

Motor Specification:

Motor Specification Under 12 Volts
Motor Performance Check point At T= 0.61 N. m Speed: 3157 ±8% RPM Current: 27.7 ±8% A Power: 332W Efficiency: 60.7% Nominal
Other Unload speed: 5134 RPM Unload Current: 3.57 A MEF at 3000 RPM: 6.8V Resistance: 0.186 Ohm Blocked Torque: 1.59 N. m Current with Blocked Torque: 67.1 A Maximum Efficiency: 76%

Description:

- The Blower Motor must be in compliance with the functional drawing with regard to the dimensions, mounting points, connections and also, where requested, the type of material.
- No part of the blower motor should have any pointed, sharp or protruding edges, which could be dangerous during handling operations.
- No trace of impact is tolerated.

Dimensions:

- The dimensions must be in compliance with the drawing.

Fire resistance:

- The unit must not emit any toxic fumes: in compliance with US Standard FMVSS N°302.

Power supply used:

- Test Voltage: 13.5 V ± 0.1 V
- Internal impedance: Under or equal to 0.7 mΩ
- Ripple ratio: below or equal to 0.2%Ω
- Residual ripple: below or under 100 mV peaks

Characteristic measurement:

- A line resistance LR is inserted between the current source and the motor power supply connector. The values for line resistance LR shall be:
LR = 0.06 MΩ ± 0.005 at 23°C
LR = 0.07 MΩ ± 0.005 at 50°C

Rotor Balance:

- The balance value and the method and measurement resources, where applicable, shall be specified on the functional drawing.
- Maximum acceptable unbalancing: 0.4gr mm

Armature End-Float:

- The armature end-float must be under 0.2mm on a new motor.

Operating Atmosphere:

- The motor is in contact with the ambient air, which may contain corrosive impurities, in particular, petrol or diesel fumes, dust, saline mist, etc.

The motor operating temperature is within the following range:

$-40^{\circ}\text{C} < \text{operating Temperature} < 50^{\circ}\text{C}$

Storage temperature:

-The storage temperature range is follows:

$-40^{\circ}\text{C} < \text{operating Temperature} < +80^{\circ}\text{C}$

Resistance to Cold:

- Resistance to cold shall be checked during the endurance test.

Resistance to Heat:

- Resistance to heat shall be checked during the endurance test.

Jammed Torque Resistance:

- Whatever the position of the brushes on the commutator, the motor should be able to withstand 30 seconds of jammed torque under the following conditions:

Voltage: $13.5\text{V} \pm 0.1\text{V}$

Linear Resistance (LR): $0.06\text{M}\Omega \pm 0.005\text{ M}\Omega$

Temperature: 23°C

Following this test and after cooling, the motor shall still meet the requirements of operating conditions and noise level.

Startup voltage:

- The motor must meet the following requirements:

Temperature: $0^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Condition: New motor

Startup voltage: 2V

Temperature: $0^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Condition: After running in 8 hours offload

Startup voltage: 1.5V

Temperature: Stored 6 hours at $-30^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Condition: After running in 8 hours offload

Startup voltage: 3V (should start under 15 seconds without undue noise)

Noise Level:

The noise level shall be defined by reference standards assessed by a jury comprised of members of the design, quality and production departments.