

# 595

## hydraulic operator for counterbalanced up-and-over doors



### IDEAL FOR RESIDENTIAL AND LIGHT COMMERCIAL GARAGES

The FAAC 595 hydraulic system is designed to lift counterbalanced up-and-over doors of residential and light commercial garages. Lifts doors with width of up to 3.5 metres. By adding another operator, the Slave version can lift doors with width of up to 5 metres.

### MECHANICALLY ASSEMBLED ACCESSORIES ARE USED

The supplied installation accessories allows you to install the operator without doing any welding. The sturdy securing longitudinal member (optional) makes it possible to install the operator in the ideal position for any type of door, without any modifications to existing structures.

### MAXIMUM SAFETY THRESHOLD

Safety is guaranteed by the exclusive hydraulic device with anti-crushing protection double by-pass valve. The anti break-in facility is provided by the opening and closing hydraulic lock, which stops the door in any position without using electric locks or bolts. In case of a power cut, a release facility from inside the garage is supplied, and another from the outside (optional), with customised key.

### HIGH-TECH

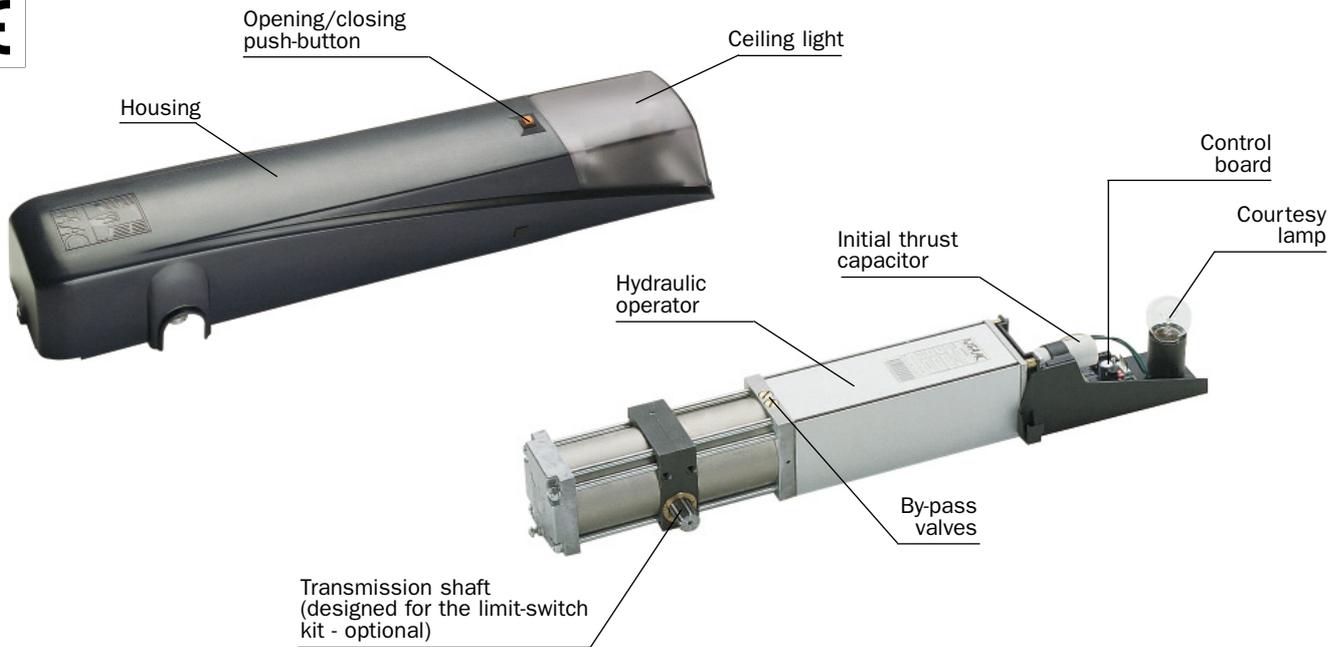
FAAC 595 is supplied with the 596 MPS control board using SMT technology, which includes a high powered transformer, a connector for inserting decoding cards or radio-receiver modules, and a stop input. FAAC 596 MPS has a double function logic - automatic and semi-automatic - and enables the fail safe function for automatically verifying the efficiency of the photocells.

### INTEGRATED COMPONENTS

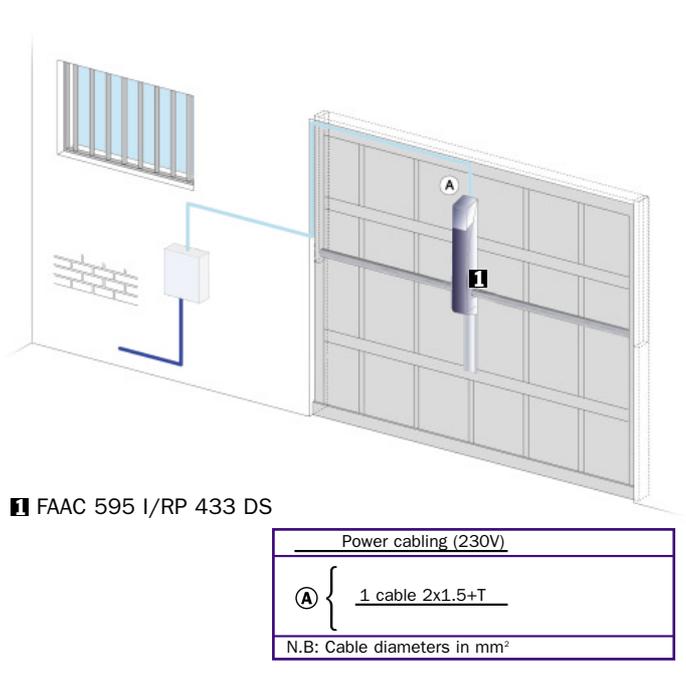
In the 595 I version, all components are integrated in an enbloc protected by ABS housing: operator, control board, timed courtesy lamp, and opening/closing push-button.

### SPECIFICATIONS

Hydraulic operator for counterbalanced up-and-over doors with locking at opening and closing • Door max width 3.5 m • Door max height 2.7 m • Door max weight 15 Kg/sqm • Two-motor application for doors with max width 5 m and max height 3 m • Main components of the automated system: operator, control board and courtesy lamp integrated in an enbloc • Protective ABS housing with built-in OPEN push-button • Installation on door panel by securing longitudinal member (optional) • Application with transmission tubes and straight or curved telescopic arms • Max torque 400 Nm • Max use frequency 50 cycles/hour • Angular velocity 9°15'/s • Electric motor power supply 230 V (+6% -10%) - 50(60) Hz • Electric motor power 220 W • Thermal protection at 120°C built into motor winding • Overall dimensions (Length x Width x Height) 731x142x112 mm • Protection class IP31 • Operating ambient temperature -20°C +55°C • Single-phase motor with two rotation directions (1,400 rpm) • Hydraulic gerotor pump (max low noise) • Die-cast distribution flange • Activated by rack and piston, and transmission shaft • Piston bores in NIPLOY treated steel • Oil re-circulation tube • Separate control of opening and closing force by by-pass valves with tamper-proof plate - Anti-crushing safety to UNI 8612 standard • Built-in lever operated manual release device • External release device with customised key (optional) • Tank in anodised aluminium • Mineral hydraulic oil with additives • Designed to install limit-switch kit (optional) • SMT technology electronic card • Motor maximum load 800 W • 24 Vdc - 360 mA max output for accessories • SMT technology • Microprocessor control • Mains filter • 2 protection fuses (power supply for accessories -motors) • Connector for card receiver/decoding cards • Separate high and low voltage terminal boards • Automatic (A) and semi-automatic (E) function logics (Programming Dip Switches • Fail-safe on photocell (can be disabled) • Two logics for safety devices • Selection range for opening/closing times: 25"-30"-35"-40" • Selectable pause times 30"/60" • Inputs: closing safety devices, stop push-button, opening push-button • Outputs: power supply for accessories, motor, courtesy lamp • Max lamp load 40W • Designed to control two motors



### INSTALLATION DIAGRAM SPECIMEN

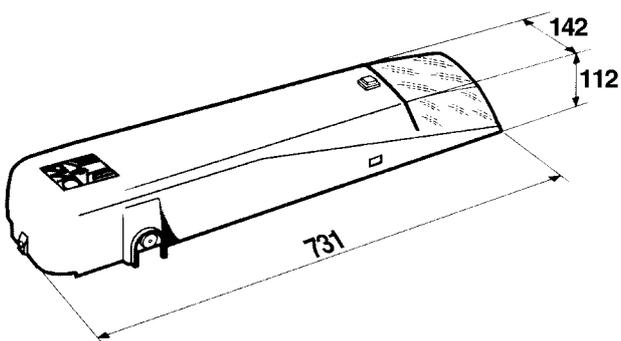


Model	Use		
	Door max dimensions W x H (m)	Door max weight (kg/sqm)	Use frequency (cycles/hour)
595 I	3,50 x 2,70	15	50
595 SLAVE	5,00 x 3,00 (*)	15	50

(\*) For up-and-over doors in the width range of 3.50 a to 5.00 metres (height 3.00 m), use a 595 I operator and a 595 SLAVE. In this case, the 596MPS control board built into the 595 I also controls the 595 SLAVE.

Technical specifications	595
Power supply	230 V ~ (+6% -10%) 50 (60) Hz
Electric motor	single-phase bi-directional
Motor rotation speed	1.400 rpm
Absorbed power	220 W
Absorbed current	1 A
Rated torque	0÷400 Nm
Angular velocity	9°15'/s
Thermal protection on motor winding	120°C
Operating ambient temperature	-20°C +55°C
Weight with oil	11 kg
Type of oil	FAAC OIL XD 220
Protection class	IP 31 (for internal use only)
Pump flow rate	0,75 l/min.

### Dimensions



Values in mm

### Specifications of 596 MPS control board

Power supply	230 V ~ (+6% -10%) 50 (60) Hz
Maximum load of motors	500 W
Accessories output	24 Vdc 360 mA max
Operating ambient temperature	-20°C + 55°C
Two protection fuses	5 A electric motor 0,5 A accessories

- **Programmable functions**
  - Function logics: automatic and semi-automatic
  - Pause times
  - Work times
  - "Closing photocell" function logic
  - Photocells fail safe
- **Terminal board outputs**
  - Motor, power supply for accessories, timed courtesy lamp
- **Terminal board inputs**
  - Open, stop, safety device, opening and closing limit-switch
- **SMT technology**