

KZ BD11E/BD12E

Compact Flatbed Recorder



FEATURES

- Modern ergonomic 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:

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

Compact Flatbed Recorder

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



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

ENVIRONMENTAL CONDITIONS

ambient temperature range	operating: -10 °C to +40 °C storage: -40 °C to +75 °C
relative humidity	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)

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

SERVO SYSTEM

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)
span accuracy	< 0.3 % fsd
non linearity	< 0.3 % fsd
dead zone	< 0.2 % fsd
input terminals	2 safety terminals
input impedance	1 MΩ for DC, 10 kΩ in series with 1.5 μF 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 μV/ °C

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