

Product image



Sensors Included

- Torque Sensor: -100 to +100 Nm (customizable)
- Speed Sensor: User-selectable (Incremental, Absolute, etc.)
- Temperature Sensors: PT1000 (customizable)

User Interface Specifications

- Power Control Panel: AC inlet socket, AC On/Off switch, DC inlet connectors, DC On/Off buttons, Emergency STOP, Signal LEDs
- Data Control Panel: Safe Torque Off (STO), STO state signal LEDs, Cooling FAN On/Off switch, USB and CAN ports
- Mechanical Operator Area: Closed chamber with a T-Slot plate and safety limit switch
- Universal Motor Brackets: 2, 3, and 4-hole symmetrical mount types of motors with holes placed on diameter 120-210 mm
- Communication Protocols: CANopen, EtherCAT, USB
- Data Logging: Real-time data logging with export functionality (CSV, Excel)
- Control Software: SOLO Motion Terminal (load and drive)
- Torque Sensor Software (provided by chosen torque sensor supplier)

Electrical Specifications

- Power Supply: 110/220 VAC, 50/60 Hz
- External DC Power Supply: DC up to 75 kW
- Motor Controller Type: User-selectable
- Maximum Power Output: up to 60 kW

Performance Parameters

- Test Accuracy: down to $\pm 0.1\%$
- Response Time: down to 1 ms
- Operating Range: 0 to 100,000 RPM
- Operating Temperature: -20 to 70°C
- Humidity: 20% to 99% non-condensing

Applications

- Purpose: For tests of a wide range of motors and controllers under different load conditions.
- Applications: EV, Automotive, Industrial, Aerospace, R&D, etc.

Safety Features

- Emergency Stop Button (On each control panel)
- Safe Torque Off (STO) protection
- Protective Enclosure with a safety limit switch
- Alarms and Warnings (visual by LEDs)

Mechanical Specifications

- Frame Material: Aluminum Alloy beams with Coated Steel panels
- Working Area: Industrial T-Slot plate, 10mm standard
- Dimensions: 806x668x795 mm (DxWxH)
- Weight: 80 kg

Installation Requirements

- Floor Space: 3x2 m
- Cooling Requirements: Air ventilation
- Foundation Requirements: Reinforced working desk: 80x200mm (DxW)

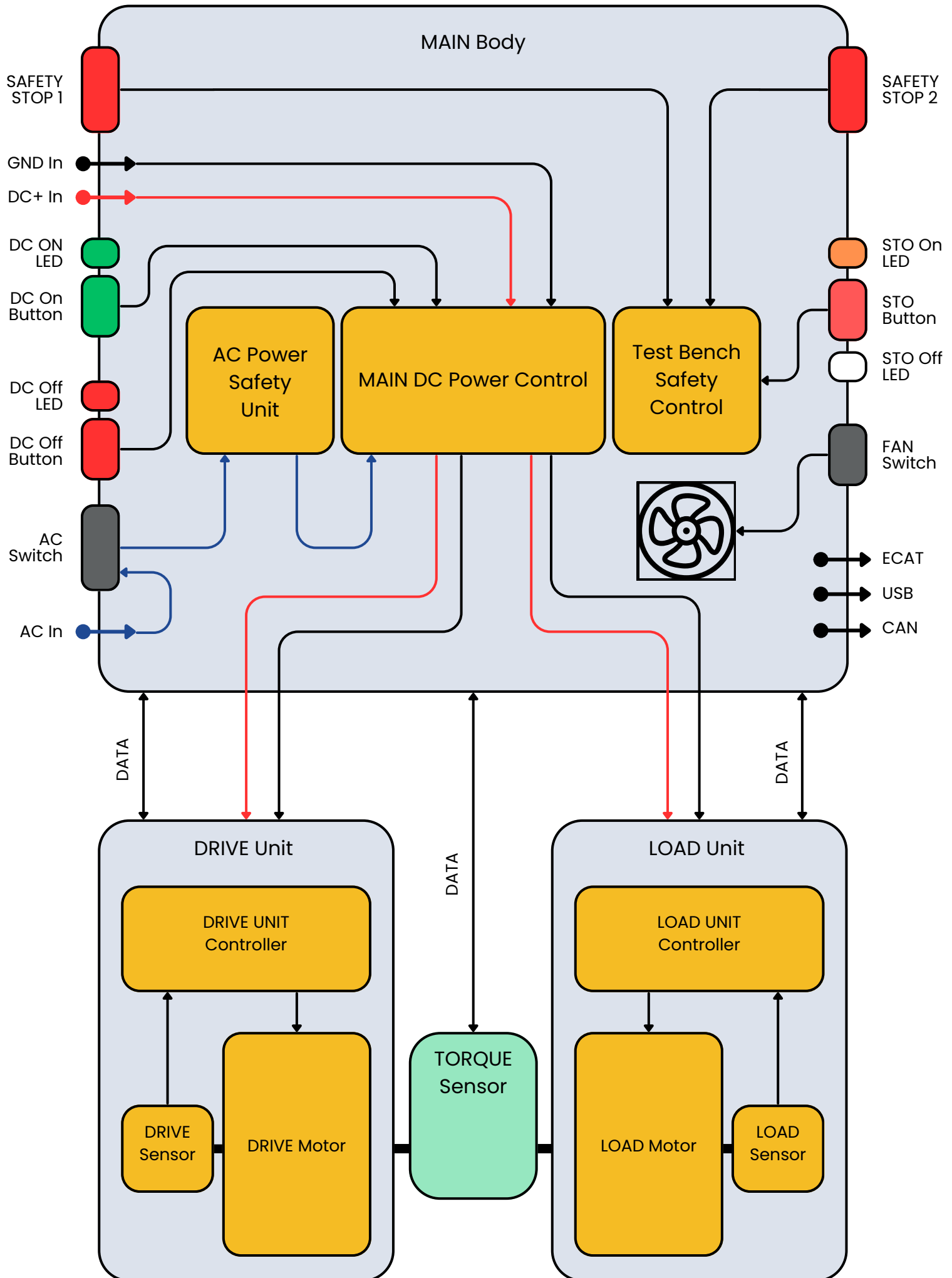
General Information

- Equipment Name: SOLO Motor Test Bench
- Part Number: TB01752006900
- Manufacturer: SOLO Motor Controllers S.R.L.
- Country of Origin: Italy
- Applicable Standards / Certifications: CE, ROHS
- Document date of issue: 15/01/2025

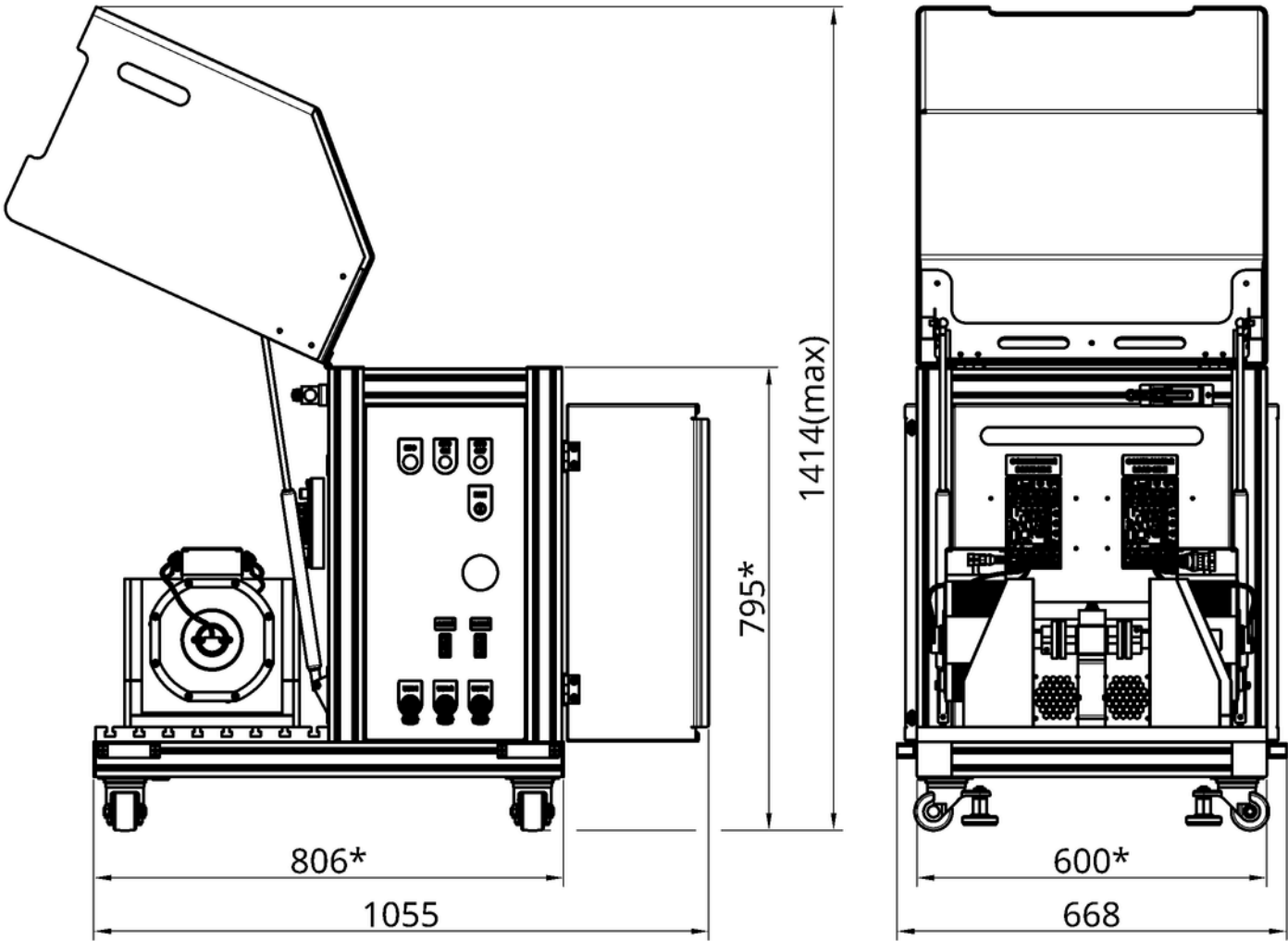
Packaging and Delivery

- Packing Dimensions: 930x730x915 mm (DxWxH)
- Weight (Packaged): 100 kg

System Architecture



General Dimensions



- * Transport dimensions
- Safe electrical cabinet with circuit breaker and lockable doors
 - Mobile design with four wheels and damping stands
 - Operational area safety cover with limit switch
 - Dual cooling fans (234.5m³/h each)
 - 10mm standard industrial T-Slot plate

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH  DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS FIRST ANGLE PROJECTION 		NAME	SIGNATURE	DATE	TITLE SOLO Motor Test Bench Dimensional Drawing A4		
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					SIZE A4	DWG NO. TB01752006900	REV.
	MATERIAL	FINISH			SCALE 1:20	WEIGHT	SHEET 1 of 1