

| Electrical data | Dynamic 400 | Dynamic 401 | Dynamic 402 | Dynamic 403 | Dynamic 404 | |
|------------------------------|--------------|-------------|-------------|-------------|-------------|-------|
| Version | | | | | -9 -11 -17 | |
| Nominal voltage | 400/3 | 400/3 | 400/3 | 400/3 | 400/3 | V/PH |
| Nominal frequency | 50 | 50 | 50 | 50 | 50 | Hz |
| Current input | 1,2 | 2 | 2,6 | 3,8 | 6 7,5 8,2 | A |
| Motor power output | 0,37 | 0,55 | 0,75 | 1,1 | 1,5 2,2 3,0 | KW |
| Duty cycle | 60 | 60 | 60 | 60 | 60 | % |
| Control unit control voltage | 24 | 24 | 24 | 24 | 24 | V DC |
| Protection category | Motor unit | IP 54 | IP 54 | IP 54 | IP 54 | IP 54 |
| | Control unit | IP 65 | IP 65 | IP 65 | IP 65 | IP 65 |

| Mechanical data | Dynamic 400 | Dynamic 401 | Dynamic 402 | Dynamic 403 | Dynamic 404 | |
|-------------------------|-------------|-------------|-------------|-------------|--------------|-------------------|
| Version | | | | | -9 -11 -17 | |
| Drive torque | 100 | 170 | 220 | 420 | 1000 900 850 | Nm |
| Output speed | 17 | 12 | 12 | 12 | 9 11 17 | min ⁻¹ |
| Diameter of motor shaft | 30 | 30 | 30 | 40 | 50 | mm |
| Max. catch torque | 1188 | 1188 | 1188 | 1627 | 5599 | Nm |
| Driving torque | 259 | 259 | 259 | 432 | 1113 | Nm |

| General data | Dynamic 400 | Dynamic 401 | Dynamic 402 | Dynamic 403 | Dynamic 404 | |
|--------------|-----------------|-------------------|-------------------|-----------------|-----------------|----|
| Measurements | 385 x 126 x 262 | 402,5 x 126 x 262 | 402,5 x 126 x 262 | 505 x 140 x 283 | 696 x 174 x 399 | mm |
| Weight | 21,5 | 22,0 | 22,5 | 35,0 | 67,0 | kg |

Basic Package „Dead-man's mode“

Direct drive operator for roller shutters with flexible fixing incl. 2 operational and 2 safety limit switches.
 1 limit switch for the closing edge safety device to cut out the reversing function.
 Hand crank for emergency operation
 Separate control unit Control 70 with additional safety contactor
 Cable set 5500 mm

precabled



Basic Package „Press-and-release“

Direct drive operator for roller shutters with flexible fixing incl. 2 operational and 2 safety limit switches.
 1 limit switch for the closing edge safety device to cut out the reversing function.
 Hand crank for emergency operation
 Separate control unit Control 70 with additional safety contactor
 Cable set 5500 mm
 Extension module for control unit
 Optosensor for closing edge safety device

precabled



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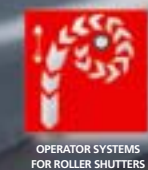
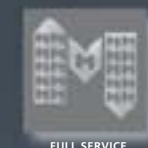


Door operators ► automatically the best choice

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Dynamic 400 – 404

Operator systems for Roller Shutters



Energy, safety and staying power



Door operators ► automatically the best choice

The Idea

Dynamic is the name for operator systems for industrial doors and gates.

„Dynamic“ means internal energy, safety and staying power – all qualities that are important for the automation of industrial door and gate systems. Marantec operator systems for industrial use are called Dynamic and with this name they document the extraordinary requirements they will meet.

Dynamic 400 – the operator series for industrially used roller shutters.

With the Dynamic series 400, 401, 402, 403 and 404 Marantec offers a complete range for special automation of industrial roller shutters. Doors with a tube diameter up to 324 mm or curtain weights up to 820 kg can be equipped with automatic drives, safely and comfortably.

Dynamic series 400 – 404: Special product features.

A safety brake feature that is independent of position and speed is integrated in the operator motor. The operator system includes 2 operational and 2 safety limit switches for the door OPEN and CLOSE directions. There is also a limit for the closing edge safety device to cut out the reversing function shortly before the end position CLOSE is reached. The standard supply package contains a hand crank for emergency operation. For Dynamic 400–403 a conversion to emergency hand chain operation is possible (factory option only).

Control 70: The perfect control unit for roller shutters.

The Control 70 in its basic format is an inversion contactor control unit with mechanical interlocking and a third safety contactor – and can be converted to a comfort control unit with connections for RC remote control, safety devices, automatic timer function and traffic control. You have the choice between a standard module and a Control 71/72 extension module with the possibility to connect a roll up safety device.

| Electrical accessories | „Dead-man`s mode“ | „press-and-release“ |
|--|-------------------|---------------------|
| Control 71 extension module for control unit Control 70 | | x |
| Control 72 extension module for control unit Control 70 to connect a roll up safety device | | x |
| Optosensor for closing edge safety device, right-hand or left-hand mounting | | x |
| Roll up safety protection roller shutters / roller grilles | | x |
| Control 220 automatic timer function | | x |
| Control 230 automatic timer function and week timer | | x |
| Control 313 signal light connection with traffic control | | x |
| Control 401 inductive loop detector | | x |
| Relay circuit board for door position indication | x | x |
| Special 613 reflection photocell | | x |
| Special 614 one-way photocell | | x |
| Retrofit-kit profile cylinder, lockable | x | x |
| Lockable main switch, installed in the control unit housing | x | x |
| Command 311 key switch (external), recess-mounted | x | x |
| Command 411 key switch (external), surface-mounted | x | x |
| Command 312 key switch in post | x | x |
| Digital 163 electronic aerial module, 868 MHz | | x |
| Digital 302 mini hand transmitter, 2-channel, 868 MHz | | x |
| Digital 304 mini hand transmitter, 4-channel, 868 MHz | | x |

Dynamic 400 – Basic packages.

Choosing the correct operator system is easy. There are two basic packages: „Dead-man`s mode“ and „Press-and-release“ that can be individually extended by a large range of accessories. The operator systems are controlled by the extendable Control 70.

Basic package „Dead-man`s mode“: The most cost-effective automation.

The basic package „Dead-man`s mode“ of the Dynamic series 400 – 404 is the simplest and most cost-effective kind of automation. Ideal for the control of roller shutters and grilles. The door travels by „Press-and-release“ in the OPEN direction and in „Dead-man`s mode“ in the CLOSE direction. The operator system contains the control unit Control 70 that can be extended at any time.

Special requirements call for special operator solutions.

Marantec develops individual solutions for special requirements, for example chain drives for extreme heavy roller shutters. We even offer a large range of accessories for these special applications.

Basic package „Press-and-release“: The convenient kind of automation.

The convenient solution for automation is called „Press-and-release“, ideal for the control of frequently used doors. The package contains a Control 71 extension module for the Control 70, which includes an optosensor for the closing edge safety device. The door travels with „Press-and-release“ in the OPEN and CLOSE directions, simply by impulse control. In special cases, e.g. parking garages, an additional roll up safety device can be connected by means of the Control 72 extension module.

| Mechanical accessories | Dynamic 400 | Dynamic 401 | Dynamic 402 | Dynamic 403 | Dynamic 404 |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Motor support bracket | x | x | x | x | |
| Pedestal bearing Ø 30 mm | x | x | x | | |
| Pedestal bearing Ø 40 mm | | | | x | |
| Pedestal bearing Ø 50 mm | | | | | x |
| Emergency hand chain operation | x | x | x | x | |

| | Tube diameter in mm | | | | | | | | | | |
|------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 101,6 x 3,6 | 108,0 x 3,6 | 133,0 x 4,0 | 159,0 x 4,5 | 177,8 x 5,0 | 193,7 x 5,4 | 219,1 x 5,9 | 244,5 x 6,3 | 273,0 x 6,3 | 298,5 x 7,1 | 323,9 x 7,1 |
| Operator systems | Max. curtain weight in kg | | | | | | | | | | |
| Dynamic 400 | 160 | 147 | 120 | 100 | 86 | | | | | | |
| Dynamic 401 | 225 | 215 | 180 | 155 | 140 | | | | | | |
| Dynamic 402 | 330 | 310 | 250 | 210 | 195 | 175 | | | | | |
| Dynamic 403 | 690 | 650 | 535 | 450 | 400 | 370 | 320 | 285 | | | |
| Dynamic 404 - 9 | | | | | 820 | 760 | 681 | 617 | 559 | 515 | 477 |
| Dynamic 404 - 11 | | | | | 738 | 684 | 601 | 530 | 490 | 450 | 410 |
| Dynamic 404 - 17 | | | | 637 | 586 | 538 | 483 | 435 | 395 | 362 | |
| | Max. curtain weight in kg at 100% duty cycle | | | | | | | | | | |
| Dynamic 401 | 135 | 129 | 108 | 93 | 84 | | | | | | |
| Dynamic 402 | 210 | 198 | 162 | 138 | 123 | 111 | | | | | |
| Dynamic 403 | 414 | 392 | 321 | 270 | 240 | 222 | 192 | 171 | | | |

The values take 20 % friction and a profile thickness of 25 mm into consideration. In unfavorable circumstances, like for additional door seals and double-skinned profiles, this friction may be greater. The values must be corrected accordingly. In high frequency applications select an operator system with 100 % duty cycle.

➤ Extensive Dynamic range for automation of roller shutters

➤ Individual operator solutions for special requirements

➤ Large range of accessories and extensions

➤ Standard extension module or roll up safety device

➤ Two Dynamic basic packages for easy orders, „Dead-man`s mode“ and „Press-and-release“

➤ The complete Dynamic package is precabled

➤ Extendable basic control unit

➤ Emergency operation with hand crank or emergency hand chain