

# 746 ER

# FAAC

## **garmotor**

**for sliding gates with max weight of 600 kg**

**746 ER Z16 for rack applications**

**746 ER Z20 for rack applications (400 Kg)**

**746 ER CAT for chain applications**

**746 ER RF for chain applications with idle transmission**



### **IDEAL FOR RESIDENTIAL APPLICATIONS**

The control board inside the gearmotor facilitates and speeds up installation, at lower cost. Its compact size makes it ideal for residential applications with gates weighing up to 600 kg.

### **TOTALLY SAFE, RELIABLE IN ALL CONDITIONS**

Safety is guaranteed by the special, adjustable, oil – bath lubricated anti crushing clutch, and by an intelligent electronic device which, when it detects the presence of an obstacle, reverses and stops gate movement. The FAAC 746 gearmotor performs uniformly, and all commands are supplied by an extremely safe and reliable microprocessor.

### **LONG LIFE**

Constant, complete oil – bath lubrication of mechanical components plus assembly in a high resistance pressure – cast aluminium body ensure a very long life.

### **IRREVERSIBLE**

As the gearmotor is non reversing, no electric locks need be installed and, in the event of power failure, the release device (protected by a customized key) makes it possible to open and close the gate manually.

### **746 ER Z20 SPECIFICATIONS**

Non-reversing screw gearmotor • Gate max. weight 600 kg • Gate speed 12 m/min (Z20) and 9.5 m/min (Z16) • Max. use frequency 70% • Max thrust 50 daN • Electric motor power supply 230 Vac (+6% - 10%) - 50 (60) Hz • Electric motor power 300 W • Thermal protection at 120 °C built into motor winding • Operating ambient temperature - 20°C ÷ + 55°C • Protection class IP 44 • Lever operated release device with code key • Single - phase motor with two rotation directions (1.400 rpm) • Pinion gear Z20/module 4 • Inductive limit - switch (chain version) • Magnetic limit-switch (rack version) • Lower and upper half-body in die - cast aluminium with cataphoresis treatment • Twin-disk clutch in oil-bath • Opening/closing force adjustable by hexagonal key • Galvanised foundation plate with side and height adjustment (optional) • Dimensions 275x191x336 mm (LxWxH) • Built-in control board • ABS control board enclosure

### **780D CONTROL BOARD**

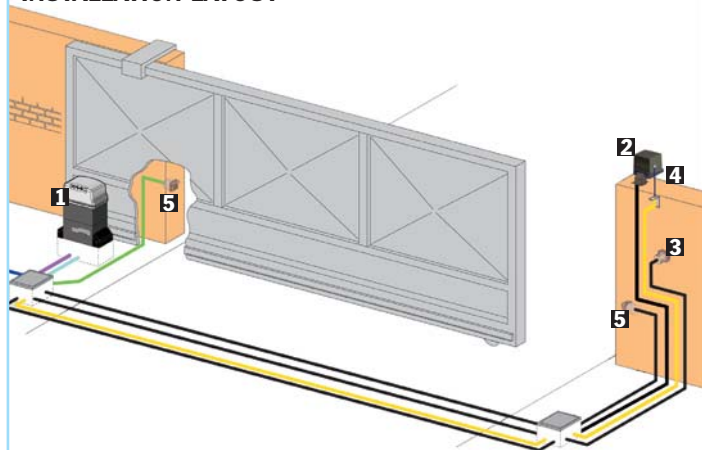
**Transformer:** faston connection to the PCB • **Power supply:** 230 Vac (+6%-10%) 50 Hz • **Absorbed power:** 10 W • **Motor max. load:** 1000 W • **Accessories max. load:** 0,5 A • **Operating ambient temperature:** -20°C ÷ +55°C • **Fuses:** 2 • **Function logics:** Automatic/"Stepped" automatic/Semi-automatic/Safety devices/Semi-automatic B / Dead-man C /"Stepped" semi-automatic / Mixed B/C logic • **Work time:** Programmable (from 0 to 4,1 min) • **Pause time:** Programmable (from 0 to 4,1 min) • **Thrust force:** Adjustable over 50 levels • **Terminal board inputs:** Open - Partially Open - Opening safety devices - Closing safety devices - Stop - Edge - Power supply + Earth • **On-connector inputs:** Opening and closing limit-switch/Motor capacitor • **Terminal board outputs:** Flashing lamp - Motor - 24 Vdc accessories power supply - 24Vdc indicator-light - Timed output - Electric lock command - "traffic lights" - Fail safe • **Rapid connector:** Plug-in receiver - Decoding card • **Programming:** Nr. 3 keys(+,-,F) and display, "basic" or "advanced" mode • **"Basic" mode programmable functions:** Function logic - Pause time - Thrust force - Opening-closing direction • **"Advanced" mode programmable functions:** Torque at initial thrust - Braking - Fail safe - Pre-flashing - Indicator-light/Timed output/Electric lock or "traffic lights" command - Opening and closing safety devices logic - Encoder/Anti-crushing sensitivity - Deceleration - Partial opening time - Worktime - Assistance request - Cycle counter

# 746 ER

| Model          | Use             |                   |
|----------------|-----------------|-------------------|
|                | Max weight (kg) | Use frequency (%) |
| 746 ER Z16     | 600             | 70                |
| 746 ER Z20     | 400             | 70                |
| 746 ER CAT (*) | -               | 70                |
| 746 ER RF (*)  | -               | 70                |

Notes  
 (\*) WARNING: Do not use the operator for applications that require it to be fixed at heights where it cannot be reached by users. The keyrelease device cannot be remote controlled. For "overhead" applications we recommend the use of 820/860 automations.

## INSTALLATION LAYOUT

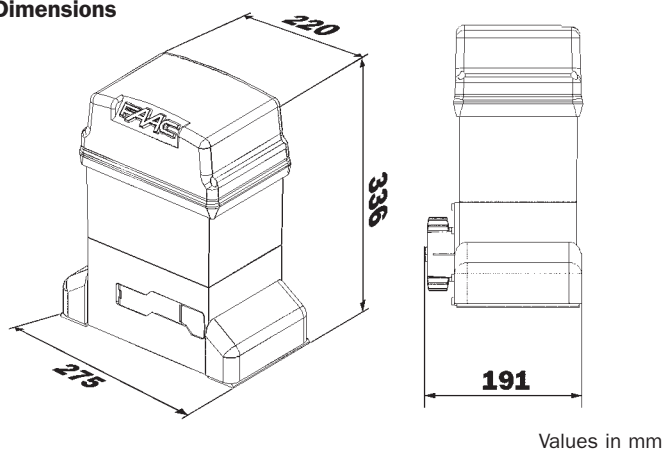


- 1 FAAC 746 Z20 with built-in control board/RP 433 DS
- 2 FAACLIGHT
- 3 FAAC T10 E
- 4 ANTENNA 433 MHZ
- 5 FAAC SAFEBEAM

| Low voltage cabling |                | Power cabling (230V) |                 |
|---------------------|----------------|----------------------|-----------------|
| A                   | 3 cables 3x0,5 | B                    | 1 cable 2x1,5+T |
|                     | 1 cable 2x0,5  |                      | 1 cable 2x1,5   |

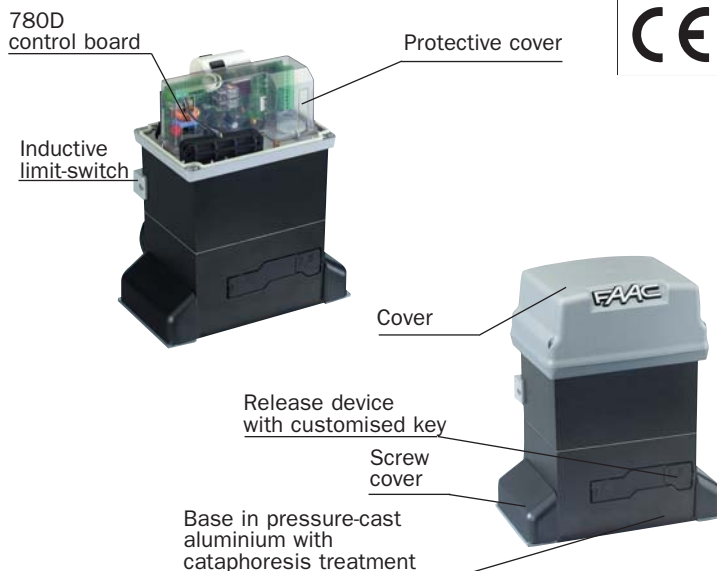
Note: Cable diameters in mm<sup>2</sup>

## Dimensions



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| Technical specifications 746 ER     | Z16                              | Z20       | CAT | RF |
|-------------------------------------|----------------------------------|-----------|-----|----|
| Power supply                        | 230 Vac (+ 6%-10%) 50 (60) Hz    |           |     |    |
| Electric motor                      | Single - phase, bi - directional |           |     |    |
| Absorbed power                      | 300 W                            |           |     |    |
| Absorbed current                    | 1.5 A                            |           |     |    |
| Traction and thrust force           | 0÷62 daN                         | 0÷50 daN  |     |    |
| Motor rotation speed                | 1.400 rpm                        |           |     |    |
| Thermal protection on motor winding | 120 °C                           |           |     |    |
| Clutch                              | Twin - disk in oil bath          |           |     |    |
| Reduction ratio                     | 1:30                             |           |     |    |
| Operating ambient temperature       | -20°C ÷ + 55°C                   |           |     |    |
| Weight with oil                     | 14 Kg                            |           |     |    |
| Type of oil                         | FAAC OIL XD 220                  |           |     |    |
| Gate speed                          | 9.6 m/min.                       | 12 m/min. |     |    |
| Protection class                    | IP 44                            |           |     |    |

## Specifications of 780 D control board (to be assembled inside the gearmotor)

|  |  |
|--|--|
| Power supply                           | 230 Vac (+6%-10%) 50 Hz  |
| Absorbed power                         | 10 W   |
| Motor max. load                        | 1000 W   |
| Accessories max. load                  | 0,5 A  |
| Operating ambient temperature          | -20°C +55°C  |
| Fuses                                  | 2  |
| Function logics                        | Automatic/"Stepped" automatic/Semi-automatic/Safety devices/Semi-automatic B / Dead-man C / "Stepped" semi-automatic / Mixed B/C logic   |
| Work time                              | Programmable (from 0 to 4,1 min)   |
| Pause time                             | Programmable (from 0 to 4,1 min)   |
| Thrust force                           | Adjustable over 50 levels  |
| Terminal board inputs                  | Open - Partially Open - Opening safety devices - Closing safety devices - Stop - Edge - Power supply + earth   |
| On-connector inputs                    | Opening and closing limit-switch/Motor capacitor   |
| Terminal board outputs                 | Flashing lamp - Motor - 24 Vdc accessories power supply - 24Vdc indicator-light - Timed output - Electric lock command - "traffic lights" - Fail safe  |
| Rapid connector                        | 5-pin card connection for Minidec, Decoder or RP receivers   |
| Programming                            | Nr. 3 keys(+,-,F) and display, "basic" or "advanced" mode  |
| "Basic" mode programmable functions    | Function logic - Pause time - Thrust force - Opening-closing direction   |
| "Advanced" mode programmable functions | Torque at initial thrust - Braking - Fail safe - Pre-flashing - Indicator-light/Timed output/ Electric lock or "traffic lights" command - Opening and closing safety devices logic - Encoder/Anti-crushing sensitivity - Deceleration - Partial opening time - Worktime - Assistance request - Cycle counter |
| Status indication                      | Display  |