

Model 112 LD/MD Proportional Speed Fan



(112-40 LD/MD Proportional Speed Fan – photo courtesy of California ARB)

Webber EMI manufactures Proportional Speed Fans for use in specialty vehicle testing applications and based upon specific customer requirements.

The Model 112-40 Proportional Speed Fan is designed to interface with the clients Chassis dynamometer to replicate airflow across a dynamic range and at a given road speed. Using this system, accurate assessment of engine performance and emission characterization is possible in a testing laboratory.



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Model 112-40 on Scissor Lift shown with the smaller counterpart 112-15.

The Webber EMI Model 112 Proportional Speed Fan is designed to meet or exceed both US EPA CFR Parts 86 and 1066, as well as California-specific test requirements. Using a user-provided 4-20ma, 0-10v or -10 to +10v signal, this system delivers uniform air speed proportional to dynamometer roll speed.

The Webber EMI fans have flow linearity that is within 3mph at the test speeds of 75 MPH and less than 1mph at slower road speeds. All well within CFR requirements.

Given this control flexibility and its 0 - 80 mph / 130 kph dynamic operating range, the fan comes mounted on a hydraulic powered scissor lift for maximum flexibility and mobility in our customers testing cells.



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Unit Features and Specifications

Dimensions	Approx. 60" W x 65" L x 76" H
Weight	Approx. 2600 lbs
Power Requirement	40 hp, 480 VAC, 60 amp
Rated Speed	0 - 80 mph (Synchronous mode operation)
Blower	38,000 cfm-rated blower
Discharge nozzle	25" x 31.75" (5.51 sq-ft) stainless steel w/shaping cells
Drive Type	Cogged Belt drive system
Digital Displays	Motor speed (Hz) or Air speed (mph / kph)
Rate Control Modes	Synchronous: Controlled by dynamometer speed signal Manual: Controlled by drive keypad
Wheels	Heavy-duty locking poly-clad casters
Safety Guards	All moving parts guarded for safe operation
Tie Downs	Eye bolts for secure system tie down during operation
Lift	Hydraulic Powered Scissor Lift. Mounted unit on separate power circuit.

