

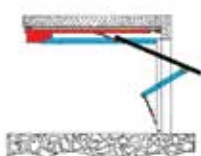
# Type of installation

| Max door dimensions L x H (m)  | Residential                      | Condominium  | Industrial                                |
|--|----------------------------------|--------------|---|
| 3,00 x 3,80<br><b>SWING</b><br>spring / counterbalanced<br>(with adapter GDA 2400) | <b>D600</b><br><b>D700HS</b>     | <b>D1000</b> |   |
| 5,00 x 3,80<br><b>SECTIONAL</b>  | <b>D600</b><br><b>D700HS</b>     | <b>D1000</b> |   |
|  |                                  |              | <b>540</b>                                |
|  |                                  |              | <b>541</b>                                |
|  |                                  |              | <b>541 3PH</b>                            |
|  | <b>Electromechanical ceiling</b> |              | <b>Electromechanical side application</b> |

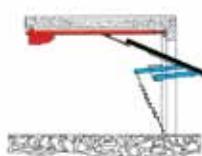
Type of up-and-over/sectional doors  
that can be automated with: D600 - D700HS - D1000



COUNTERBALANCED  
(with GDA 2400 adapter)



HORIZONTAL TRACKS



DOUBLE LEVER



SECTIONAL  
(with curved arm)

**FAAC**

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Automated systems  
for sectional doors

# Electromechanically-driven operator 24V

for sectional doors or spring/counterbalanced up-and-over doors,  
for residential (D600-D700HS) and also condominium (D1000) use

### News:

**D700HS (High Speed): up to 12m/minute  
double speed compared to traditional motors**

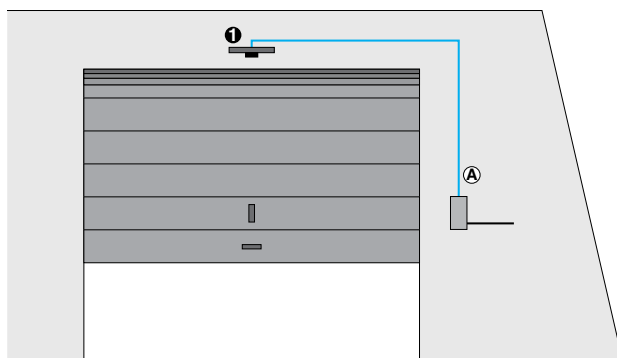
- Anti-burglary non-reversing facility: there is no need to install locks and bolts.
- Bi-stable release device (patented).
- The anti-crushing device makes it possible to build automated systems conforming to European Directives.  
The safety edge is not necessary.
- Quick, simple installation thanks to the pre-installed rail and installation of the automated system without any tools with rotation coupling.
- Chain/belt transmission.
- Adjustable travel limit electronic slow-down.



### DIMENSIONS AND TECHNICAL SPECIFICATIONS OF D600 - D700 HS - D1000

|   | D600      | D700HS                       | D1000     |
|---|-----------|------------------------------|-----------|
| Power supply                            |           | 230 Vac                      |           |
| Electric motor                          |           | 24 Vdc                       |           |
| Max. absorbed power                     | 220 W     | 440 W                        | 350 W     |
| Thrust force                            | 600 N     | 700 N                        | 1000 N    |
| Type of use                             |           | continuous                   |           |
| Maximum overall dimensions from ceiling |           | 35 mm                        |           |
| Courtesy lamp                           |           | 230 Vac - 40 W (max)         |           |
| Courtesy lamp timing                    |           | 120 s.                       |           |
| Carriage standard off load speed        | 6.6 m/min | 1.2 m/min                    | 6.6 m/min |
| Carriage reduced off load speed         |           | 3.8 m/min                    |           |
| Carriage speed at slow-down             | 1.3 m/min | 2.5 m/min                    | 1.3 m/min |
| Noise at standard speed                 |           | 45 dB(A)                     |           |
| Travel length at slow-down              |           | variable from setup          |           |
| Intrinsic safety device                 |           | standard supply              |           |
| Protection class                        |           | for internal use only (IP20) |           |
| Operating ambient temperature           |           | from -20 °C to +55 °C        |           |
| Dimensions (L x D x H) in mm            |           | 360 x 200 x 145              |           |

### TYPICAL INSTALLATION EXAMPLE



- **(A) Low voltage cabling**
  - 1 cable 2x1.5\*T

N.B.: Cable sections in mm<sup>2</sup>.

| Ref.   | Q.ty | Description                                  | Item code |
|--|------|--|-----------|
| ①  | 1    | D600 Dolphin kit 868                         | 10566515  |
| ①  | 1    | Single piece rail with chain travel 2,000 mm | 390119    |
|  | 1    | Receiver XF 433 / 868                        | included  |
|  | 1    | Transmitter 433 / 868                        |           |
|  | 1    | XL 24 flashing lamp                          | 410017    |
|  | 1    | Pair of photocelles                          |           |
|  | 1    | Key operated push button T10                 | 401010001 |
| <b>Adaptor for counterbalanced up-and-over doors</b> |      |  |           |
|  | 1    | GDA 2400                                     | 390548    |
| <b>Arm for sectional doors</b>                       |      |  |           |
|  | 1    | Arm for sectional doors                      | 390768    |

### Notes

**ATTENTION:** The configuration does not include the safety devices (i.e.: active or passive safety edges) that are to be determined according to the specific "risk analysis" of each installation.

(Ref.: UNI-EN 12445 and 12453 European Standards).

- The indicated price does not include the installation costs and the expenses for masonry, electrical and metalwork preparations.

## SPECIFIC ACCESSORIES FOR DOLPHIN KIT

|                        | Item code |
|------------------------|-----------|
| D600 Dolphin kit K868  | 10566515  |
| D600 Dolphin kit K433  | 10566516  |
| D700HS                 | 110602    |
| D1000 Dolphin kit K868 | 10566615  |
| D1000 Dolphin kit K433 | 10566616  |

**IMPORTANT:** a rail (single piece or two pieces with belt or chain drive) must always be ordered with every D600 or D1000 operator.

**Packages contain:** an electro-mechanical operator with control unit and timed courtesy lamp, installation accessories and internal release device.

## CONTROL UNITS



Built-in E600, E700HS, E1000 control boards. See electronics and accessories page 147

## SPECIFIC ACCESSORIES



Curved arm for sectional doors

Item code 390768



GDA 2400 adaptor for counterbalanced up-and-over doors, max. height 2400 mm

Item code 390548



Receiver

XF 868 MHz - XF 433 MHz

XF 868 Code 319007

XF 433 Code 319006



Flashing lamp XL 24 L

Item code 410017



Rail central support - supplied standard with two piece rails

Item code 390765

Cable and sheath for external release (for application to the existing handle)

Item code 390488

Emergency battery kit XBAT 24

Item code 390923 (\*)

Key-operated external release for doors over 15 mm thick from no. 1 to no. 36 (\*\*)

Item code from 424591001 to 424591036

**Notes (\*)** The D600 - D700HS - D1000 automated systems are designed for housing "on board" the XBAT24 emergency battery kit (optional).

**(\*\*)** To install, the accessory cable and sheath for external release must also be used.

**Important:** Important: the E600/E700HS/E1000 control boards, with new technology are compatible only with the XF 433/XF868 receiver.

The D600 - D700 HS - D1000 automated systems can be equipped only with the XL24L flashing lamp.

## USE OF OPERATORS D600 - D700HS - D1000

| Rail                 | Door max. dimensions<br>l x h (m) | Sectional door max. dimensions<br>l x h (m) | Length of rail (mm) | Carriage max. travel (mm) | Item code |
|----------------------|-----------------------------------|---|---------------------|---------------------------|-----------|
| Single with chain    | 3,00 x 2,15                       | 5,00 x 2,02                                 | 2400                | 2020                      | 390119    |
| Single with chain    | 3,00 x 2,60                       | 5,00 x 2,62                                 | 3000                | 2620                      | 390125    |
| Single with chain    | 3,00 x 3,20                       | 5,00 x 3,20                                 | 3600                | 3200                      | 390131    |
| Single with chain    | 3,00 x 3,80                       | 5,00 x 3,80                                 | 4200                | 3800                      | 390138    |
| Two-piece with chain | 3,00 x 2,60                       | 5,00 x 2,62                                 | 3000                | 2620                      | 390225    |
| Two-piece with chain | 3,00 x 3,20                       | 5,00 x 3,20                                 | 3600                | 3200                      | 390231    |
| Two-piece with chain | 3,00 x 3,80                       | 5,00 x 3,80                                 | 4200                | 3800                      | 390238    |
| Single with belt     | 3,00 x 2,15                       | 5,00 x 2,02                                 | 2400                | 2020                      | 390120    |
| Single with belt     | 3,00 x 2,60                       | 5,00 x 2,62                                 | 3000                | 2620                      | 390126    |
| Single with belt     | 3,00 x 3,20                       | 5,00 x 3,20                                 | 3600                | 3200                      | 390132    |
| Single with belt     | 3,00 x 3,80                       | 5,00 x 3,80                                 | 4200                | 3800                      | 390139    |
| Two-piece with belt  | 3,00 x 2,60                       | 5,00 x 2,62                                 | 3000                | 2620                      | 390226    |
| Two-piece with belt  | 3,00 x 3,20                       | 5,00 x 3,20                                 | 3600                | 3200                      | 390232    |
| Two-piece with belt  | 3,00 x 3,80                       | 5,00 x 3,80                                 | 4200                | 3800                      | 390239    |

## OTHER ACCESSORIES



Key-operated push-buttons page 166



Photocells and Columns page 171



Safety devices page 173



Flashing lamps page 174



Transmitters page 160



Various accessories page 175

# Gearmotors for industrial sectional doors 230V

(with integrated control board)

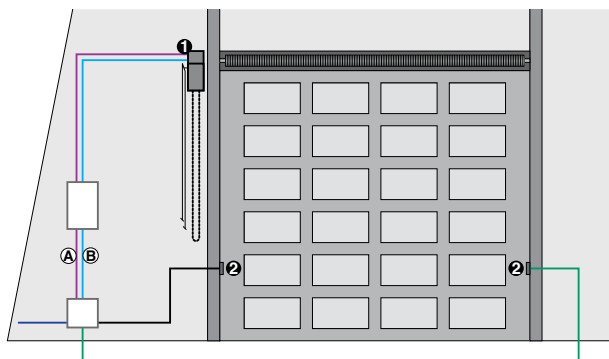


- Ideal for industrial application with "dead-man" control.
- 2 types of application: by direct transmission on the spring-carrier shaft or indirect by chain transmission (in case of shortage of space at the sides or too short a door shaft).
- The gearmotor is non-reversing. In case of power cut: the door can be moved manually by using the rapid release cord device or (540 V) by activating the chain winch.

## DIMENSIONS AND TECHNICAL SPECIFICATIONS OF 540

|                               |                                       |                               |                       |
|-------------------------------|---------------------------------------|-------------------------------|-----------------------|
| Power supply                  | 230 Vac (+6% -10%) 50 (60) Hz         | Shaft rated torque            | 50 Nm                 |
| Electric motor                | asynchronous single-phase 1450 r.p.m. | Drive max. revs               | 24                    |
| Max. absorbed power           | 800 W                                 | Protection class              | IP54                  |
| Absorbed current              | 3.5 A                                 | Operating ambient temperature | from -20 °C to +55 °C |
| Thrust capacitor              | 20 µF                                 | Gearmotor max. weight         | 14 Kg                 |
| Rotation speed                | 23 r.p.m.                             | Type of oil                   | FAAC HP OIL           |
| Thermal protection on winding | 140 °C                                | Oil quantity                  | 0.9 l                 |
| Use frequency                 | 40% S3                                | Dimensions (L x D x H) in mm  | 92 x 376 x 266        |
| Drive                         | through shaft diam. 25.4 mm (1")      |                               |                       |

## TYPICAL INSTALLATION EXAMPLE



### ■ (A) Low voltage cabling

- 2 cables 2x0.75
- 1 cable 3x0.75
- 1 cable 2x0.75

### ■ (B) Power cabling (230V)

- 1 cable 2x1.5+T

N.B.: Cable sections in mm<sup>2</sup>.

| Ref. | Q.ty | Description  | Item code |
|------|------|--|-----------|
| 1    | 1    | Gearmotor 540 V BRP with travel limit and integrated control board | 109511    |
| 3    | 1    | Receiver RP 433 SLH  | 787824    |
|      | 1    | Two-channel transmitter XT2 433 SLH LR                             | 787007    |
| 2    | 1    | Pair of photocells SAFEBEAM  | 785165    |

### Notes

**ATTENTION:** The configuration does not include the safety devices (i.e.: active or passive safety edges) that are to be determined according to the specific "risk analysis" of each installation. (Ref.: UNI-EN 12445 and 12453 European Standards).

- The indicated price does not include the installation costs and the expenses for masonry, electrical and metalwork preparations.

## 540

| Model         | Use           |                   | Control unit     | Item code |
|---------------|---------------|-------------------|------------------|-----------|
|               | Applications  | Use frequency (%) |                  |           |
| 540           | See graph (*) | 40 (S3)           | 540 BT included  | 109541    |
| 540 X         | See graph (*) | 40 (S3)           | 540 BT included  | 109530    |
| 540 V         | See graph (*) | 40 (S3)           | 540 BT included  | 109540    |
| 540 BPR       | See graph (*) | 40 (S3)           | 540 BPR included | 109511    |
| 540 X BPR     | See graph (*) | 40 (S3)           | 540 BPR included | 109513    |
| 540 V BPR kit | See graph (*) | 40 (S3)           | 540 BPR included | 109509    |

**The package 540 (540 BPR) includes:** a gearmotor with travel limit and integrated control board 540 BT (540 BPR), securing plate, "cord operated" emergency release device (\*\*).

**The package 540 V (540 V BPR) includes:** a gearmotor with travel limit and integrated control board 540 BT (540 BPR), securing plate, "cord operated" emergency release device (\*\*), manual motion "chain" device (winch) (\*\*).

**The package 540 X (540 X BPR) includes:** a gearmotor with travel limit and integrated control board 540 BT (540 BPR), securing plate, manual motion "chain" device (winch) (\*\*).

### CONTROL UNITS



**Electronic circuit board 200 BT (built-in)**

Technical Specifications page 153



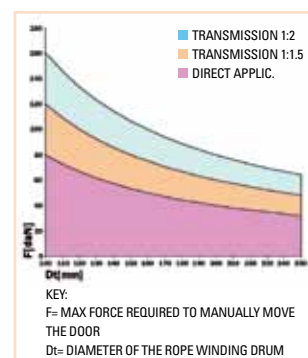
**Built-in control board 540 BPR**  
Technical specifications page 148

### SPECIFIC ACCESSORIES



**Securing plate for three-dimensional adjustment**

Item code 390721



#### (\*) GRAPH - FIELDS OF APPLICATIONS

To assess correct application of the automated system, measure the force required to lift the door (this value can also be found in the door documentation) and the diameter of the rope winding drum.

The graph will make it possible to determine the possible application of the gearmotor and the need to use a transmission kit for off-axis application (see specific accessories for 540).



**The transmission kit for "off axis" applications R. 1:1.5 (\*) includes:**

- Securing plate of gearmotor including the chain tension adjustment system
- Pinion Z20 with shaft for installation on the gearmotor
- Pinion Z30 with shaft for installation on the sectional door shaft
- Transmission chain

Item code 390744



**The transmission kit for "off axis" applications R. 1:2.0 (\*) includes:**

- Securing plate of gearmotor including the chain tension adjustment system
- Pinion Z20 with shaft for installation on the gearmotor
- Pinion Z40 with shaft for installation on the sectional door shaft
- Transmission chain

Item code 390745



**Button-board XB300**

Item code 402500

**Rapid release extension for installations of up to 8 m**

Item code 390719



**Chain winch extension for installations of up to 8 m**

Item code 390720

### Notes

- (\*\*) For installation of the gearmotor at heights of up to 4 m. For greater heights, see above Specific accessories.

### OTHER ACCESSORIES



**Key-operated push-buttons**  
page 166



**Photocells and Columns**  
page 171



**Safety devices**  
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**Flashing lamps**  
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**Transmitters**  
page 160



**Various accessories**  
page 175

# Gearmotors for industrial sectional doors 230V

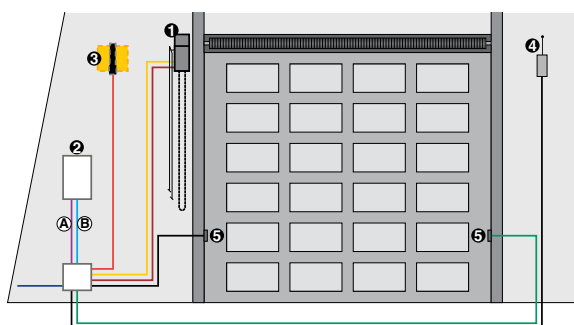


- Ideal for industrial applications with "automatic/semiautomatic logics" command, with a "remote" control unit.
- 2 types of application: by direct transmission on the spring-carrier shaft or indirect by chain transmission (in case of shortage of space at the sides or too short a door shaft).
- The gearmotor is non-reversing. In case of power cut: the door can be moved manually by using the rapid release cord device or (541 V) by activating the chain winch.

## DIMENSIONS AND TECHNICAL SPECIFICATIONS OF 541

|                               |                                       |                               |                       |
|-------------------------------|---------------------------------------|-------------------------------|-----------------------|
| Power supply                  | 230 Vac (+6% -10%) 50 (60) Hz         | Shaft rated torque            | 50 Nm                 |
| Electric motor                | asynchronous single-phase 1450 r.p.m. | Drive max. revs               | 24                    |
| Max. absorbed power           | 800 W                                 | Protection class              | IP54                  |
| Absorbed current              | 3.5 A                                 | Operating ambient temperature | from -20 °C to +55 °C |
| Thrust capacitor              | 20 µF                                 | Gearmotor max. weight         | 14 Kg                 |
| Rotation speed                | 23 r.p.m.                             | Type of oil                   | FAAC HP OIL           |
| Thermal protection on winding | 140 °C                                | Oil quantity                  | 0.9 l                 |
| Use frequency                 | 40% S3                                | Dimensions (L x D x H) in mm  | 92 x 376 x 266        |
| Drive                         | through shaft diam. 25.4 mm (1")      |                               |                       |

## TYPICAL INSTALLATION EXAMPLE



### ■ (A) Low voltage cabling

- 2 cables 3x0.5
- 1 cable 2x0.5
- 1 cable 6x0.5

### ■ (B) Power cabling (230V)

- 1 cable 3x1.5+T
- 1 cable 2x1.5+T
- 1 cable 2x1.5

N.B.: Cable sections in mm<sup>2</sup>.

| Ref. | Q.ty | Description                             | Item code |
|------|------|---|-----------|
| ①    | 1    | Gearmotor 541 V with integrated encoder | 109542    |
| ②    | 1    | Control board 578 D                     | 790922    |
|      | 1    | Enclosure mod. E                        | 720119    |
| ④    | 1    | Receiver RP 433 SLH                     | 787824    |
|      | 1    | Two-channel transmitter XT2 433 SLH LR  | 787007    |
| ③    | 1    | Flashing lamp FAAC LAMP                 | 410001    |
| ⑥    | 1    | Pair of photocells PHOTOBEAM            | 785163    |

### Notes

**ATTENTION:** The configuration does not include the safety devices (i.e.: active or passive safety edges) that are to be determined according to the specific "risk analysis" of each installation.  
(Ref.: UNI-EN 12445 and 12453 European Standards).

• The indicated price does not include the installation costs and the expenses for masonry, electrical and metalwork preparations.



## 541

| Model | Use           |                   | Control unit | Item code |
|-------|---------------|-------------------|--------------|-----------|
|       | Applications  | Use frequency (%) |              |           |
| 541   | See graph (*) | 40 (S3)           | Not included | 109543    |
| 541 X | See graph (*) | 40 (S3)           | Not included | 109532    |
| 541 V | See graph (*) | 40 (S3)           | Not included | 109542    |

**The package 541 includes:** a gearmotor with travel limit and integrated encoder, securing plate, "cord operated" emergency release device (\*\*).

**The package 541 V includes:** a gearmotor with travel limit and integrated encoder, securing plate, "cord operated" emergency release device (\*\*), manual motion "chain" device (winch) (\*\*).

**The package 541 X includes:** a gearmotor with travel limit and integrated encoder, securing plate, manual motion "chain" device (winch) (\*\*).

## CONTROL UNITS



**Control unit EB 578 D (including board 578D, enclosure, disconnecting switch, control button-board and activation key)**

Item code 402501



**Control board 578 D**  
Technical specifications page 145

Item code 790922



**Enclosure mod. E for control boards**

Item code 720119



**Enclosure mod. L for control boards**

Item code 720118

## SPECIFIC ACCESSORIES



**Enclosure mod. LM**

Item code 720309



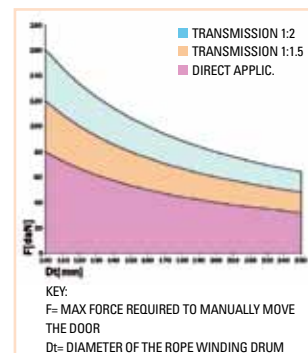
**Transmission kit for "Off axis" applications R. 1:1.5 (\*)**

Item code 390744



**Transmission kit for "Off axis" applications R. 1:2.0 (\*)**

Item code 390745



**(\*) GRAPH - FIELDS OF APPLICATIONS**

To assess correct application of the automated system, measure the force required to lift the door (this value can also be found in the door documentation) and the diameter of the rope winding drum.

The graph will make it possible to determine the possible application of the gearmotor and the need to use a transmission kit for off-axis application (see specific accessories for 541).



**Securing plate for three-dimensional adjustment**

Item code 390721



**Rapid release extension for installations of up to 8 m**

Item code 390719



**Chain winch extension for installations of up to 8 m**

Item code 390720

**Notes (\*\*)** For installation of the gearmotor at heights of up to 4 m. For greater heights, see Specific accessories for the 541.

## OTHER ACCESSORIES



**Key-operated push-buttons**  
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**Photocells and Columns**  
page 171



**Safety devices**  
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**Flashing lamps**  
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**Transmitters**  
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**Various accessories**  
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## Gearmotors for industrial sectional doors 230V (with "remote" control board)

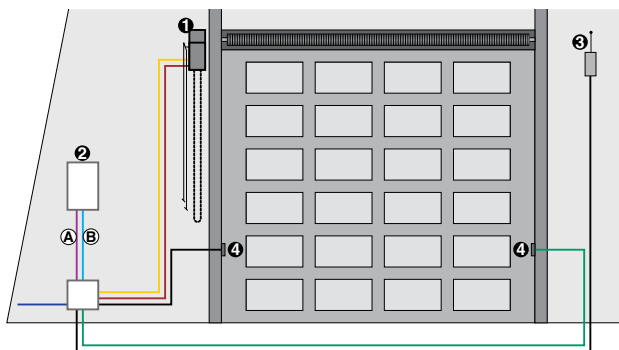


- Ideal for industrial applications with "automatic/semiautomatic logics" command, with a "remote" control unit.
- Capacity 70 Nm.
- 2 types of application: by direct transmission on the spring-carrier shaft or indirect by chain transmission (in case of shortage of space at the sides or too short a door shaft).
- The gearmotor is non-reversing. In case of power cut: the door can be moved manually by using the rapid release cord device or (541 V 3 PH) by activating the chain winch.

### DIMENSIONS AND TECHNICAL SPECIFICATIONS OF 541 - 3PH

|                               |                                      |                               |                  |
|-------------------------------|--------------------------------------|-------------------------------|------------------|
| Power supply                  | 400 Vac (+6% -10%) 50 (60) Hz        | Shaft rated torque            | 70 Nm            |
| Electric motor                | asynchronous three-phase 1450 r.p.m. | Drive max. revs               | 24               |
| Max. absorbed power           | 720 W                                | Protection class              | IP54             |
| Absorbed current              | 1.1 A                                | Operating ambient temperature | -20 °C to +55 °C |
| Rotation speed                | 24 r.p.m.                            | Gearmotor max. weight         | 14 Kg            |
| Thermal protection on winding | 140 °C                               | Type of oil                   | FAAC HP OIL      |
| Use frequency                 | 60% S3                               | Oil quantity                  | 0.9 l            |
| Drive                         | through shaft diam. 25.4 mm (1")     | Dimensions (L x D x H) in mm  | 92 x 376 x 266   |

### TYPICAL INSTALLATION EXAMPLE



- (A) **Low voltage cabling**
- 2 cables 2x0.75
  - 1 cable 3x0.75
  - 1 cable 2x0.75

- (B) **Power cabling (230V)**
- 1 cable 2x1.5+T

N.B.: Cable sections in mm<sup>2</sup>.

| Ref. | Q.ty | Description                                  | Item code |
|------|------|--|-----------|
| 1    | 1    | Gearmotor 541 V 3 PH with integrated encoder | 109550    |
| 2    | 1    | Control unit EB540 BPR 3PH                   | 402502    |
| 4    | 1    | Receiver RP 433 SLH                          | 787824    |
|      | 1    | Two-channel transmitter XT2 433 SLH LR       | 787007    |
| 5    | 1    | Pair of photocells PHOTOBEAM                 | 785163    |

#### Notes

**ATTENTION:** The configuration does not include the safety devices (i.e.: active or passive safety edges) that are to be determined according to the specific "risk analysis" of each installation.  
(Ref.: UNI-EN 12445 and 12453 European Standards).

• The indicated price does not include the installation costs and the expenses for masonry, electrical and metalwork preparations.

## 541 - 3 PH

| Model     | Use           |                   | Control unit | Item code |
|-----------|---------------|-------------------|--------------|-----------|
|           | Applications  | Use frequency (%) |              |           |
| 541 3PH   | See graph (*) | 60 (S3)           | Not included | 109549    |
| 541 X 3PH | See graph (*) | 60 (S3)           | Not included | 109520    |
| 541 V 3PH | See graph (*) | 60 (S3)           | Not included | 109550    |

**The package 541 3PH includes:** a gearmotor with travel limit and integrated encoder, securing plate, "cord operated" emergency release device (\*\*).

**The package 541 V 3PH includes:** a gearmotor with travel limit and integrated encoder, securing plate, "cord operated" emergency release device (\*\*), manual motion "chain" device (winch) (\*\*).

**The package 541 X 3PH includes:** a gearmotor with travel limit and integrated encoder, securing plate, manual motion "chain" device (winch) (\*\*).

## CONTROL UNITS



**Control unit EB 540 BPR 3PH**  
(including board 540 BPR, enclosure, disconnecting switch, remote control switches, control button-board and activation key)

Item code 402502



**Control unit EB 578 D 3PH**  
(including board 578 D, enclosure, disconnecting switch, remote control switches, control button-board and activation key)

Item code 402504

## SPECIFIC ACCESSORIES



**Transmission kit for "Off axis" applications R. 1:1.5 (\*)**

Item code 390744



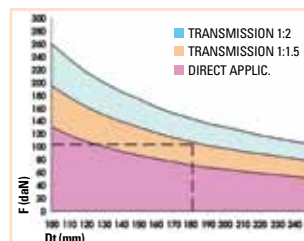
**Transmission kit for "Off axis" applications R. 1:2.0 (\*)**

Item code 390745



**Securing plate for three-dimensional adjustment**

Item code 390721



KEY:  
F= MAX FORCE REQUIRED TO MANUALLY MOVE THE DOOR  
Dt= DIAMETER OF THE ROPE WINDING DRUM

### (\*) GRAPH - FIELDS OF APPLICATIONS

The graph shows with which type of application the 541 3PH model can be installed, considering the maximum force F necessary to manually move the door, expressed in daN (1daN = force required to lift 1.02 kg) and the diameter Dt of the rope-winding drum, expressed in millimetres. For example, if a door can be moved with a force of 108 daN and the drum diameter is 180 mm, a 541 3PH model with chain transmission of 1:1.5 must be installed.

N.B.: force F can be measured with a dynamometer. It is not directly related to the door weight, but to its balance.



**Rapid release extension for installations of up to 8 m**

Item code 390719



**Chain winch extension for installations of up to 8 m**

Item code 390720

**Notes (\*\*)** For installation of the gearmotor at heights of up to 4 m. For greater heights, see Specific accessories for the 541 3PH.

## OTHER ACCESSORIES



**Key-operated push-buttons**  
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**Photocells and Columns**  
page 171



**Safety devices**  
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**Flashing lamps**  
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**Transmitters**  
page 160



**Various accessories**  
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