

E82 Control System

For DC-21 Sliding Door Operators

For AC door operators DICTATOR offers the type "E" control systems as an **economic** alternative to the SQUARE control systems.

The control system allows either for **dead man or impulse operation**.

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

The function of the potential-free 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 VDC and 48 VDC door operators.



Summary

Types of control systems	Sliding doors with DC-motor: E82 Fire protection with DC-motor: E8
Motors to be connected	24/48 VDC, max. 120 W
Does not meet the requirements of the EN 12453 standard.	



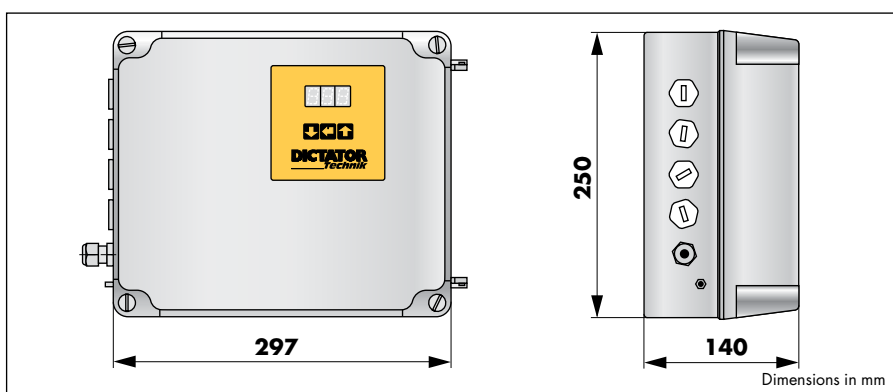


Dimensions / Installation

The control system E82 comes in an IP 56 plastic casing. The high IP rating of the casing permits its installation in humid surroundings, too.

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

Dimensions E82



On the left side of the casing there are provided five cable inlets. The inlet for the mains cable is already equipped with a Pg cable gland. The remaining four cable inlets have a diameter of 20 mm and are intended for Pg 13.5 cable glands. Make sure you always use cable glands with pull relief.



Installation Electrical Connection of the Door Operators

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 door operators are supplied with a 2.5 m connection cable to the control system.

Drive unit, operating elements and safety equipment 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 operators. One of the main objectives of the research work had been to develop a line that can be **mastered in fast and easy way**, that offers at the same time the **most modern technics, high operating comfort** and that permits **flexible solutions** to 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: Dead Man 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. When triggered 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 memorised positions of the position control system act as a STOP.)

Motor Parameters

In order to optimally adjust the door operator to the requirements of the door, several parameters of the motor can be set in the E82 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 by separate limit switches or by using the integrated encoder of the door operators 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 dead man 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 operators Dictator provides the E82 control system.

Technical Data

Voltage	230 VAC, 50/60Hz +/- 10 %
Power consumption	max. 250 W, 10 A
Output voltage (secondary)	24 VDC
Power supply (secondary)	max. 400 mA
Output voltage to motor	24 or 48 VDC
Motor rating	max. 5 A (120 W)
Dimensions	H x W x D = 297 x 250 x 140
Potential-free relay contact, capacity	max. 30 VAC / 60 VDC, 10 A
Operating temperature	0 - 40 °C, 20 - 70 % of humidity
IP rating	IP 56 / 2
Overvoltage rating / Insulation	II / class I

Order Information

E82 control system	part no. 730115
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 the DC-21 door operators with 24 or 48 V **direct current (DC) motors** for **sliding doors**.

DICTAMAT 5000-21 door operator	from page 04.024.00
DICTAMAT 3400-21 door operator	from page 04.025.00
Customised door operators 24 VDC, 48 VDC	on demand