



PRODUCT TECHNICAL DATASHEET



### **ROGER**<sup>®</sup> TECHNOLOGY



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## **TW110 BOX**

- Stainless Steel 316 enclosure
- Adjustable Motor Height
- **Ergonomic Control Board Placement**
- Easy Cable Access
- Built-in Battery Backup
- Status LED Indicator
  Versatile Accessory Mounting: DIN Rail Compatible

#### ТW110-1000-HS / ТW110-1600-HS / ТW110-2000

Electromechanical HIGH SPEED BRUSHLESS motor, low voltage, super intensive 100% duty cycle, with SENSORED digital magnetic encoder at 4096 Pulses Per Revolution (PPR), irreversible. Digital controller in pre-wired box, for gates up to 1600kg and 2000kg respectively.

Intensive Use



Brushless



**High Speed** 



Digital Encoder

	тw110-1000-нs	тw110-1600-нs	TW110-2000
Max Gate Weight	1000 kg	1600 kg	2000 kg
Power Line Supply	230V AC - 50Hz	230V AC - 50Hz	230V AC - 50Hz
Motor Power Supply	36V AC	36V AC	36V AC
Power Rating	240W	240W	240W
Duty Cycle	100% Intensive Use	100% Intensive Use	100% Intensive Use
Thrust	1150N	1250N	1700N
Operating Temperature	-20+55°C	-20+55°C	-20+55°C
Protection Level	IP44	IP44	IP44
Reductor Type	Irreversible	Irreversible	Irreversible
Manoeuvre Speed	25 m/min (420mm/s)	21 m/min (350mm/s)	12 m/min (200mm/s)
Limit Switch	Without Limit Switches - Optional	Without Limit Switches - Optional	Without Limit Switches - Optional
Onboard Control Unit	B70/ITHP	в70/1тнр	в70/1тнр
Encoder	Digital Encoder + Magnetic Digital SENSORED, 4096 PPR	Digital Encoder + Magnetic Digital SENSORED, 4096 PPR	Digital Encoder + Magnetic Digital SENSORED, 4096 PPR
Batteries Recovery	Two Internal 12V 7AH batteries	Two Internal 12V 7AH batteries	Two Internal 12V 7AH batteries
Type Exit Gear	Z17/mod 4	Z17/mod 4	Z17/mod 4





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SWING	

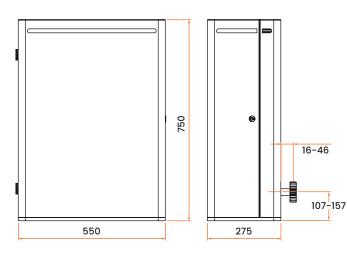


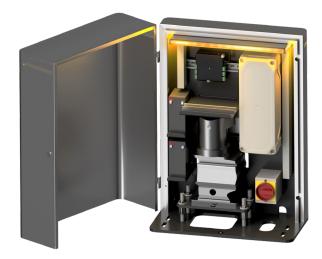


## **TOWER BOX**

#### Dimensions

**Control Box Fusion** 





CANTILEVER

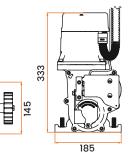
- Convenient access to control board and accessories
- Status LED
  Integrated Battery F
- Integrated Battery Backup

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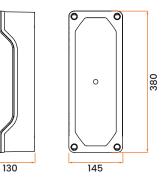
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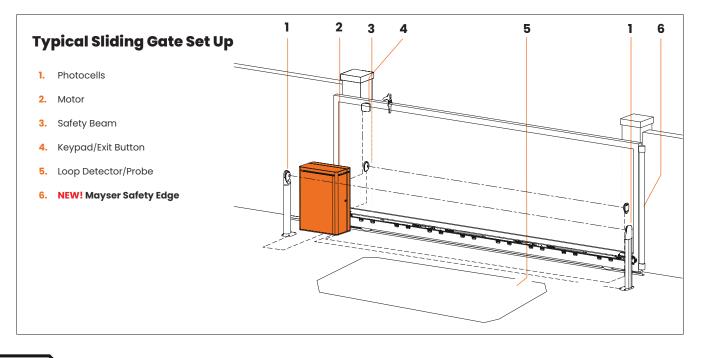
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#### TW110 Control Unit Dimensions





#### TW110 Motor

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#### Brushless Digital Motor

This motor uses a permanent magnetic field with neodymium iron baron magnets inside the rotor. It has special coil windings and runs on a three-phase 36V AC for the TW110 power system. The motor is compact, operates at ambient temperature, very low energy consumption and for use in high duty cycle applications.

#### 4096 PPR High Resolution Magnetic Encoder

This encoder ensures precise control of the motor's movements, especially during acceleration and deceleration and detects obstacles accurately.

#### Precision Engineering

The gear motor is made of aluminum, steel, and bronze. It uses high-quality double-shielded ball bearings for precise alignment and long-lasting, quiet operation.

#### Adjustable Pinion

Pinion easily adjustable on 7 positions. With the through type pinion shaft, the pinion distance can be adjusted via 5 mm steps, up to a maximum extension of 30mm.

#### Lock Release System

Internal lever unlocking system equipped with a magnetic release sensor, which allows the control unit to be informed of the unlocking status of the automation.

#### Emergency Battery Back Up

In the event of power failure housed within the enclosure are two x 12V DC 7AH batteries.

#### Optional Magnetic Limit Switch

An optional limit switch can be added, taking up minimal space in the automation system.

#### Sustainablity

Roger Technology is a green customer-centric company dedicated to creating sustainable products through environmentally responsible production processes, innovative technologies, and a culture that prioritizes the health, safety, and development of its workers and customers.