PULSE 600 Direct-Drive DC Door Operator

Engineered for versatility, the PULSE 600 is designed for springless commercial and industrial doors.

What Makes the PULSE 600 Stand Out?

A high-performance 180V DC brake motor, available in 1½, 2, 2½ or 3 HP horsepower-rated options, rated for unlimited continuous-duty operation

Universal input voltage acceptance from
208 - 600Vac (3 Ph) or
208 - 240Vac (1 Ph), requiring no step-down transformer or additional configuration

Programmable gearbox output speeds measured in revolutions per minute (RPM) for precise door control

Soft start/stop functionality to reduce mechanical wear and extend door longevity

A large, floor-level LCD control panel housed in a NEMA 4 enclosure for door monitoring, programming, troubleshooting and wiring

Electromechanical 180V brake motor for added safety

2-year, 1,000,000-cycle warranty against manufacturing defects

The PULSE 600 Series Delivers High-End Performance for Springless Commercial or Industrial Doors

Key Features Include:

Works Globally, Right Out of the Box

The PULSE 600 accepts universal input voltage from 208- 600Vac, 50/60 Hz (3 Phase) or 208 - 240Vac, 50/60 Hz (1 Phase), right out of the box. No step-down transformer or additional configuration required. This built-in flexibility makes the PULSE 600 ready for installations anywhere in the world.

Advanced, RPM-Based, Programmable Speed Control

Set independent RPM values for the open and close cycles to achieve consistent door speeds suited to the installation. The PULSE 600's built-in speed-detecting encoder continuously monitors and compensates for voltage fluctuations, delivering reliable, steady speed control throughout every operation.

High-Performance DC 180V Brake Motor

Each unit is equipped with a DC 180V brake motor, available in 1½, 2, 2½ or 3 HP, paired with a gearbox in a variety of sizes and gear ratios to match the demands of the application.

Unlimited Continuous-Duty Operation

The 180V direct-drive DC brake motor powering the PULSE 600 is built for nonstop performance. With unlimited continuous-duty operation, the PULSE 600 runs around the clock without interruption. Extended-duty capability isn't an upgrade or add-on: it comes standard on every PULSE 600 model.

Soft Start / Soft Stop Functionality

The PULSE 600 features programmable soft start and soft stop functionality, providing smooth acceleration and deceleration with every cycle. This reduces mechanical stress on door components, prevents cable throw, and can be fine-tuned to suit the specific requirements of the installation.

Electromechanical Brake Motor

The PULSE 600 includes an electromechanical 180V brake motor. The brake, mounted to the base of the motor, automatically engages whenever the operator stops. This safety feature securely locks the door in place, preventing unintended movement and helping protect both the personnel and the facility.

Optional Chain Hoist

The PULSE chain hoist ensures manual operation remains available during power interruptions. Engagement is straightforward: it engages with a red cord and disengages with a green cord. This simple, reliable mechanism helps prevent downtime and keeps operations running when it matters most. Note: The standard chain length is 26' for a 17' shaft height. Contact iControls if an extra 26' chain kit or other chain-hoist customizations are required.

Centralized Control Panel

The PULSE 600 is operated through a large, floor-level control panel housed in a NEMA 4 enclosure. Most wiring connections can be completed at ground level, making installation, programming and troubleshooting significantly more convenient. The large LCD display uses plain, intuitive language, no abstract codes to decipher.

Weather-Protect Option

To improve resistance to water ingress, the Weather-Protect option upgrades the PULSE 600. Zinc-plated hardware is replaced with or stainless steel where applicable and a water-resistant coating is applied to the operator.

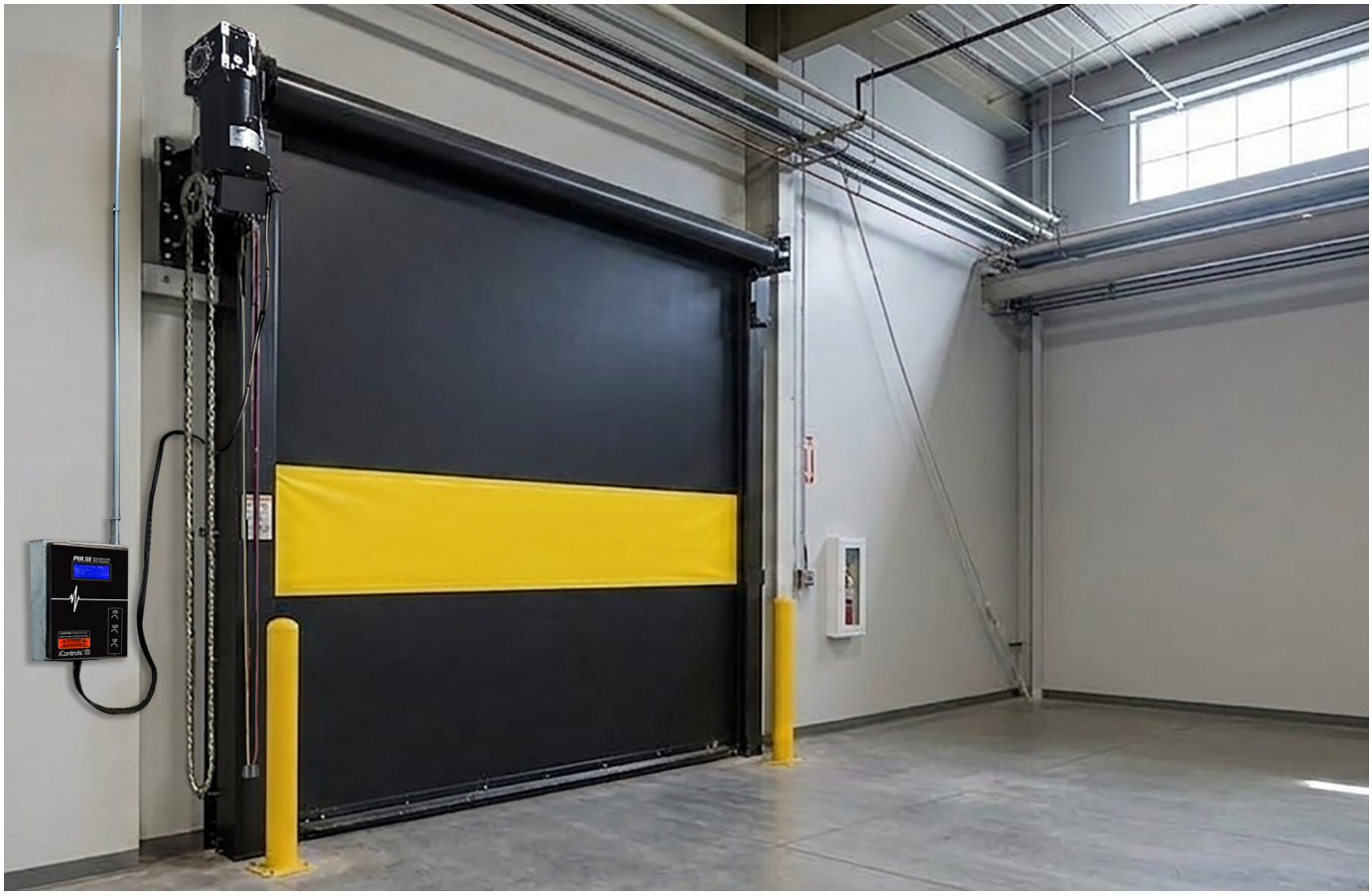
Programmable Closing Timer

The closing timer automatically closes the door after a selectable delay of 1 to 99 seconds, providing convenience and added security without requiring manual intervention.

Reliable Encoder for Precise Control

Mounted inside the gearbox, the encoder simplifies limit setup and allows flexible left or right-side mounting. It works with the fully-open home sensor to establish electronic door limits, eliminating the need for a physical limit bracket. If the door stops unexpectedly mid-cycle, the encoder detects the loss of motion and halts operation to prevent potential damage.

Standard Specifications



Springless Applications
Ideal for a wide variety of springless applications, including fabric, rubber, sectional, rolling steel and bi-fold doors

Motor Options
1½, 2, 2½ & 3 horse-power rated motors available

Universal Input Voltage
208 - 600Vac (3 Phase)
208 - 240Vac (1 Phase)

Gearbox Shaft Output
1" shaft (Size 63)
1¼" shaft (Size 75 & 90)
1½" shaft (Size 105)
2" shaft (Size 130)

Cycle-Duty:
Unlimited continuous

The PULSE 600 is available in a variety of motor and gearbox combinations based on factors such as door weight, application type and desired speed.

Please contact the iControls Team to help select the ideal configuration for your application.

iControls®

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