

CB-1 Concrete Batch Controller Dual-Scale Automated Batching System

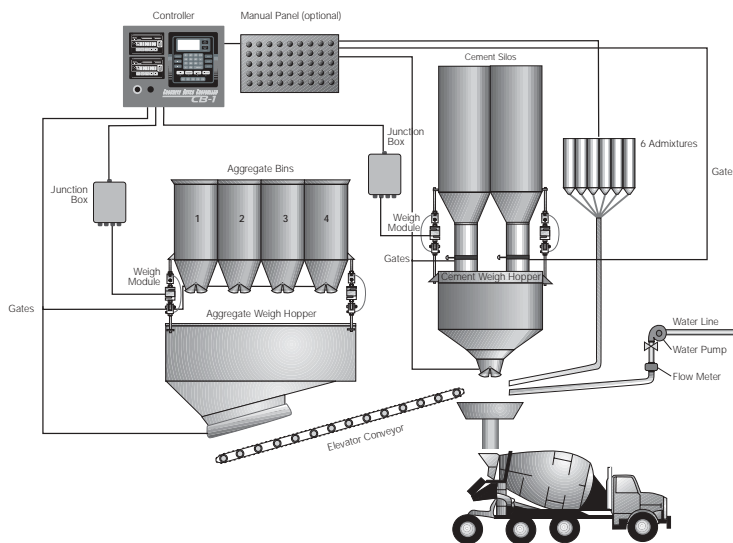


PART # DESCRIPTION

43267	CB-1 Concrete Batch Controller, 115 VAC
45093	CB-1 Concrete Batch Controller, 230 VAC
45095	CB-1 Concrete Batch Controller without indicators, 115 VAC
45094	CB-1 Concrete Batch Controller without indicators, 230 VAC

A digital batch controller provides dual-scale control in this automated concrete batching system. Two high-quality Rice Lake weight indicators—one for each hopper—gather weight data used to control the release of four separate aggregates and three cements.

The system also controls water addition and six admixtures by monitoring a pulse from a flow meter. Configurable formula setup and user-definable inputs and outputs allow full control of the batching routine.



Applications

- Automated concrete batching applications
- Ready-mix plants
- Concrete block plants

Standard Features

- Controls for 3 types of cement, 4 aggregates, 6 admixtures, 1 metered water control
- Two-speed concrete batching
- Real-time display of batch status
- NEMA 4 mild steel enclosure
- User-friendly backlit touchscreen interface with 32-key tactile membrane keypad
- OPTO 22 G4 I/O module outputs
- Opoisolated inputs
- Gross/net weighing modes
- 100 mix designs
- Autolearn preact algorithms
- Advanced self-test screen
- RATTLETRAP® vibration control
- Configurable ingredient setup
- Reporting includes batch and material usage reports
- Safety interlocks
- System alarm output
- Adjustable control of cement and aggregate inching gates
- Moisture compensation for aggregates
- Controls for cement and aggregate vibrators
- Automatic discharge rate control

Options/Accessories

- 48418 PC program to upload/download parameter files
- 64546 Getting started manual
- 45045 Additional installation/operation manual

Consult factory for these additional options:

- NEMA 4X stainless steel enclosure
- Audible alarms
- Manual panel
- Weighed water control
- Simulator
- Moisture probe
- Printer cable

LOAD CELL EXCITATION (PER INDICATOR):

10 ± 0.5 VDC, 6 x 350W load cells or 12 x 700W

LOAD CURRENT:

175 mA maximum (6 350W load cells)

INTERCONNECTION CABLE REQUIREMENTS:

6-wire selective (jumpers required on sense leads for 4-wire)

ANALOG SIGNAL INPUT RANGE:

0.6 mV/V - 3.9 mV/V

ANALOG SIGNAL SENSITIVITY:

0.3 microvolts/graduation minimum
Legal-for-trade recommended minimum 1 microvolt/graduation

INPUT OVERLOAD:

±12V continuous, static discharge protected

CONVERSION RATE AT FULL SCALE:

50/second, typical

RESOLUTION:

Selectable up to 60,000 displayed graduations
Approximately 1,000,000 graduations internal

DISPLAY INCREMENTS:

1, 2, 5

UNDERRANGE BLANKING:

-2 mV signal nominal

OVER/UNDER CAPACITY ANNUNCIATION:

Overload displayed as: ---
Underload displayed as: ...

LEAD ZERO BLANKING:

Standard, per NIST H-44 requirements

DISPLAY:

0.55" 7-digit VFD weight displays,
5" x 2.5" backlit graphic LCD process display

POLARITY INDICATION:

" - " sign

DECIMAL POINTS:

8888888, 888888.8, 88888.88, 8888.888, 888.8888,
88.88888, 8.888888, 8888800, 8888880

LB/KG SWITCHING:

Front-panel push button

FRONT-PANEL KEYPAD:

32-key membrane keypad

FRONT-PANEL ANNUNCIATORS:

Motion, Center of Zero, Units

SERIAL OUTPUT:

"Printer" port, duplex RS-232
"PC" port, duplex RS-232/RS-485

OPTOISOLATED INPUTS:

20 inputs

RELAY OUTPUTS:

40 outputs

AZM APERTURE:

±1.9% of selected full scale capacity or 100%, internal selectable

DIGITAL FILTERING:

Standard range software selectable

MOTION BAND:

1, 2, 3, off

MOTION TIME SENSITIVITY:

Fixed at 1 second

POWER:

Line voltages: 115 VAC +10%/-15%
Frequency: 50 or 60 Hz
Indicator Fusing: 100-120 VAC-2 x 0.25A SB (UL/CSA) 5 x 20mm
220-240 VAC-2 x 0.125A (IEC 127) 5 x 20mm
Output Controller Fusing: 3A TS5 Fastact fuse

OPERATING TEMPERATURE:

14°F to 104°F (-10°C to 40°C)

PACKAGING:

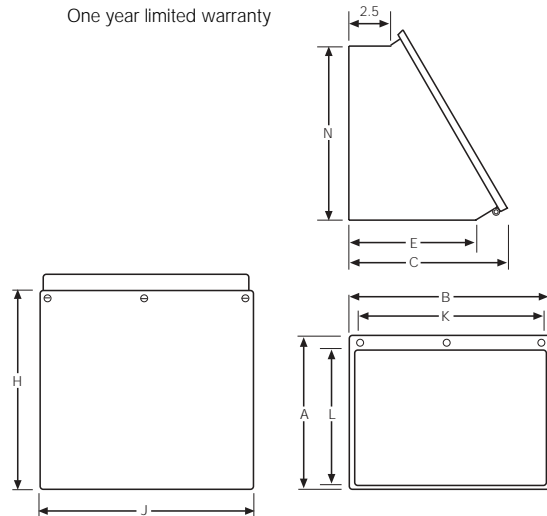
Enclosure: NEMA 4 painted mild steel
Weight: Approximately 45 lb (20.4 kg)

APPROVALS:

NTEP certified Class III/IIL, CC# 98-156

WARRANTY:

One year limited warranty



DIMENSIONS

A = 20.00" (508mm)	J = 24.28" (617mm)
B = 24.00" (610mm)	K = 22.62" (575mm)
C = 13.09" (332mm)	L = 18.62" (473mm)
E = 11.62" (295mm)	N = 18.00" (457mm)
H = 20.28" (515mm)	