

540-541

FAAC

industrial sectional gearmotors "Dead man" (540) "with automatic/semi-automatic logics" (541)



THE SOLUTION FOR INDUSTRIAL APPLICATIONS

The 540/541 gearmotors were specifically designed to satisfy all closing requirements in industrial and commercial environments, and are able to automate sectional doors, large ones included.

STURDY AND SAFE

The operation of the oil bath gearbox is guaranteed by a steel worm-screw coupled to a bronze ring-gear, enclosed in a solid die-cast aluminium body. The gearmotor is non-reversing. In the event of a power cut, the door can be moved manually by using the "rapid" release cord device (standard supply for all models) or, in the 540/541 V versions, by manually activating the chain winch. If one of the two manual activation systems is activated, a safety microswitch prevents electrical operation.

THE IMPORTANCE OF VERSATILITY

The gearmotors were conceived for lateral fitting with "direct" transmission on the spring shaft, or with "indirect" transmission by chain. The latter application make it possible to increase the automated system's versatility, enabling use even if lateral space is insufficient, or for particularly heavy doors. The gearmotor is highly compact, in particular its width of only 92 mm makes it easy to install even where space is tight. The use frequency of the gearmotors (almost intensive) means that they can be used also for particularly heavy duty cycles.

TWO VERSIONS FOR EACH APPLICATION

The range comprises two versions:
- **540:** for "dead man" operation - the 540 BT control board is built into the gearmotor to simplify electrical wiring.
- **541:** with a built-in encoder for operation "with automatic/semi-automatic logics", using the 578D control board, which should be remotely installed.
The two versions are available "with or without" a chain winch for manual activation.

SPECIFICATIONS

Power supply 230 Vac (+6% -10%) 50-60Hz / Single-phase electric induction motor 1450 rpm / Max absorbed power 800W / Absorbed current 3.5 A / Thrust capacitor 20 μ F / Rotation speed 25 rpm / Winding thermal protection to 140 °C / Use frequency (S3) 40% / Max number of consecutive cycles 5 / Through Shaft diam 25.4 mm (1") drive / Shaft rated torque 50 Nm / Drive max. revs 24 / Protection class IP 54 / Operating ambient temperature -20 / +55°C / Gearmotor maximum weight 14 kg / Oil type FAAC XD220 / Oil quantity 0.75 l / Transmission by steel worm-screw and bronze ring-gear in oil bath / Die-cast aluminium body / Travel-limit unit with micrometric screw / Rapid release device for manual activation with cord / Chain winch (models 540/541 V) for manual activation / Built-in "dead man" control board (models 540) / Built-in encoder (models 541) for control via board 578 D /

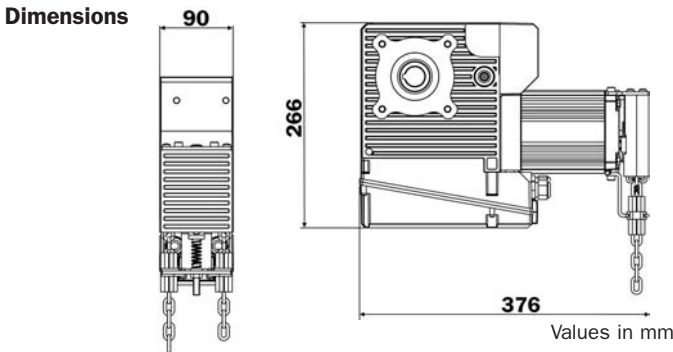
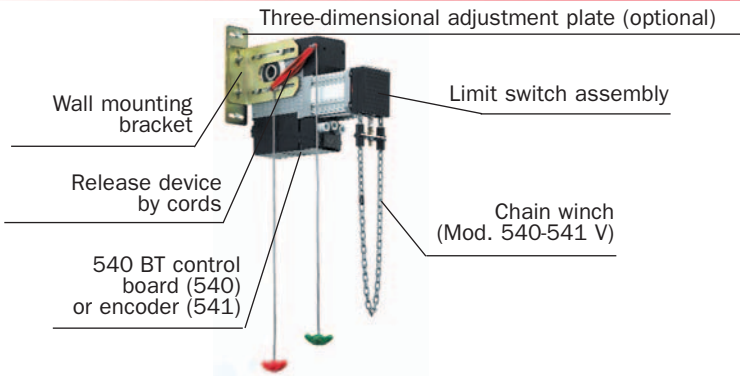
540 BT CONTROL BOARD (BUILT INTO MODELS 540 AND 540 V)

Power supply 230 V ~ (+6% -10%) 50 Hz / Low voltage commands 24 Vdc / Motor max load 800 W / Interlocked opening/closing push-buttons / Two fuses 0.25 A for transformer and 6.3 A for motor

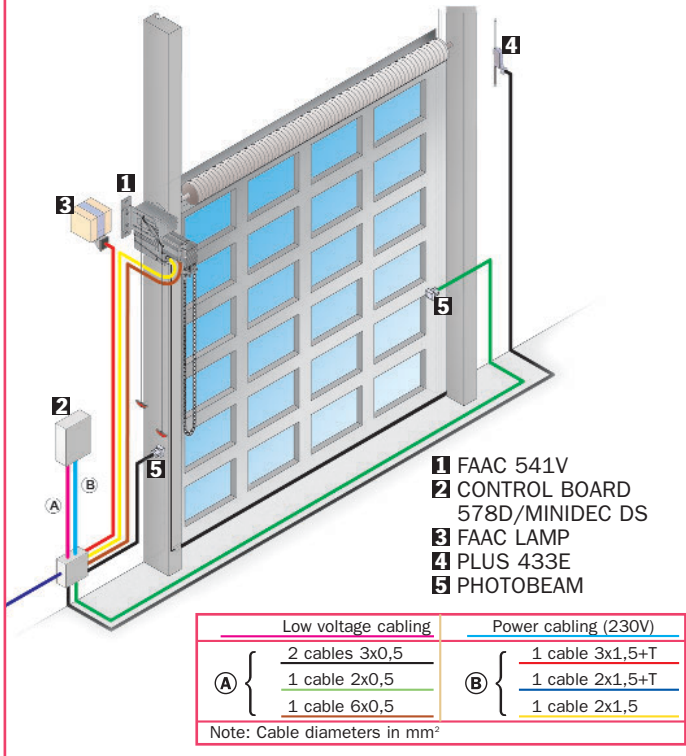
578 D CONTROL BOARD

Power supply 230 V ~ (+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 / Two Fuses / Function Logics: Automatic / "Stepped" automatic / Semi-automatic / Security / Semi-automatic B / Dead man C / "Stepped" Semi-automatic / Programmable Work time (from 0 to 4 min.) / Programmable Pause time (from 0 to 4 min.) / Thrust Force Adjustable on 50 levels / Terminal board inputs Open / Partial Open / Opening safety devices / Closing safety devices / Stop / Edge / Power supply + Earth / On-connector inputs Opening and closing limit-switch / Encoder / Terminal board outputs Flashing lamp - Motor - 24 Vdc power supply to accessories - 24 Vdc indicator-light / Timed output - Failsafe / Rapid connector 5-pin card connection for Minidec, Decoder or RP receivers / On-display Programming with three keys / Two programming modes: "basic" or "advanced" / "Basic" mode programmable functions Function Logic - Pause time - Thrust force - Travel direction / "Advanced" mode programmable functions Thrust torque - Braking - Failsafe - Pre-flashing - Indicator-light / Timed output - Opening and closing safety devices logic - Encoder (optional) for anti-crushing electronic safety device, management of slow-downs and partial opening in "real-time" - Slowdowns - Partial opening time - Work time - Assistance request - Cycle counter

540-541



INSTALLATION LAY-OUT



Technical specifications of gearmotors 540/541

Power supply	230 Vac (+6% -10%) 50 (60) Hz
Electric motor	single-phase induction 1450 rpm
Max absorbed power	800 W
Absorbed current	3.5 A
Thrust capacitor	20 µF
Rotation speed	25 rpm
Winding thermal protection	140° C
Use frequency	40% S3
Max consecutive cycles	5
Drive	Through shaft diam. 25.4mm (1")
Shaft rated torque	50 Nm
Drive max revs	24
Protection class	IP54
Operating ambient temperature	-20 / +55°C
Gearmotor max weight	14 Kg
Type of oil	FAAC XD220
Oil quantity	0.75 l

Specifications of 540 BT control board (built into models 540 and 540 V)

Power supply voltage	230 V ~ (+6% -10%) 50 Hz
Low voltage commands	24 Vdc
Motor max. load	800 W
Opening/closing push-buttons	Interlocked
Operating ambient temperature	- 20° C +55° C
Two fuse	Transformer 0.25 A Motor 6.3 A

Specifications of 578 D control board

Power supply voltage	230 V ~ (+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/Semi-automatic B/Dead-man C / "Stepped" semi-automatic
Work time	Programmable (from 0 to 4 min.)
Pause time	Programmable (from 0 to 4 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 travel-limit/Encoder
Terminal board outputs	Flashing lamp - Motor - 24 Vdc power supply to accessories -24 Vdc indicator-light / Timed output - Failsafe
Rapid connector	5-pin card connection for Minidec, Decoder or RP receivers
Programming	N. 3 keys (+, -, F) and display, "basic" or "advanced" mode
"Basic" mode programmable functions	Function logic - Pause time - Thrust force - Gate direction
"Advanced" mode programmable functions	Thrust torque - Braking - Failsafe - Pre-flashing - Indicator-light/Timed output - Opening and closing safety devices logic - Encoder (optional) for anti-crushing electronic safety device, management of slowdowns and partial opening in real-time - Slowdowns - Partial opening time - Work time - Assistance request - Cycle counter

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