



# AMETEK LAMB ELECTRIC

**G2K**  
Generation 2000 Vacuum Motors

## Product Bulletin

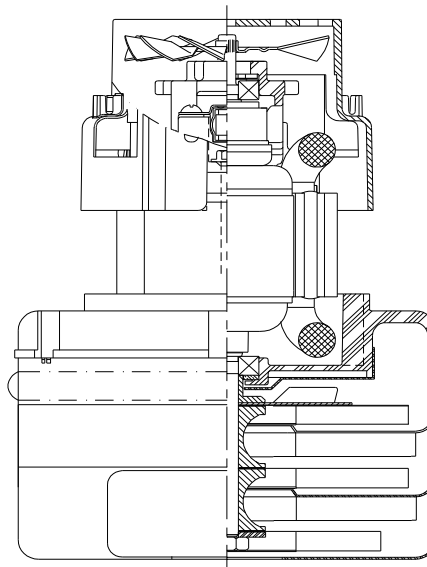
Model: 119517-13

### DESCRIPTION

- Three stage
- 24 volts
- 5.7"/145 mm diameter
- Double 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



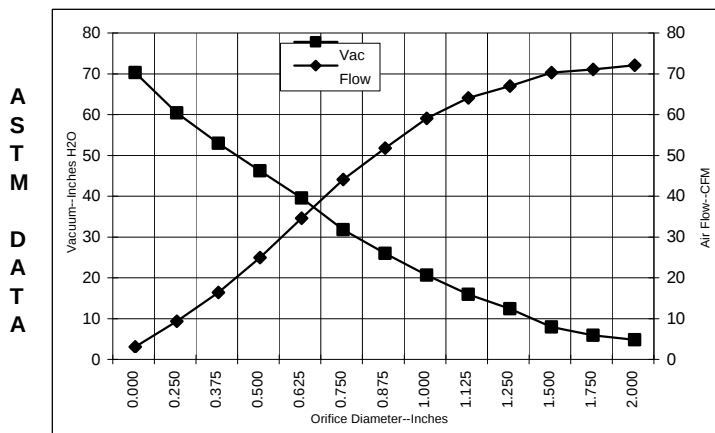
### SPECIAL FEATURES

- Suitable for 24 volt DC operation
- UL Recognized, category PRGY2 (E47185)
- Provision for grounding
- Skeleton-frame design
- Epoxy painted fan case
- Patented air seal bearing construction. U.S. Patent #4,088,424
- The Lamb Electric vacuum motor line offers a wide range of performance levels to meet design needs.

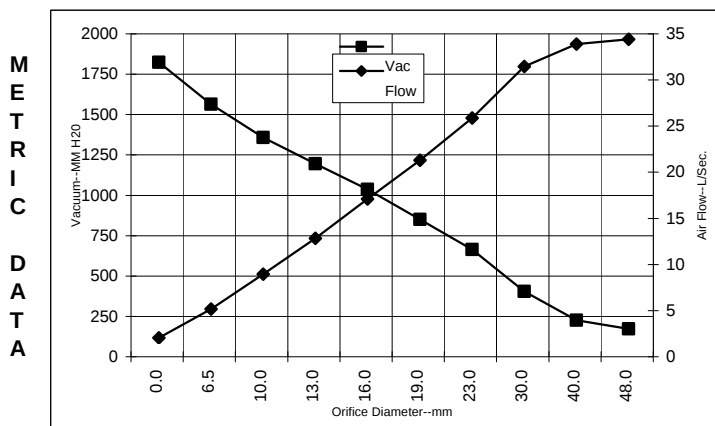
**Model 119517-13 is the G2K replacement for model 116514-13**

### TYPICAL MOTOR PERFORMANCE.\*

(At 24 volts DC, test data is corrected to standard conditions of 29.92 Hg, 68° F.)



| Orifice (Inches) | Amps | Watts (In) | RPM   | Vac (In.H2O) | Flow (CFM) | Air Watts |
|------------------|------|------------|-------|--------------|------------|-----------|
| 2.000            | 20.9 | 535        | 12667 | 1.7          | 69.0       | 13        |
| 1.750            | 21.0 | 537        | 12583 | 2.8          | 68.0       | 22        |
| 1.500            | 21.1 | 540        | 12533 | 4.9          | 67.2       | 39        |
| 1.250            | 21.4 | 545        | 12433 | 9.3          | 63.9       | 69        |
| 1.125            | 21.5 | 549        | 12383 | 12.9         | 61.0       | 91        |
| 1.000            | 21.5 | 550        | 12300 | 17.6         | 56.0       | 116       |
| 0.875            | 21.5 | 548        | 12367 | 22.9         | 48.7       | 132       |
| 0.750            | 21.0 | 537        | 12517 | 28.7         | 41.0       | 142       |
| 0.625            | 20.4 | 522        | 12933 | 36.5         | 31.5       | 135       |
| 0.500            | 19.4 | 499        | 13550 | 43.1         | 21.9       | 111       |
| 0.375            | 18.3 | 471        | 14300 | 49.9         | 13.3       | 78        |
| 0.250            | 17.1 | 443        | 15200 | 57.3         | 6.3        | 42        |
| 0.000            | 16.1 | 418        | 16167 | 67.2         | 0.0        | 0         |



| Orifice (mm) | Amps | Watts (In) | RPM   | Vac (mm H2O) | Flow (L/Sec) | Air Watts |
|--------------|------|------------|-------|--------------|--------------|-----------|
| 48.0         | 20.9 | 536        | 12630 | 55           | 32.4         | 17        |
| 40.0         | 21.1 | 539        | 12548 | 108          | 31.8         | 34        |
| 30.0         | 21.4 | 547        | 12406 | 287          | 29.4         | 81        |
| 23.0         | 21.5 | 549        | 12350 | 548          | 23.8         | 128       |
| 19.0         | 21.0 | 537        | 12525 | 733          | 19.3         | 142       |
| 16.0         | 20.4 | 523        | 12916 | 919          | 15.0         | 135       |
| 13.0         | 19.5 | 501        | 13488 | 1078         | 10.8         | 113       |
| 10.0         | 18.5 | 475        | 14188 | 1242         | 6.9          | 83        |
| 6.5          | 17.2 | 444        | 15155 | 1446         | 3.1          | 44        |
| 0.0          | 16.1 | 418        | 16167 | 1707         | 0.0          | 0         |

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

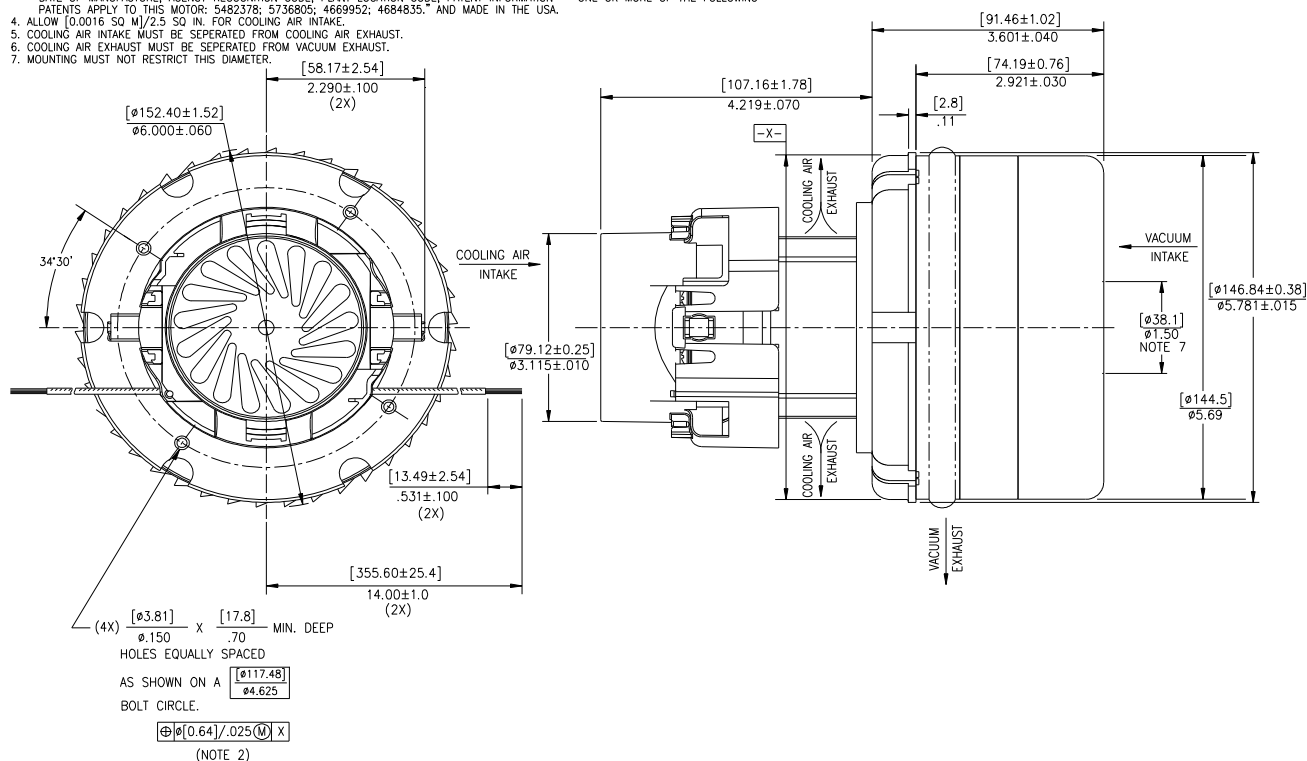
\* Data represents performance of a typical motor sampled from a large production quantity. Individual motor data may vary due to normal manufacturing variations.

|             |          |                        |       |          |       |                 |       |                |     |
|-------------|----------|------------------------|-------|----------|-------|-----------------|-------|----------------|-----|
| Test Specs: | 24 volts | Minimum Sealed Vacuum: | 62.0" | ORIFICE: | 7/8 " | Minimum Vacuum: | 22.0" | Maximum Watts: | 640 |
|-------------|----------|------------------------|-------|----------|-------|-----------------|-------|----------------|-----|

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NOTES:

1. LEADS: 14 GA STRANDED, LEAD CAN BE ANY COLOR EXCEPT GREEN OR GREEN WITH YELLOW STRIPE.  
2. RECOMMENDED SCREW SIZE 10-16 TYPE BT OR TYPE 25 THREAD CUTTING SCREW, MAXIMUM PENETRATION [17.40]/.685.  
3. MOTOR IDENTIFICATION: MANUFACTURER'S NAME, MODEL NUMBER, VOLTAGE, FREQUENCY, INSPECTORS CODE, DATE OF MANUFACTURE, AGENCY RECOGNITION CODE, PLANT LOCATION CODE, PATENT INFORMATION \* ONE OR MORE OF THE FOLLOWING PATENTS APPLY TO THIS MOTOR: 5482378; 5736805; 4669952; 4684835, \* AND MADE IN THE USA.  
4. ALLOW [0.0016 SQ MI]/2.5 SQ IN. FOR COOLING AIR INTAKE.  
5. COOLING AIR INTAKE MUST BE SEPERATED FROM COOLING AIR EXHAUST.  
6. COOLING AIR EXHAUST MUST BE SEPERATED FROM VACUUM EXHAUST.  
7. MOUNTING MUST NOT RESTRICT THIS DIAMETER. *from ECU*



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

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**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.

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