## electro-mechanical ceiling operators for spring, counterbalanced up-and-over doors and sectional doors



## VERSATILITY

The 525 R - 530 R operators can be used for spring and sectional doors, and by using an adapter, for counterbalanced up-and-over doors. The existing structure does not require any modification to install the automated system.

## QUICK AND EASY TO INSTALL

The automated system is easy to install as
it is fitted to the ceiling. A simple Set Up operation ensures automatic memory storage of stroke limit positions and deceleration spaces. At the end of the initialising cycle, the automated system operates correctly without further adjustments.

## MAXIMUM SAFETY

The electronic anti-crushing device adjusts itself automatically at Set Up. The operator keeps the tripping threshold constantly at minimum level, and adapts at all times to the differences in force required to move the door. The device stops the door movement as it opens and reverses it at closing.

## ELECTRONIC SPEED CONTROL

To protect the door against mechanical stress as the movement begins, an electronic control gradually increases the speed of the operator (Soft Start). Deceleration, both at opening end phase and closing (Soft Stop), prevents the door reaching the mechanical stops in a damaging, noisy way.

> ANTI-BREAK-IN NON-REVERSING FACILITY Break-in protection is guaranteed by the non-reversing gearmotor, which thus does avoids installation of electrical locks or bolts. If a power cut occurs, a patented "bi-stable device", activated from the inside, facilitates manual operation and prevents spontaneous, unwanted, restoring of the automated system. By using appropriate accessories, you can release the device from the outside either with a customised key or by using the door handle.

## SPECIFICATIONS

Automatic system for sprung overhead and sectional doors - Applications for counterbalanced overhead doors with adapter • Door max width $3 \mathrm{~m} \bullet$ Models for max door height of 2.15 m and $2.6 \mathrm{~m} \bullet$ Available working stroke 1900 mm and $2500 \mathrm{~mm} \bullet$ Ceiling installation - Minimum clearance from ceiling $35 \mathrm{~mm} \bullet$ Max pull/thrust power 600N (60kg) • No-load drive speed $12 \mathrm{~cm} / \mathrm{s} \bullet$ Max use frequency 20 cycles/hour (on max load of 28 Kg ) • Max consecutive cycles: 6 - Main components of automatic system: guide-beam, chain transmission, housing for 24 Vdc gearmotor, power transformer, electronic card and courtesy light - Protective housing in pc+ABS, with built-in OPEN push-button, designed for installation of receiver antenna - Cord activated Manual release "bi-stable device" (lock/release statuses can be reset at will) - External release devices, either activated by personalised key or fitted to the existing handle (optional items) - Initialisation of automatic or manual operation (Set Up) - Automatic Set Up: recognition of opening and closing stroke limit positions and memory storage of deceleration spaces - Manual Set Up: deceleration and stroke limit positions customised by OPEN pulses - Automatically controlled electronic anti-crush device with tripping threshold maintained at minimum level during entire door movement (Set Up) - Tripping of anti-crush device: movement stopped during opening and reversed at closure - Sensitivity selection of anti-crush device: $15 \mathrm{Kg}-30 \mathrm{Kg}$ - Soft Start: door movement started at gradual speed - Automatic and semi-automatic function logics - Outputs: 24 Vdc power supply to accessories/flashlight • Inputs: open/stop/closure safety • Fail safe for safety devices (can be cut out) - Three protection fuses (motor/lamp-power supply/accessories • Internal plug for card-receiver or decoding cards • Courtesy light 40 W at 230 Vac timed to 2 minutes • Designed for installation of emergency batteries (optional item) • Protection class IP20 • Power supply 230 Vac $50(60) \mathrm{Hz} \bullet$ Max absorbed power $220 \mathrm{~W} \bullet$ Operating ambient temperature $-20^{\circ} \mathrm{C}+55^{\circ} \mathrm{C}$

## c $\epsilon$



|  | Power line (230V) |
| :--- | :--- |
| A. $\left\{\begin{array}{l}\frac{1 \text { cable } 2 \times 1.5+\mathrm{T}}{1 \text { cable } 2 \times 1.5} \\ \frac{1 \text { cable } 3 \times 0.5}{2}\end{array}\right.$ | B $\left\{\begin{array}{l}\frac{1}{2 \text { cables } 2 \times 0.5} \\ \hline \text { N.B: Cable diameters in } \mathrm{mm}^{2}\end{array}\right.$ |


| Model | Use |  |  |
| :---: | :---: | :---: | :---: |
|  | Door type | Door max dimensions Wx H (m) | Use frequency (cycles/hour) |
| 525R | spring/counterbalanced doors | 3,00 x 2,15 (*) | 20 |
|  | sectional doors | 5,00 x 1,9 (*) |  |
| 530R | spring/counterbalanced doors | 3,00 x 2,60 (*) | 20 |
|  | sectional doors | 5,00 x 2,50 (*) |  |

(*) L'altezza max è in funzione della geometria della porta. I valori indicati sono relativi a configurazioni tradizionali.

| Technical specifications | 525R | 530R |
| :---: | :---: | :---: |
| Power supply | 230Vac 50 (60) Hz |  |
| Electric motor | 24 Vdc |  |
| Absorbed power | 220 W |  |
| Maximum cycles per hour | 20 (on 28 Kg load) |  |
| Max consecutive cycles | 6 |  |
| Minimum clearance from ceiling | 35 mm |  |
| Max pull/thrust force | 600N (~60 kg) |  |
| Protection class | IP20 |  |
| Courtesy lamp | 230Vac 40W |  |
| Courtesy lamp timer | 2 minutes |  |
| Carriage speed | $12 \mathrm{~cm} / \mathrm{s}$ |  |
| Carriage max stroke | 1.900 mm | 2.500 mm |
| Operating ambient temperature | $-20^{\circ} \mathrm{C}+55^{\circ} \mathrm{C}$ |  |

## Dimensions



| Specifications of 525 MPS control board |  |
| :--- | :--- |
| Power supply | $230 \mathrm{Vac} 50(60) \mathrm{Hz}$ |
| Power supply for accessories | 24 Vdc |
| Accessories max load | 200 mA |
| - Protection fuses |  |
| - transformer/motor/accessories |  |
| - Terminal board connections |  |
| - open, stop, safety devices, fail safe, flashing lamp |  |
| - Rapid connector |  |
| - for RP card receivers/decoding cards |  |
| - Fail Safe |  |
| - Yes (can be disabled) |  |
| - Functions |  |
| - soft-start, soft -stop, automatic or manual Set Up (*) |  |
| - Anti-crushing electronic device |  |
| - sensitivity 150N - 300N |  |
| - Function logics |  |
| - automatic and semi-automatic |  |

(*) The Set Up operation enables initialisation of the automated system including memory storage of stroke limit positions and adjustment of anticrushing, soft-start and soft-stop functions.

