

V20-EV PPV Electric Motor

Powered by a RAE, TEAO variable-speed electric motor, this PPV fan provides a slightly larger PPV — perfect for jurisdictions with medium to large residential structures, as well as some commercial buildings, that seek precise air control movement and up to 33% more airflow than single-speed motors. This PPV runs on a 15-amp circuit. Featuring a patent-pending frame design that is simple and intuitive to position on the fireground, the Valor series is engineered to ease the toughest ventilation challenges.

Frame Features

- 1 **Full-Roll Cage Frame:** Features a tough, tubular aluminum frame to protect key components; delivers a lightweight design (15% lighter than steel frames)
- 2 **7-Position Tilt Frame with Step Pad:** Provides positive/negative angles; allows for fan placement on stairs; allows tall firefighters to easily move fan
- 3 **Fold-Down Ergonomic Handle:** Folds down into frame for compact storage; features full-width handle for easy grip with heavy-duty gloves
- 4 **Flat-Proof Rubber Tires:** Eliminates flat tires; rolls up stairs and curbs easily; tires are placed on the back of the frame so that firefighters never have to put themselves between the PPV and the fire during setup

Fan Features

- 5 **Single-Piece Cast Aluminum Blade:** Holds up better than plastic in high heat
- 6 **Precision-Spun Steel Shroud:** Provides durability with maximum airflow
- 7 **StreamShaper Guard:** Standard guard, designed for farther setback; Air Cone Guard available by request
- 8 **AMCA Certified Airflow:** Ratings listed below are based on tests in accordance with Air Movement Control Association (AMCA publication 240) and comply with the AMCA certified ratings program



20" Blades - H x W x D: 26.5" x 25" x 21.5" - 675 mm x 635 mm x 550 mm

Model	Weight	Motor	RPM	Start	Run	Setback	Angle	AMCA Certified Airflow
V20-EV	86 lbs 39 kg	RAE, TEAO variable speed 1.5 HP 50/60 Hz, 115/230V AC	3,131	2,000 w 15-amp circuit	1,500 w	9 ft 2.7 m	11°	13,788 cfm 23,426 cmh



POSITIVE PRESSURE VENTILATOR

A Super Vac, part number #V20-EV, 20" electric positive pressure ventilator shall be supplied. The unit shall be cart-style designed with rear-mounted wheels, a full-height frame and a tilt-up, full-width handle for easy positioning and rapid deployment. The components of the positive pressure ventilator shall be 100% manufactured and assembled in the United States.

The entire frame of the unit shall be constructed of aluminum that shall surround the shroud and the seven-blade 20" airfoil propeller in a roll-cage design that shall enhance lifting and user safety. The blade shall be constructed of precision-cast aluminum alloy #A356. The blade shall be driven by the electric motor that shall have a direct drive connection. Any ventilators using plastic or nylon blades shall not be acceptable due to the high radiant heat found on the fire scene.

The shroud and the safety grill shall be designed as to provide maximum air velocity. The positive pressure ventilator shall have a foot-activated tilt control with seven positions, including three positions that can direct airflow downward. The standard angle of air direction shall be equipped with positions of the air flow to 18, 12, 6, 0, -6, -12 and -18 degrees above and below horizontal level. Ventilators that do not tilt into a downward direction shall not be acceptable due to the need to fit taller firefighters while moving the unit and the need to easily access the engine controls for starting.

The rubber, never-flat tires shall be engineered to be in the back (engine side) of the fan to help protect the shroud while moving the unit and allow the unit to be re-positioned on the fire scene without personnel turning their backs to the doorway. Any ventilator with wheels on the shroud side shall not be acceptable.

The front and rear safety guards shall be designed to OSHA and U.L. Standards to prevent accidental contact with the blade. The unit shall be certified to AMCA 240-15 for air movement, and the air movement shall exceed 13,788 cubic feet per minute as listed at www.amca.org.

The positive pressure ventilator shall be designed with the following:

Motor Manufacturer:	RAE, TEAO Variable-Speed Electric Motor
Horsepower:	1.5 HP
Speed:	3,131 rpm
AMCA Certified Airflow:	13,788 cfm
Dimensions:	26.5" high x 25" wide x 21.5" deep
Weight:	86 pounds

The PPV shall have a minimum five (5) year warranty. The motor shall be warranted by the motor manufacturer for a minimum of two (2) years.

