 400V full scale) and gilded input contacts allow even very low voltages to be measured accurately.

This high-speed servo system records signals up to 5Hz and the 6th order 14Hz low pass filter eliminates the 50/60Hz noise completely.

The newly designed penholder has improved grip and simplifies the exchange of pens.

TWO DIFFERENT MODELS

BD11E Single channel flatbed recorder with electrical penlift and remote control

BD12E Dual channel flatbed recorder with electrical penlift and remote control

In addition to the standard voltage inputs, the following input modules are also available:

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VOLTAGE INPUT ACCESSORIES	ORDER CODE
Attenuator 100x, 500V max.	0328-311
Attenuator 10x, 500V max.	0328-324
Current Shunt 0-20 mA	0328-320
Current Shunt 4-20 mA	0328-321
Current Shunt 0-16 A	3300-001
Temperature module type J	0350-732
Temperature module type K	0350-731
Temperature module type PT100	0350-710



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GENERAL SPECIFICATIONS

recording system potentiometric servo balance system

recording paper roll chart

pens disposable fibre tip cartridges

power supply 93.5 – 132V / 187 – 264V, 50/60Hz

(voltage selector)

max. consumption 30 VA (1 channel),

40VA (2 channels)

safety certified in accordance with cUL 3101-1

and IEC 1010-1

emission EN 50081-1 (group standard)

RFI: EN 55022

ENVIRONMENTAL CONDITIONS

ambient temperature

range

relative humidity

operating: -10 °C to +40 °C storage: -40 °C to +75 °C

operating: 20 % - 85 % non condensing: storage 5 % - 95 %

housing material Bay Blend no. FR 110-00005

colour: white

flammability rating according to UL 94 V-0 weight 3.5 kg including roll of chart

dimensions 380 x 290 x 90 mm (W x D x H)

SERVO SYSTEM

span accuracy

span settings 1-2-5-10-20-50-100-200-500 mV,

1-2-5-10-20 V

pen travel 200 mm

number of pens 1 or 2, factory installed
pen response time < 0.2 s for 5 % - 95 % fsd
(full scale deflection)

< 0.3 % fsd

non linearity < 0.3 % fsd dead zone < 0.2 % fsd

input terminals 2 safety terminals

input impedance $~1~M\Omega$ for DC, 10 $k\Omega$ in series ~ with

 $1.5 \mu F$ for AC input

configuration floating

maximum input voltage 42 VDC / 30 VAC (personal safety limits)

zero adjustment -50 % to +150 % full scale

zero selectable left-hand or right-hand side off the

paper (default left)

zero drift $< 1 \mu V/ ^{\circ}C$



The motors used in the modules are from the same brand and similar to the ones used in the Mars Pathfinder

common mode rejection 130 dB (DC and 50 Hz AC)

variable range setting 40% - 100% of selected pen

pen lift electrical, pen 1 and 2

independent up/down

CHART DRIVE SYSTEM

speed setting 0.1-0.2-0.5-1-2-5-10-20

mm/min or mm/sec

step size 0.05 mm

inaccuracy time-base better than +/- 50 ppm

recording paper chart roll according to DIN 16230

paper length 25 meters

STANDARD INCLUDED

manual, power cord, fuses, chart roll, one pen per

channel

OPTIONS

Safety banana plugs

Flight case

Van Renesse Supplies B.V. reserve the right to alter specifications of the equipment described in this documentation without prior notice