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Find the *Phytron MSD MINI 172-140* at our website: *Click HERE*

MSD MINI

phytron

Stepper Motor Power Stage with Supply Unit for Rack or Wall Mounting



MSD MINI Power Stages

The compact stepper motor power stages include a supply unit for direct connection to 230 V_{AC} (optional 115 V_{AC}).

MSD MINI are available in 4 models with different motor voltage and design:

70 or 140 V_{DC} motor voltage

Housing with 6 U front plate for mounting in 19" racks or housing with removable mounting brackets for wall mounting.

The phase currents up to 17 A_{PEAK} and the step resolution (full step to 1/20 step) are selectable by setting switches.

Optimum motor drive and best use of the motor torque are achieved by the rotating field synchronized current regulation based on the patented SYNCHROCHOP principle as well as by the overdrive and boost functions.

Application Ranges

phytron MSD MINI stepper motor power stages are preferentially used for positioning tasks with programmable systems like PLC: in machine and appliance construction, handling systems, labelling and packaging machines.

MSD MINI control signals may be provided from control units delivering step pulses and direction signals or from PCs equipped with a stepper motor interface.

Noise suppression between control and power circuit is obtained by optocouplers for electrical separation of the push-pull inputs from the supply voltage.

MSD MINI power stages with supply unit meet the requirements of the EMC and Low Voltage EU Directives and therefore, may bear the CE mark. The units do not require additional external filters for EMC-correct wiring.

Control Elements

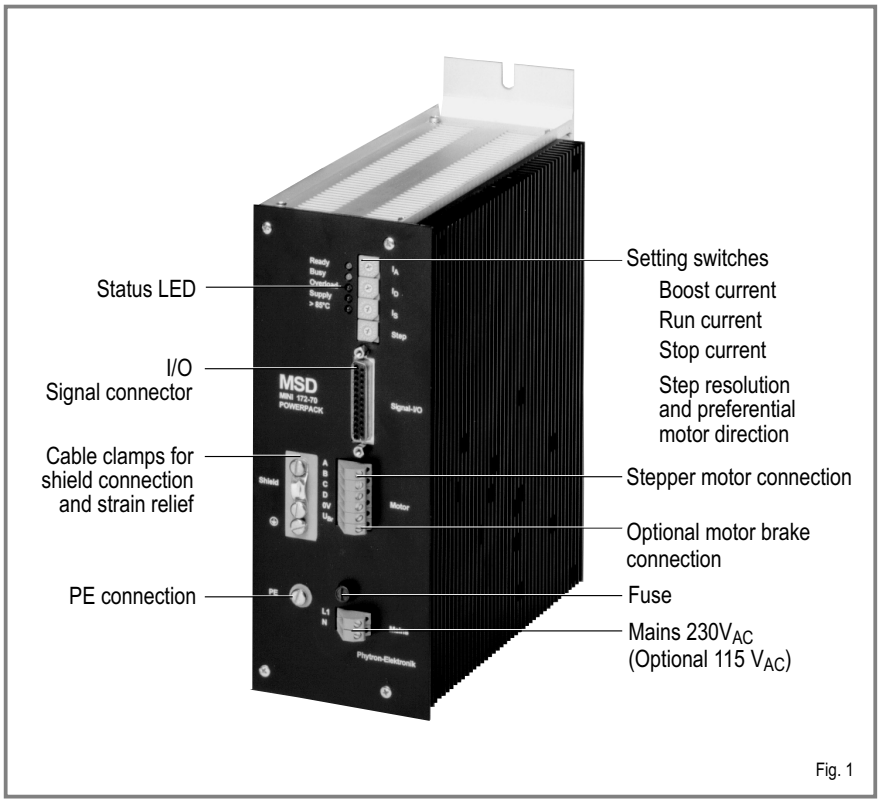


Fig. 1

Technical Information

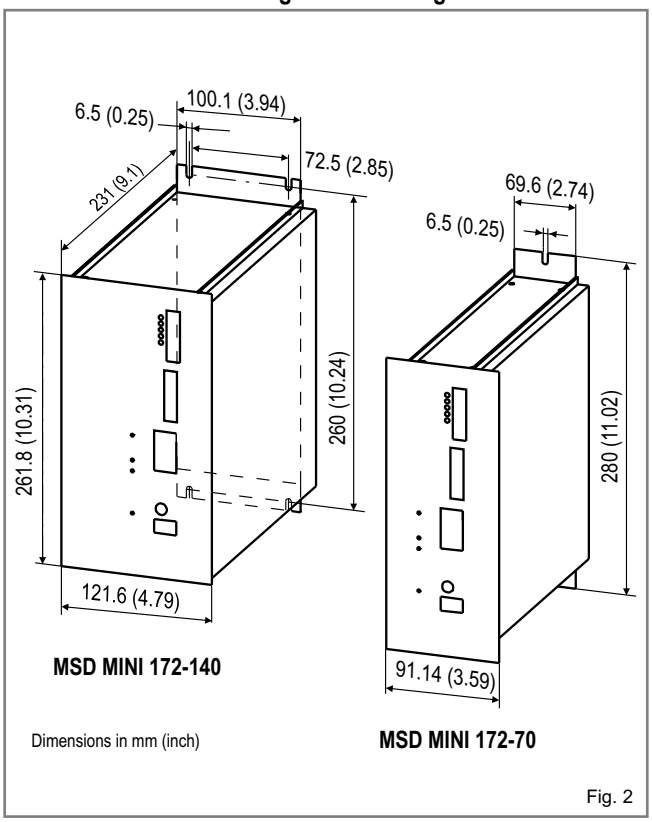
- Ministep power stage for controlling 2-phase stepper motors
- Supply unit for direct connection to 230 V_{AC} (optional: 115 V_{AC})
- Phase currents up to 17 A_{PEAK}
- 2 models with different motor voltage:
  MSD MINI 172-70: 70 V or
  MSD MINI 172-140: 140 V
- Step resolutions: from full step to 1/20 step
- Maximum torque utilization by Boost and Overdrive
- Rotary switches for setting Run, Boost and Stop current, Step resolution and Preferential motor direction
- Electrical separation of inputs and outputs by optocouplers
- Electronical monitoring of overtemperature, short-circuit and low voltage
- Status LED
- 2 models with different design: Rack or wall mounting
- Optional: connection of stepper motor with permanent magnet motor brake
- EMC-compliant design

customized solutions in motion

phytron Power Stages

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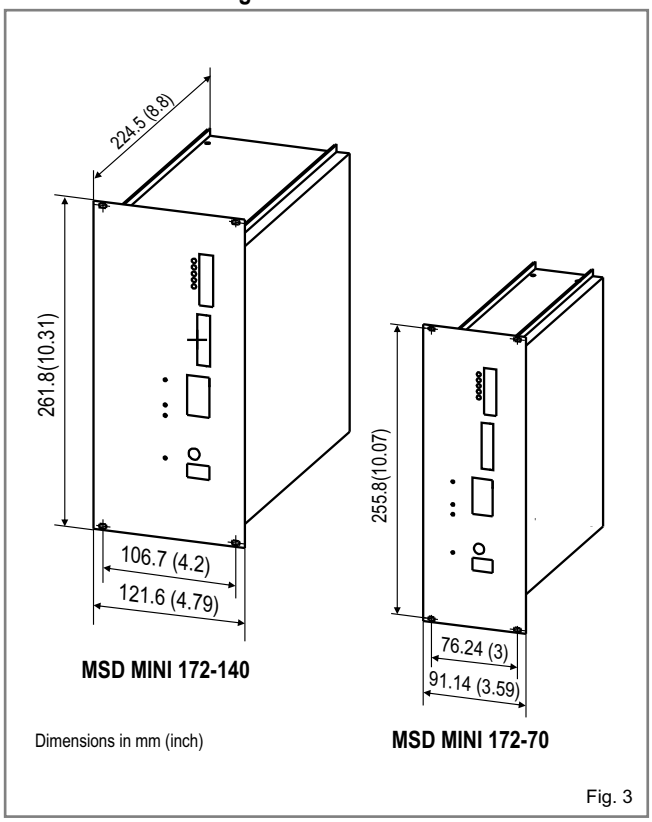
MSD MINI for Wall Mounting with Mounting Brackets



Dimensions in mm (inch)

Fig. 2

MSD for Rack Mounting



Dimensions in mm (inch)

Fig. 3

Optional: Motor Brake

MSD MINI supports the operation of stepper motors with a 24 V_{DC} / 1 A max. permanent magnet motor brake.

The braking effect of the motor brake is controlled via the Brake input (I/O connector). If this input is activated, the brake is supplied with current and the braking effect is suppressed.

If an error signal occurs or the Deactivation input is active, the brake supply is interrupted, i.e. the brake activated.

The brake has to be connected to the motor connector. The brake is supplied by the screw terminals U_{Br} and 0 V.

Ordering Code

MSD MINI 172-140-W-115 V

Type	MSD MINI	= Ministep power stage
Peak current	17	= 17 A peak current
Current regulation	2	= SYNCHROCHOP current regulation
Motor voltage	70	= 70 V
	140	= 140 V
Mounting	W	= Wall mounting
	R	= Rack mounting
Optional	115	= Mains voltage 115 V (no indication: mains voltage 230 V)
	OK	= Special version without setting switches

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