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Direct Drive Heavy Duty Barrier Gate

TIS B35/10
TIS B50/14

Technical Data	Unit	TIS B35/10	TIS B50/14
Max. boom length	feet	10	14
Opening time	s	approx. 2.3	approx. 4.6
Closing time	s	approx. 2.8	approx. 4.9
Voltage	V	115	115
Frequency	Hz	60	60
Power consumption	W	65	65
Housing width	inches	12	12
Depth	inches	14	14
Height	inches	41	41
Weight	Lbs	110	110

The Barrier

The ECOLINE barrier represents the combination of our proven Magnetic technology with a single phase torque motor, housing and conventional control for both manual and automatic operation. Additional features of the ECOLINE barrier are easy setup and installation.

These barriers are suitable for all applications with simple requirements like gated communities, small car parks or those controlled by a guard.

The controller and a limit switch are integrated in the barrier. The barrier boom may be supplied in either standard or customized length.

The Drive Unit

The reliable direct drive consists of a maintenance-free torque motor and the lever system which enables an harmonious movement of the barrier boom. The counterbalance springs balance the boom weight. Using the lever system the barrier boom is locked in both end positions open or closed. In case of power failure the barrier can easily be opened manually. This can be done without using any tools.

The precise spring adjustment that corresponds to the boom length can be done quickly on site. This is necessary for every installation. An automatic opening of the barrier boom in case of power failure can be achieved by a stronger adjustment of the springs.

In the end positions the motor remains under power and the low power consumption of the motor is dissipated in the form of heat which guarantees the barrier to be operated at low temperatures and also prevents the occurrence of condensation in the motor and housing.

The Housing

The barrier consists of a self-supporting and compact housing with a UV-resistant and environmentally-friendly powder coat finish for maximum protection against corrosion. The housing color comes as standard in RAL9010 White. The controller and the power switch are located on the mounting plate. Pre-mounted DIN-rails enable an easy installation of additional electrical devices. The mounting plate and the drive unit within the barrier housing are readily accessible through the maintenance door at the left hand side. The top cover can also easily be removed.

The barrier boom

The barrier boom is extruded from highly stable aluminium alloy, to produce an octagonal profile of 4" x 2 x 1/16" thickness and finished with a RAL 9010 white paint then applied with red high reflective tape strips. The boom is readily visible even at night. If the barrier is to be any longer than 14 ft, it is imperative to use either a pendulum support or support post. If the available vertical height is restricted, the barrier can optionally be supplied with an articulated boom.

The Control Unit

The ECOLINE controller enables the barrier to be operated manually or automatically. There are 11 standard functions to be selected for operating the barriers. These functions cover all standard applications.

The connection of additional safety equipment for pedestrians is possible.

Besides the standard operating modes several special functions are additionally integrated. These enable the operation of traffic lights. The storage of opening pulses (vent signal count) makes access control possible. After power failure there are three possibilities to restart the barrier: Manual reset, signal reset or automatically. For safety reasons the manual reset function is factory-set. This means the barrier remains open as long as the reset button at the control unit is pressed. The electrical connections are made on labeled terminal blocks. The motor is driven by a TRIAC output stage.

All signal inputs and relay outputs are opto-coupled. Selection of the operating mode and the special functions are by a rotary switch and DIP-switch.

For the power supply of optional external devices for example induction loop detectors 24 V DC / 0.5 A is supplied.



LED's show the status of inputs and outputs and help trouble shooting and diagnostics.

The Signal Inputs

The 6 signal inputs use the internal 24 VDC for the following functions:
Input 1 = Opening
Input 2 = Opening loop detector
Input 3 = Closing
Input 4 = Pedestrian safety
Input 5 = Safety
Input 6 = Limit switch
(Inputs require potential free contacts)

The Relay Outputs

The 4 potential-free relay outputs can be loaded with 24VDC / 1A. The functions can be selected via DIP-switch.

- Output 1 = motor drive direction or feedback CLOSE
- Output 2 = pulse when barrier opens or after release of safety device (passing of safety loop)
- Output 3 = Operation of traffic light or signal lamp
- Output 4 = System failure or additional traffic light control

Mounting, Installation and Connection

It is imperative when installing this product to follow the installation instructions and comply with the electrical code.

Safety

The details for the mounting and operating instructions as well as the accident prevention regulations are to be observed for installing and operating the barriers.

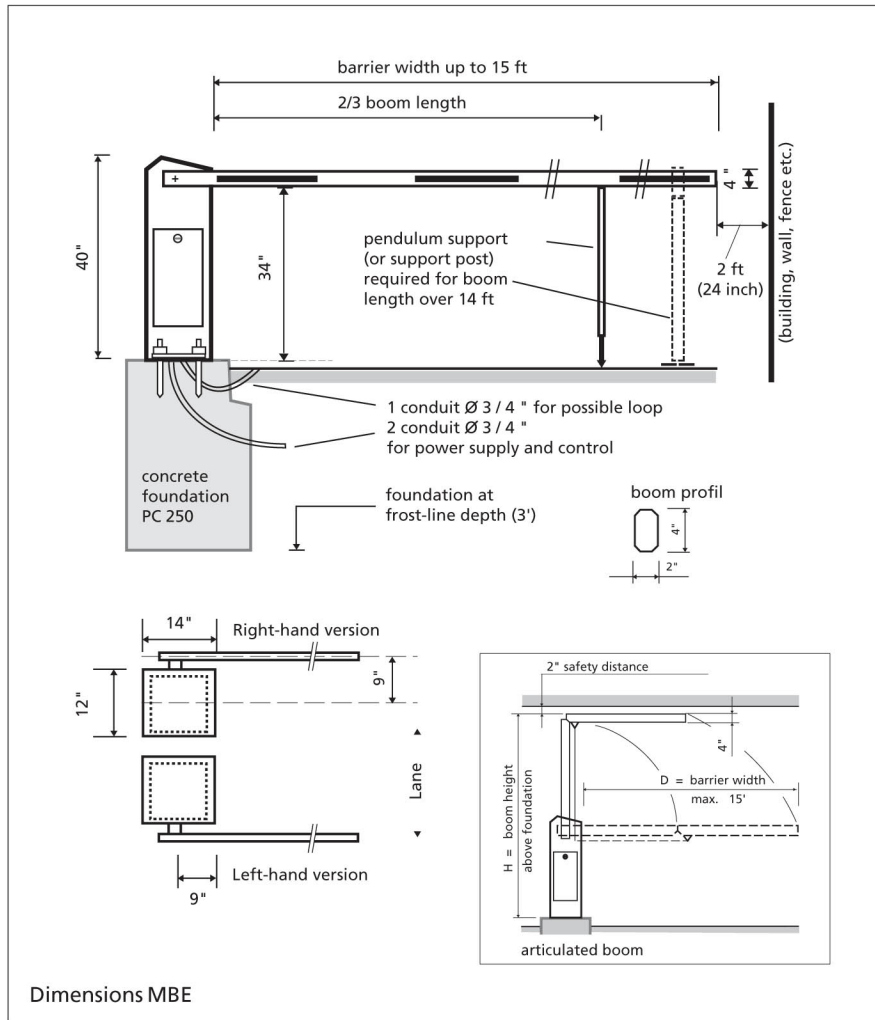
A safe clearance distance of at least 2 ft (24 inch) must be provided between the tip of the barrier boom and the closest solid obstacle (building, wall, fence etc.).

MAGNETIC emphasizes that the barriers shall only be used to control vehicle traffic. PEDESTRIANS ARE NOT ALLOWED.

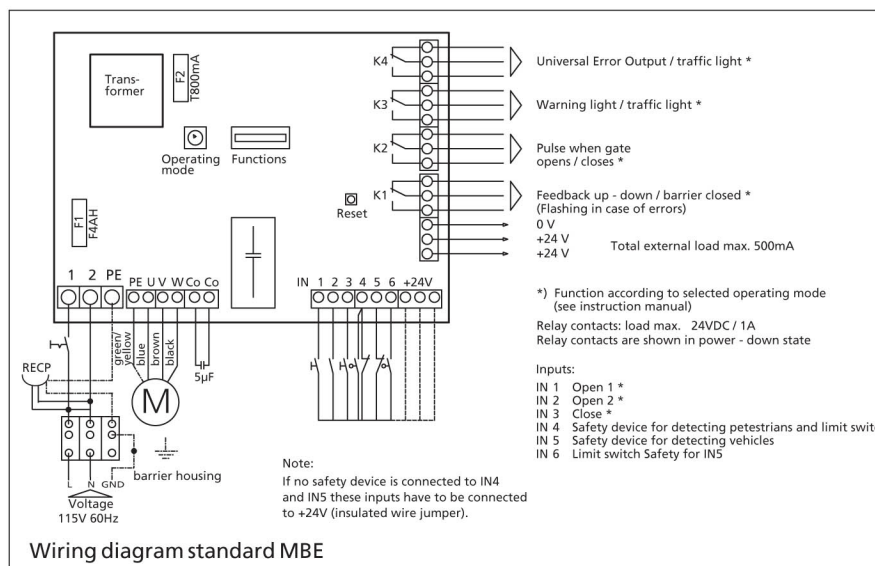
The operator has to ensure an absolute separation of vehicle and pedestrian traffic by taking appropriate measures. Walkways next to the roadway must have additional markings and warning signs to keep pedestrians away from vehicle traffic and barrier.

The barrier comes with pictograms and warning labels "Automotive Traffic Only". The opening and closing actions must be observed. The barrier operation must be observed at all time.

Magnetic products correspond to the quality assurance according to the ISO 9001 regulations.



Dimensions MBE



Wiring diagram standard MBE

Order details

- Type: MBE35 MBE50
- Version: Right Left
- Required width "D" = _____ ft
- Order quantity _____ pcs
- For boom length > 12 ft
- Pendulum support supporting post
- Articulated boom necessary? Yes
- If yes, "H" = _____ ft