



**LAMB ELECTRIC**

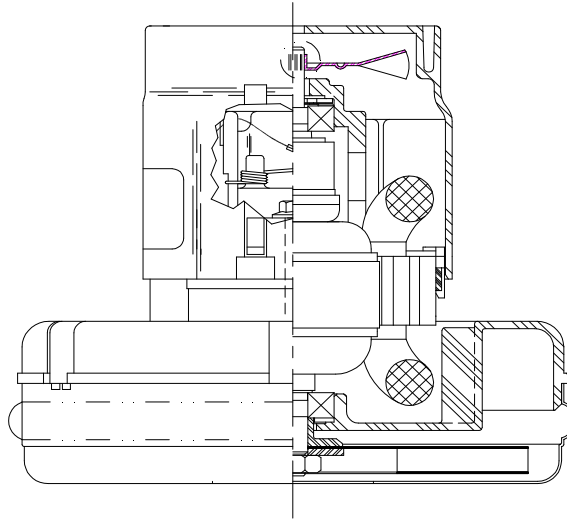
**Model: 116866-45**

**DESCRIPTION**

- One stage
- 120 volts
- 5.7"/145 mm diameter
- Ball/Ball bearings
- Single speed
- Peripheral bypass discharge
- Thermoset fan end bracket
- Thermoset commutator bracket

**DESIGN APPLICATION**

- Equipment operating in environments requiring separation of working air from motor ventilating air
- Designed to handle clean, dry, filtered air only



**SPECIAL FEATURES**

- Suitable for 120 volt AC operation, 50/60 Hz
- UL recognized, category PRGY2 (E47185)
- CSA certified, class 1611 01 (LR31393)
- Provision for grounding
- Skeleton-frame design
- The Lamb Electric vacuum motor line offers a wide range of performance levels to meet design needs

**TYPICAL MOTOR PERFORMANCE.\***

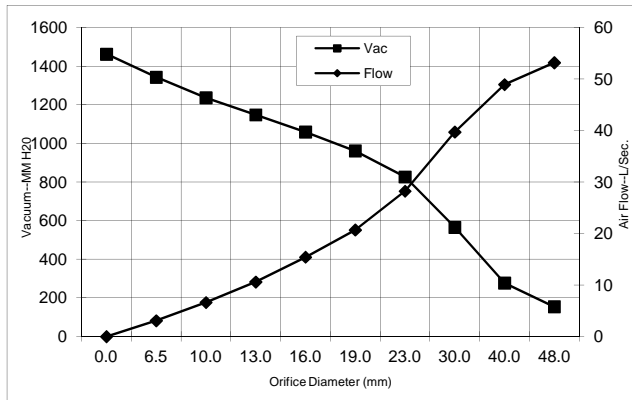
(At 120 volts, 60Hz, test data is corrected to standard conditions of 29.92 Hg, 68° F.)

**ASTM DATA**



| Orifice (Inches) | Amps | Watts (In) | RPM    | Vac (In.H <sub>2</sub> O) | Flow (CFM) | Air Watts |
|------------------|------|------------|--------|---------------------------|------------|-----------|
| 2.000            | 7.0  | 797        | 20,051 | 4.9                       | 114.9      | 66        |
| 1.750            | 7.1  | 804        | 20,051 | 7.6                       | 109.8      | 98        |
| 1.500            | 7.1  | 806        | 19,756 | 12.3                      | 101.0      | 146       |
| 1.250            | 7.1  | 810        | 19,756 | 19.6                      | 88.8       | 204       |
| 1.125            | 7.1  | 805        | 19,756 | 24.5                      | 80.3       | 230       |
| 1.000            | 6.9  | 790        | 20,051 | 29.3                      | 69.2       | 238       |
| 0.875            | 6.8  | 772        | 20,346 | 33.6                      | 56.7       | 224       |
| 0.750            | 6.5  | 744        | 20,935 | 37.8                      | 44.1       | 195       |
| 0.625            | 6.2  | 715        | 21,820 | 41.9                      | 32.2       | 158       |
| 0.500            | 5.9  | 680        | 22,705 | 45.6                      | 21.4       | 114       |
| 0.375            | 5.6  | 649        | 23,589 | 49.2                      | 12.8       | 74        |
| 0.250            | 5.3  | 615        | 24,474 | 53.0                      | 6.2        | 39        |
| 0.000            | 5.1  | 595        | 25,064 | 57.5                      | 0.0        | 0         |

**METRIC DATA**



| Orifice (mm) | Amps | Watts (In) | RPM   | Vac (mm H <sub>2</sub> O) | Flow (L/Sec) | Air Watts |
|--------------|------|------------|-------|---------------------------|--------------|-----------|
| 48.0         | 7.0  | 800        | 20051 | 155                       | 53.2         | 80        |
| 40.0         | 7.1  | 806        | 19844 | 277                       | 48.9         | 132       |
| 30.0         | 7.1  | 807        | 19756 | 566                       | 39.7         | 219       |
| 23.0         | 6.8  | 776        | 20272 | 826                       | 28.2         | 227       |
| 19.0         | 6.5  | 743        | 20953 | 961                       | 20.7         | 195       |
| 16.0         | 6.3  | 716        | 21785 | 1059                      | 15.4         | 160       |
| 13.0         | 6.0  | 684        | 22616 | 1148                      | 10.6         | 119       |
| 10.0         | 5.7  | 653        | 23457 | 1236                      | 6.6          | 80        |
| 6.5          | 5.3  | 616        | 24430 | 1342                      | 3.1          | 40        |
| 0.0          | 5.1  | 595        | 25064 | 1462                      | 0.0          | 0         |

Note: Metric performance data is calculated from the ASTM data above.

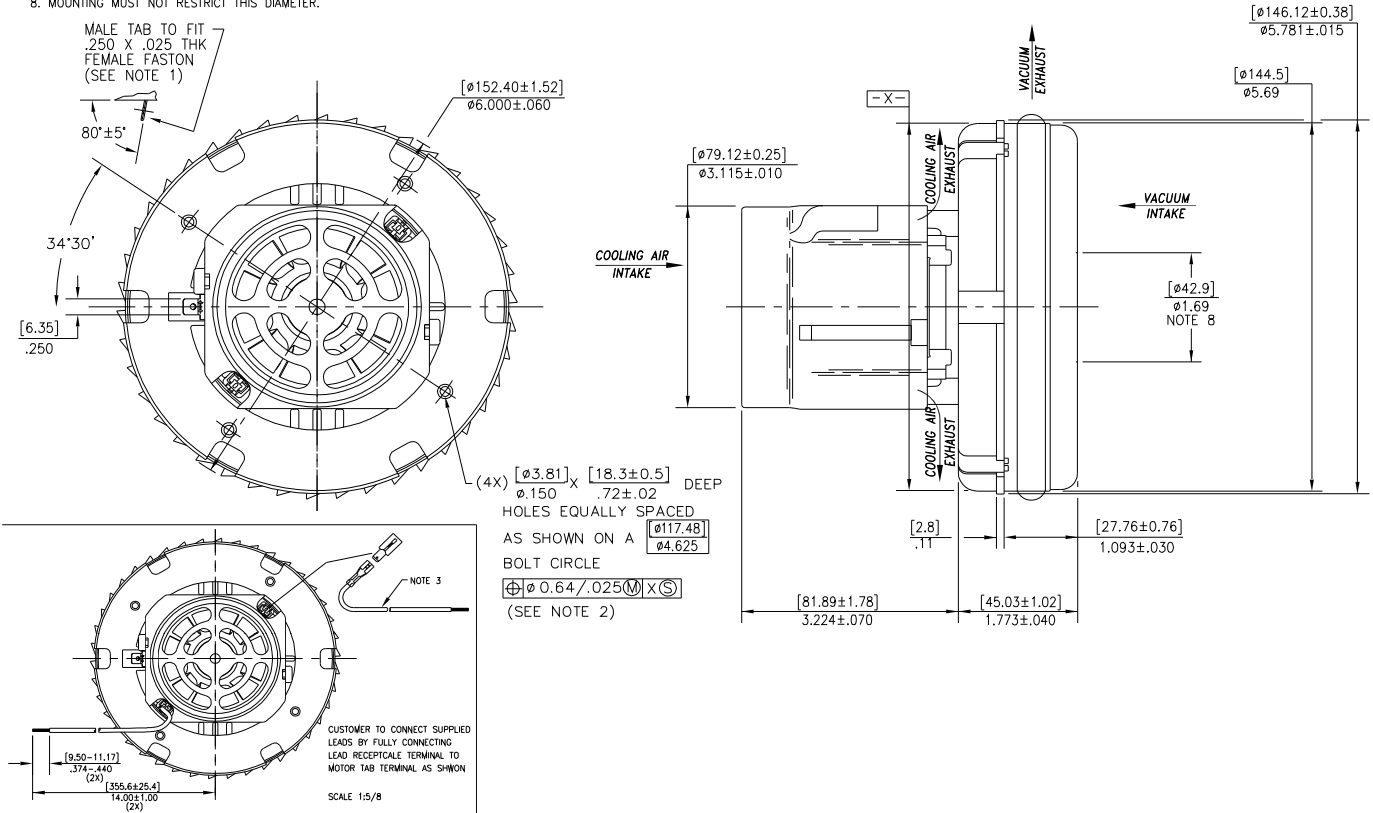
\* Data represents performance of a typical motor sampled from a large production quantity. Individual motor data may vary due to normal manufacturing variations.

|                    |           |                                   |                 |      |                            |                       |     |
|--------------------|-----------|-----------------------------------|-----------------|------|----------------------------|-----------------------|-----|
| <b>Test Specs:</b> | 120 volts | <b>Minimum Sealed Vacuum:</b> 49" | <b>ORIFICE:</b> | 7/8" | <b>Minimum Vacuum:</b> 29" | <b>Maximum Watts:</b> | 850 |
|--------------------|-----------|-----------------------------------|-----------------|------|----------------------------|-----------------------|-----|

**DIMENSIONS**

**NOTES:**

1. GROUNDING OR EARTHING PROVISIONS: USE ONLY UL RECOGNIZED AMP INC., 0.250 SERIES FOR .025 THICK TAB BRASS CONNECTOR WITH DETENT MOUNTED ON A 18 GA. UL RECOGNIZED AWM LEAD WIRE WITH 300V 90°C MINIMUM INSULATION COLORED GREEN WITH YELLOW STRIPE.
2. RECOMMENDED SCREW SIZE 10-16 TYPE BT OR TYPE 25 THREAD CUTTING SCREW. MAXIMUM PENETRATION [17.40]/.685.
3. SUPPLIED LEADS: 18GA STRANDED.
4. MOTOR IDENTIFICATION: MANUFACTURER'S NAME, MODEL NUMBER, VOLTAGE, FREQUENCY, INSPECTORS CODE, DATE OF MANUFACTURE, AGENCY RECOGNITION CODE, PLANT LOCATION CODE AND COUNTRY OF ORIGIN.
5. ALLOW [0.0016 SQ M]/2.5 SQ IN FOR COOLING AIR INTAKE.
6. COOLING AIR INTAKE MUST BE SEPARATED FROM COOLING AIR EXHAUST.
7. VACUUM EXHAUST MUST BE SEPARATE FROM COOLING AIR EXHAUST.
8. MOUNTING MUST NOT RESTRICT THIS DIAMETER.



**IMPORTANT NOTE:** Pictorial and dimensional data are subject to change without notice. Contact factory for current revision levels.

**WARNING** - When using AMETEK Lamb Electric bypass motors in machines that come in contact with foam, liquid (including water), or other foreign substances, the machine must be designed and constructed to prevent those substances from reaching the fan system, motor housing, and electrical components. Lamb Electric vacuum motors other than hazardous duty models should not be applied in machines that come in contact with dry chemicals or other volatile materials. Failure to observe these precautions could cause flashing (depending on volatility) or electrical shock which could result in property damage and severe bodily injury, including death in extreme cases. All applications incorporating Lamb Electric motors should be submitted to appropriate organizations or agencies for testing specifically related to the safety of your equipment.

**AMETEK/Floorcare & Specialty Motors**  
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