

E82 Control System

For sliding door drives (DC)

DICTATOR Technik offers the type "E" control systems as an **economic** alternative to the SQUARE control systems.

The control systems allows either for **deadman or impulse operation**.

Most parameters can be adjusted using the **membrane keys** on the lid of the casing. These membrane keys replace traditional potentiometers. In order to carry out the adjustments the lid of the casing has no longer to be removed, which is an important contribution to increase safety and reduce the danger of accidents.

The function of the potentialfree relay contact is adjusted with DIP-switches in the control system: contact closed, when the door is closed, when it is moving or when it is either open or closed.

The control systems also offer the possibility to connect an electric door lock, either with or without a feed-back contact.

The binders can be removed for an easy connection.

The control system can be used both for 24 V DC and 48 V DC door drives.



Summary

| | |
|--------------------------|-----------------------------------|
| Types of Control Systems | Sliding doors with DC-motor: E82 |
| | Fire protection with DC-motor: E8 |
| Motors to be connected | 24/48 V DC, max. 120 W |



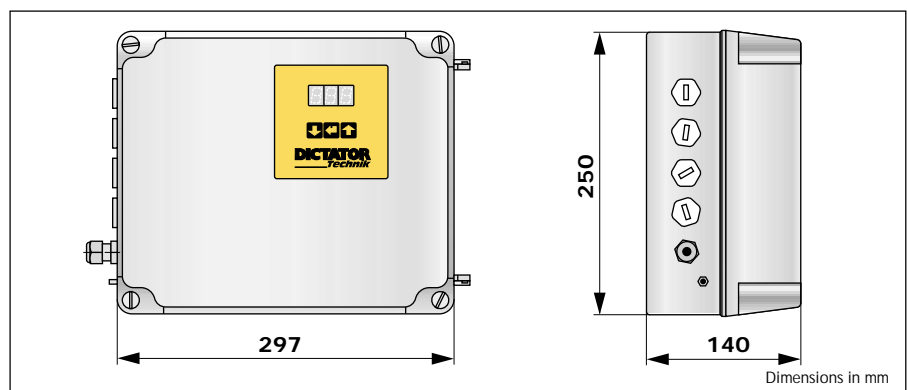


Dimensions / Installation

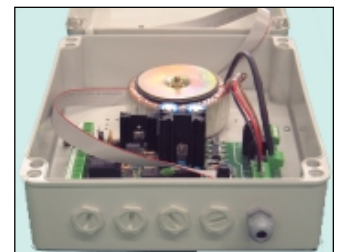
The control system E82 comes in a IP 56 plastic casing. The high protection degree of the casing permits its installation also in humid surroundings.

Due to its reduced exterior dimensions the E82 control system can be installed also when little space is available.

Dimensions E82



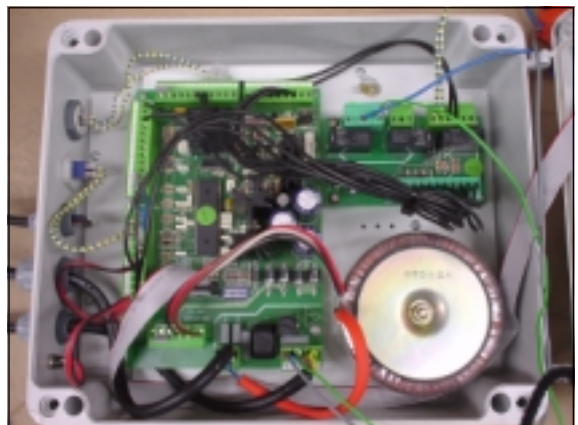
On the left side of the casing there are provided 5 cable inlets. The inlet for the mains cable is already equipped with a Pg-screw cable inlet. The remaining four cable inlets have a diameter of 20 mm and are intended for Pg 13,5 screw cable inlets. Make sure you always use screw cable inlets with pull relief.



Installation / Electrical connection of the door drives

The control system should be placed not farther than 30 m from the door drive. Normally a 2,5 m distance is recommended as all DC-21 drive units are supplied with a 2,5 m connection cable to the control system.

Drive unit, operating elements and safety equipments are connected to the **removable binders**. All blocks consist of a different number of binders and therefore cannot be plugged into a wrong position.





Programming and Adjusting

All type "E" control systems have a very similar design. The **programming and adjusting** is therefore **almost the same** for all E control systems. This saves you the necessity to master a lot of different control systems.

DICTATOR presents a new, **complete product line** consisting of the "E" control systems and the system 21 door drives. One of the main objectives of the research work had been to develop a line that can be **mastered fast and easy**, that offers at the same time the **most modern technics, high operating comfort** and that permits **flexible solutions** for customer requirements.

Basic adjustments

The different parameters are adjusted with the membrane keys and the display on the lid of the casing. The Enter-key permits to switch from one parameter to the next one. With help of the arrow keys the values are either increased or reduced.

Operating options / Safety features / Relay contact

- *OPEN, CLOSE: Deadman or Impulse Function (adjustable with a DIP-switch)*
- *STOP 1: operating in opening and closing direction*
- *STOP 2: operating only in closing direction*
- *Safety equipment (STOP 3): operating only in closing direction. The following functions can be adjusted:*
 - temporary STOP or
 - STOP and then the door opens completely (Parameter P-A)The safety device is not working once the door has reached its fully closed position.
- *Automatic closing: as soon as the position OPEN has been reached the door closes automatically after a pre-set time (1 to 180 sec.) (Parameter P-5)*
- *Connection of an electric door lock (Parameter P-D and DIP-Switch on additional circuit board)*

When connecting an electric lock an "initial reversing" is activated with the Parameter P-D, i.e. after an OPEN-command the door drive first runs shortly in closing direction to release the pressure on the door lock. Only then the door opens. Normally a door lock with a feed back contact should be used (adjustment with DIP-switch: ON = door lock with feed-back contact; OFF = door lock without feed-back contact)
- *Relay contact to activate warning or signalling devices (function adjustable with 4 DIP-switches): contact closed when door is open, when door is closed, when door is moving or when door is closed and opened*
- *Connection of a remote control*

The sequence of commands of a connected remote control is as follows: OPEN - STOP - CLOSE - STOP (the limit switches or the memorized positions of the position control system act as a STOP)

Motor parameters

In order to optimally adjust the door drive to the requirements of the door, several parameters of the motor can be set in the E 82 control system, such as:

- *Opening and closing speed*
- *Crawling speed* before the final positions OPEN and CLOSED (speed is reduced before reaching the final positions rendering separate final dampers superfluous)
- *Position where the crawling speed starts* before the positions OPEN and CLOSED

Encoder

The Parameter P-b is used to choose the type of position control: either with separate limit switches or using the integrated encoder of the door drives equipped with this type of position control. In case of the latter the positions are adjusted in the control system. When starting the control system for the first time the control system automatically switches to deadman operation. Only when all positions have been entered it will return automatically to the adjusted impulse function.

Diagnostic function

All "E" control systems are provided with a **diagnostic function** that will help the DICTATOR service team to solve problems - even by telephone.



Technical Data, Order Information

For the control of DC - door drives DICTATOR provides the E82 control system.

Technical Data

| | |
|---------------------------------------|----------------------------------|
| Voltage | 230 VAC, 50/60Hz +/- 10 % |
| Power consumption | max. 250 W, 10A |
| Output voltage (secondary) | 24 VDC |
| Power supply (secondary) | max. 400 mA |
| Output voltage to motor | 24 or 48 VDC |
| Motor rating | max. 5 A (120W) |
| Dimensions | HxWxD= 310 x 230 x 130 |
| Potentialfree relay contact, capacity | max. 30 VAC / 60 V DC, 10 A |
| Temperature range | 0 - 40° C, 20 - 70 % of humidity |
| Protection | IP 56 / 2 |
| Overvoltage rating / Insulation | II / class I |

Order Information

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|---|------------------|
| E82 control system | Part no. 730 115 |
| UPS power supply for E82 control system | on demand |

Components included

Control system in casing IP 56 with membrane keys and display on the casing

Application range E82 control system

The E82 control system is provided for door drives with 24 or 48 V **direct current (DC) motors** for **sliding doors**.

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|---------------------------------------|---------------------|
| DICTAMAT 5000-21 door drive | from page 04.003.00 |
| DICTAMAT 3400-21 door drive | from page 04.007.00 |
| Customized door drives 24 VDC, 48 VDC | on demand |