Boom gate / motorised door controller

BD112P

The BD112 Gate Logic Controller is used to control the operation of automatic boom gates and motorised gates and doors.

The module receives control signals from external devices (i.e. Card readers, ticket vending machines, free exit loop, etc.) that determines the control output to the gate motor.

The unit has an integral vehicle detector designed to monitor a “safety” loop installed immediately below the boom gate arm or roller – door. While a vehicle is over this loop the controller will not allow the barrier to lower. The unit has Memory, and Non Memory inputs and a Ticket Issue Interlock or End of transaction outputs.

Motor control is via a change-over relay contact.

PART NUMBER

310FT0411	BD112P Nortech	240 VAC

FEATURES

Compact Size:

Miniature housing that saves space in compact equipment designs. The lightweight design makes it possible to plug the unit directly into a DIN rail compatible socket.

Memory and Non- memory inputs:

Memory inputs may be used in “non-revenue” applications where the boom will not close between authorised following vehicles.

Manual / remote override option:

The controller may be manually placed in the “raise” or “lower” condition. Using this feature, the gate will remain in the selected state regardless of inputs or timers. This may be a local or remote override.

Selectable Timings:

The controller has a selectable rollback time-out for the protection of the vehicle should it move back on to the closing loop whilst the barrier is lowering. Also if the vehicle fails to exit, the auto close timer will lower the gate after a preset delay.

Ticket Vend Interlock:

This output will inhibit ticket issue while the boom is opening or opened. The output will either be activated when the barrier is raised, Ticket Vend Interlock (TVI) mode or on the completion of a transaction, End of Transaction (EOT) mode.

Input and Status Indicators:

A “Status” indicator indicates the motor control output status and the presence of a manual override.

The “Input” indicator provides information on the status of the “in-built” vehicle detector.

Motor Control:

In general applications a torque motor should be used with the BD112 but a conventional motor with limit switches may also be controlled.

APPLICATIONS

- Parking boom gate control
- Motorised gates and doors
- Industrial control systems

Nortech Detection Pty Ltd
Tel: 02 8977 4047 Fax: 02 9475 4742
email: mail@nortechdetection.com.au
web: www.nortechdetection.com.au

TECHNICAL DETAILS

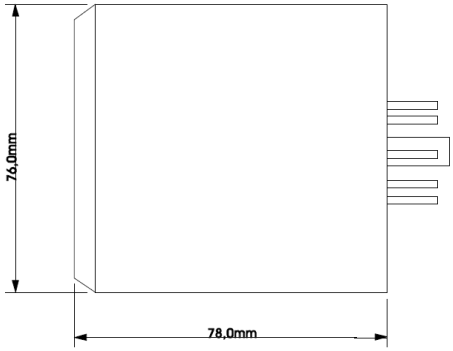
BD112P

Self tuning range:	20-1500µH
Sensitivity:	Four step adjustable High - 0.02% Δ L/L Med - High 0.05% ΔL/L Med - Low 0.1% ΔL/L Low: 0.5% ΔL/L
Frequency:	Four step adjustable on face plate, High, Med-High, Med-Low, Low (frequency determined by switch setting and loop geometry)
Automatic Sens. Boost:	Switch selectable
Presence Time:	Selectable - limited or permanent presence. (Limited-presence 1 hour for 3% ΔL/L
Roll-back Time:	2 secs. or 10 secs.
Auto-Close:	30 secs. or 1 minute
Operating modes:	Push button on front of enclosure 1. Auto 2. Raise 3. Lower
Indications:	The following face-plate indications are provided: 1 x Power LED – Red 1 x Status LED – Yellow 1 x Input LED – Green
Inputs:	Memory and Non-memory inputs Optically Isolated (500V DC) Active high requiring connection to 0V (Potential Free Relay contact) 10 mA sink current @ 12V DC
Input signal duration:	80 m.s. minimum Minimum of 2 Seconds between inputs on Memory input.
Power requirements:	240V AC ± 15% 48-60Hz 1.5VA max @ 230V
Ticket Issue Interlock / EOT:	Relay - Max current = 1Amp Max voltage permissible 30 VDC
Raise and Lower Relay:	Change over contact Contact supply 230 VAC Live Max current permissible 5A Max inrush current 8A
Note:	An external contactor is required for motors with a higher current rating

Operating temperature range: -40ºC to +70ºC

Mechanical detail:

Material:	High heat ABS blend
Dimensions:	76(H) x 40(W) x 78(L)mm
Mounting:	Shelf or DIN-rail socket
Connector: submagnal	Single rear mount 11-pin (JEDEC No. B11-88)



WIRING DETAILS

pin		designation
1	Live	230V AC 50/60 Hz
2	Neutral	Output control
3	Raise contact	
4	Lower contact	
5	Ticket Vend Interlock	N/O contact
6	TVI common contact	
7	Memory input	
8	no connection	
9	Memory input negative	
10	Loop	Twist this pair
11	Loop	

OPTIONAL ITEMS

CTR 119090	11 pin Relay Base

NORTECH PARKING