

# MSR / ML SERIES ROOTS BLOWERS

## TECHNICAL SELECTION CATALOG

MSR Standard Three-Lobe Series

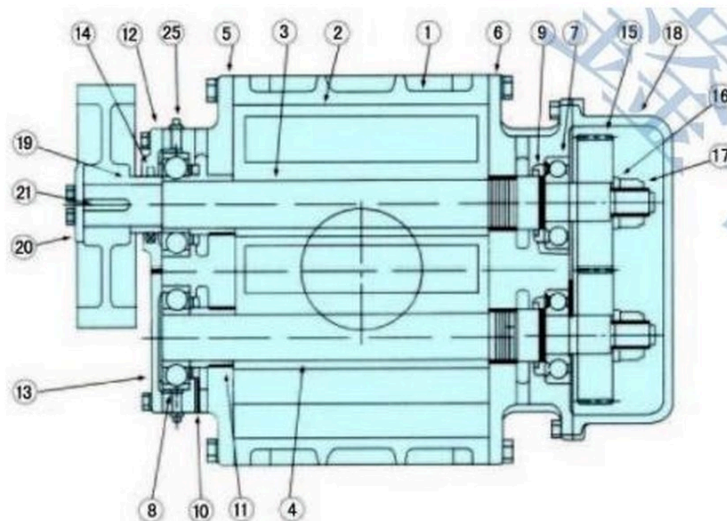
MSR-H High-Pressure Series

MSR-V Vacuum Roots Pump Series

ML Large Two-Lobe Roots Series

MSR-MJ Compact Package Units

Acoustic Silencing Enclosures



1. PERFORMANCE TABLE INSTRUCTIONS & SELECTION FORMULAS

The performance table indicates the relationship between blower model, bore size, speed, discharge pressure, airflow rate, and required motor power.

1. Standard Airflow Condition (Qs): Airflow in performance tables is under standard inlet condition (Temp: 20°C, Absolute Pressure: 101.3 kPa, RH: 65%).

2. Normal Airflow Condition (Qn): Airflow under normal condition (Temp: 0°C, Absolute Pressure: 101.3 kPa) is expressed in Nm³/min. Converted by:

**Qs = Qn × 1.0732** (where Qs: Standard Airflow in m³/min, Qn: Normal Airflow in Nm³/min)

3. Discharge State Airflow Conversion: To convert discharge state airflow (Q) to standard inlet airflow (Qs):

**Qs = Q × [(1.0332 + Pd) / 1.0332] × [(273 + t1) / (273 + t2)]**

(where Q: Discharge airflow m³/min, Pd: Discharge pressure kgf/cm², t1: Inlet temp °C, t2: Discharge temp °C)

4. Model Selection: Determine model, bore size, speed and power from calculated airflow and discharge pressure.

5. Motor Power Color Legend: Different motor output powers are indicated by distinct background colors in performance tables.

6. Overlapping Selection Range: For economy, select smaller blowers; for lower noise and longer life, select larger blowers.

2. MSR SERIES ROOTS BLOWER FEATURES & ADVANTAGES

1. Low Noise & Low Vibration

Three-lobe rotor design combined with helical casing air-inlet/outlet structure significantly reduces pulsation, mechanical noise and vibration.

2. High Precision & Durability

CNC precision machining ensures micro-level rotor clearance, zero internal contact, and consistent aerodynamic performance.

3. High Efficiency & Low Power Consumption

Advanced composite rotor profile minimizes internal leakage and dramatically improves volumetric efficiency across wide pressure ranges.

4. Stable & Constant Air Delivery

Discharge volume varies minimally with discharge pressure fluctuations, ensuring stable continuous airflow for process systems.

5. Clean, 100% Oil-Free Air

Specialized labyrinth oil seal and isolation chamber prevent lubricating oil from entering the casing, delivering completely oil-free air.

6. Long Service Life

Equipped with heavy-duty precision bearings and alloy steel carburized timing gears for superior reliability and extended service intervals.

7. Comprehensive Range & Easy Selection

Extensive model range with dense parameter steps allows optimal sizing and minimizes initial and operating costs.

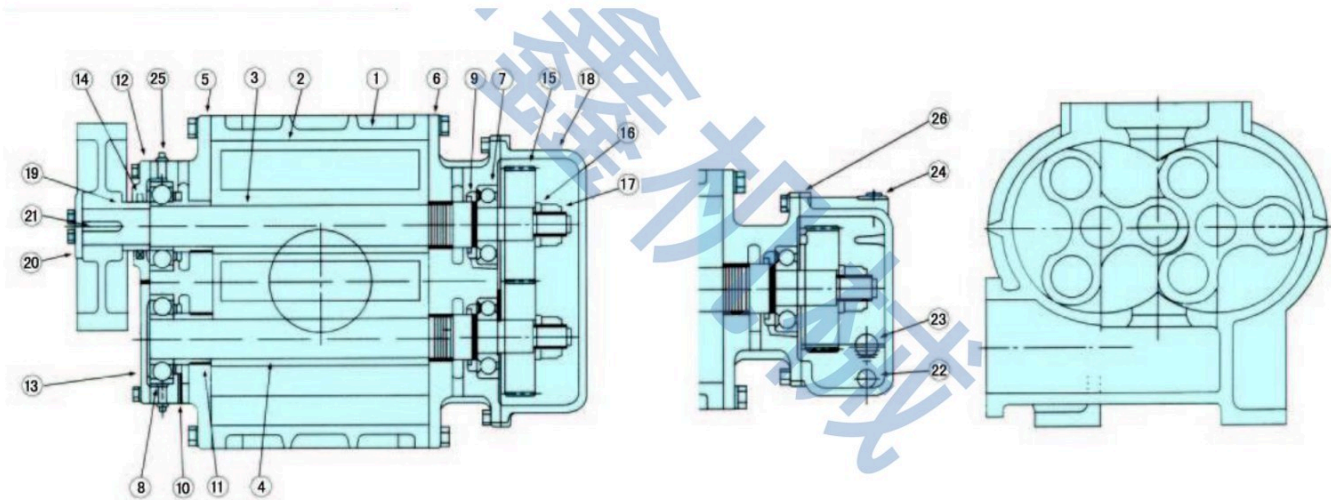
3. PRESSURE UNIT CONVERSION TABLE

| Pressure Unit | Pa (N/m²)     | kPa                        | bar                        | kgf/cm²                    | mmH2O (at 4°C) | mmHg (Torr)                | atm                        |
|---------------|---------------|----------------------------|----------------------------|----------------------------|----------------|----------------------------|----------------------------|
| 1 Pa          | 1             | 1 × 10 <sup>-3</sup>       | 1 × 10 <sup>-5</sup>       | 1.01972 × 10 <sup>-5</sup> | 0.101972       | 7.50062 × 10 <sup>-3</sup> | 9.86923 × 10 <sup>-8</sup> |
| 1 kPa         | 1 × 10³       | 1                          | 0.01                       | 0.0101972                  | 101.972        | 7.50062                    | 9.86923 × 10 <sup>-3</sup> |
| 1 bar         | 1 × 10⁵       | 100                        | 1                          | 1.01972                    | 1.01972 × 10⁴  | 750.062                    | 0.986923                   |
| 1 kgf/cm²     | 9.80665 × 10⁴ | 98.0665                    | 0.980665                   | 1                          | 1.00000 × 10⁴  | 735.559                    | 0.967841                   |
| 1 mmH2O       | 9.80665       | 9.80665 × 10 <sup>-3</sup> | 9.80665 × 10 <sup>-5</sup> | 1 × 10 <sup>-4</sup>       | 1              | 0.073556                   | 9.67841 × 10 <sup>-5</sup> |
| 1 mmHg        | 133.322       | 0.133322                   | 1.33322 × 10 <sup>-3</sup> | 1.35951 × 10 <sup>-3</sup> | 13.5951        | 1                          | 1.31579 × 10 <sup>-3</sup> |
| 1 atm         | 1.01325 × 10⁵ | 101.325                    | 1.01325                    | 1.03323                    | 1.03323 × 10⁴  | 760.000                    | 1                          |

MSR Series Roots Blower Construction & Parts List

Structural Engineering Diagram

Cross-Sectional Construction Diagram



| MSR SERIES STANDARD PARTS & MATERIAL SPECIFICATION LIST |                         |                                  |     |    |                               |                               |     |  |  |
|---------------------------------------------------------|-------------------------|----------------------------------|-----|----|-------------------------------|-------------------------------|-----|--|--|
| NO                                                      | Part Name               | Material                         | Qty | NO | Part Name                     | Material                      | Qty |  |  |
| 01                                                      | Casing                  | HT250 / Cast Iron                | 1   | 11 | Driven Timing Gear            | 20CrMnTi Alloy Steel (SCM415) | 1   |  |  |
| 02                                                      | Drive Rotor (Impeller)  | HT250 / Cast Iron                | 1   | 12 | Gear Oil Tank / Housing       | HT250 / Cast Iron             | 1   |  |  |
| 03                                                      | Driven Rotor (Impeller) | HT250 / Cast Iron                | 1   | 13 | Oil Splash Ring / Slinger     | 45# Carbon Steel (S45C)       | 2   |  |  |
| 04                                                      | Drive Shaft             | 45# Carbon Steel (S45C)          | 1   | 14 | Oil Seal                      | NBR / Fluoroelastomer         | 4   |  |  |
| 05                                                      | Driven Shaft            | 45# Carbon Steel (S45C)          | 1   | 15 | Bearing Retainer / Cap        | HT250 / Cast Iron             | 2   |  |  |
| 06                                                      | Drive End Side Plate    | HT250 / Cast Iron                | 1   | 16 | Shaft End V-Ring Seal         | NBR Rubber                    | 1   |  |  |
| 07                                                      | Gear End Side Plate     | HT250 / Cast Iron                | 1   | 17 | Oil Level Gauge / Sight Glass | Assembly                      | 1   |  |  |
| 08                                                      | Drive End Bearing       | High Carbon Bearing Steel (SUJ2) | 2   | 18 | Oil Drain Plug                | 45# Carbon Steel (S45C)       | 2   |  |  |
| 09                                                      | Gear End Bearing        | High Carbon Bearing Steel (SUJ2) | 2   | 19 | Breather / Vent Plug          | Assembly                      | 1   |  |  |
| 10                                                      | Drive Timing Gear       | 20CrMnTi Alloy Steel (SCM415)    | 1   | 20 | Fastening Bolts & Studs       | Grade 8.8 High Tensile Steel  | Set |  |  |

MSR Series Standard Performance Table (Part 1)

Models: MSR-50 ~ MSR-100

QS: Inlet Condition Airflow Rate (m³/min) | La: Required Shaft Power (kW)

1.1kW

1.5kW

2.2kW

3.0kW

4.0kW

5.5kW

7.5kW

11kW

15kW

18.5kW

22kW

30kW

37kW

45kW

| Type / Model |          |        | Bore<br>(mm) | Speed<br>(rpm) | Discharge Pressure (kgf/cm²) 0.20 |      |          |      |          |      |          |      | 0.25     |      | 0.30     |      | 0.35     |      | 0.40     |      | 0.45     |      | 0.50     |      | 0.60 |      |
|--------------|----------|--------|--------------|----------------|-----------------------------------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|------|------|
|              |          |        |              |                | 9.8 kPa                           |      | 14.7 kPa |      | 19.6 kPa |      | 24.5 kPa |      | 29.4 kPa |      | 34.3 kPa |      | 39.2 kPa |      | 44.1 kPa |      | 49.0 kPa |      | 58.8 kPa |      |      |      |
|              |          |        |              |                | Qs                                | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs   | La   |
| MSR 40       | ★<br>40A | 1250   | 0.44         | 0.30           | 0.43                              | 0.35 | 0.42     | 0.39 | 0.41     | 0.42 | 0.40     | 0.45 | 0.39     | 0.51 | 0.38     | 0.59 | 0.37     | 0.67 | 0.36     | 0.72 | 0.35     | 0.80 | 0.34     | 0.88 |      |      |
|              |          | 1390   | 0.50         | 0.36           | 0.49                              | 0.40 | 0.47     | 0.44 | 0.46     | 0.47 | 0.45     | 0.50 | 0.44     | 0.56 | 0.43     | 0.62 | 0.42     | 0.71 | 0.41     | 0.73 | 0.40     | 0.85 | 0.36     | 0.93 |      |      |
|              |          | 1480   | 0.54         | 0.42           | 0.53                              | 0.47 | 0.51     | 0.50 | 0.50     | 0.52 | 0.49     | 0.59 | 0.48     | 0.63 | 0.47     | 0.69 | 0.46     | 0.75 | 0.45     | 0.82 | 0.44     | 0.92 | 0.42     | 0.99 |      |      |
|              |          | 1800   | 0.64         | 0.50           | 0.62                              | 0.55 | 0.63     | 0.58 | 0.62     | 0.60 | 0.61     | 0.67 | 0.60     | 0.71 | 0.59     | 0.77 | 0.58     | 0.83 | 0.57     | 0.91 | 0.56     | 0.98 | 0.55     | 1.10 |      |      |
|              |          | 2100   | 0.72         | 0.58           | 0.70                              | 0.62 | 0.69     | 0.65 | 0.68     | 0.68 | 0.67     | 0.72 | 0.66     | 0.78 | 0.65     | 0.85 | 0.64     | 0.90 | 0.63     | 0.97 | 0.62     | 1.12 | 0.61     | 1.22 |      |      |
|              |          | 2400   | 0.85         | 0.64           | 0.84                              | 0.68 | 0.83     | 0.72 | 0.82     | 0.75 | 0.80     | 0.79 | 0.79     | 0.83 | 0.78     | 0.91 | 0.77     | 0.98 | 0.76     | 1.09 | 0.75     | 1.20 | 0.73     | 1.32 |      |      |
| MSR 50       | ★<br>50A | 1100   | 1.22         | 0.30           | 1.14                              | 0.14 | 1.11     | 0.50 | 1.03     | 0.67 | 0.98     | 0.79 | 0.92     | 0.91 | 0.89     | 1.05 | 0.83     | 1.16 | 0.75     | 1.34 | 0.70     | 1.54 | 0.65     | 1.77 |      |      |
|              |          | 1230   | 1.40         | 0.39           | 1.30                              | 0.50 | 1.26     | 0.61 | 1.18     | 0.79 | 1.12     | 0.95 | 1.07     | 1.05 | 1.03     | 1.23 | 0.98     | 1.37 | 0.92     | 1.47 | 0.88     | 1.65 | 0.83     | 1.83 |      |      |
|              |          | 1350   | 1.53         | 0.44           | 1.45                              | 0.61 | 1.41     | 0.75 | 1.32     | 0.85 | 1.29     | 1.05 | 1.25     | 1.17 | 1.17     | 1.35 | 1.15     | 1.53 | 1.06     | 1.63 | 1.03     | 1.80 | 0.99     | 2.01 |      |      |
|              |          | 1430   | 1.66         | 0.50           | 1.55                              | 0.64 | 1.50     | 0.84 | 1.43     | 0.96 | 1.38     | 1.14 | 1.34     | 1.30 | 1.22     | 1.43 | 1.21     | 1.63 | 1.17     | 1.76 | 1.12     | 1.91 | 1.09     | 2.11 |      |      |
|              |          | 1530   | 1.74         | 0.55           | 1.66                              | 0.75 | 1.61     | 0.91 | 1.53     | 1.07 | 1.50     | 1.35 | 1.45     | 1.41 | 1.39     | 1.68 | 1.33     | 1.74 | 1.32     | 2.05 | 1.28     | 2.12 | 1.25     | 2.35 |      |      |
|              |          | 1640   | 1.89         | 0.64           | 1.79                              | 0.81 | 1.74     | 1.02 | 1.71     | 1.15 | 1.65     | 1.46 | 1.61     | 1.54 | 1.56     | 1.82 | 1.52     | 1.88 | 1.48     | 2.23 | 1.43     | 2.28 | 1.40     | 2.60 |      |      |
|              |          | 1730   | 2.00         | 0.72           | 1.91                              | 0.95 | 1.86     | 1.14 | 1.82     | 1.25 | 1.78     | 1.55 | 1.73     | 1.68 | 1.68     | 1.97 | 1.64     | 2.03 | 1.60     | 2.35 | 1.57     | 2.47 | 1.53     | 2.73 |      |      |
|              |          | 1840   | 2.13         | 0.80           | 2.11                              | 1.03 | 2.05     | 1.23 | 1.99     | 1.39 | 1.93     | 1.68 | 1.87     | 1.79 | 1.82     | 2.10 | 1.78     | 2.25 | 1.75     | 2.56 | 1.72     | 2.65 | 1.68     | 2.94 |      |      |
|              |          | 1950   | 2.20         | 0.89           | 2.27                              | 1.14 | 2.21     | 1.35 | 2.15     | 1.51 | 2.10     | 1.83 | 2.04     | 1.94 | 1.96     | 2.27 | 1.93     | 2.41 | 1.90     | 2.71 | 1.86     | 2.81 | 1.82     | 3.15 |      |      |
|              |          | 2120   | 2.58         | 1.06           | 2.52                              | 1.28 | 2.46     | 1.50 | 2.39     | 1.73 | 2.32     | 2.05 | 2.26     | 2.17 | 2.20     | 2.53 | 2.18     | 2.68 | 2.15     | 3.05 | 2.11     | 3.15 | 2.07     | 3.54 |      |      |
|              |          | 2300   | 2.75         | 1.13           | 2.71                              | 1.38 | 2.67     | 1.63 | 2.62     | 1.87 | 2.58     | 2.31 | 2.53     | 2.35 | 2.48     | 2.85 | 2.43     | 2.90 | 2.40     | 3.33 | 2.38     | 3.41 | 2.35     | 3.83 |      |      |
|              |          | MSR 65 | ★<br>65A     | 1110           | 1.68                              | 0.38 | 1.55     | 0.63 | 1.50     | 0.82 | 1.42     | 1.02 | 1.34     | 1.18 | 1.23     | 1.37 | 1.15     | 1.54 | 1.14     | 1.74 | 1.05     | 1.84 | 0.99     | 2.02 | 0.94 | 2.25 |
| 1240         | 1.94     |        |              | 0.48           | 1.84                              | 0.72 | 1.75     | 0.94 | 1.63     | 1.14 | 1.55     | 1.35 | 1.52     | 1.55 | 1.45     | 1.76 | 1.35     | 1.94 | 1.34     | 2.12 | 1.25     | 2.32 | 1.19     | 2.58 |      |      |
| 1360         | 2.16     |        |              | 0.56           | 2.08                              | 0.83 | 1.95     | 1.06 | 1.85     | 1.26 | 1.80     | 1.50 | 1.77     | 1.73 | 1.70     | 1.96 | 1.64     | 2.20 | 1.55     | 2.33 | 1.51     | 2.55 | 1.45     | 2.80 |      |      |
| 1440         | 2.31     |        |              | 0.63           | 2.24                              | 0.85 | 2.16     | 1.14 | 2.05     | 1.36 | 2.02     | 1.62 | 1.95     | 1.83 | 1.88     | 2.12 | 1.82     | 2.34 | 1.76     | 2.56 | 1.70     | 2.75 | 1.65     | 3.02 |      |      |
| 1530         | 2.44     |        |              | 0.70           | 2.35                              | 0.98 | 2.28     | 1.22 | 2.23     | 1.47 | 2.15     | 1.70 | 2.09     | 1.95 | 2.04     | 2.27 | 1.97     | 2.52 | 1.92     | 2.74 | 1.86     | 2.95 | 1.80     | 3.22 |      |      |
| 1640         | 2.66     |        |              | 0.80           | 2.59                              | 1.05 | 2.51     | 1.35 | 2.44     | 1.62 | 2.38     | 1.85 | 2.32     | 2.15 | 2.62     | 2.48 | 2.20     | 2.75 | 2.14     | 2.93 | 2.08     | 3.24 | 2.03     | 3.44 |      |      |
| 1740         | 2.88     |        |              | 0.89           | 2.78                              | 1.20 | 2.71     | 1.45 | 2.64     | 1.76 | 2.58     | 2.02 | 2.53     | 2.32 | 2.48     | 2.66 | 2.41     | 2.96 | 2.34     | 3.18 | 2.28     | 3.47 | 2.23     | 3.72 |      |      |
| 1820         | 3.00     |        |              | 0.96           | 3.01                              | 1.25 | 2.92     | 1.54 | 2.83     | 1.88 | 2.75     | 2.15 | 2.68     | 2.44 | 2.62     | 2.75 | 2.56     | 3.12 | 2.50     | 3.35 | 2.44     | 3.65 | 2.38     | 3.93 |      |      |
| 1940         | 3.23     |        |              | 1.11           | 3.15                              | 1.42 | 3.07     | 1.73 | 3.04     | 2.05 | 2.98     | 2.33 | 2.92     | 2.68 | 2.85     | 3.04 | 2.79     | 3.38 | 2.74     | 3.57 | 2.68     | 3.92 | 2.63     | 4.22 |      |      |
| 2130         | 3.66     |        |              | 1.33           | 3.57                              | 1.63 | 3.48     | 1.93 | 3.42     | 2.32 | 3.35     | 2.67 | 3.30     | 3.03 | 3.25     | 3.38 | 3.17     | 3.74 | 3.11     | 4.02 | 3.06     | 4.32 | 3.02     | 4.64 |      |      |
| 2300         | 3.8      |        |              | 1.42           | 3.72                              | 1.78 | 3.64     | 2.14 | 3.57     | 2.52 | 3.50     | 2.92 | 3.43     | 3.31 | 3.35     | 3.85 | 3.30     | 4.23 | 3.25     | 4.45 | 3.20     | 4.92 | 3.15     | 5.35 |      |      |
| MSR 80       | ★<br>80A |        |              | 1140           | 3.09                              | 1.04 | 3.02     | 1.34 | 2.92     | 1.62 | 2.82     | 1.95 | 2.75     | 2.12 | 2.68     | 2.45 | 2.59     | 2.67 | 2.52     | 3.02 | 2.45     | 3.25 | 2.38     | 3.45 | 2.34 | 3.76 |
|              |          | 1230   | 3.37         | 1.14           | 3.25                              | 1.44 | 3.15     | 1.75 | 3.08     | 2.04 | 3.04     | 2.33 | 2.95     | 2.63 | 2.88     | 2.96 | 2.80     | 3.25 | 2.74     | 3.55 | 2.65     | 3.83 | 2.60     | 4.13 |      |      |
|              |          | 1300   | 3.59         | 1.22           | 3.52                              | 1.55 | 3.42     | 1.86 | 3.35     | 2.23 | 3.28     | 2.53 | 3.22     | 2.85 | 3.14     | 3.16 | 3.05     | 3.47 | 2.98     | 3.75 | 2.92     | 4.07 | 2.86     | 4.43 |      |      |
|              |          | 1360   | 3.77         | 1.29           | 3.65                              | 1.65 | 3.55     | 1.97 | 3.50     | 2.35 | 3.44     | 2.62 | 3.35     | 2.97 | 3.30     | 3.33 | 3.20     | 3.65 | 3.14     | 3.95 | 3.07     | 4.32 | 3.01     | 4.67 |      |      |
|              |          | 1440   | 4.06         | 1.40           | 3.90                              | 1.80 | 3.82     | 2.12 | 3.71     | 2.53 | 3.58     | 3.11 | 3.50     | 3.22 | 3.42     | 3.80 | 3.34     | 3.91 | 3.27     | 4.09 | 3.20     | 4.65 | 3.14     | 5.35 |      |      |
|              |          | 1560   | 4.38         | 1.52           | 4.19                              | 1.95 | 4.11     | 2.34 | 4.03     | 2.76 | 3.95     | 3.38 | 3.88     | 3.46 | 3.81     | 4.15 | 3.73     | 4.41 | 3.65     | 4.97 | 3.58     | 5.25 | 3.52     | 5.77 |      |      |
|              |          | 1650   | 4.66         | 1.62           | 4.55                              | 2.13 | 4.45     | 2.52 | 4.43     | 2.94 | 4.25     | 3.53 | 4.19     | 3.75 | 4.14     | 4.46 | 4.04     | 4.74 | 3.91     | 5.32 | 3.89     | 5.62 | 3.84     | 6.13 |      |      |
|              |          | 1730   | 4.90         | 1.77           | 4.80                              | 2.25 | 4.75     | 2.66 | 4.69     | 3.05 | 4.53     | 3.74 | 4.45     | 3.94 | 4.37     | 4.65 | 4.29     | 4.82 | 4.22     | 5.55 | 4.15     | 5.72 | 4.07     | 6.45 |      |      |
|              |          | 1820   | 5.22         | 1.88           | 5.12                              | 2.35 | 5.02     | 2.82 | 4.96     | 3.25 | 4.82     | 3.95 | 4.74     | 4.13 | 4.66     | 4.95 | 4.58     | 5.06 | 4.51     | 5.85 | 4.43     | 6.04 | 4.35     | 6.84 |      |      |
|              |          | 1900   | 5.51         | 2.11           | 5.38                              | 2.52 | 5.25     | 2.93 | 5.17     | 3.46 | 5.13     | 4.14 | 5.04     | 4.33 | 4.93     | 5.15 | 4.87     | 5.35 | 4.77     | 6.14 | 4.70     | 6.35 | 4.63     | 7.42 |      |      |
|              |          | 2100   | 6.13         | 2.35           | 6.04                              | 2.80 | 5.95     | 3.25 | 5.86     | 3.80 | 5.78     | 4.65 | 5.71     | 4.79 | 5.63     | 5.87 | 5.54     | 5.91 | 5.46     | 7.12 | 5.39     | 7.01 | 5.33     | 7.95 |      |      |
|              |          | 2300   | 6.21         | 2.55           | 6.12                              | 3.08 | 6.03     | 3.61 | 5.94     | 4.54 | 5.85     | 4.85 | 5.79     | 5.24 | 5.74     | 6.17 | 5.69     | 6.70 | 5.64     | 7.53 | 5.59     | 7.68 | 5.55     | 8.15 |      |      |

注：1. 所选电机一般为4级电机，另视转速调整级数。2. 带 ★ 号的也可用于直联传动。

## MSR Series Standard Performance Table (Part 2)

Models: MSR-100 ~ MSR-150

QS: Inlet Condition Airflow Rate (m³/min) | La: Required Shaft Power (kW)

|      |        |      |      |      |      |      |      |      |       |       |       |       |       |       |
|------|--------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 15kW | 18.5kW | 22kW | 30kW | 37kW | 45kW | 55kW | 75kW | 90kW | 110kW | 132kW | 160kW | 200kW | 220kW | 250kW |
|------|--------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|

| Type / Model |       |         | Bore<br>(mm) | Speed<br>(rpm) | Discharge Pressure (kgf/cm²) |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |
|--------------|-------|---------|--------------|----------------|------------------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|              |       |         |              |                | 0.20                         |       | 0.25     |       | 0.30     |       | 0.35     |       | 0.40     |       | 0.45     |       | 0.50     |       | 0.60     |       |          |       |          |       |
|              |       |         |              |                | 9.8 kPa                      |       | 14.7 kPa |       | 19.6 kPa |       | 24.5 kPa |       | 29.4 kPa |       | 34.3 kPa |       | 39.2 kPa |       | 44.1 kPa |       | 49.0 kPa |       | 58.8 kPa |       |
| Qs           | La    | Qs      | La           | Qs             | La                           | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       | Qs    | La       |       |
| MSR 100      | 100A  | 1060    | 4.57         | 1.35           | 4.42                         | 1.83  | 4.26     | 2.25  | 4.07     | 2.72  | 3.93     | 3.12  | 3.84     | 3.55  | 3.72     | 4.02  | 3.57     | 4.46  | 3.46     | 4.97  | 3.35     | 5.42  | 3.25     | 5.85  |
|              |       | 1140    | 4.98         | 1.53           | 4.82                         | 2.03  | 4.67     | 2.44  | 4.52     | 2.94  | 4.38     | 3.43  | 4.25     | 3.93  | 4.14     | 4.35  | 4.03     | 4.86  | 3.92     | 5.35  | 3.83     | 5.85  | 3.73     | 6.35  |
|              |       | 1220    | 5.36         | 1.69           | 5.15                         | 2.22  | 5.01     | 2.72  | 4.87     | 3.23  | 4.75     | 3.73  | 4.63     | 4.22  | 4.55     | 4.74  | 4.44     | 5.27  | 4.35     | 5.78  | 4.25     | 6.35  | 4.15     | 6.92  |
|              |       | 1310    | 5.75         | 1.88           | 5.60                         | 2.43  | 5.46     | 2.94  | 5.34     | 3.52  | 5.15     | 4.03  | 5.05     | 4.63  | 4.93     | 5.16  | 4.86     | 5.77  | 4.73     | 6.33  | 4.66     | 6.95  | 4.53     | 7.45  |
|              |       | 1460    | 6.52         | 2.18           | 6.35                         | 2.75  | 6.27     | 3.42  | 6.13     | 3.95  | 6.02     | 4.64  | 5.87     | 5.22  | 5.75     | 5.85  | 5.66     | 6.54  | 5.56     | 7.13  | 5.45     | 7.76  | 5.36     | 8.43  |
|              |       | 1540    | 6.91         | 2.40           | 6.79                         | 3.04  | 6.63     | 3.66  | 6.55     | 4.32  | 6.42     | 4.95  | 6.30     | 5.65  | 6.17     | 6.32  | 6.07     | 6.97  | 5.97     | 7.64  | 5.89     | 8.35  | 5.78     | 9.02  |
|              |       | 1680    | 7.63         | 2.78           | 7.47                         | 3.45  | 7.39     | 4.15  | 7.26     | 4.92  | 7.15     | 5.64  | 7.04     | 6.33  | 6.90     | 7.10  | 6.84     | 7.85  | 6.71     | 8.53  | 6.65     | 9.32  | 6.53     | 10.05 |
|              |       | 1780    | 8.02         | 3.08           | 7.94                         | 3.83  | 7.86     | 4.58  | 7.75     | 5.35  | 7.64     | 6.13  | 7.54     | 6.84  | 7.44     | 7.65  | 7.34     | 8.45  | 7.25     | 9.13  | 7.16     | 9.95  | 7.04     | 10.73 |
|              |       | 1880    | 8.51         | 3.35           | 8.43                         | 4.15  | 8.35     | 4.95  | 8.23     | 5.77  | 8.13     | 6.57  | 8.03     | 7.35  | 7.93     | 8.16  | 7.88     | 9.03  | 7.75     | 9.83  | 7.65     | 10.64 | 7.62     | 11.45 |
|              |       | 1980    | 9.01         | 3.54           | 8.94                         | 4.44  | 8.87     | 5.34  | 8.73     | 6.15  | 8.67     | 7.03  | 8.52     | 7.92  | 8.44     | 8.73  | 8.39     | 9.65  | 8.26     | 10.42 | 8.22     | 11.32 | 8.15     | 12.15 |
|              |       | 2100    | 9.62         | 4.89           | 9.53                         | 5.50  | 9.44     | 6.11  | 9.35     | 6.79  | 9.25     | 7.55  | 9.16     | 8.40  | 9.07     | 9.35  | 8.98     | 10.23 | 8.88     | 11.12 | 8.79     | 12.00 | 8.73     | 12.95 |
|              |       | 2200    | 10.22        | 5.47           | 10.13                        | 5.86  | 10.04    | 6.25  | 9.94     | 7.24  | 9.83     | 8.05  | 9.74     | 8.94  | 9.64     | 9.94  | 9.55     | 10.71 | 9.45     | 11.75 | 9.35     | 12.57 | 9.25     | 13.60 |
| MSR 125      | 125A  | 980     | 6.50         | 1.65           | 6.32                         | 2.25  | 6.13     | 2.83  | 6.03     | 3.42  | 5.93     | 4.12  | 5.80     | 4.73  | 5.73     | 5.42  | 5.62     | 6.13  | 5.58     | 6.72  | 5.45     | 7.22  | 5.35     | 8.03  |
|              |       | 1050    | 6.95         | 1.90           | 6.75                         | 2.53  | 6.65     | 3.13  | 6.52     | 3.83  | 6.45     | 4.55  | 6.32     | 5.22  | 6.20     | 5.93  | 6.13     | 6.63  | 6.05     | 7.32  | 5.93     | 7.93  | 5.83     | 8.73  |
|              |       | 1200    | 8.00         | 2.50           | 7.82                         | 3.22  | 7.67     | 3.95  | 7.53     | 4.72  | 7.43     | 5.52  | 7.32     | 6.25  | 7.23     | 7.13  | 7.12     | 7.92  | 7.02     | 8.63  | 6.95     | 9.43  | 6.85     | 10.23 |
|              |       | 1310    | 8.75         | 2.90           | 8.53                         | 3.63  | 8.42     | 4.53  | 8.25     | 5.33  | 8.17     | 6.23  | 8.07     | 7.03  | 8.02     | 7.92  | 7.93     | 8.83  | 7.84     | 9.62  | 7.76     | 10.03 | 7.66     | 11.42 |
|              |       | 1390    | 9.30         | 3.20           | 9.12                         | 4.02  | 8.93     | 4.92  | 8.85     | 5.82  | 8.72     | 6.72  | 8.65     | 7.62  | 8.52     | 8.52  | 8.42     | 9.42  | 8.35     | 10.33 | 8.25     | 11.27 | 8.22     | 12.23 |
|              |       | 1460    | 9.72         | 3.45           | 9.48                         | 4.23  | 9.33     | 5.22  | 9.23     | 6.13  | 9.13     | 7.13  | 9.03     | 8.03  | 8.93     | 9.02  | 8.82     | 9.93  | 8.75     | 10.92 | 8.73     | 11.82 | 8.63     | 12.83 |
|              |       | 1530    | 10.27        | 3.80           | 10.09                        | 4.72  | 9.92     | 5.63  | 9.82     | 6.63  | 9.72     | 7.62  | 9.62     | 8.62  | 9.52     | 9.62  | 9.43     | 10.62 | 9.35     | 11.63 | 9.23     | 12.63 | 9.13     | 13.62 |
|              |       | 1630    | 10.96        | 4.30           | 10.73                        | 5.23  | 10.55    | 6.23  | 10.45    | 7.23  | 10.35    | 8.33  | 10.25    | 9.33  | 10.15    | 10.33 | 10.05    | 11.33 | 10.03    | 12.43 | 9.95     | 13.53 | 9.83     | 14.62 |
|              |       | 1750    | 11.69        | 4.71           | 11.52                        | 5.82  | 11.35    | 6.93  | 11.27    | 7.93  | 11.15    | 9.15  | 11.07    | 10.22 | 10.97    | 11.24 | 10.93    | 12.35 | 10.85    | 13.35 | 10.73    | 14.72 | 10.64    | 15.82 |
|              |       | 1850    | 12.39        | 5.19           | 12.23                        | 6.36  | 12.07    | 7.53  | 11.95    | 8.55  | 11.85    | 9.85  | 11.72    | 10.92 | 11.63    | 12.04 | 11.55    | 13.15 | 11.52    | 14.22 | 11.45    | 15.62 | 11.33    | 16.83 |
|              |       | 2000    | 13.39        | 7.17           | 13.22                        | 8.07  | 13.05    | 8.97  | 12.91    | 9.96  | 12.83    | 11.07 | 12.71    | 12.26 | 12.64    | 13.62 | 12.58    | 14.96 | 12.53    | 16.23 | 12.44    | 17.42 | 12.35    | 18.74 |
|              |       | MSR 150 | 150A         | 810            | 12.00                        | 3.84  | 11.74    | 5.03  | 11.52    | 6.23  | 11.33    | 7.32  | 11.13    | 8.52  | 11.02    | 9.62  | 10.84    | 10.82 | 10.74    | 11.97 | 10.06    | 13.22 | 10.54    | 14.42 |
| 860          | 12.80 |         |              | 4.40           | 12.64                        | 5.63  | 12.43    | 6.88  | 12.23    | 8.03  | 12.05    | 9.32  | 11.84    | 10.47 | 11.73    | 11.73 | 11.63    | 13.03 | 11.56    | 14.23 | 11.42    | 15.53 | 11.25    | 16.82 |
| 970          | 14.70 |         |              | 5.58           | 14.52                        | 7.02  | 14.32    | 8.33  | 14.13    | 9.63  | 13.93    | 11.07 | 13.72    | 12.43 | 13.82    | 13.82 | 13.62    | 15.23 | 13.52    | 16.62 | 13.33    | 18.03 | 13.25    | 19.43 |
| 1110         | 17.08 |         |              | 7.00           | 16.92                        | 8.62  | 16.73    | 10.17 | 16.54    | 11.72 | 16.35    | 13.12 | 16.23    | 14.82 | 16.17    | 16.53 | 16.07    | 18.03 | 15.97    | 19.63 | 15.82    | 21.23 | 15.72    | 22.82 |
| 1180         | 18.25 |         |              | 7.80           | 18.13                        | 9.43  | 17.94    | 11.12 | 17.75    | 12.73 | 17.57    | 14.43 | 17.45    | 16.03 | 17.35    | 17.83 | 17.25    | 19.4  | 17.15    | 21.13 | 17.05    | 22.82 | 16.95    | 24.43 |
| 1240         | 19.27 |         |              | 8.45           | 19.12                        | 10.21 | 18.93    | 11.92 | 18.75    | 13.62 | 18.65    | 15.42 | 18.55    | 17.05 | 18.45    | 18.93 | 18.35    | 20.7  | 18.25    | 22.43 | 18.15    | 24.23 | 18.05    | 25.83 |
| 1400         | 22.00 |         |              | 10.20          | 21.85                        | 12.12 | 21.72    | 14.03 | 21.53    | 15.93 | 21.42    | 17.92 | 21.32    | 19.92 | 21.23    | 21.92 | 21.17    | 23.83 | 21.07    | 25.83 | 20.95    | 27.93 | 20.85    | 29.72 |
| 1470         | 23.93 |         |              | 11.65          | 23.04                        | 13.38 | 22.87    | 15.41 | 22.77    | 17.43 | 22.65    | 19.51 | 22.56    | 21.59 | 22.48    | 23.82 | 23.39    | 25.84 | 22.30    | 27.97 | 22.15    | 30.20 | 22.09    | 32.33 |
| 1620         | 25.42 |         |              | 13.40          | 25.32                        | 15.62 | 25.13    | 18.02 | 25.02    | 20.42 | 24.84    | 22.62 | 24.74    | 25.03 | 24.66    | 27.43 | 24.55    | 29.63 | 24.45    | 32.07 | 24.32    | 34.42 | 24.25    | 36.93 |
| 1730         | 27.15 |         |              | 15.04          | 26.94                        | 17.63 | 26.73    | 20.22 | 26.63    | 22.92 | 26.48    | 25.32 | 26.33    | 27.92 | 26.29    | 30.42 | 26.15    | 33.03 | 26.05    | 35.53 | 25.95    | 38.02 | 25.85    | 40.82 |
| 1900         | 29.61 |         |              | 20.57          | 29.48                        | 22.53 | 29.35    | 24.49 | 29.24    | 26.62 | 29.15    | 28.94 | 29.03    | 31.76 | 28.96    | 34.54 | 28.84    | 37.48 | 28.73    | 40.32 | 28.63    | 42.66 | 28.54    | 45.14 |
| MSR 175      | 175A  |         |              | 970            | 21.87                        | 7.20  | 22.20    | 10.19 | 22.13    | 11.25 | 21.63    | 13.35 | 21.05    | 15.46 | 20.85    | 17.57 | 20.53    | 19.65 | 20.21    | 21.75 | 20.12    | 23.87 | 19.83    | 26.03 |
|              |       | 1110    | 25.43        | 8.91           | 26.54                        | 11.94 | 26.33    | 13.14 | 25.83    | 15.53 | 26.04    | 17.93 | 25.24    | 20.33 | 24.83    | 22.73 | 24.55    | 25.10 | 24.23    | 27.53 | 24.07    | 29.93 | 23.95    | 32.33 |
|              |       | 1180    | 27.20        | 9.87           | 28.50                        | 12.54 | 28.35    | 13.84 | 27.96    | 16.35 | 27.55    | 18.95 | 27.17    | 21.47 | 26.83    | 24.07 | 26.57    | 26.63 | 26.34    | 29.15 | 26.15    | 31.74 | 25.95    | 34.26 |
|              |       | 1240    | 28.73        | 10.65          | 30.10                        | 13.43 | 29.94    | 14.75 | 29.53    | 17.47 | 29.15    | 20.16 | 28.85    | 22.85 | 28.55    | 25.54 | 28.27    | 28.24 | 28.05    | 30.93 | 27.84    | 33.56 | 27.63    | 36.26 |
|              |       | 1400    | 32.81        | 12.75          | 33.93                        | 16.70 | 33.65    | 18.54 | 33.35    | 21.65 | 33.26    | 25.54 | 32.83    | 27.57 | 32.55    | 30.64 | 32.33    | 33.63 | 32.03    | 36.65 | 31.82    | 39.71 | 31.62    | 42.76 |
|              |       | 1460    | 35.76        | 14.47          | 35.24                        | 17.25 | 35.04    | 19.09 | 34.69    | 22.25 | 34.50    | 25.39 | 34.09    | 28.55 | 33.86    | 31.74 | 33.64    | 34.85 | 33.34    | 38.01 | 33.18    | 41.68 | 32.94    | 44.36 |
|              |       | 1520    | 36.65        | 15.96          | 36.54                        | 17.80 | 36.43    | 19.64 | 36.03    | 22.94 | 35.73    | 26.23 | 35.35    | 29.52 | 35.17    | 32.83 | 34.95    | 36.07 | 34.65    | 39.37 | 34.56    | 43.65 | 34.25    | 45.95 |
|              |       | 1620    | 38.68        | 19.39          | 38.52                        | 21.13 | 38.36    | 22.87 | 38.03    | 26.43 | 37.84    | 29.94 | 37.43    | 33.42 | 37.15    | 36.96 | 36.96    | 40.43 | 36.65    | 43.95 | 36.55    | 47.45 | 36.35    | 50.97 |

注：1. 所选电机一般为4级电机，另视转速调整级数。2. 带★号的也可用于直联传动。

MSR Series Standard Performance Table (Part 3)

Models: MSR-200 ~ MSR-350

QS: Inlet Condition Airflow Rate (m³/min) | La: Required Shaft Power (kW)

37kW

45kW

55kW

75kW

90kW

110kW

132kW

160kW

185kW

200kW

220kW

250kW

280kW

315kW

| Type / Model |      |      | Bore<br>(mm) | Speed<br>(rpm) | Discharge |       | Pressure (kgf/cm²) |       | 0.20     |       | 0.25     |       | 0.30     |       | 0.35     |       | 0.40     |       | 0.45     |       | 0.50     |       | 0.60     |       |
|--------------|------|------|--------------|----------------|-----------|-------|--------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|              |      |      |              |                | 9.8 kPa   |       | 14.7 kPa           |       | 19.6 kPa |       | 24.5 kPa |       | 29.4 kPa |       | 34.3 kPa |       | 39.2 kPa |       | 44.1 kPa |       | 49.0 kPa |       | 58.8 kPa |       |
|              |      |      |              |                | Qs        | La    | Qs                 | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    |
|              |      |      | Qs           | La             | Qs        | La    | Qs                 | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    |
| MSR 200D     | 200A | 730  | 22.73        | 10.15          | 22.42     | 10.70 | 22.13              | 11.25 | 21.59    | 13.35 | 21.05    | 15.46 | 20.69    | 17.85 | 20.53    | 19.65 | 20.30    | 21.97 | 20.12    | 23.87 | 19.86    | 26.17 | 19.65    | 28.14 |
|              |      | 850  | 26.70        | 10.78          | 26.5      | 11.92 | 26.33              | 13.14 | 25.90    | 15.52 | 25.64    | 17.93 | 25.20    | 19.89 | 24.83    | 22.73 | 24.51    | 25.12 | 24.23    | 27.53 | 24.06    | 29.92 | 23.95    | 32.33 |
|              |      | 900  | 28.68        | 11.02          | 28.5      | 12.25 | 28.35              | 13.84 | 27.85    | 16.24 | 27.55    | 18.95 | 27.12    | 22.35 | 26.83    | 24.07 | 26.56    | 27.89 | 26.34    | 29.15 | 26.10    | 32.08 | 25.95    | 34.26 |
|              |      | 970  | 30.92        | 12.29          | 30.43     | 13.52 | 29.94              | 14.75 | 29.45    | 18.25 | 29.13    | 20.16 | 28.80    | 23.10 | 28.55    | 25.54 | 28.20    | 28.73 | 28.05    | 30.93 | 27.80    | 33.91 | 27.63    | 36.26 |
|              |      | 1070 | 34.18        | 17.16          | 33.90     | 17.85 | 33.65              | 18.54 | 33.40    | 22.10 | 33.26    | 24.54 | 32.88    | 28.75 | 32.55    | 30.64 | 32.28    | 34.01 | 32.03    | 36.65 | 31.79    | 39.85 | 31.62    | 42.76 |
|              |      | 1170 | 39.60        | 10.30          | 39.10     | 13.50 | 38.30              | 18.00 | 37.80    | 19.60 | 37.30    | 25.20 | 36.90    | 28.50 | 36.50    | 33.00 | 36.10    | 35.20 | 35.60    | 40.30 | 35.30    | 42.80 | 35.00    | 47.40 |
|              |      | 1250 | 42.50        | 11.30          | 41.80     | 14.20 | 41.30              | 19.10 | 40.80    | 20.60 | 40.30    | 27.30 | 39.80    | 28.90 | 39.40    | 35.00 | 39.00    | 36.90 | 38.60    | 42.70 | 38.30    | 44.20 | 38.00    | 51.00 |
|              |      | 1350 | 46.40        | 12.40          | 45.80     | 14.80 | 45.10              | 20.60 | 44.60    | 27.10 | 44.10    | 29.40 | 43.70    | 34.90 | 43.30    | 37.60 | 42.90    | 44.60 | 42.40    | 46.40 | 42.10    | 49.00 | 41.80    | 54.60 |
|              |      | 1480 | 51.20        | 13.40          | 50.80     | 15.80 | 49.80              | 22.40 | 49.20    | 26.30 | 48.60    | 31.30 | 48.00    | 36.50 | 47.70    | 40.20 | 47.30    | 45.20 | 46.90    | 49.10 | 46.30    | 55.20 | 46.10    | 58.10 |
| MSR 200      | 200A | 810  | 31.77        | 8.05           | 31.17     | 11.26 | 30.54              | 14.63 | 29.95    | 17.62 | 29.52    | 20.66 | 29.23    | 23.85 | 28.87    | 26.96 | 28.55    | 29.97 | 28.24    | 33.14 | 27.93    | 36.07 | 27.65    | 39.07 |
|              |      | 900  | 35.68        | 9.95           | 35.01     | 13.41 | 34.41              | 17.12 | 34.01    | 20.42 | 33.62    | 24.22 | 33.34    | 27.55 | 33.03    | 30.95 | 32.5     | 34.42 | 32.36    | 37.85 | 32.05    | 41.04 | 31.73    | 44.35 |
|              |      | 980  | 39.15        | 11.58          | 38.52     | 15.52 | 38.87              | 19.31 | 37.62    | 22.91 | 37.31    | 27.15 | 37.07    | 30.76 | 36.75    | 34.53 | 36.44    | 38.25 | 36.05    | 42.04 | 35.6     | 45.55 | 35.35    | 49.35 |
|              |      | 1070 | 43.03        | 13.46          | 42.53     | 17.81 | 42.03              | 21.22 | 41.63    | 25.82 | 41.43    | 30.12 | 41.11    | 34.45 | 40.95    | 38.66 | 40.58    | 42.63 | 40.17    | 46.84 | 39.75    | 50.73 | 39.45    | 54.97 |
|              |      | 1150 | 46.05        | 15.18          | 46.01     | 19.92 | 45.51              | 23.71 | 45.31    | 28.12 | 45.01    | 32.74 | 44.82    | 37.24 | 44.62    | 42.04 | 44.23    | 46.64 | 43.75    | 50.97 | 43.44    | 55.07 | 43.18    | 59.76 |
|              |      | 1230 | 49.60        | 17.07          | 49.13     | 21.91 | 48.72              | 26.42 | 48.42    | 31.23 | 48.23    | 36.22 | 48.11    | 41.23 | 47.71    | 46.02 | 47.41    | 50.72 | 47.01    | 55.52 | 46.82    | 59.81 | 46.62    | 64.81 |
|              |      | 1310 | 52.67        | 19.65          | 52.21     | 24.32 | 51.81              | 29.23 | 51.51    | 34.21 | 51.32    | 39.62 | 51.13    | 44.81 | 50.92    | 50.11 | 50.62    | 55.02 | 50.42    | 59.91 | 50.13    | 64.52 | 49.81    | 69.72 |
|              |      | 1390 | 55.77        | 21.31          | 54.33     | 26.61 | 54.93              | 31.82 | 54.73    | 37.41 | 54.41    | 42.92 | 54.31    | 48.53 | 54.12    | 54.22 | 53.93    | 59.21 | 53.6     | 64.42 | 53.42    | 69.11 | 53.22    | 74.62 |
|              |      | 1480 | 59.20        | 23.80          | 58.81     | 28.92 | 58.41              | 34.32 | 58.21    | 40.41 | 58.03    | 46.52 | 57.82    | 52.33 | 57.71    | 58.11 | 57.51    | 63.62 | 57.36    | 68.92 | 57.22    | 74.22 | 57.14    | 80.12 |
| MSR 250D     | 250A | 1100 | 57.74        | 19.97          | 57.26     | 26.94 | 56.90              | 32.37 | 56.65    | 37.84 | 56.42    | 43.89 | 56.22    | 49.65 | 55.99    | 55.52 | 55.65    | 60.95 | 55.42    | 66.39 | 55.13    | 71.5  | 54.77    | 77.25 |
|              |      | 1160 | 60.89        | 22.96          | 60.39     | 28.41 | 60.01              | 34.14 | 59.74    | 39.91 | 59.51    | 46.29 | 59.30    | 52.36 | 59.05    | 58.55 | 58.69    | 64.28 | 58.46    | 70.02 | 58.14    | 75.4  | 57.76    | 81.47 |
|              |      | 1210 | 63.52        | 23.95          | 63.00     | 29.64 | 62.60              | 35.62 | 62.32    | 41.64 | 62.08    | 48.29 | 61.86    | 54.62 | 61.60    | 61.08 | 61.23    | 67.06 | 60.99    | 73.04 | 60.65    | 78.65 | 60.25    | 84.99 |
|              |      | 1260 | 66.15        | 24.94          | 65.61     | 30.87 | 65.19              | 37.10 | 64.90    | 43.37 | 64.65    | 50.29 | 64.42    | 56.88 | 64.15    | 63.61 | 63.77    | 69.84 | 63.52    | 76.06 | 63.16    | 81.90 | 62.75    | 88.51 |
|              |      | 1310 | 68.78        | 25.93          | 68.22     | 32.10 | 67.78              | 38.58 | 67.48    | 45.15 | 67.22    | 52.29 | 66.98    | 59.14 | 66.70    | 66.14 | 66.31    | 72.62 | 66.05    | 79.08 |          |       |          |       |
|              |      | 1390 | 72.83        | 28.12          | 72.35     | 34.98 | 71.85              | 42.00 | 71.61    | 49.38 | 71.38    | 56.65 | 71.13    | 64.05 | 70.98    | 71.57 | 70.74    | 78.15 | 70.57    | 85.03 |          |       |          |       |
|              |      | 1480 | 77.55        | 31.41          | 77.04     | 38.17 | 76.51              | 45.30 | 76.25    | 53.34 | 76.01    | 61.40 | 75.74    | 69.07 | 75.60    | 76.70 | 75.33    | 83.97 | 75.14    | 90.97 |          |       |          |       |
| MSR 250      | 250A | 990  | 63.5         | 19.2           | 63.3      | 28.5  | 63.1               | 30.8  | 62.9     | 35.8  | 62.7     | 41.8  | 62.5     | 48.6  | 62.2     | 55.3  | 62.0     | 62.1  | 61.8     | 66.7  | 61.6     | 73.3  | 61.4     | 76.7  |
|              |      | 1170 | 74.7         | 22.5           | 74.5      | 29.2  | 74.3               | 35.9  | 74       | 42.2  | 73.6     | 49.1  | 73.1     | 56.9  | 72.7     | 64.6  | 72.3     | 72.5  | 72       | 77.8  | 71.7     | 85.3  | 71.3     | 89.2  |
|              |      | 1250 | 80.2         | 28.1           | 79.9      | 34.2  | 79.6               | 40.3  | 79.2     | 45.2  | 78.8     | 52.6  | 78.5     | 61.1  | 78.2     | 69.5  | 77.9     | 78.1  | 77.4     | 83.6  | 77.1     | 91.7  | 76.8     | 96.0  |
|              |      | 1360 | 89.5         | 35.9           | 89.1      | 38.2  | 88.7               | 40.5  | 88.5     | 50.4  | 88.3     | 58.9  | 88.1     | 68.5  | 87.8     | 78.1  | 87.5     | 87.6  | 87.2     | 94.2  | 86.9     | 103.4 | 86.6     | 108.3 |
|              |      | 1480 | 97.52        | 37.1           | 97.01     | 40.6  | 96.5               | 44.1  | 96.2     | 54.8  | 96.1     | 64.1  | 95.8     | 74.5  | 95.5     | 84.9  | 95.3     | 95.8  | 95       | 102.6 | 94.5     | 112.5 | 94.1     | 117.3 |
| MSR 300      | 300A | 990  | 89.3         | 26.4           | 89.1      | 29.2  | 88.9               | 32.0  | 88.7     | 46.1  | 88.5     | 55.3  | 88.3     | 64.3  | 88.1     | 73.4  | 87.9     | 73.2  | 87.6     | 77.1  | 87.4     | 94.3  | 87.1     | 108.8 |
|              |      | 1170 | 108          | 27.3           | 106.5     | 35.5  | 105                | 43.7  | 104.7    | 54.4  | 104      | 65    | 104.1    | 75.9  | 103.8    | 86.4  | 103.5    | 90.6  | 103.2    | 101.1 | 102.9    | 110.1 | 102.7    | 128.4 |
|              |      | 1250 | 114.8        | 28.1           | 113.5     | 37.4  | 112.2              | 46.7  | 112      | 58.2  | 111.8    | 69.8  | 111.6    | 81.3  | 111.4    | 92.8  | 111.2    | 97.8  | 111.0    | 108.8 | 110.8    | 119.6 | 110.6    | 138.2 |
|              |      | 1360 | 127          | 34             | 126       | 43.0  | 125                | 52.1  | 124.8    | 64.5  | 124.6    | 77.5  | 124.4    | 90.7  | 124.2    | 103.4 | 124.0    | 109.1 | 123.8    | 121.3 | 123.6    | 133.5 | 123.4    | 154.2 |
|              |      | 1480 | 138.1        | 35             | 137       | 45.5  | 135.9              | 56.2  | 135.8    | 70.6  | 135.6    | 84.3  | 135.3    | 98.6  | 135.1    | 112.5 | 134.9    | 118.7 | 134.7    | 132.1 | 134.5    | 145.3 | 134.3    | 167.8 |
| MSR 350      | 350A | 650  | 120.7        | 29             | 118.6     | 40    | 116.6              | 51    | 115      | 62    | 113.4    | 73    | 111.9    | 85    | 110.5    | 96    | 109.2    | 107   | 107.9    | 118   | 106.7    | 129   | 105.5    | 140   |
|              |      | 730  | 137.2        | 32             | 135.1     | 45    | 133.1              | 57    | 131.5    | 70    | 129.9    | 82    | 128.4    | 95    | 127      | 107   | 125.7    | 120   | 124.4    | 132   | 123.2    | 145   | 122      | 157   |
|              |      | 800  | 151.6        | 35             | 149.5     | 49    | 147.5              | 63    | 145.5    | 77    | 144.3    | 90    | 142.5    | 104   | 141.4    | 118   | 140.1    | 132   | 138.8    | 145   | 137.6    | 158   | 136.4    | 172   |
|              |      | 880  | 168.1        | 39             | 166       | 54    | 164                | 69    | 162.4    | 84    | 160.8    | 99    | 159      | 114   | 157.9    | 129   | 156.6    | 144   | 155.3    | 159   | 154.1    | 175   | 152.9    | 190   |
|              |      | 980  | 188.7        | 43             | 186.6     | 60    | 184.6              | 76    | 183      | 93    | 181.4    | 110   | 179.5    | 127   | 178.5    | 144   | 177.2    | 161   | 175.9    | 178   | 174.5    | 195   | 173.5    | 211   |

注：1. 所选电机一般为4级电机，另视转速调整级数。2. 带★号的也可用于直联传动。

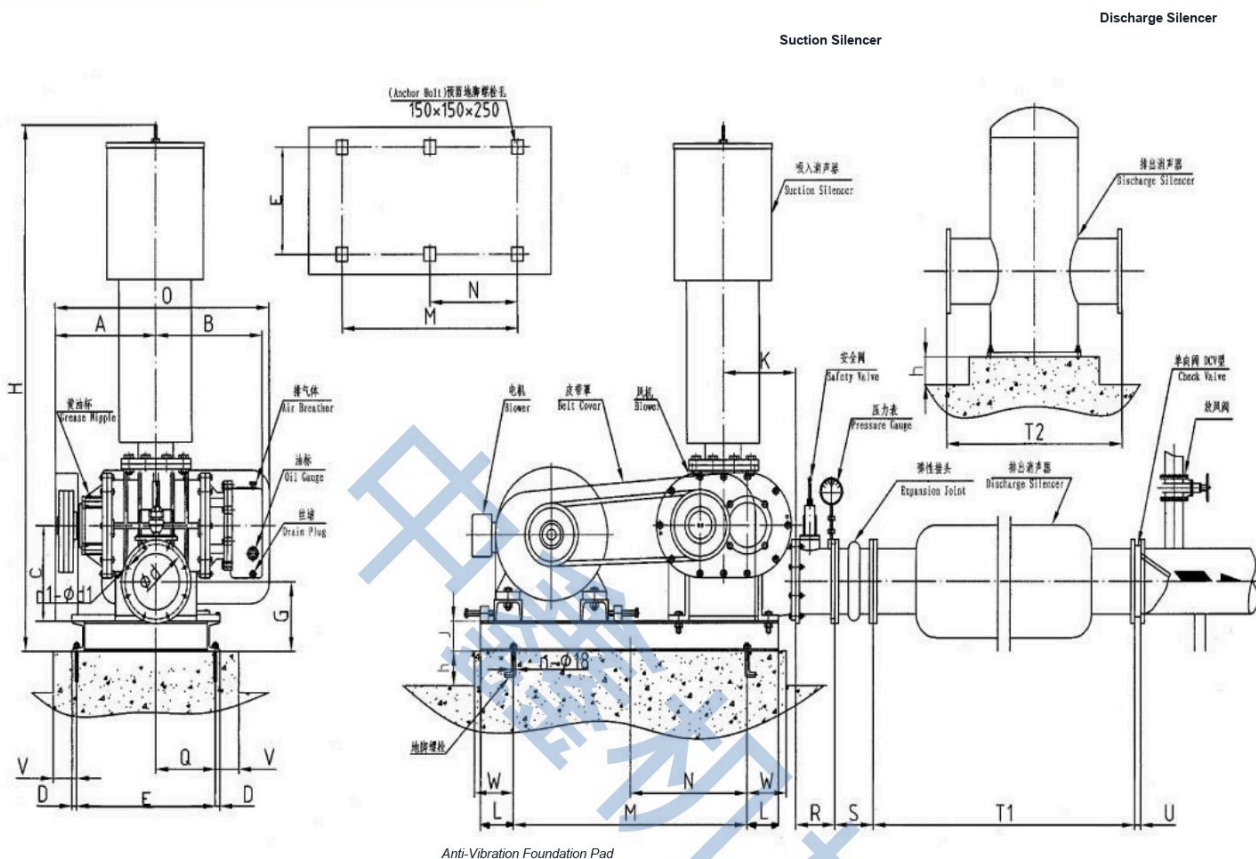
Notes: 1. Motors are standard 4-pole electric motors. 2. Models marked with ★ can also be direct-coupled.

## MSR Series V-Belt Drive Outline &amp; Dimensions

Belt-Driven Units (MSR-50 ~ MSR-300)

## MSR Series V-Belt Drive Outline &amp; Dimensions Drawing

(Anchor Bolt Hole) 150×150×250



| 型号       | 口径   | A   | B   | C   | D  | E    | G   | J   | H    | K   | L   | M    | N   | O    | Q   | R   | S   | T1   | T2   | U  | V   | W   | h   | n | Φd     | n1-Φd1   | 重量<br>(kg) |
|----------|------|-----|-----|-----|----|------|-----|-----|------|-----|-----|------|-----|------|-----|-----|-----|------|------|----|-----|-----|-----|---|--------|----------|------------|
| Model    | Bore | A   | B   | C   | D  | E    | G   | J   | H    | K   | L   | M    | N   | P    | Q   | R   | S   | T    | U    | V  | W   | X   | Y   | Z | WT(kg) | Silencer |            |
| MSR-50   | 50A  | 185 | 179 | 128 | 15 | 270  | 125 | 80  | 895  | 135 | 100 | 410  | -   | 450  | 160 | 120 | 105 | 600  | 300  | 19 | 100 | 150 | 100 | 4 | 125    | 4-Φ18    | 70         |
| MSR-65   | 65A  | 205 | 202 | 135 | 15 | 310  | 135 | 80  | 970  | 135 | 100 | 450  | -   | 500  | 170 | 125 | 115 | 700  | 350  | 19 | 100 | 150 | 100 | 4 | 145    | 4-Φ18    | 81         |
| MSR-80   | 80A  | 220 | 225 | 180 | 15 | 330  | 150 | 80  | 1130 | 175 | 100 | 500  | -   | 530  | 210 | 150 | 135 | 900  | 400  | 19 | 100 | 200 | 100 | 4 | 160    | 8-Φ18    | 123        |
| MSR-100  | 100A | 260 | 265 | 187 | 15 | 440  | 160 | 80  | 1255 | 175 | 100 | 580  | -   | 600  | 280 | 150 | 150 | 1200 | 450  | 19 | 100 | 200 | 100 | 4 | 180    | 8-Φ18    | 157        |
| MSR-125  | 125A | 295 | 294 | 217 | 15 | 440  | 190 | 100 | 1515 | 215 | 80  | 700  | -   | 710  | 255 | 160 | 165 | 1400 | 500  | 21 | 100 | 200 | 100 | 4 | 210    | 8-Φ18    | 235        |
| MSR-150  | 150A | 375 | 377 | 261 | 20 | 550  | 210 | 100 | 1730 | 260 | 155 | 750  | -   | 860  | 295 | 155 | 180 | 1600 | 600  | 24 | 120 | 255 | 100 | 4 | 240    | 8-Φ22    | 394        |
| MSR-175  | 150A | 375 | 600 | 261 | 22 | 656  | 210 | 100 | 1730 | 260 | 175 | 800  | -   | 920  | 320 | 170 | 180 | 1600 | 600  | 24 | 120 | 275 | 100 | 4 | 240    | 8-Φ22    | 695        |
| MSR-200B | 200A | 445 | 412 | 325 | 24 | 602  | 230 | 100 | 2077 | 330 | 250 | 750  | -   | 950  | 356 | 200 | 190 | 1800 | 650  | 29 | 150 | 350 | 100 | 4 | 295    | 8-Φ22    | 755        |
| MSR-200  | 200A | 525 | 550 | 345 | 25 | 705  | 250 | 120 | 2210 | 321 | 200 | 1000 | 500 | 1080 | 400 | 200 | 190 | 1800 | 650  | 29 | 150 | 300 | 100 | 6 | 295    | 8-Φ22    | 900        |
| MSR-250B | 250A | 645 | 589 | 380 | 25 | 800  | 330 | 120 | 2195 | 340 | 200 | 1000 | 500 | 1250 | 384 | 250 | 230 | 2000 | 702  | 30 | 150 | 300 | 100 | 6 | 350    | 12-Φ22   | 1198       |
| MSR-250  | 250A | 668 | 590 | 420 | 30 | 890  | 370 | 160 | 2785 | 460 | 205 | 1490 | 745 | 1258 | 550 | 250 | 230 | 2000 | 700  | 30 | 200 | 305 | 100 | 6 | 350    | 12-Φ22   | 1758       |
| MSR-300  | 300A | 756 | 677 | 510 | 30 | 890  | 400 | 160 | 2975 | 460 | 205 | 1490 | 745 | 1433 | 500 | 260 | 245 | 2000 | 1120 | 40 | 200 | 305 | 100 | 6 | 400    | 12-Φ22   | 2256       |
| MSR-350  | 350A | 950 | 920 | 630 | 32 | 1376 | 435 | 180 | 3200 | 560 | 350 | 1500 | 750 | 1870 | 688 | 300 | 255 | 2000 | 1200 | 45 | 200 | 450 | 100 | 8 | 460    | 16-Φ22   | 3450       |

注意：①.重量中不包括电机消音器重量 ②.大型风机底座随电机功率大小定 ③.用户可根据现场选用出口消音器T1或T2

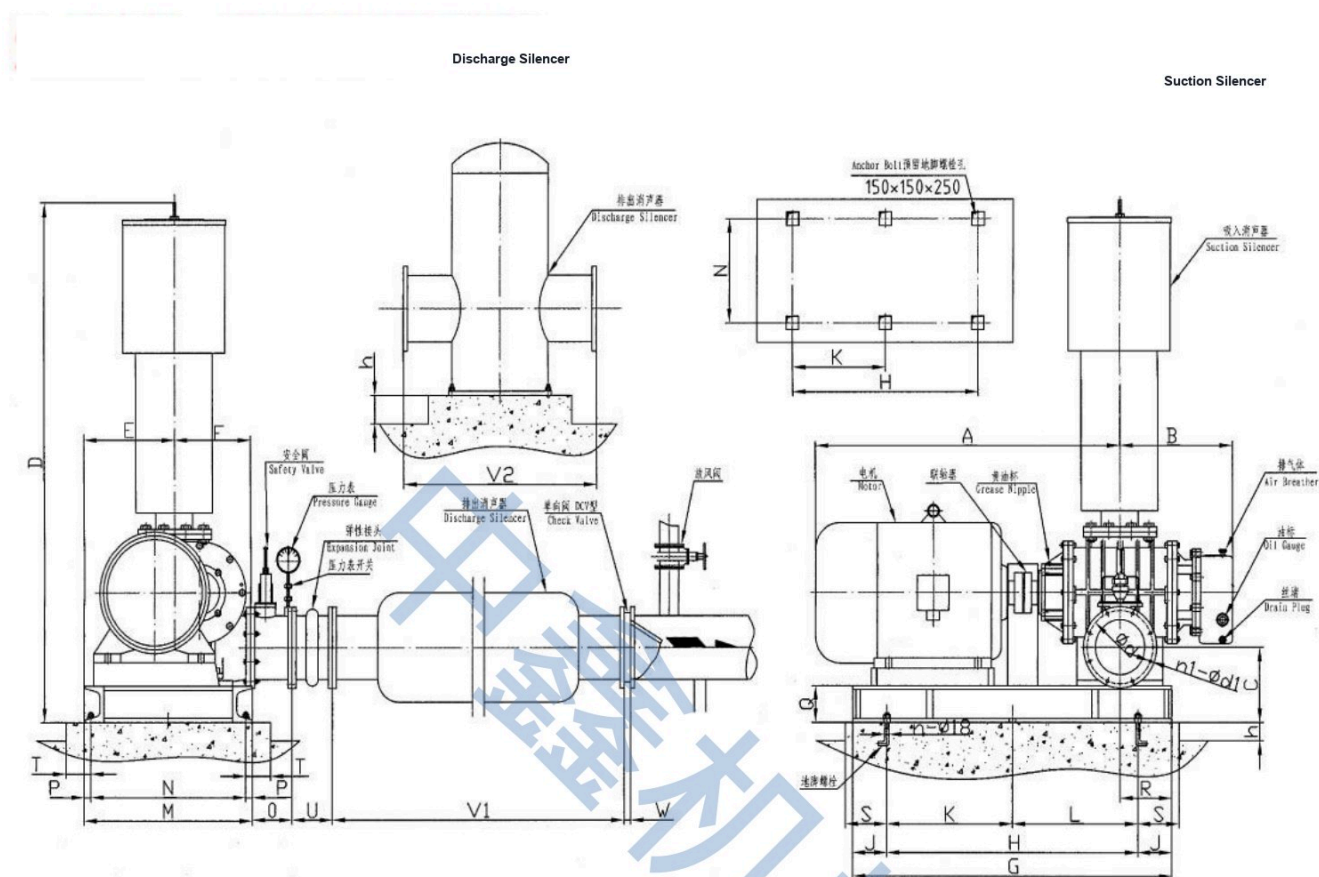
Notes: 1. Weight does not include motor and silencers. 2. Base dimensions for large models depend on motor size. 3. Outlet silencer T1 or T2 can be selected.

## MSR Series Direct-Coupled Drive Outline &amp; Dimensions

Direct-Coupled Units (MSR-50 ~ MSR-350)

## MSR Series Direct-Coupled Drive Outline &amp; Dimensions Drawing

(Anchor Bolt Hole) 150×150×250



| 型号       | 口径   | A    | B   | C   | D    | E   | F   | G    | H    | J   | K    | L    | M    | N    | O   | Q   | R   | S   | T   | U   | V1   | V2   | W  | h   | n | n1- Φd1 | 重量 (kg)  |
|----------|------|------|-----|-----|------|-----|-----|------|------|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|---|---------|----------|
| Model    | Bore | A    | B   | C   | D    | E   | F   | G    | H    | J   | K    | L    | M    | N    | P   | Q   | R   | S   | T   | U   | V    | W    | X  | Y   | Z | WT(kg)  | Silencer |
| MSR-50   | 50A  | 570  | 179 | 125 | 895  | 152 | 135 | 540  | 420  | 60  | -    | -    | 260  | 220  | 120 | 80  | 60  | 150 | 100 | 105 | 600  | 300  | 19 | 100 | 4 | 4-Φ18   | 70       |
| MSR-65   | 65A  | 610  | 202 | 135 | 970  | 192 | 135 | 600  | 440  | 80  | -    | -    | 300  | 260  | 125 | 80  | 80  | 150 | 100 | 115 | 700  | 350  | 19 | 100 | 4 | 4-Φ18   | 81       |
| MSR-80   | 80A  | 700  | 225 | 150 | 1130 | 217 | 175 | 650  | 500  | 75  | -    | -    | 370  | 330  | 150 | 80  | 75  | 150 | 100 | 135 | 900  | 400  | 19 | 100 | 4 | 8-Φ18   | 123      |
| MSR-100  | 100A | 900  | 265 | 160 | 1255 | 234 | 175 | 850  | 630  | 110 | -    | -    | 400  | 360  | 150 | 80  | 110 | 150 | 100 | 150 | 1200 | 450  | 19 | 100 | 4 | 8-Φ18   | 157      |
| MSR-125  | 125A | 945  | 294 | 190 | 1515 | 260 | 215 | 920  | 710  | 105 | 355  | 355  | 430  | 390  | 160 | 100 | 105 | 150 | 100 | 165 | 1400 | 500  | 21 | 100 | 6 | 8-Φ18   | 235      |
| MSR-150  | 150A | 1155 | 377 | 210 | 1730 | 305 | 260 | 1150 | 950  | 100 | 475  | 475  | 500  | 455  | 155 | 100 | 165 | 200 | 120 | 180 | 1600 | 600  | 24 | 100 | 6 | 8-Φ22   | 394      |
| MSR-175  | 150A | 1250 | 600 | 210 | 1730 | 305 | 260 | 1400 | 1100 | 150 | 550  | 550  | 540  | 495  | 170 | 100 | 240 | 200 | 120 | 180 | 1600 | 600  | 24 | 100 | 6 | 8-Φ22   | 695      |
| MSR-200B | 200A | 1200 | 412 | 230 | 2077 | 435 | 330 | 1400 | 1200 | 100 | 600  | 600  | 650  | 600  | 200 | 100 | 190 | 200 | 150 | 190 | 1800 | 650  | 29 | 100 | 6 | 8-Φ22   | 755      |
| MSR-200  | 200A | 1570 | 550 | 250 | 2163 | 405 | 321 | 1600 | 1300 | 150 | 650  | 650  | 650  | 605  | 200 | 120 | 240 | 200 | 150 | 190 | 1800 | 650  | 29 | 100 | 6 | 8-Φ22   | 900      |
| MSR-250B | 250A | 1635 | 589 | 330 | 2195 | 405 | 355 | 1700 | 1300 | 200 | 650  | 650  | 650  | 605  | 250 | 120 | 315 | 300 | 150 | 230 | 2000 | 700  | 30 | 100 | 6 | 12-Φ22  | 1198     |
| MSR-250  | 250A | 1847 | 590 | 370 | 2785 | 520 | 460 | 2100 | 1800 | 150 | 900  | 900  | 1020 | 950  | 250 | 160 | 250 | 250 | 200 | 230 | 2000 | 700  | 30 | 100 | 6 | 12-Φ22  | 1758     |
| MSR-300  | 300A | 2167 | 677 | 400 | 2975 | 520 | 460 | 2200 | 2000 | 100 | 1000 | 1000 | 1020 | 950  | 260 | 160 | 270 | 250 | 200 | 245 | 2000 | 1120 | 40 | 100 | 6 | 12-Φ22  | 2256     |
| MSR-350  | 350A | 2630 | 920 | 435 | 3200 | 601 | 560 | 2800 | 2100 | 350 | 700  | 700  | 1240 | 1176 | 300 | 180 | 405 | 450 | 200 | 255 | 2000 | 1200 | 45 | 100 | 8 | 16-Φ22  | 3450     |

注意：①.重量中不包括电机消音器重量 ②.大型风机底座随电机功率大小定 ③.用户可根据现场选用出口消音器V1或V2

Notes: 1. Weight does not include motor and silencers. 2. Base dimensions for large models depend on motor size. 3. Outlet silencer V1 or V2 can be selected.

MSR-H High-Pressure Performance Table (Part 1)

Models: MSR-50H ~ MSR-150H (63.7 ~ 98.0 kPa)

QS: Inlet Condition Airflow Rate (m³/min) | La: Required Shaft Power (kW)



| Type / Model |      | Bore<br>(mm) | Speed<br>(rpm) | Discharge Pressure (kgf/cm²) |      |          |      |          |      |          |      |          |      |       |      |       |      |       |      |
|--------------|------|--------------|----------------|------------------------------|------|----------|------|----------|------|----------|------|----------|------|-------|------|-------|------|-------|------|
|              |      |              |                | 0.70                         |      |          |      | 0.80     |      |          |      | 0.90     |      |       |      | 1.00  |      |       |      |
|              |      |              |                | 63.7 kPa                     |      | 68.6 kPa |      | 78.4 kPa |      | 88.2 kPa |      | 98.0 kPa |      |       |      |       |      |       |      |
|              |      | Qs           | La             | Qs                           | La   | Qs       | La   | Qs       | La   | Qs       | La   | Qs       | La   |       |      |       |      |       |      |
| MSR-50H      | 50A  | 1230         | 0.78           | 2.05                         | 0.73 | 2.24     | 0.69 | 2.49     | 0.65 | 2.76     | 0.61 | 3.37     | 0.56 | 3.95  | 0.50 | 4.17  | 0.45 | 4.65  | 1230 |
|              |      | 1350         | 0.95           | 2.23                         | 0.90 | 2.48     | 0.86 | 2.76     | 0.81 | 3.06     | 0.78 | 3.40     | 0.69 | 4.01  | 0.65 | 4.32  | 0.61 | 4.65  | 1350 |
|              |      | 1430         | 1.06           | 2.35                         | 1.01 | 2.61     | 0.97 | 2.90     | 0.93 | 3.23     | 0.90 | 3.68     | 0.87 | 4.05  | 0.81 | 4.48  | 0.72 | 4.81  | 1430 |
|              |      | 1530         | 1.22           | 2.55                         | 1.19 | 2.83     | 1.16 | 3.18     | 1.13 | 3.57     | 1.08 | 3.88     | 0.96 | 4.20  | 0.90 | 4.61  | 0.85 | 5.10  | 1530 |
|              |      | 1640         | 1.38           | 2.75                         | 1.35 | 3.16     | 1.32 | 3.32     | 1.29 | 3.89     | 1.24 | 4.27     | 1.18 | 4.43  | 1.13 | 4.80  | 1.06 | 5.20  | 1640 |
|              |      | 1730         | 1.50           | 2.93                         | 1.46 | 3.25     | 1.42 | 3.54     | 1.39 | 3.91     | 1.31 | 4.38     | 1.26 | 4.70  | 1.22 | 5.12  | 1.14 | 5.50  | 1730 |
|              |      | 1840         | 1.65           | 3.15                         | 1.60 | 3.35     | 1.56 | 3.64     | 1.51 | 3.96     | 1.46 | 4.43     | 1.40 | 4.92  | 1.35 | 5.30  | 1.28 | 5.70  | 1840 |
|              |      | 1950         | 1.78           | 3.42                         | 1.75 | 3.65     | 1.71 | 3.97     | 1.68 | 4.31     | 1.62 | 4.60     | 1.57 | 5.10  | 1.50 | 5.53  | 1.45 | 5.92  | 1950 |
|              |      | 2120         | 2.02           | 3.77                         | 1.98 | 3.97     | 1.95 | 4.21     | 1.91 | 4.53     | 1.83 | 4.80     | 1.75 | 5.30  | 1.70 | 5.75  | 1.63 | 6.12  | 2120 |
| 2300         | 2.31 | 4.43         | 2.24           | 4.35                         | 2.20 | 4.57     | 2.17 | 4.81     | 2.12 | 5.20     | 2.07 | 5.50     | 2.03 | 6.01  | 1.98 | 6.32  | 2300 |       |      |
| MSR-65H      | 65A  | 1110         | 0.89           | 2.52                         | 0.85 | 2.86     | 0.80 | 3.22     | 0.76 | 3.58     | 0.71 | 3.94     | 0.66 | 4.30  | 0.62 | 4.66  | 0.57 | 5.02  | 1110 |
|              |      | 1240         | 1.13           | 2.89                         | 1.08 | 3.17     | 1.03 | 3.49     | 0.98 | 3.84     | 0.93 | 4.20     | 0.88 | 4.56  | 0.83 | 4.92  | 0.78 | 5.28  | 1240 |
|              |      | 1360         | 1.39           | 3.08                         | 1.34 | 3.42     | 1.28 | 3.76     | 1.23 | 4.13     | 1.17 | 4.40     | 1.12 | 4.75  | 1.06 | 5.11  | 1.01 | 5.47  | 1360 |
|              |      | 1440         | 1.60           | 3.35                         | 1.55 | 3.68     | 1.51 | 4.05     | 1.46 | 4.45     | 1.41 | 4.85     | 1.35 | 5.20  | 1.29 | 5.56  | 1.23 | 5.92  | 1440 |
|              |      | 1530         | 1.74           | 3.50                         | 1.69 | 3.80     | 1.64 | 4.14     | 1.59 | 4.49     | 1.53 | 5.10     | 1.48 | 5.40  | 1.42 | 5.71  | 1.37 | 6.05  | 1530 |
|              |      | 1640         | 1.98           | 3.74                         | 1.92 | 4.06     | 1.86 | 4.42     | 1.81 | 4.80     | 1.75 | 5.25     | 1.70 | 5.40  | 1.65 | 5.78  | 1.60 | 6.10  | 1640 |
|              |      | 1740         | 2.18           | 4.13                         | 2.12 | 4.59     | 2.06 | 5.05     | 2.01 | 5.55     | 1.92 | 5.80     | 1.84 | 6.10  | 1.75 | 6.35  | 1.70 | 6.50  | 1740 |
|              |      | 1820         | 2.34           | 4.36                         | 2.27 | 4.75     | 2.20 | 5.15     | 2.13 | 5.74     | 2.10 | 6.10     | 2.08 | 6.40  | 2.03 | 6.63  | 2.00 | 6.90  | 1820 |
|              |      | 1940         | 2.57           | 4.71                         | 2.52 | 5.03     | 2.47 | 5.59     | 2.42 | 6.21     | 2.38 | 6.43     | 2.31 | 6.60  | 2.27 | 7.00  | 2.24 | 7.30  | 1940 |
|              |      | 2130         | 2.96           | 5.22                         | 2.89 | 5.54     | 2.84 | 5.86     | 2.78 | 6.30     | 2.70 | 6.62     | 2.65 | 6.91  | 2.60 | 7.20  | 2.53 | 7.55  | 2130 |
| 2300         | 3.09 | 5.72         | 3.06           | 6.14                         | 3.01 | 6.58     | 2.95 | 6.89     | 2.88 | 7.10     | 2.83 | 7.33     | 2.77 | 7.51  | 2.70 | 7.82  | 2300 |       |      |
| MSR-80H      | 80A  | 1140         | 2.27           | 4.09                         | 2.20 | 4.44     | 2.14 | 4.83     | 2.07 | 5.25     | 2.01 | 5.61     | 1.96 | 5.97  | 1.89 | 6.33  | 1.82 | 6.69  | 1140 |
|              |      | 1230         | 2.52           | 4.49                         | 2.45 | 4.88     | 2.37 | 5.30     | 2.30 | 5.76     | 2.25 | 6.10     | 2.19 | 6.45  | 2.12 | 6.81  | 2.06 | 7.17  | 1230 |
|              |      | 1300         | 2.77           | 4.82                         | 2.69 | 5.23     | 2.61 | 5.69     | 2.53 | 6.18     | 2.48 | 6.40     | 2.40 | 6.71  | 2.34 | 7.07  | 2.28 | 7.43  | 1300 |
|              |      | 1360         | 2.95           | 5.08                         | 2.86 | 5.52     | 2.77 | 5.99     | 2.69 | 6.52     | 2.62 | 6.80     | 2.57 | 7.21  | 2.49 | 7.53  | 2.42 | 7.89  | 1360 |
|              |      | 1440         | 3.07           | 5.67                         | 3.00 | 6.06     | 2.92 | 6.44     | 2.84 | 6.89     | 2.78 | 7.03     | 2.65 | 7.38  | 2.60 | 7.90  | 2.55 | 8.10  | 1440 |
|              |      | 1560         | 3.44           | 6.17                         | 3.37 | 6.57     | 3.30 | 6.97     | 3.21 | 7.21     | 3.18 | 7.40     | 3.15 | 7.70  | 3.10 | 8.12  | 3.07 | 8.35  | 1560 |
|              |      | 1650         | 3.73           | 6.55                         | 3.65 | 7.02     | 3.59 | 7.45     | 3.48 | 7.73     | 3.40 | 8.00     | 3.32 | 8.20  | 3.27 | 8.40  | 3.21 | 8.70  | 1650 |
|              |      | 1730         | 4.01           | 6.94                         | 3.93 | 7.35     | 3.85 | 7.84     | 3.79 | 8.25     | 3.70 | 8.40     | 3.65 | 8.71  | 3.61 | 8.98  | 3.52 | 9.10  | 1730 |
|              |      | 1820         | 4.29           | 7.27                         | 4.22 | 7.74     | 4.15 | 8.25     | 4.08 | 8.72     | 4.00 | 9.01     | 3.95 | 9.15  | 3.89 | 9.28  | 3.80 | 9.55  | 1820 |
|              |      | 1900         | 4.55           | 7.65                         | 4.49 | 8.14     | 4.42 | 8.63     | 4.35 | 9.13     | 4.27 | 9.31     | 4.20 | 9.58  | 4.13 | 9.88  | 4.07 | 10.1  | 1900 |
| 2100         | 5.26 | 8.45         | 5.18           | 9.04                         | 5.12 | 9.54     | 5.05 | 9.90     | 5.00 | 10.20    | 4.91 | 10.51    | 4.87 | 10.90 | 4.80 | 11.2  | 2100 |       |      |
| 2300         | 5.52 | 8.73         | 5.50           | 9.35                         | 5.47 | 9.97     | 5.41 | 11.04    | 5.35 | 11.66    | 5.28 | 12.28    | 5.21 | 12.90 | 5.14 | 13.52 | 2300 |       |      |
| MSR-100H     | 100A | 1060         | 3.17           | 6.36                         | 3.09 | 6.91     | 3.01 | 7.51     | 2.94 | 8.17     | 2.87 | 8.53     | 2.79 | 8.89  | 2.72 | 9.25  | 2.65 | 9.61  | 1060 |
|              |      | 1140         | 3.65           | 6.90                         | 3.58 | 7.51     | 3.65 | 8.15     | 3.72 | 8.66     | 3.65 | 8.90     | 3.60 | 9.10  | 3.54 | 9.50  | 3.48 | 9.86  | 1140 |
|              |      | 1220         | 4.06           | 7.52                         | 3.98 | 8.18     | 3.90 | 8.88     | 3.83 | 9.65     | 3.75 | 10.10    | 3.68 | 10.40 | 3.61 | 10.76 | 3.54 | 11.11 | 1220 |
|              |      | 1310         | 4.43           | 8.15                         | 4.35 | 8.75     | 4.26 | 9.62     | 4.18 | 10.56    | 4.10 | 10.82    | 4.03 | 11.50 | 3.90 | 11.71 | 3.82 | 12.10 | 1310 |
|              |      | 1460         | 5.28           | 9.23                         | 5.19 | 9.85     | 5.10 | 10.44    | 4.99 | 10.91    | 4.78 | 11.32    | 4.61 | 11.85 | 4.48 | 12.30 | 4.30 | 12.75 | 1460 |
|              |      | 1540         | 5.70           | 9.75                         | 5.64 | 10.46    | 5.55 | 11.12    | 5.43 | 10.96    | 5.21 | 11.98    | 5.00 | 12.21 | 4.83 | 12.80 | 4.68 | 13.20 | 1540 |
|              |      | 1680         | 6.44           | 10.77                        | 6.35 | 11.53    | 6.25 | 12.21    | 6.16 | 12.63    | 6.00 | 12.90    | 5.85 | 13.20 | 5.71 | 13.67 | 5.49 | 14.10 | 1680 |
|              |      | 1780         | 6.95           | 11.52                        | 6.87 | 12.34    | 6.83 | 13.07    | 6.75 | 13.44    | 6.55 | 13.92    | 6.38 | 14.10 | 6.10 | 14.52 | 5.91 | 14.88 | 1780 |
|              |      | 1880         | 7.55           | 12.25                        | 7.45 | 13.05    | 7.33 | 13.86    | 7.24 | 14.26    | 7.09 | 14.58    | 6.90 | 14.93 | 6.73 | 15.20 | 6.51 | 15.69 | 1880 |
|              |      | 1980         | 8.06           | 13.05                        | 7.92 | 13.87    | 7.85 | 14.72    | 7.75 | 15.27    | 7.58 | 15.61    | 7.40 | 16.02 | 7.21 | 16.60 | 7.03 | 17.20 | 1980 |
|              |      | 2100         | 8.65           | 13.85                        | 8.55 | 14.70    | 8.49 | 15.62    | 8.40 | 16.02    | 8.25 | 16.62    | 8.07 | 17.13 | 7.93 | 17.66 | 7.71 | 18.20 | 2100 |
|              |      | 2200         | 9.17           | 14.57                        | 9.14 | 15.46    | 9.04 | 16.42    | 8.92 | 16.95    | 8.72 | 17.40    | 8.61 | 17.98 | 8.47 | 18.33 | 8.21 | 18.98 | 2200 |

注：1. 所选电机一般为4级电机，另视转速调整级数。2. 带★号的也可用于直联传动。  
3. 风机油箱水冷却时用水量MSR125（DN）以下为5~8L/min MSR150（DN）以上为8~13L/min，  
冷却水进时温度不高于25℃，进口压力为196kpa。

## MSR-H High-Pressure Performance Table (Part 2)

Models: MSR-175H ~ MSR-300H (63.7 ~ 98.0 kPa)

QS: Inlet Condition Airflow Rate (m³/min) | La: Required Shaft Power (kW)

37kW 45kW 55kW 75kW 90kW 110kW 132kW 160kW 185kW 200kW 225kW 250kW 315kW

| Type / Model | Bore (mm) | Speed (rpm) | Discharge Pressure (kgf/cm²) |       |          |       |          |       |          |       |          |       |       |       |       |       |       |       |
|--------------|-----------|-------------|------------------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|-------|-------|-------|-------|-------|-------|
|              |           |             | 0.70                         |       |          |       | 0.80     |       |          |       | 0.90     |       |       |       | 1.00  |       |       |       |
|              |           |             | 63.7 kPa                     |       | 68.6 kPa |       | 78.4 kPa |       | 88.2 kPa |       | 98.0 kPa |       |       |       |       |       |       |       |
|              |           |             | Qs                           | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs    | La    | Qs    | La    | Qs    | La    |
| MSR-125H     | 125A      | 1050        | 5.54                         | 9.71  | 5.43     | 10.78 | 5.32     | 11.98 | 5.21     | 13.01 | 5.11     | 14.08 | 5.01  | 15.11 | 4.92  | 16.01 | 4.80  | 17.10 |
|              |           | 1200        | 6.83                         | 11.05 | 6.74     | 11.82 | 6.66     | 12.55 | 6.54     | 13.33 | 6.43     | 14.61 | 6.32  | 15.58 | 6.23  | 16.57 | 6.15  | 17.90 |
|              |           | 1310        | 7.55                         | 12.22 | 7.45     | 13.13 | 7.39     | 13.92 | 7.34     | 14.83 | 7.25     | 15.85 | 7.17  | 16.86 | 7.09  | 17.87 | 6.99  | 18.80 |
|              |           | 1390        | 8.14                         | 13.14 | 8.06     | 14.04 | 7.92     | 14.91 | 7.85     | 15.82 | 7.61     | 16.20 | 7.52  | 17.21 | 7.43  | 18.23 | 7.34  | 19.25 |
|              |           | 1460        | 8.50                         | 13.73 | 8.45     | 14.67 | 8.33     | 15.62 | 8.24     | 16.55 | 8.08     | 17.10 | 7.90  | 17.72 | 7.73  | 18.20 | 7.53  | 19.8  |
|              |           | 1530        | 9.05                         | 14.63 | 8.95     | 15.62 | 8.87     | 16.63 | 8.82     | 17.62 | 8.61     | 18.01 | 8.48  | 18.71 | 8.21  | 19.40 | 8.00  | 20.10 |
|              |           | 1630        | 9.75                         | 15.65 | 9.65     | 16.73 | 9.55     | 17.82 | 9.45     | 18.95 | 9.31     | 19.60 | 9.15  | 20.30 | 8.93  | 20.98 | 8.80  | 21.60 |
|              |           | 1750        | 10.55                        | 16.94 | 10.45    | 18.06 | 10.35    | 19.14 | 10.25    | 20.25 | 10.05    | 21.0  | 9.87  | 21.80 | 9.80  | 22.35 | 9.62  | 23.10 |
|              |           | 1850        | 11.23                        | 18.05 | 11.13    | 19.24 | 11.04    | 20.37 | 10.94    | 21.45 | 10.78    | 22.10 | 10.61 | 22.98 | 10.45 | 23.70 | 10.27 | 24.20 |
|              |           | 2000        | 12.23                        | 20.02 | 12.12    | 21.31 | 12.05    | 22.63 | 11.93    | 23.92 | 11.71    | 24.50 | 11.58 | 25.10 | 11.37 | 25.90 | 11.10 | 26.80 |
| MSR-150H     | 150A      | 810         | 10.26                        | 17.16 | 10.16    | 18.86 | 10.06    | 20.73 | 9.96     | 22.78 | 9.86     | 24.38 | 9.75  | 25.98 | 9.64  | 27.28 | 9.53  | 28.58 |
|              |           | 860         | 11.16                        | 17.77 | 11.03    | 18.97 | 10.85    | 20.87 | 10.73    | 24.37 | 10.62    | 25.67 | 10.51 | 26.97 | 10.40 | 28.27 | 10.29 | 29.57 |
|              |           | 970         | 13.12                        | 21.45 | 12.95    | 22.93 | 12.86    | 24.34 | 12.73    | 25.82 | 12.51    | 26.50 | 12.39 | 29.01 | 12.25 | 30.36 | 12.12 | 33.71 |
|              |           | 1110        | 15.55                        | 25.07 | 15.46    | 26.74 | 15.33    | 28.45 | 15.15    | 30.07 | 15.00    | 32.60 | 14.78 | 35.00 | 14.65 | 37.21 | 14.5  | 39.35 |
|              |           | 1180        | 16.86                        | 26.34 | 16.73    | 28.22 | 16.55    | 30.15 | 16.43    | 31.84 | 16.27    | 33.20 | 16.10 | 36.30 | 15.89 | 40.10 | 15.71 | 44.23 |
|              |           | 1240        | 17.92                        | 27.73 | 17.75    | 29.55 | 17.66    | 31.43 | 17.53    | 33.17 | 17.21    | 36.21 | 17.10 | 39.38 | 16.8  | 44.45 | 16.63 | 47.78 |
|              |           | 1400        | 20.76                        | 33.34 | 20.63    | 35.85 | 20.45    | 37.97 | 20.33    | 40.13 | 20.11    | 43.0  | 19.87 | 46.10 | 19.63 | 49.80 | 19.48 | 52.0  |
|              |           | 1470        | 21.92                        | 34.57 | 21.82    | 36.92 | 21.69    | 39.12 | 21.52    | 41.33 | 21.30    | 44.8  | 21.11 | 47.10 | 20.90 | 50.9  | 20.71 | 54.0  |
|              |           | 1620        | 24.12                        | 40.07 | 24.04    | 43.32 | 23.85    | 45.83 | 23.73    | 48.25 | 23.50    | 51.10 | 23.31 | 54.0  | 23.13 | 57.8  | 22.90 | 60.1  |
|              |           | 1730        | 25.76                        | 44.85 | 25.64    | 47.63 | 25.45    | 50.27 | 25.32    | 52.95 | 25.14    | 55.95 | 25.00 | 58.10 | 24.80 | 61.0  | 24.61 | 65.0  |
| MSR-200H     | 200A      | 1900        | 28.35                        | 47.83 | 28.15    | 50.54 | 27.97    | 53.35 | 27.92    | 56.43 | 27.71    | 59.23 | 27.58 | 62.01 | 27.39 | 65.30 | 27.11 | 69.01 |
|              |           | 810         | 27.26                        | 47.34 | 26.93    | 45.35 | 26.62    | 48.52 | 26.33    | 51.73 | 26.12    | 55.0  | 25.90 | 58.2  | 25.59 | 61.4  | 25.28 | 64.61 |
|              |           | 900         | 31.45                        | 47.64 | 31.14    | 51.23 | 30.85    | 54.52 | 30.54    | 57.85 | 30.21    | 60.8  | 29.90 | 64.01 | 28.89 | 67.21 | 28.58 | 70.41 |
|              |           | 980         | 35.05                        | 53.03 | 34.72    | 56.75 | 34.38    | 60.55 | 34.05    | 64.23 | 33.80    | 66.80 | 33.62 | 69.10 | 33.27 | 72.3  | 32.92 | 75.51 |
|              |           | 1070        | 39.35                        | 58.83 | 39.13    | 63.73 | 38.92    | 67.37 | 38.75    | 71.44 | 38.58    | 74.01 | 38.37 | 77.20 | 38.11 | 80.50 | 37.90 | 84.20 |
|              |           | 1150        | 43.03                        | 64.33 | 42.74    | 68.63 | 42.45    | 73.34 | 42.25    | 77.66 | 42.03    | 80.10 | 41.81 | 84.20 | 41.63 | 87.5  | 41.45 | 90.7  |
|              |           | 1230        | 46.41                        | 69.32 | 46.21    | 74.22 | 46.02    | 78.81 | 45.83    | 83.52 | 45.60    | 86.10 | 45.42 | 89.10 | 45.20 | 92.3  | 45.0  | 96.0  |
|              |           | 1310        | 49.72                        | 74.81 | 49.53    | 79.71 | 49.32    | 84.72 | 49.11    | 89.76 | 48.90    | 92.10 | 48.68 | 95.3  | 48.41 | 99.2  | 48.25 | 105.1 |
|              |           | 1390        | 53.03                        | 79.65 | 52.82    | 84.91 | 52.71    | 90.24 | 52.52    | 95.55 | 52.35    | 98.7  | 52.10 | 103.2 | 51.90 | 107.2 | 51.72 | 112.0 |
|              |           | 1480        | 56.92                        | 85.61 | 56.82    | 91.32 | 56.71    | 96.72 | 56.53    | 102.4 | 56.21    | 106.3 | 56.10 | 110.0 | 55.75 | 115.0 | 55.4  | 120.0 |
| MSR-250H     | 250A      | 990         | 61.2                         | 83.2  | 61.0     | 88.9  | 59.9     | 93.6  | 59.8     | 99.7  | 59.2     | 112.1 | 58.8  | 120.0 | 58.3  | 129.6 | 58.0  | 137.0 |
|              |           | 1170        | 71                           | 96.1  | 69.6     | 101.5 | 69.4     | 108.5 | 69.0     | 115.1 | 68.6     | 126.0 | 68.2  | 134.4 | 67.7  | 140.1 | 67.1  | 152.0 |
|              |           | 1250        | 76.4                         | 103.5 | 76.0     | 110.8 | 75.6     | 118.2 | 75.1     | 125.2 | 74.5     | 142.0 | 74.1  | 149.0 | 73.4  | 155.0 | 73.0  | 165.0 |
|              |           | 1360        | 86.3                         | 112.5 | 86.0     | 125.5 | 85.7     | 133.9 | 85.4     | 142.4 | 85.1     | 154.0 | 84.7  | 165.0 | 84.3  | 177.0 | 84.0  | 183.0 |
| MSR-300H     | 300A      | 1480        | 93.7                         | 126.9 | 93.4     | 136.2 | 93.2     | 145.6 | 92.6     | 154.3 | 92.2     | 170.1 | 91.8  | 184.0 | 91.5  | 192.0 | 91.2  | 205.0 |
|              |           | 990         | 86.9                         | 114.7 | 86.7     | 123.6 | 86.4     | 127.1 | 86.1     | 135.1 | 85.5     | 150.1 | 85.0  | 165.0 | 84.6  | 172.3 | 83.8  | 183.0 |
|              |           | 1170        | 102.5                        | 135.3 | 102.3    | 145.3 | 102.1    | 150.1 | 101.8    | 159.8 | 101.5    | 170.5 | 101.1 | 182.1 | 100.8 | 200.1 | 100.5 | 227.0 |
|              |           | 1250        | 110.4                        | 145.7 | 110.2    | 155.8 | 110      | 161.7 | 109.8    | 172.4 | 109.3    | 187.1 | 108.9 | 203.1 | 108.6 | 220.1 | 108.3 | 234.0 |
| MSR-350H     | 350A      | 1360        | 123.2                        | 162.6 | 123.0    | 176.6 | 122.7    | 180.4 | 122.5    | 192.3 | 122.2    | 206.1 | 122.0 | 217.5 | 121.7 | 232.0 | 121.5 | 256.0 |
|              |           | 1480        | 134.1                        | 177.8 | 134.0    | 190.6 | 133.8    | 196.7 | 133.7    | 209.9 | 133.5    | 213.0 | 133.2 | 235.1 | 132.8 | 250.1 | 132.5 | 270.1 |
|              |           | 650         | 104.4                        | 151   | 103.4    | 162   | 102.4    | 174   | 101.5    | 185   | 100.6    | 197   | 99.7  | 209   | 98.8  | 221   | 97.9  | 233   |
|              |           | 730         | 120.9                        | 170   | 119.9    | 182   | 118.9    | 195   | 118      | 207   | 117.1    | 220   | 116.2 | 233   | 115.3 | 246   | 114.4 | 259   |
|              |           | 800         | 135.3                        | 186   | 134.3    | 200   | 133.3    | 214   | 132.4    | 227   | 131.5    | 240   | 130.6 | 253   | 129.7 | 266   | 128.8 | 279   |
|              |           | 880         | 151.8                        | 205   | 150.8    | 220   | 149.8    | 235   | 148.9    | 250   | 148      | 265   | 147.1 | 280   | 146.2 | 295   | 145.3 | 310   |
|              |           | 980         | 172.4                        | 228   | 171.4    | 245   | 170.4    | 262   | 169.5    | 278   | 168.6    | 294   | 167.7 | 310   | 166.8 | 326   | 165.9 | 342   |

注：1、所选电机一般为4级电机，另视转速调整级数。 2、带“★”号的也可用于直联传动。

3、风机油箱水冷却时用水量MSR125 (DN) 以下为5~8L/min MSR150 (DN) 以上为8~13L/min，冷却水进时温度不高于25℃，进口压力为196kpa。

MSR-V Vacuum Roots Blower Performance Table (Part 1)

Models: MSR-50V ~ MSR-150V (-13.3 ~ -44.0 kPa)

QS: Airflow Rate at Specified Vacuum (m³/min) | La: Required Shaft Power (kW)

|       |       |       |       |       |       |      |      |        |      |      |      |      |
|-------|-------|-------|-------|-------|-------|------|------|--------|------|------|------|------|
| 1.5kW | 2.2kW | 3.0kW | 4.0kW | 5.5kW | 7.5kW | 11kW | 15kW | 18.5kW | 22kW | 30kW | 37kW | 45kW |
|-------|-------|-------|-------|-------|-------|------|------|--------|------|------|------|------|

| Type / Model |                                       | Bore<br>(mm) | Speed<br>(rpm) | Vacuum Degree (-mmHg / -kPa) |      |      |      | -200      |      |      |      | -250      |      |      |      | -300      |  |    |  | -330      |  |      |  |
|--------------|---------------------------------------|--------------|----------------|------------------------------|------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|--|----|--|-----------|--|------|--|
|              |                                       |              |                | -13.3 kPa                    |      |      |      | -26.7 kPa |      |      |      | -33.3 kPa |      |      |      | -40.0 kPa |  |    |  | -44.0 kPa |  |      |  |
|              |                                       |              |                | Qs                           |      | La   |      | Qs        |      | La   |      | Qs        |      | La   |      | Qs        |  | La |  | Qs        |  | La   |  |
| MSR-50V      | 吸入口径<br>5K-40A<br>吐出口径<br>1.0MPa-50A  | 1230         | 1.29           | 0.47                         | 1.20 | 0.67 | 1.10 | 0.88      | 1.02 | 1.08 |      |           |      |      |      |           |  |    |  |           |  | 1230 |  |
|              |                                       | 1350         | 1.45           | 0.58                         | 1.36 | 0.80 | 1.26 | 1.02      | 1.16 | 1.24 |      |           |      |      |      |           |  |    |  |           |  | 1350 |  |
|              |                                       | 1470         | 1.62           | 0.74                         | 1.54 | 0.96 | 1.45 | 1.18      | 1.35 | 1.40 | 1.25 | 1.62      | 1.21 | 1.75 | 1470 |           |  |    |  |           |  |      |  |
|              |                                       | 1560         | 1.76           | 0.86                         | 1.69 | 1.09 | 1.60 | 1.31      | 1.50 | 1.54 | 1.37 | 1.76      | 1.31 | 1.89 | 1560 |           |  |    |  |           |  |      |  |
|              |                                       | 1660         | 1.88           | 0.93                         | 1.81 | 1.17 | 1.71 | 1.41      | 1.61 | 1.66 | 1.48 | 1.90      | 1.42 | 2.04 | 1660 |           |  |    |  |           |  |      |  |
|              |                                       | 1750         | 1.99           | 0.99                         | 1.92 | 1.27 | 1.82 | 1.50      | 1.71 | 1.76 | 1.58 | 2.02      | 1.52 | 2.17 | 1750 |           |  |    |  |           |  |      |  |
|              |                                       | 1850         | 2.12           | 1.13                         | 2.05 | 1.39 | 1.95 | 1.65      | 1.84 | 1.91 | 1.71 | 2.17      | 1.64 | 2.32 | 1850 |           |  |    |  |           |  |      |  |
|              |                                       | 1960         | 2.27           | 1.28                         | 2.20 | 1.55 | 2.10 | 1.81      | 1.99 | 2.08 | 1.90 | 2.34      | 1.85 | 2.50 | 1960 |           |  |    |  |           |  |      |  |
|              |                                       | 2120         | 2.46           | 1.56                         | 2.38 | 1.84 | 2.27 | 2.21      | 2.15 | 2.40 | 2.02 | 2.67      | 1.95 | 2.83 | 2120 |           |  |    |  |           |  |      |  |
|              |                                       | 2300         | 2.67           | 1.79                         | 2.59 | 2.10 | 2.48 | 2.50      | 2.37 | 2.70 | 2.27 | 3.05      | 2.23 | 3.21 | 2300 |           |  |    |  |           |  |      |  |
| MSR-65V      | 吸入口径<br>5K-50A<br>吐出口径<br>1.0MPa-65A  | 1100         | 1.57           | 0.75                         | 1.43 | 0.98 | 1.30 | 1.21      | 1.16 | 1.45 |      |           |      |      |      |           |  |    |  |           |  | 1100 |  |
|              |                                       | 1240         | 1.83           | 0.84                         | 1.69 | 1.09 | 1.54 | 1.35      | 1.40 | 1.61 |      |           |      |      |      |           |  |    |  |           |  | 1240 |  |
|              |                                       | 1360         | 2.08           | 0.95                         | 1.93 | 1.24 | 1.78 | 1.52      | 1.64 | 1.81 |      |           |      |      |      |           |  |    |  |           |  | 1360 |  |
|              |                                       | 1460         | 2.27           | 1.05                         | 2.13 | 1.35 | 1.99 | 1.65      | 1.84 | 1.96 | 1.70 | 2.26      | 1.61 | 2.44 | 1460 |           |  |    |  |           |  |      |  |
|              |                                       | 1550         | 2.47           | 1.13                         | 2.32 | 1.45 | 2.17 | 1.77      | 2.03 | 2.09 | 1.88 | 2.41      | 1.80 | 2.60 | 1550 |           |  |    |  |           |  |      |  |
|              |                                       | 1670         | 2.70           | 1.24                         | 2.56 | 1.58 | 2.42 | 1.93      | 2.27 | 2.28 | 2.13 | 2.62      | 2.05 | 2.83 | 1670 |           |  |    |  |           |  |      |  |
|              |                                       | 1770         | 2.90           | 1.32                         | 2.76 | 1.69 | 2.62 | 2.06      | 2.49 | 2.43 | 2.35 | 2.79      | 2.27 | 3.03 | 1770 |           |  |    |  |           |  |      |  |
|              |                                       | 1860         | 3.08           | 1.44                         | 2.94 | 1.82 | 2.80 | 2.20      | 2.65 | 2.59 | 2.51 | 2.98      | 2.44 | 3.20 | 1860 |           |  |    |  |           |  |      |  |
|              |                                       | 1980         | 3.33           | 1.60                         | 3.18 | 2.00 | 3.03 | 2.41      | 2.89 | 2.81 | 2.74 | 3.23      | 2.72 | 3.47 | 1980 |           |  |    |  |           |  |      |  |
|              |                                       | 2150         | 3.57           | 1.84                         | 3.43 | 2.28 | 3.30 | 2.72      | 3.16 | 3.16 | 3.02 | 3.60      | 2.92 | 3.86 | 2150 |           |  |    |  |           |  |      |  |
| MSR-80V      | 吸入口径<br>5K-65A<br>吐出口径<br>1.0MPa-80A  | 2300         | 3.80           | 2.10                         | 3.65 | 2.54 | 3.49 | 3.05      | 3.34 | 3.51 | 3.18 | 3.95      | 3.09 | 4.21 | 2300 |           |  |    |  |           |  |      |  |
|              |                                       | 1130         | 2.92           | 1.01                         | 2.79 | 1.46 | 2.65 | 1.90      | 2.50 | 2.35 |      |           |      |      |      |           |  |    |  |           |  | 1130 |  |
|              |                                       | 1240         | 3.29           | 1.17                         | 3.15 | 1.66 | 3.00 | 2.14      | 2.85 | 2.63 | 2.69 | 3.11      | 2.62 | 3.40 | 1240 |           |  |    |  |           |  |      |  |
|              |                                       | 1300         | 3.49           | 1.30                         | 3.35 | 1.80 | 3.20 | 2.30      | 3.05 | 2.80 | 2.89 | 3.30      | 2.82 | 3.60 | 1300 |           |  |    |  |           |  |      |  |
|              |                                       | 1370         | 3.73           | 1.44                         | 3.59 | 1.96 | 3.44 | 2.49      | 3.29 | 3.01 | 3.13 | 3.53      | 3.06 | 3.84 | 1370 |           |  |    |  |           |  |      |  |
|              |                                       | 1470         | 4.03           | 1.60                         | 3.89 | 2.16 | 3.74 | 2.73      | 3.59 | 3.30 | 3.43 | 3.86      | 3.35 | 4.20 | 1470 |           |  |    |  |           |  |      |  |
|              |                                       | 1570         | 4.35           | 1.82                         | 4.21 | 2.40 | 4.07 | 2.99      | 3.92 | 3.57 | 3.77 | 4.16      | 3.66 | 4.51 | 1570 |           |  |    |  |           |  |      |  |
|              |                                       | 1660         | 4.64           | 2.01                         | 4.51 | 2.62 | 4.37 | 3.24      | 4.22 | 3.85 | 4.06 | 4.46      | 3.96 | 4.82 | 1660 |           |  |    |  |           |  |      |  |
|              |                                       | 1750         | 4.95           | 2.23                         | 4.81 | 2.85 | 4.67 | 3.48      | 4.53 | 4.11 | 4.38 | 4.73      | 4.27 | 5.10 | 1750 |           |  |    |  |           |  |      |  |
|              |                                       | 1840         | 5.23           | 2.42                         | 5.10 | 3.09 | 4.96 | 3.75      | 4.81 | 4.42 | 4.65 | 5.09      | 4.55 | 5.48 | 1840 |           |  |    |  |           |  |      |  |
|              |                                       | 1930         | 5.53           | 2.64                         | 5.40 | 3.33 | 5.26 | 4.02      | 5.11 | 4.72 | 4.95 | 5.41      | 4.85 | 5.82 | 1930 |           |  |    |  |           |  |      |  |
|              |                                       | 2100         | 6.09           | 2.88                         | 5.96 | 3.65 | 5.82 | 4.42      | 5.65 | 5.19 | 5.49 | 5.96      | 5.41 | 6.42 | 2100 |           |  |    |  |           |  |      |  |
| MSR-100V     | 吸入口径<br>5K-80A<br>吐出口径<br>1.0MPa-100A | 2300         | 6.75           | 3.27                         | 6.62 | 4.12 | 6.48 | 4.96      | 6.31 | 5.80 | 6.15 | 6.65      | 6.07 | 7.14 | 2300 |           |  |    |  |           |  |      |  |
|              |                                       | 1070         | 4.35           | 1.56                         | 4.06 | 2.24 | 3.80 | 2.92      | 3.57 | 3.60 |      |           |      |      |      |           |  |    |  |           |  | 1070 |  |
|              |                                       | 1160         | 4.83           | 1.80                         | 4.56 | 2.53 | 4.29 | 3.27      | 4.03 | 4.01 | 3.78 | 4.72      | 3.63 | 5.15 | 1160 |           |  |    |  |           |  |      |  |
|              |                                       | 1240         | 5.27           | 1.97                         | 4.99 | 2.74 | 4.72 | 3.52      | 4.46 | 4.29 | 4.20 | 5.07      | 4.07 | 5.52 | 1240 |           |  |    |  |           |  |      |  |
|              |                                       | 1320         | 5.80           | 2.09                         | 5.54 | 2.94 | 5.27 | 3.79      | 5.01 | 4.64 | 4.74 | 5.49      | 4.58 | 6.00 | 1320 |           |  |    |  |           |  |      |  |
|              |                                       | 1480         | 6.51           | 2.27                         | 6.28 | 3.19 | 6.05 | 4.14      | 5.82 | 5.05 | 5.60 | 5.97      | 5.47 | 6.51 | 1480 |           |  |    |  |           |  |      |  |
|              |                                       | 1580         | 6.99           | 2.45                         | 6.77 | 3.43 | 6.55 | 4.44      | 6.33 | 5.44 | 6.10 | 6.40      | 5.96 | 6.98 | 1580 |           |  |    |  |           |  |      |  |
|              |                                       | 1700         | 7.57           | 2.66                         | 7.37 | 3.72 | 7.16 | 4.79      | 6.95 | 5.68 | 6.73 | 6.92      | 6.60 | 7.56 | 1700 |           |  |    |  |           |  |      |  |
|              |                                       | 1790         | 8.00           | 2.87                         | 7.81 | 3.95 | 7.60 | 5.07      | 7.38 | 6.19 | 7.15 | 7.27      | 7.01 | 7.93 | 1790 |           |  |    |  |           |  |      |  |
|              |                                       | 1890         | 8.47           | 3.03                         | 8.29 | 4.21 | 8.09 | 5.39      | 7.88 | 6.56 | 7.66 | 7.74      | 7.53 | 8.45 | 1890 |           |  |    |  |           |  |      |  |
|              |                                       | 2010         | 9.08           | 3.23                         | 8.92 | 4.48 | 8.75 | 5.74      | 8.57 | 7.00 | 8.38 | 8.26      | 8.27 | 9.03 | 2010 |           |  |    |  |           |  |      |  |
|              |                                       | 2200         | 10.07          | 3.56                         | 9.91 | 5.00 | 9.63 | 6.37      | 9.33 | 7.79 | 9.06 | 9.13      | 8.89 | 9.95 | 2200 |           |  |    |  |           |  |      |  |

MSR-V Vacuum Roots Blower Performance Table (Part 2)

Models: MSR-175V ~ MSR-300V (-13.3 ~ -44.0 kPa)

QS: Airflow Rate at Specified Vacuum (m³/min) | La: Required Shaft Power (kW)



| Type / Model |                                        | Bore<br>(mm) | Speed<br>(rpm) | Vacuum Degree (-mmHg / -kPa) |       |           |       |           |       |           |       |           |       |       |      |      |  |  |  |
|--------------|----------------------------------------|--------------|----------------|------------------------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-------|------|------|--|--|--|
|              |                                        |              |                | -200                         |       |           |       | -250      |       |           |       | -300      |       |       |      | -330 |  |  |  |
|              |                                        |              |                | -13.3 kPa                    |       | -26.7 kPa |       | -33.3 kPa |       | -40.0 kPa |       | -44.0 kPa |       |       |      |      |  |  |  |
|              |                                        | Qs           | La             | Qs                           | La    | Qs        | La    | Qs        | La    | Qs        | La    | Qs        | La    | Qs    | La   |      |  |  |  |
| MSR-125V     | 吸入口径<br>5K-100A<br>吐出口径<br>1.0MPa-125A | 1200         | 7.77           | 3.26                         | 7.51  | 4.31      | 7.25  | 5.37      | 6.98  | 6.42      | 6.69  | 7.47      | 6.58  | 8.08  | 1200 |      |  |  |  |
|              |                                        | 1310         | 8.57           | 3.71                         | 8.36  | 4.87      | 8.13  | 6.02      | 7.88  | 7.18      | 7.61  | 8.33      | 7.44  | 9.00  | 1310 |      |  |  |  |
|              |                                        | 1410         | 9.27           | 4.05                         | 9.05  | 5.29      | 8.82  | 6.53      | 8.57  | 7.77      | 8.30  | 9.00      | 8.15  | 9.73  | 1410 |      |  |  |  |
|              |                                        | 1470         | 9.70           | 4.37                         | 9.48  | 5.66      | 9.25  | 6.95      | 9.02  | 8.23      | 8.78  | 9.50      | 8.50  | 10.28 | 1470 |      |  |  |  |
|              |                                        | 1550         | 10.37          | 4.62                         | 10.10 | 5.98      | 9.82  | 7.34      | 9.85  | 8.70      | 9.33  | 10.10     | 9.13  | 10.92 | 1550 |      |  |  |  |
|              |                                        | 1650         | 11.00          | 5.18                         | 10.70 | 6.64      | 10.50 | 8.11      | 10.30 | 9.58      | 10.10 | 11.10     | 9.64  | 11.93 | 1650 |      |  |  |  |
|              |                                        | 1770         | 11.80          | 5.70                         | 11.50 | 7.23      | 11.30 | 8.75      | 11.10 | 10.30     | 10.90 | 11.80     | 10.38 | 12.71 | 1770 |      |  |  |  |
|              |                                        | 1880         | 12.50          | 6.25                         | 12.30 | 7.86      | 12.00 | 9.46      | 11.80 | 11.10     | 11.60 | 12.70     | 11.16 | 13.66 | 1880 |      |  |  |  |
|              | 2000                                   | 13.37        | 6.84           | 13.17                        | 8.55  | 12.85     | 10.27 | 12.51     | 11.97 | 12.21     | 13.69 | 12.04     | 14.72 | 2000  |      |      |  |  |  |
| MSR-150V     | 吸入口径<br>5K-125A<br>吐出口径<br>1.0MPa-150A | 810          | 12.60          | 3.51                         | 12.20 | 4.83      | 11.80 | 6.72      | 11.40 | 8.61      | 11.00 | 10.50     | 10.75 | 11.61 | 810  |      |  |  |  |
|              |                                        | 870          | 13.80          | 4.12                         | 13.30 | 6.00      | 12.80 | 7.80      | 12.30 | 9.77      | 11.80 | 11.70     | 11.50 | 12.74 | 870  |      |  |  |  |
|              |                                        | 990          | 15.60          | 4.46                         | 15.10 | 6.58      | 14.60 | 8.70      | 14.20 | 10.80     | 13.80 | 12.90     | 13.60 | 14.17 | 990  |      |  |  |  |
|              |                                        | 1120         | 17.70          | 6.61                         | 17.30 | 8.94      | 16.80 | 11.30     | 16.30 | 13.60     | 15.80 | 15.90     | 15.55 | 17.30 | 1120 |      |  |  |  |
|              |                                        | 1200         | 19.20          | 7.57                         | 18.70 | 9.93      | 18.20 | 12.30     | 17.80 | 14.70     | 17.30 | 17.00     | 16.93 | 18.48 | 1200 |      |  |  |  |
|              |                                        | 1270         | 20.30          | 8.40                         | 19.90 | 10.80     | 19.50 | 13.20     | 19.10 | 15.60     | 18.70 | 18.00     | 18.09 | 19.42 | 1270 |      |  |  |  |
|              |                                        | 1410         | 22.50          | 10.50                        | 22.10 | 13.20     | 21.70 | 15.90     | 21.30 | 18.60     | 20.90 | 21.30     | 20.69 | 22.90 | 1410 |      |  |  |  |
|              |                                        | 1540         | 24.70          | 12.50                        | 24.20 | 15.40     | 23.70 | 18.30     | 23.20 | 21.20     | 22.70 | 24.00     | 22.25 | 25.70 | 1540 |      |  |  |  |
|              |                                        | 1670         | 26.50          | 14.30                        | 26.00 | 17.40     | 25.50 | 20.50     | 25.00 | 23.50     | 24.50 | 26.60     | 24.22 | 28.41 | 1670 |      |  |  |  |
|              | 1780                                   | 27.80        | 15.90          | 27.30                        | 19.20 | 26.80     | 22.50 | 26.30     | 25.80 | 25.70     | 29.10 | 25.51     | 31.07 | 1780  |      |      |  |  |  |
|              | 1900                                   | 29.25        | 17.77          | 28.81                        | 21.09 | 27.91     | 24.83 | 27.34     | 28.45 | 26.72     | 32.26 | 26.47     | 33.93 | 1900  |      |      |  |  |  |
| MSR-175V     | 吸入口径<br>5K-150A<br>吐出口径<br>1.0MPa-200A | 970          | 21.19          | 8.09                         | 20.43 | 11.19     | 19.57 | 13.69     | 18.86 | 15.85     | 18.01 | 18.15     | 17.21 | 19.71 | 970  |      |  |  |  |
|              |                                        | 1110         | 24.84          | 10.07                        | 23.90 | 13.81     | 23.10 | 16.65     | 22.55 | 19.14     | 21.51 | 21.70     | 19.98 | 23.10 | 1110 |      |  |  |  |
|              |                                        | 1180         | 26.63          | 11.46                        | 25.75 | 14.56     | 24.86 | 17.75     | 24.28 | 20.53     | 23.42 | 23.42     | 21.90 | 25.62 | 1180 |      |  |  |  |
|              |                                        | 1240         | 28.18          | 11.96                        | 27.24 | 15.70     | 26.55 | 19.01     | 25.88 | 21.74     | 24.96 | 25.15     | 22.50 | 28.91 | 1240 |      |  |  |  |
|              |                                        | 1400         | 32.18          | 14.20                        | 31.32 | 18.48     | 30.57 | 22.64     | 29.95 | 25.53     | 29.08 | 29.27     | 27.80 | 34.21 | 1400 |      |  |  |  |
|              |                                        | 1520         | 35.15          | 16.11                        | 34.25 | 20.99     | 33.65 | 24.85     | 32.91 | 28.58     | 32.03 | 32.33     | 30.61 | 37.38 | 1520 |      |  |  |  |
|              |                                        | 1620         | 37.48          | 18.02                        | 36.62 | 23.57     | 35.79 | 27.67     | 35.13 | 31.53     | 34.23 | 35.84     | 32.13 | 40.17 | 1620 |      |  |  |  |
|              |                                        | 1730         | 40.00          | 20.22                        | 39.12 | 26.00     | 38.32 | 30.85     | 37.66 | 35.35     | 36.67 | 39.61     | 34.17 | 45.01 | 1730 |      |  |  |  |
| MSR-200V     | 吸入口径<br>5K-150A<br>吐出口径<br>1.0MPa-200A | 810          | 31.07          | 10.38                        | 29.92 | 14.89     | 29.01 | 18.96     | 28.16 | 23.20     | 27.08 | 27.43     | 25.72 | 29.85 | 810  |      |  |  |  |
|              |                                        | 900          | 34.92          | 12.49                        | 33.98 | 17.37     | 33.17 | 22.01     | 32.28 | 26.82     | 31.16 | 31.49     | 29.76 | 34.30 | 900  |      |  |  |  |
|              |                                        | 980          | 38.39          | 14.40                        | 37.24 | 19.66     | 36.85 | 24.80     | 35.97 | 30.06     | 35.10 | 35.14     | 34.60 | 38.19 | 980  |      |  |  |  |
|              |                                        | 1070         | 42.37          | 16.59                        | 41.02 | 21.61     | 40.91 | 27.72     | 40.09 | 33.57     | 38.86 | 39.32     | 36.37 | 42.81 | 1070 |      |  |  |  |
|              |                                        | 1150         | 45.90          | 18.61                        | 45.25 | 24.06     | 44.65 | 30.15     | 43.72 | 36.35     | 42.50 | 42.76     | 40.96 | 46.16 | 1150 |      |  |  |  |
|              |                                        | 1230         | 49.01          | 20.58                        | 48.38 | 26.74     | 47.79 | 33.47     | 47.02 | 40.25     | 45.87 | 46.83     | 43.78 | 50.74 | 1230 |      |  |  |  |
|              |                                        | 1310         | 52.26          | 23.03                        | 51.61 | 29.61     | 50.95 | 36.65     | 50.33 | 43.84     | 49.24 | 50.97     | 46.60 | 55.13 | 1310 |      |  |  |  |
|              |                                        | 1390         | 55.22          | 25.15                        | 54.65 | 32.33     | 54.11 | 39.86     | 53.61 | 47.40     | 52.64 | 55.03     | 49.44 | 59.57 | 1390 |      |  |  |  |
|              | 1480                                   | 58.65        | 27.52          | 58.17                        | 34.85 | 57.64     | 43.13 | 57.05     | 51.20 | 56.46     | 59.06 | 52.61     | 63.76 | 1480  |      |      |  |  |  |
| MSR-250V     | 吸入口径<br>5K-200A<br>吐出口径<br>1.0MPa-250A | 990          | 63.3           | 28.5                         | 63.1  | 30.8      | 62.9  | 35.8      | 62.7  | 41.8      | 62.2  | 55.3      | 62.0  | 62.1  | 990  |      |  |  |  |
|              |                                        | 1170         | 74.5           | 29.2                         | 74.3  | 35.9      | 74    | 42.2      | 73.6  | 49.1      | 72.7  | 64.6      | 72.3  | 72.5  | 1170 |      |  |  |  |
|              |                                        | 1250         | 79.9           | 36.2                         | 79.6  | 38.3      | 79.2  | 45.2      | 78.8  | 52.6      | 78.2  | 69.5      | 77.9  | 78.1  | 1250 |      |  |  |  |
|              |                                        | 1360         | 89.1           | 37.2                         | 88.7  | 40.5      | 88.5  | 50.4      | 88.3  | 58.9      | 87.8  | 78.1      | 87.5  | 87.6  | 1360 |      |  |  |  |
|              |                                        | 1480         | 97.01          | 38.2                         | 96.5  | 44.1      | 96.2  | 54.8      | 96.1  | 64.1      | 95.5  | 84.9      | 95.2  | 95.8  | 1480 |      |  |  |  |
| MSR-300V     | 吸入口径<br>5K-250A<br>吐出口径<br>1.0MPa-300A | 990          | 89.6           | 29.2                         | 88.9  | 32        | 88.7  | 46.1      | 88.5  | 55.3      | 88.1  | 73.4      | 87.9  | 73.2  | 990  |      |  |  |  |
|              |                                        | 1170         | 106.5          | 35.5                         | 105   | 43.7      | 104.7 | 54.4      | 104   | 65        | 103.8 | 86.4      | 103.5 | 90.6  | 1170 |      |  |  |  |
|              |                                        | 1250         | 113.5          | 37.4                         | 112.2 | 46.7      | 112   | 58.2      | 111.8 | 69.8      | 111.4 | 92.8      | 111.2 | 97.8  | 1250 |      |  |  |  |
|              |                                        | 1360         | 126            | 43.0                         | 125   | 52.1      | 124.8 | 64.5      | 124.6 | 77.5      | 124.2 | 103.4     | 124.0 | 109.1 | 1360 |      |  |  |  |
|              |                                        | 1480         | 137            | 45.5                         | 135.9 | 56.2      | 135.8 | 70.6      | 135.6 | 84.3      | 135.1 | 112.5     | 134.9 | 118.7 | 1480 |      |  |  |  |

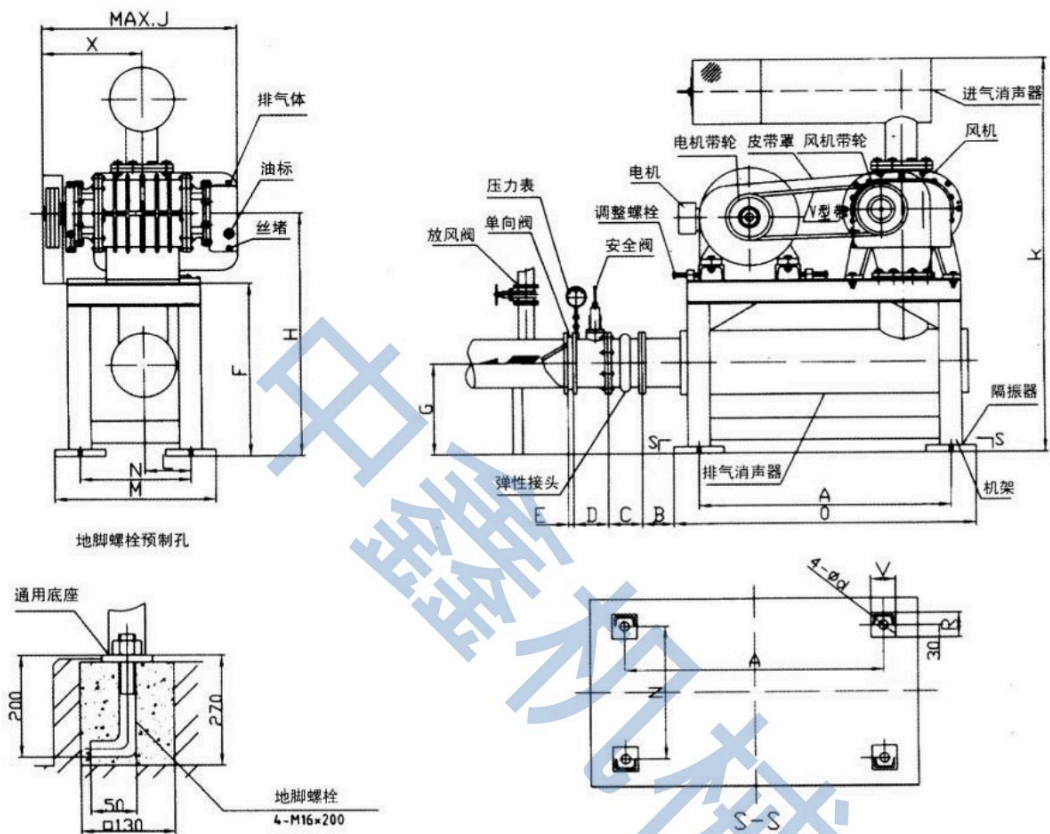
Notes: 1. Performance data indicated at specified vacuum degrees. 2. Equipped with high-reliability vacuum relief valves.

MSR-MJ Series Compact Package Unit Dimensions

Integrated Compact Design (MSR-50MJ ~ MSR-150MJ)

MSR-MJ Series Compact Package Unit Outline & Dimensions

Anchor Bolt Preformed Holes



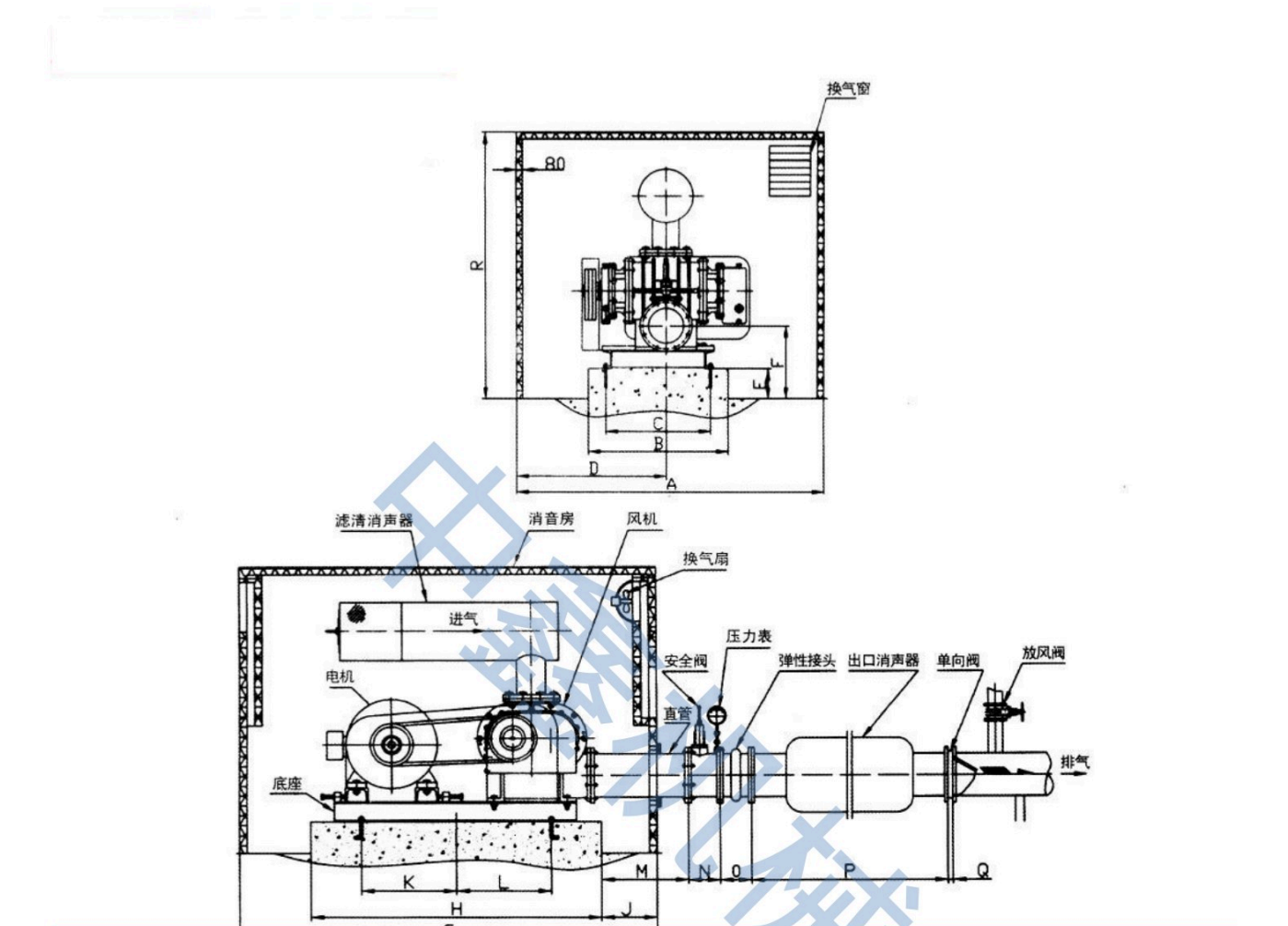
| Model    | Bore | A    | B   | C   | D   | E  | F   | G   | H    | J    | K    | L   | M   | N   | P    | Q   | R   | S   | T    | U      | WT(kg) |
|----------|------|------|-----|-----|-----|----|-----|-----|------|------|------|-----|-----|-----|------|-----|-----|-----|------|--------|--------|
| 型号       | 口径   | A    | B   | C   | D   | E  | F   | G   | H    | J    | K    | L   | M   | N   | O    | X   | R   | V   | 4-Φd | 重量(kg) |        |
| MSR-50   | 50A  | 380  | 90  | 105 | 120 | 19 | 450 | 240 | 578  | 450  | 970  | 125 | 320 | 200 | 560  | 185 | 90  | 100 | 18   | 100    |        |
| MSR-65   | 65A  | 450  | 100 | 115 | 130 | 19 | 480 | 240 | 615  | 500  | 1050 | 140 | 360 | 240 | 650  | 205 | 90  | 100 | 18   | 110    |        |
| MSR-80   | 80A  | 500  | 110 | 135 | 140 | 19 | 500 | 250 | 680  | 530  | 1150 | 150 | 380 | 260 | 700  | 220 | 90  | 100 | 18   | 150    |        |
| MSR-100  | 100A | 540  | 110 | 150 | 140 | 19 | 520 | 265 | 707  | 600  | 1200 | 200 | 490 | 370 | 780  | 260 | 90  | 100 | 18   | 180    |        |
| MSR-125  | 125A | 600  | 120 | 165 | 150 | 21 | 560 | 280 | 777  | 710  | 1380 | 215 | 490 | 370 | 860  | 295 | 90  | 120 | 18   | 280    |        |
| MSR-150  | 150A | 760  | 130 | 180 | 150 | 24 | 620 | 340 | 881  | 860  | 1565 | 250 | 610 | 470 | 1060 | 375 | 100 | 120 | 18   | 430    |        |
| MSR-175  | 150A | 850  | 130 | 180 | 150 | 24 | 620 | 340 | 881  | 950  | 1565 | 320 | 720 | 580 | 1150 | 470 | 100 | 120 | 18   | 680    |        |
| MSR-200B | 200A | 950  | 150 | 190 | 160 | 29 | 750 | 380 | 1095 | 980  | 1870 | 325 | 670 | 530 | 1250 | 425 | 100 | 120 | 18   | 740    |        |
| MSR-200  | 200A | 1050 | 150 | 190 | 160 | 29 | 750 | 380 | 1095 | 1080 | 1920 | 304 | 775 | 640 | 1400 | 525 | 100 | 140 | 18   | 980    |        |
| MSR-250B | 250A | 1050 | 160 | 230 | 250 | 30 | 900 | 400 | 1280 | 1300 | 2250 | 357 | 870 | 750 | 1400 | 641 | 100 | 140 | 18   | 1350   |        |
| MSR-250  | 250A | 1340 | 160 | 230 | 250 | 30 | 900 | 400 | 1320 | 1258 | 2300 | 460 | 970 | 800 | 1900 | 608 | 140 | 180 | 26   | 1858   |        |
| MSR-300  | 300A | 1340 | 160 | 245 | 250 | 40 | 950 | 420 | 1460 | 1433 | 2480 | 375 | 970 | 800 | 1900 | 756 | 140 | 180 | 26   | 2356   |        |

注意：①.重量中不包括电机消音器重量 ②.大型风机底座随电机功率大小定 ③.用户可根据现场选用出口消音器T1或T2

MSR Series Acoustic Silencing Enclosure

Noise Reduction Soundproof Enclosure

MSR Series Acoustic Silencing Enclosure Outline & Dimensions



| Model    | Bore | A    | B    | C    | D    | E   | F   | G    | H    | J   | K   | L   | M   | N   | P   | Q    | R  | WT(kg) |
|----------|------|------|------|------|------|-----|-----|------|------|-----|-----|-----|-----|-----|-----|------|----|--------|
| 型号       | 口径   | A    | B    | C    | D    | E   | F   | G    | H    | J   | K   | K   | M   | N   | O   | P    | Q  | R      |
| MSR-50   | 50A  | 1200 | 470  | 270  | 500  | 100 | 225 | 1300 | 660  | 200 | -   | -   | 300 | 120 | 105 | 610  | 19 | 1300   |
| MSR-65   | 65A  | 1200 | 510  | 310  | 500  | 100 | 235 | 1400 | 750  | 200 | -   | -   | 300 | 130 | 115 | 710  | 19 | 1300   |
| MSR-80   | 80A  | 1400 | 530  | 330  | 600  | 100 | 250 | 1600 | 800  | 300 | -   | -   | 400 | 140 | 135 | 910  | 19 | 1600   |
| MSR-100  | 100A | 1400 | 640  | 440  | 600  | 100 | 260 | 1700 | 880  | 300 | -   | -   | 400 | 140 | 150 | 1200 | 19 | 1600   |
| MSR-125  | 125A | 1400 | 640  | 440  | 600  | 100 | 290 | 1800 | 960  | 300 | -   | -   | 400 | 150 | 165 | 1410 | 21 | 1600   |
| MSR-150  | 150A | 1600 | 750  | 550  | 700  | 100 | 310 | 2100 | 1160 | 350 | -   | -   | 450 | 150 | 180 | 1610 | 24 | 2000   |
| MSR-175  | 150A | 1600 | 856  | 656  | 700  | 100 | 360 | 2200 | 1250 | 350 | -   | -   | 450 | 150 | 180 | 1610 | 24 | 2000   |
| MSR-200B | 200A | 1800 | 802  | 602  | 800  | 100 | 350 | 2350 | 1350 | 400 | -   | -   | 500 | 160 | 190 | 1810 | 29 | 2000   |
| MSR-200  | 200A | 1800 | 905  | 705  | 800  | 100 | 350 | 2600 | 1500 | 400 | 500 | 500 | 500 | 160 | 190 | 1810 | 29 | 2000   |
| MSR-250B | 250A | 2200 | 1050 | 800  | 1000 | 100 | 430 | 2600 | 1600 | 300 | 500 | 500 | 500 | 250 | 230 | 2000 | 30 | 2000   |
| MSR-250  | 250A | 2400 | 1100 | 890  | 1100 | 100 | 470 | 3000 | 2000 | 400 | 745 | 745 | 500 | 250 | 230 | 2000 | 30 | 2200   |
| MSR-300  | 300A | 2400 | 1100 | 890  | 1100 | 100 | 470 | 3000 | 2000 | 400 | 745 | 745 | 500 | 260 | 245 | 2000 | 40 | 2200   |
| MSR-350  | 350A | 3000 | 1840 | 1376 | 1400 | 100 | 530 | 4000 | 2600 | 550 | 700 | 700 | 700 | 300 | 245 | 2000 | 45 | 2800   |

注意：重量中不包括电机消音器重量

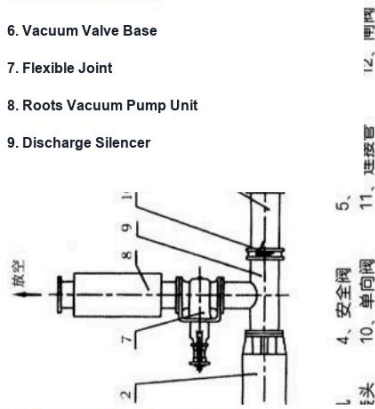
Notes: 1. Reduces noise by 15~20 dB(A). 2. Equipped with forced ventilation cooling fan and inspection access doors.

## Roots Blower &amp; Vacuum Pump Piping Layout Diagrams

## System Installation &amp; Component Layout

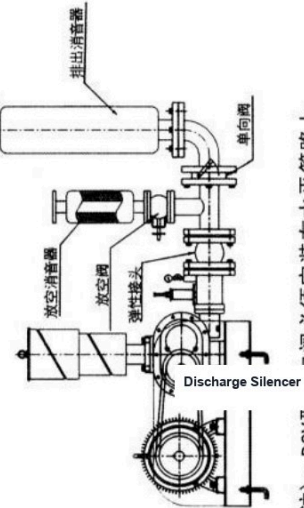
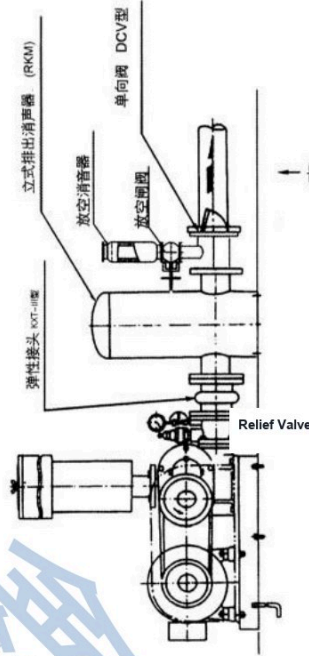
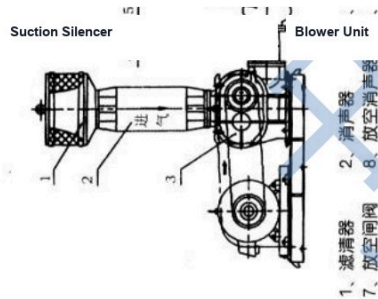
## ● Roots Vacuum Pump Piping Layout Diagram

1. Pipeline Air Filter
2. Elbow Pipe
3. Inlet Silencer
4. Shockproof Vacuum Gauge
5. Vacuum Relief Valve
6. Vacuum Valve Base
7. Flexible Joint
8. Roots Vacuum Pump Unit
9. Discharge Silencer



## ● Direct-Coupled Blower Piping Layout Diagram

## ● 罗茨鼓风机配管布置简图



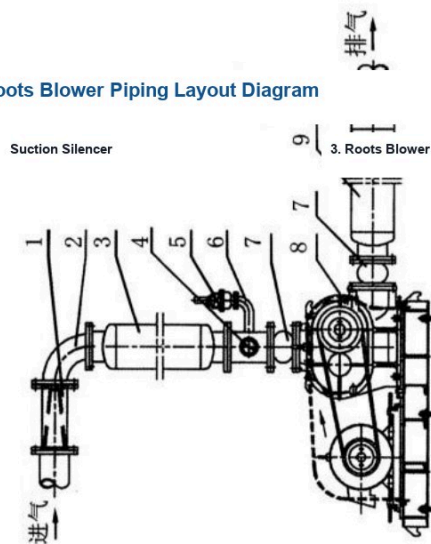
(注)：DCV型  
标准配置不包  
引阀必须安装在水平管路上  
空三通、放空消声器、阀门及管道部分

## Main Pipeline / Flexible Joint / Check Valve

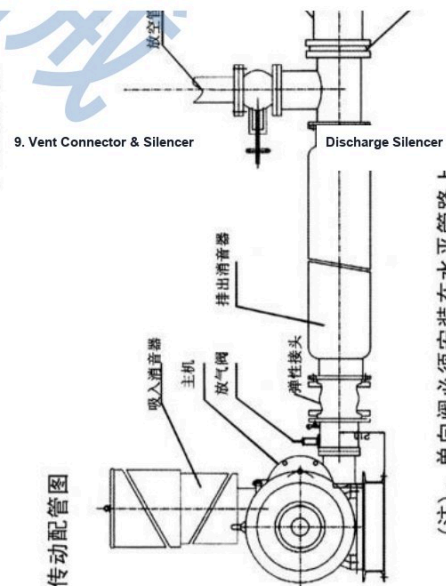
(Note): Check valve must be installed on horizontal piping.

## ● Standard Roots Blower Piping Layout Diagram

## ● 罗茨真空泵配管布置简图



1. 进口消声器
2. 前震真空表
3. 罗茨真空泵
4. 真空阀座
5. 真空阀
6. 弹性接头
7. 罗茨真空泵
8. 出口消声器
9. 放空消声器



(注)：单向阀必须安装在水平管路上  
标准配置不包括放空三通、放空消声器、  
及管道部分

## DCV Check Valve / Flexible Joint / Main Line

(Note): DCV check valve must be installed on horizontal piping.

Notes: 1. Check valve (DCV) must be installed on horizontal piping. 2. Standard scope excludes vent tee, vent silencer, and external valves.

ML Series Two-Lobe Performance Parameters (Part 1)

Heavy-Duty Two-Lobe Series (ML52LD ~ ML74WD)

| Model | Speed (rpm) | Pressure (kPa) | Airflow Q (m³/min) | Shaft Power (kW) | Motor Type & Power (kW) | Weight (kg) |
|-------|-------------|----------------|--------------------|------------------|-------------------------|-------------|
|-------|-------------|----------------|--------------------|------------------|-------------------------|-------------|

| 风机型号  | 转速<br>r/min | 升压<br>kPa | 进口流量<br>m³/min | 轴功率<br>(KW) | 配套电机       |         | 主机重量<br>kg |
|-------|-------------|-----------|----------------|-------------|------------|---------|------------|
|       |             |           |                |             | 型号         | 功率 (kw) |            |
| L82WD | 580         | 39.2      | 81.8           | 75.5        | Y355M1-10  | 90      | 4900       |
|       |             |           |                |             | JS126-10   | 95      |            |
|       |             | 49.0      | 78.4           | 94.3        | Y255M2-10  | 110     | 4900       |
|       |             |           |                |             | JS127-10   | 115     |            |
|       | 730         | 9.8       | 123            | 23.8        | Y250M-8    | 30      | 4900       |
|       |             | 19.6      | 118            | 47.8        | Y315S-8    | 55      | 4900       |
|       |             |           |                |             | JS115-8    | 60      |            |
|       |             | 29.4      | 114            | 71.7        | Y315L1-8   | 90      | 4900       |
|       |             |           |                |             | JS117-8    | 80      |            |
|       |             | 39.2      | 109            | 94.8        | Y315L2-8   | 110     | 4900       |
|       |             |           |                |             | JS126-8    |         |            |
|       |             | 49.0      | 107            | 119         | Y355M1-8   | 132     | 4900       |
|       |             |           |                |             | JS127-8    | 130     |            |
|       | 980         | 9.8       | 168            | 31.9        | Y250M-6    | 37      | 4900       |
|       |             | 19.6      | 164            | 63.8        | Y315S-6    | 75      | 4900       |
|       |             |           |                |             | JS115-6    |         |            |
|       |             | 29.4      | 160            | 95.4        | Y315L1-6   | 110     | 4900       |
|       |             |           |                |             | JS117-6    | 115     |            |
|       |             | 39.2      | 156            | 128         | Y355M1-6   | 160     | 4900       |
| L83WD | 580         |           |                |             | JS126-6    | 155     |            |
|       |             | 49.0      | 153            | 160         | Y355M2-6   | 200     | 4900       |
|       |             |           |                |             | JS127-6    | 185     |            |
|       |             | 9.8       | 122            | 24.2        | Y315S-10   | 45      | 4900       |
|       |             |           |                |             | JS115-10   |         |            |
|       |             | 19.6      | 117            | 47.9        | Y315M-10   | 55      | 5530       |
|       | 730         |           |                |             | JS116-10   |         |            |
|       |             | 29.4      | 111            | 78.1        | Y355M1-10  | 90      | 5530       |
|       |             |           |                |             | JS125-10   | 80      |            |
|       |             | 39.2      | 107            | 95.3        | Y355M2-10  | 110     | 5530       |
|       |             |           |                |             | JS127-10   | 115     |            |
|       |             | 49.0      | 104            | 121         | Y355L1-10  | 132     | 5530       |
|       |             |           |                |             | JS128-10   | 130     |            |
|       |             | 9.8       | 157            | 30.4        | Y280S-8    | 37      | 5530       |
|       | 980         | 19.6      | 151            | 60.4        | Y315M-8    | 75      | 5530       |
|       |             |           |                |             | JS116-8    | 70      |            |
|       |             | 29.4      | 147            | 90.5        | Y315L2-8   | 110     | 5530       |
|       |             |           |                |             | JS126-8    |         |            |
|       |             | 39.2      | 141            | 120         | Y355M1-8   | 132     | 5530       |
|       |             |           |                |             | JS127-8    | 130     |            |
|       |             | 49.0      | 139            | 151         | Y355M2-8   | 160     | 5530       |
|       |             |           |                |             | JS128-8    | 155     |            |
| L84WD | 580         | 9.8       | 216            | 40.5        | Y280S-6    | 45      | 5530       |
|       |             | 19.6      | 210            | 80.9        | Y315M-6    | 90      | 5530       |
|       |             |           |                |             | JS116-6    | 95      |            |
|       |             | 29.4      | 205            | 122         | Y315L2-6   | 132     | 5530       |
|       |             |           |                |             | JS125-6    | 130     |            |
|       |             | 39.2      | 201            | 163         | Y355M2-6   | 185     | 5530       |
|       | 730         |           |                |             | JS127-6    |         |            |
|       |             | 49.0      | 197            | 203         | Y355L1-6   | 220     | 5530       |
|       |             |           |                |             | JS128-6    | 215     |            |
|       |             | 9.8       | 154            | 31          | Y315S-10   | 45      | 5530       |
|       |             |           |                |             | JS115-10   |         |            |
|       |             | 19.6      | 146            | 61          | Y315L2-10  | 75      | 6030       |
| L84WD | 580         |           |                |             | JS117-10   | 65      |            |
|       |             | 29.4      | 141            | 91          | Y355M2-10  | 110     | 6030       |
|       |             |           |                |             | JS126-10   | 95      |            |
|       |             | 39.2      | 137            | 121         | Y355L1-10  | 132     | 6030       |
|       |             |           |                |             | JS128-10   | 130     |            |
|       |             | 49.0      | 132            | 150         | Y3137-10   | 155     | 6030       |
|       | 730         | 9.8       | 198            | 38.4        | Y280M-8    | 45      | 6030       |
|       |             | 19.6      | 191            | 75.8        | Y315L1-8   | 90      | 6030       |
|       |             |           |                |             | JS125-8    | 95      |            |
|       |             | 29.4      | 185            | 185         | Y355M1-8   | 132     | 6030       |
|       |             |           |                |             | JS127-8    | 130     |            |
|       |             |           |                |             |            |         |            |
| L84WD | 730         | 39.2      | 181            | 151         | Y355L1-8   | 185     | 6030       |
|       |             |           |                |             | JS136-8    | 180     |            |
|       |             | 49.0      | 176            | 189         | Y4003-8*   | 220     | 6030       |
|       |             |           |                |             | JS137-8    | 210     |            |
|       | 980         | 9.8       | 270            | 51.5        | Y315S-6    | 75      | 6030       |
|       |             |           |                |             | JS115-6    |         |            |
|       |             | 19.6      | 264            | 102         | Y315L1-6   | 110     | 6030       |
|       |             |           |                |             | JS117-6    | 115     |            |
|       |             | 29.4      | 258            | 152         | Y355M1-6   | 160     | 6030       |
|       |             |           |                |             | JS126-6    | 155     |            |
|       |             | 39.2      | 254            | 203         | Y355L1-6   | 220     | 6030       |
|       |             |           |                |             | JS128-6    | 215     |            |
| L93WD | 580         | 49.0      | 250            | 254         | Y4003-6*   | 280     | 6030       |
|       |             |           |                |             | JS137-6    |         |            |
|       |             | 9.8       | 259            | 49.8        | Y315M-10   | 55      | 10250      |
|       |             |           |                |             | JS116-10   |         |            |
|       |             | 19.6      | 251            | 99.5        | Y355M2-10  | 110     | 10250      |
|       |             |           |                |             | JS127-10   | 115     |            |
|       | 730         | 29.4      | 244            | 149         | JS137-10   | 155     | 10250      |
|       |             | 34.3      | 241            | 174         | JS138-10   | 180     | 10250      |
|       |             | 39.2      | 238            | 199         | Y4501-10*  | 220     | 10250      |
|       |             |           |                |             | JS157-10*  | 260     |            |
|       |             | 49.0      | 233            | 248         | Y4503-10*  | 280     | 10250      |
|       |             |           |                |             | JS157-10*  | 260     |            |
|       |             | 9.8       | 332            | 62.8        | Y315M-8    | 75      | 10250      |
|       |             |           |                |             | JS116-8    | 70      |            |
| L94WD | 730         | 19.6      | 324            | 126         | Y355M2-8   | 160     | 10250      |
|       |             |           |                |             | JS128-8    | 155     |            |
|       |             | 29.4      | 317            | 188         | Y355L2-8   | 200     | 10250      |
|       |             |           |                |             | JS137-8    | 210     |            |
|       |             | 34.3      | 314            | 219         | Y4004-8*   | 250     | 10250      |
|       |             |           |                |             | JS138-8    | 245     |            |
|       |             | 39.2      | 311            | 250         | Y4005-8*   | 280     | 10250      |
|       |             |           |                |             | JS1410-8*  |         |            |
|       | 980         | 49.0      | 306            | 312         | Y4502-8*   | 355     | 10250      |
|       |             |           |                |             | JS157-8*   | 320     |            |
|       |             | 9.8       | 294            | 57          | Y315L2-10  | 75      | 11850      |
|       |             |           |                |             | JS117-10   | 65      |            |
|       |             | 19.6      | 285            | 113         | Y315L1-10  | 132     | 11850      |
|       |             |           |                |             | JS128-10   | 130     |            |
|       |             | 29.4      | 278            | 169         | JS138-10   | 180     | 11850      |
|       |             |           |                |             | Y4501-10*  | 220     |            |
| L94WD | 580         | 34.3      | 275            | 197         | JS1410-10* | 200     | 11850      |
|       |             |           |                |             | Y4502-10*  | 250     |            |
|       |             | 39.2      | 272            | 225         | JS157-10*  | 260     | 11850      |
|       |             |           |                |             | Y4504-10*  | 315     |            |
|       |             | 49.0      | 266            | 281         | JS158-10*  | 310     | 11850      |
|       |             |           |                |             |            |         |            |
|       | 730         | 9.8       | 376            | 70.8        | Y315M-8    | 75      | 11850      |
|       |             |           |                |             | JS117-8    | 80      |            |
|       |             | 19.6      | 368            | 142         | Y355M2-8   | 160     | 11850      |
|       |             |           |                |             | JS128-8    | 155     |            |
|       |             | 29.4      | 360            | 213         | Y4004-8*   | 250     | 11850      |
|       |             |           |                |             | JS138-8    | 245     |            |
|       |             | 34.3      | 357            | 248         | Y4005-8*   | 280     | 11850      |
|       |             |           |                |             | JS1410-8*  |         |            |
| L94WD | 730         | 39.2      | 354            | 283         | Y4501-8*   | 315     | 11850      |
|       |             |           |                |             | JS157-8*   | 320     |            |
|       |             | 49.0      | 349            | 354         | Y4503-8*   | 400     | 11850      |
|       |             |           |                |             | JS158-8*   | 380     |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       | 980         |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |
|       |             |           |                |             |            |         |            |

注：电机防护等级IP44，电压380V。 \*表示该电机为6000V高压电机。

## ML Series Two-Lobe Performance Parameters (Part 2)

## Heavy-Duty Two-Lobe Series (ML82WD ~ ML94WD)

| Model | Speed (rpm) | Pressure (kPa) | Airflow Q (m³/min) | Shaft Power (kW)   | Motor Type & Power (kW) | Weight (kg) |      |      |
|-------|-------------|----------------|--------------------|--------------------|-------------------------|-------------|------|------|
| 风机型号  | 转速 r/min    | 升压 kPa         | 进口流量 m³/min        | 轴功率 (KW)           | 配套电机 型号 功率 (kw)         | 主机重量 kg     |      |      |
| L52LD | 980         | 9.8            | 22.8               | 4.50               | Y132M2-6                | 5.5         | 1240 |      |
|       |             | 19.6           | 21.2               | 8.98               | Y160L-6                 | 11          | 1240 |      |
|       |             | 29.4           | 20.2               | 13.6               | Y180L-6                 | 15          | 1240 |      |
|       |             | 39.2           | 18.8               | 17.7               | Y200L2-6                | 22          | 1240 |      |
|       |             | 49.0           | 18.3               | 22.1               | Y225M-6                 | 30          | 1240 |      |
|       | 1450        | 9.8            | 35.2               | 6.60               | Y132M-4                 | 7.5         | 1240 |      |
|       |             | 19.6           | 33.5               | 13.1               | Y160L-4                 | 15          | 1240 |      |
|       |             | 29.4           | 32.2               | 19.7               | Y180L-4                 | 22          | 1240 |      |
|       |             | 39.2           | 31.2               | 26.7               | Y200L-4                 | 30          | 1240 |      |
|       |             | 49.0           | 30.0               | 33.5               | Y225S-4                 | 37          | 1240 |      |
| L53LD | 980         | 9.8            | 28.8               | 5.69               | Y160M-6                 | 7.5         | 1310 |      |
|       |             | 19.6           | 26.8               | 11.8               | Y180L-6                 | 15          | 1310 |      |
|       |             | 29.4           | 25.8               | 17.4               | Y200L2-6                | 22          | 1310 |      |
|       |             | 39.2           | 24.6               | 22.9               | Y225M-6                 | 30          | 1310 |      |
|       |             | 49.0           | 23.5               | 28.6               | Y250M-6                 | 37          | 1310 |      |
|       | 1450        | 9.8            | 44.3               | 8.6                | Y160M-4                 | 11          | 1310 |      |
|       |             | 19.6           | 42.8               | 17.0               | Y180M-4                 | 18.5        | 1310 |      |
|       |             | 29.4           | 41.2               | 25.6               | Y200L-4                 | 30          | 1310 |      |
|       |             | 39.2           | 39.8               | 33.8               | Y225S-4                 | 37          | 1310 |      |
|       |             | 49.0           | 38.8               | 42.3               | Y250M-4                 | 55          | 1310 |      |
| L62LD | 730         | 9.8            | 31.8               | 6.42               | Y160L-8                 | 7.5         | 1960 |      |
|       |             | 19.6           | 29.2               | 13.1               | Y200L-8                 | 15          | 1960 |      |
|       |             | 29.4           | 27.6               | 19.5               | Y225M-8                 | 22          | 1960 |      |
|       |             | 39.2           | 25.8               | 25.9               | Y250M-8                 | 30          | 1960 |      |
|       | 980         | 9.8            | 43.9               | 8.60               | Y160L-6                 | 11          | 1960 |      |
|       |             | 19.6           | 41.8               | 17.5               | Y200L2-6                | 22          | 1960 |      |
|       |             | 29.4           | 40.5               | 26.0               | Y225M-6                 | 30          | 1960 |      |
|       |             | 39.2           | 38.4               | 34.6               | Y280S-6                 | 45          | 1960 |      |
|       | 1450        | 49.0           | 36.9               | 43.3               | Y280M-6                 | 55          | 1960 |      |
|       |             | 9.8            | 67.4               | 13.0               | Y160L-4                 | 15          | 1960 |      |
|       |             | 19.6           | 65.2               | 25.8               | Y200L-4                 | 30          | 1960 |      |
|       |             | 29.4           | 63.4               | 38.4               | Y225M-4                 | 45          | 1960 |      |
|       |             | 39.2           | 61.8               | 51.2               | Y250M-4                 | 55          | 1960 |      |
|       |             | 49.0           | 60.3               | 63.8               | Y280S-4                 | 75          | 1960 |      |
| L63LD | 730         | 9.8            | 39.6               | 8.05               | Y180L-8                 | 11          | 2300 |      |
|       |             | 19.6           | 37.3               | 16.3               | Y225S-8                 | 18.5        | 2300 |      |
|       |             | 29.4           | 35.1               | 24.3               | Y250M-8                 | 30          | 2300 |      |
|       |             | 39.2           | 33.4               | 32.3               | Y280S-8                 | 37          | 2300 |      |
|       | 980         | 49.0           | 31.7               | 40.3               | Y280M-8                 | 45          | 2300 |      |
|       |             | 9.8            | 55.2               | 11.2               | Y180L-6                 | 15          | 2300 |      |
|       |             | 19.6           | 52.7               | 21.8               | Y225M-6                 | 30          | 2300 |      |
|       |             | 29.4           | 50.7               | 32.5               | Y250M-6                 | 37          | 2300 |      |
|       |             | 39.2           | 49.2               | 43.3               | Y280M-6                 | 55          | 2300 |      |
|       |             | 49.0           | 47.2               | 54.0               | Y315S-6 JS115-6         | 75          | 2300 |      |
| 1450  | 9.8         | 84.6           | 16.2               | Y180M-4            | 18.5                    | 2300        |      |      |
|       | 19.6        | 82.1           | 32.1               | Y225S-4            | 37                      | 2300        |      |      |
|       | 29.4        | 80.1           | 48.0               | Y250M-4            | 55                      | 2300        |      |      |
|       | 39.2        | 78.3           | 63.9               | Y280S-4            | 75                      | 2300        |      |      |
| L72WD | 730         | 49.0           | 76.6               | 79.8               | Y280M-4                 | 90          | 2300 |      |
|       |             | 9.8            | 64.6               | 12.9               | Y200L-8                 | 15          | 3300 |      |
|       |             | 19.6           | 60.9               | 25.8               | Y250M-8                 | 30          | 3300 |      |
|       |             | 29.4           | 58.2               | 38.8               | Y280M-8                 | 45          | 3300 |      |
|       | 980         | 39.2           | 56.2               | 51.2               | Y315S-8                 | 55          | 3300 |      |
|       |             | 49.0           | 53.4               | 63.3               | Y315M-8 JS116-8         | 75          | 3300 |      |
|       | 980         | 9.8            | 89.2               | 17.6               | Y200L2-6                | 22          | 3300 |      |
|       |             | 19.6           | 85.8               | 34.5               | Y250M-6                 | 37          | 3300 |      |
|       |             | 29.4           | 82.9               | 51.6               | Y280M-6                 | 55          | 3300 |      |
|       |             | 39.2           | 80.8               | 68.6               | Y315S-6 JS115-6         | 75          | 3300 |      |
| 980   | 49.0        | 78.7           | 85.7               | Y315M-6 JS116-6    | 90                      | 3300        |      |      |
|       |             |                |                    |                    | 95                      |             |      |      |
|       | L73WD       | 730            | 9.8                | 76.9               | 15.3                    | Y225S-8     | 18.5 | 3470 |
|       |             |                | 19.6               | 73.7               | 30.7                    | Y280S-8     | 37   | 3470 |
| 29.4  |             |                | 70.7               | 45.8               | Y315S-8                 | 55          | 3470 |      |
| 39.2  |             |                | 67.8               | 60.7               | Y315M-8 JS116-8         | 75          | 3470 |      |
| 49.0  |             |                | 65.8               | 75.8               | Y315L1-8 JS125-8        | 90          | 3470 |      |
| 980   |             | 9.8            | 107                | 20.8               | Y200L2-6                | 22          | 3470 |      |
|       |             | 19.6           | 104                | 40.8               | Y280S-6                 | 45          | 3470 |      |
|       |             | 29.4           | 99.9               | 60.9               | Y315S-6 JS115-6         | 75          | 3470 |      |
|       |             | 39.2           | 97.6               | 81.4               | Y315M-6 JS116-6         | 90          | 3470 |      |
|       |             | 49.0           | 94.9               | 101.6              | Y315L1-6 JS117-6        | 110         | 3470 |      |
| L74WD | 730         | 9.8            | 92.2               | 18.5               | Y225M-8                 | 22          | 3680 |      |
|       |             | 19.6           | 88.3               | 36.5               | Y280M-8                 | 45          | 3680 |      |
|       |             | 29.4           | 85.2               | 54.3               | Y315M-8 JS115-8         | 75          | 3680 |      |
|       |             | 39.2           | 82.5               | 72.3               | Y315L1-8 JS117-8        | 90          | 3680 |      |
|       |             | 49.0           | 79.8               | 90.4               | Y315L2-8 JS126-8        | 110         | 3680 |      |
|       | 980         | 9.8            | 128                | 24.6               | Y225M-6                 | 30          | 3680 |      |
|       |             | 19.6           | 124                | 48.6               | Y280M-6                 | 55          | 3680 |      |
|       |             | 29.4           | 121                | 72.8               | Y315M-6 JS116-6         | 90          | 3680 |      |
|       |             | 39.2           | 118                | 96.9               | Y315L1-6 JS117-6        | 110         | 3680 |      |
|       |             | 49.0           | 115                | 122                | Y315L2-6 JS125-6        | 130         | 3680 |      |
| L81WD | 580         | 9.8            | 74.3               | 15.2               | Y315S-10 JS115-10       | 45          | 4150 |      |
|       |             | 19.6           | 69.9               | 30.2               | Y315S-10 JS115-10       | 45          | 4150 |      |
|       |             | 29.4           | 66.3               | 44.9               | Y315M-10 JS116-10       | 55          | 4150 |      |
|       |             | 39.2           | 62.7               | 59.9               | Y315L2-10 JS117-10      | 75          | 4150 |      |
|       |             | 49.0           | 60.1               | 74.9               | Y355M1-10 JS125-10      | 90          | 4150 |      |
|       | 730         | 9.8            | 95.8               | 18.9               | Y225M-8                 | 22          | 4150 |      |
|       |             | 19.6           | 92.3               | 37.9               | Y280M-8                 | 45          | 4150 |      |
|       |             | 29.4           | 88.1               | 56.5               | Y315M-8 JS116-8         | 75          | 4150 |      |
|       |             | 39.2           | 85.2               | 75.7               | Y315L1-8 JS125-8        | 90          | 4150 |      |
|       |             | 49.0           | 81.5               | 94.6               | Y315L2-8 JS126-8        | 110         | 4150 |      |
| 980   | 9.8         | 133            | 25.5               | Y225M-6            | 30                      | 4150        |      |      |
|       | 19.6        | 129            | 50.8               | Y280M-6            | 55                      | 4150        |      |      |
|       | 29.4        | 125            | 75.8               | Y315M-6 JS116-6    | 90                      | 4150        |      |      |
|       | 39.2        | 122            | 102                | Y315L1-6 JS117-6   | 110                     | 4150        |      |      |
|       | 49.0        | 119            | 127                | Y355M1-6 JS126-6   | 160                     | 4150        |      |      |
| 980   | 9.8         | 94.8           | 18.9               | Y315S-10 JS115-10  | 45                      | 4900        |      |      |
|       | 19.6        | 88.5           | 37.4               | Y315S-10 JS115-10  | 45                      | 4900        |      |      |
|       | 29.4        | 85.3           | 56.8               | Y315L2-10 JS117-10 | 75                      | 4900        |      |      |
|       |             |                |                    |                    | 65                      |             |      |      |

注：电机防护等级IP44，电压380V。 \*表示该电机为6000V高压电机。

Notes: Motor protection grade IP44/IP55, Voltage 380V. \* Indicates 6000V high-voltage motor.

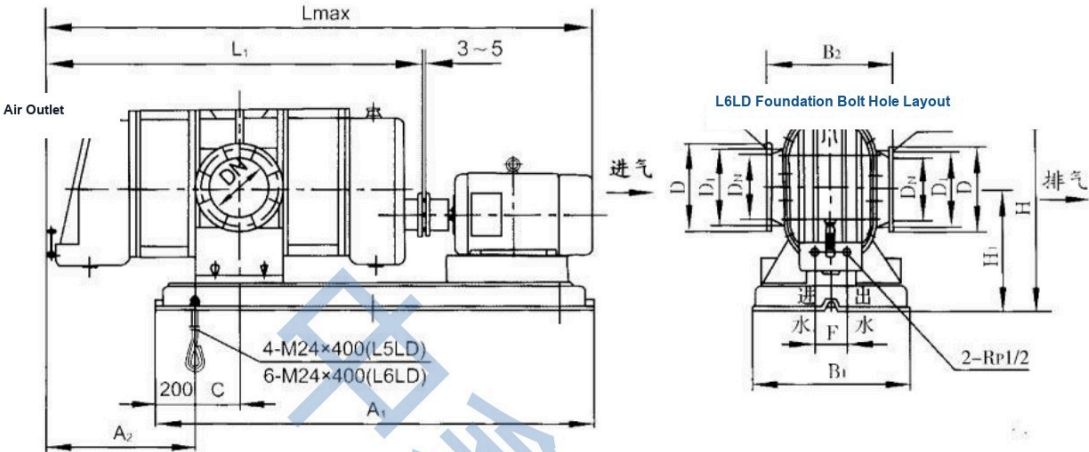
ML5-ML6LD Two-Lobe Roots Blower Outline & Dimensions

Belt Drive Models (ML52LD ~ ML64LD)

ML5-ML6LD Two-Lobe Roots Blower Installation Drawing

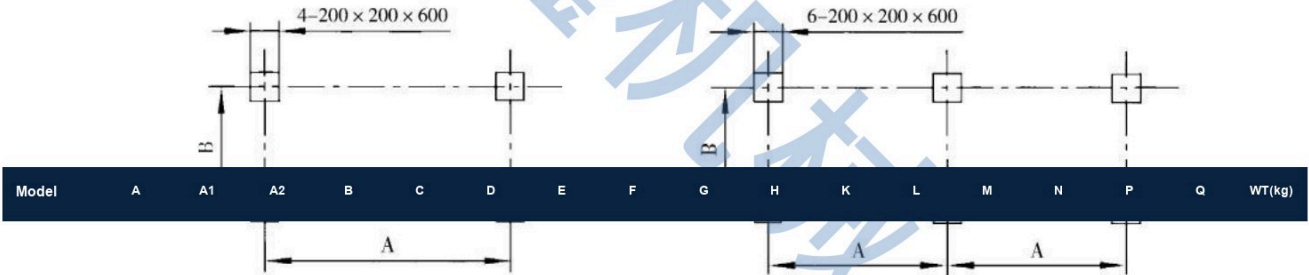
Air Inlet

L5LD Foundation Bolt Hole Layout



L5LD型地脚螺栓孔布置图

L6LD型地脚螺栓孔布置图



| 风机型号  | A    | A <sub>1</sub> | A <sub>2</sub> | B   | B <sub>1</sub> | B <sub>2</sub> | C   | F   | H   | H <sub>1</sub> | L <sub>1</sub> | L <sub>max</sub> | DN  | D <sub>1</sub> | D   | n-d      | 配用电机型号                                                    |
|-------|------|----------------|----------------|-----|----------------|----------------|-----|-----|-----|----------------|----------------|------------------|-----|----------------|-----|----------|-----------------------------------------------------------|
| L52LD | 1000 | 1400           | 692.5          | 610 | 660            | 600            | 0   | 140 | 830 | 520            | 1330           | 2047             | 200 | 280            | 320 | 8-φ17.5  | Y132M,Y160L,Y180L                                         |
|       | 1170 | 1570           |                | 610 | 660            |                | 0   |     |     |                |                | 2267             |     |                |     |          | Y200L,Y225S,Y225M,Y250M                                   |
| L53LD | 1170 | 1570           | 657            | 610 | 660            | 600            | 83  | 140 | 830 | 520            | 1425           | 2207             | 250 | 335            | 375 | 12-φ17.5 | Y160M,Y180M,Y180L,Y200L                                   |
|       | 1440 | 1840           |                | 610 | 660            |                | 83  |     |     |                |                | 2482             |     |                |     |          | Y225S,Y225M,Y250M                                         |
| L62LD | 672  | 1745           | 731.5          | 740 | 790            | 720            | 46  | 150 | 980 | 600            | 1518           | 2455             | 250 | 335            | 375 | 12-φ17.5 | Y160L,Y200L,Y225M,Y250M                                   |
|       | 845  | 2090           |                | 740 | 790            |                | 46  |     |     |                |                | 2797             |     |                |     |          | Y280S,Y280M,Y315S,Y315M                                   |
| L63LD | 745  | 1890           | 730.5          | 740 | 790            | 720            | 102 | 150 | 980 | 600            | 1628           | 2565             | 300 | 395            | 440 | 12.φ22   | Y180L,Y180M,Y225SM,Y250M                                  |
|       | 930  | 2260           |                | 740 | 790            |                | 102 |     |     |                |                | 2977             |     |                |     |          | Y280S,Y280M,Y315S,Y315M<br>JS114-4JS115-6,JS116-6,JS116-8 |

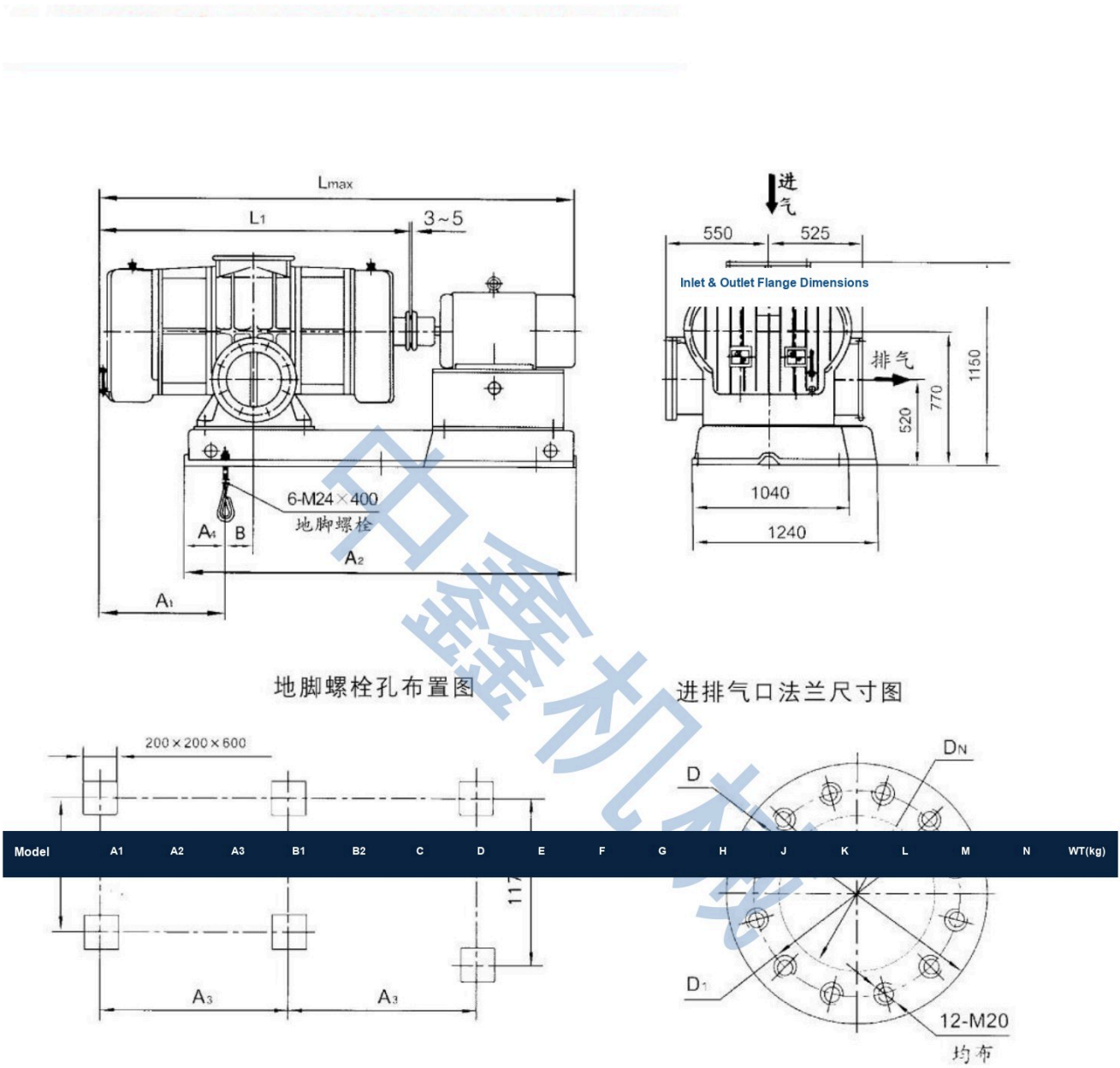
注：当 ΔP>49kPa时，加装冷却器

ML7WD Two-Lobe Roots Blower Outline & Dimensions

Direct-Coupled Models (ML72WD ~ ML74WD)

- ML7WD Two-Lobe Roots Blower Installation Drawing & Flange Dimensions

Foundation Bolt Hole Layout



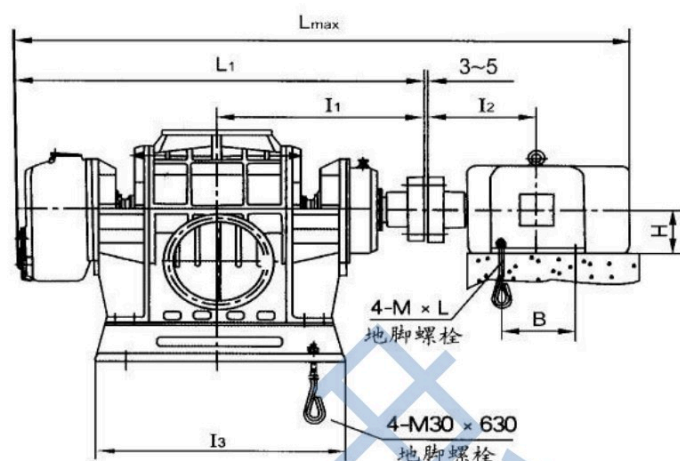
| 风机型号  | A <sub>1</sub> | A <sub>2</sub> | A <sub>3</sub> | A <sub>4</sub> | B  | L <sub>1</sub> | L <sub>max</sub> | D <sub>n</sub> | D <sub>1</sub> | D   |
|-------|----------------|----------------|----------------|----------------|----|----------------|------------------|----------------|----------------|-----|
| L72WD | 772            | 2320           | 810            | 350            | 45 | 1686           | 3055             | 300            | 395            | 440 |
| L73WD | 825            | 2600           | 850            | 450            | 45 | 1791           | 3140             | 350            | 445            | 490 |
| L74WD | 882            | 2600           | 850            | 450            | 45 | 1916           | 3265             | 350            | 445            | 490 |

## ML8WD &amp; ML9WD Two-Lobe Roots Blower Outline &amp; Dimensions

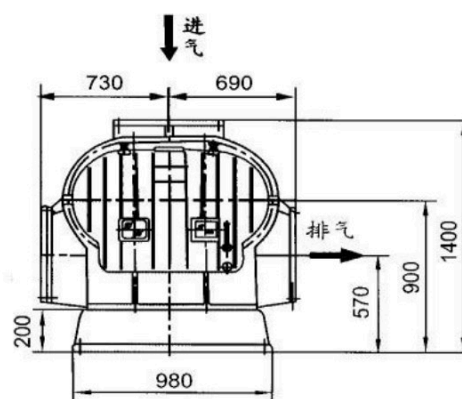
Large-Scale Industrial Models (ML82WD ~ ML94WD)

## ML8WD Two-Lobe Roots Blower Installation Drawing &amp; Dimensions

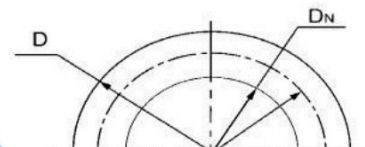
Foundation Bolt Layout &amp; Flanges



地脚螺栓孔布置图



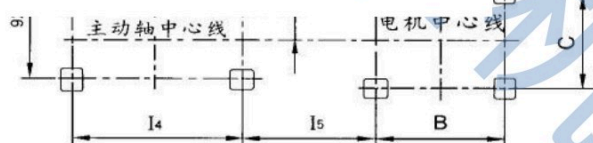
进、排气口法兰尺寸图



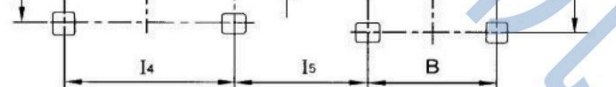
Foundation Bolt Layout &amp; Flanges



## ML9WD Two-Lobe Roots Blower Installation Drawing &amp; Dimensions



地脚螺栓孔布置图



| 风机型号  | I1   | I3   | I4  | Lmax | L1   | DN  | D1  | D   | n-d    |
|-------|------|------|-----|------|------|-----|-----|-----|--------|
| L81WD | 970  | 1030 | 440 | 3623 | 1994 | 350 | 445 | 490 | 12-M20 |
| L82WD | 1035 | 1160 | 570 | 3823 | 2124 | 400 | 495 | 540 | 8-M20  |
| L83WD | 1120 | 1330 | 740 | 3997 | 2294 | 450 | 550 | 595 | 8-M20  |
| L84WD | 1220 | 1530 | 940 | 4418 | 2494 | 500 | 600 | 645 | 10-M20 |

## 配套电机尺寸表

| 电机型号<br>尺寸 | Y225    | Y250    | Y280 |         | Y315 |       |         | Y355 |         | JS    |          |                      |                | JS         |            | JS                |       |
|------------|---------|---------|------|---------|------|-------|---------|------|---------|-------|----------|----------------------|----------------|------------|------------|-------------------|-------|
|            | M       | M       | S    | M       | S    | M     | L       | M    | L       | 115-6 | 115-8.10 | 116-8.10<br>117-8.10 | 116-6<br>117-6 | 126<br>127 | 127<br>128 | 136-8<br>137-8.10 | 137-6 |
| C          | 356     | 406     | 457  |         | 508  |       |         | 610  |         | 620   |          |                      |                | 710        |            | 790               |       |
| B          | 311     | 349     | 368  | 419     | 406  | 457   | 508     | 560  | 630     | 490   |          | 590                  |                | 550        | 650        | 660               | 760   |
| H          | 225     | 250     | 280  |         | 315  |       |         | 355  |         | 375   |          |                      |                | 450        |            | 500               |       |
| M×L        | M16×300 | M20×300 |      | M24×400 |      |       | M24×400 |      | M20×300 |       |          |                      | M24×400        |            |            |                   |       |
| L2         | 446.5   | 484.5   | 516  | 541.5   | 594  | 619.5 | 645     | 709  | 744     | 710   | 660      | 710                  | 760            | 770        | 820        | 840               | 890   |
| L3         | 1046    | 1065    | 1087 |         | 1146 |       |         | 1184 |         | 1220  | 1170     |                      | 1220           | 1250       |            | 1265              |       |

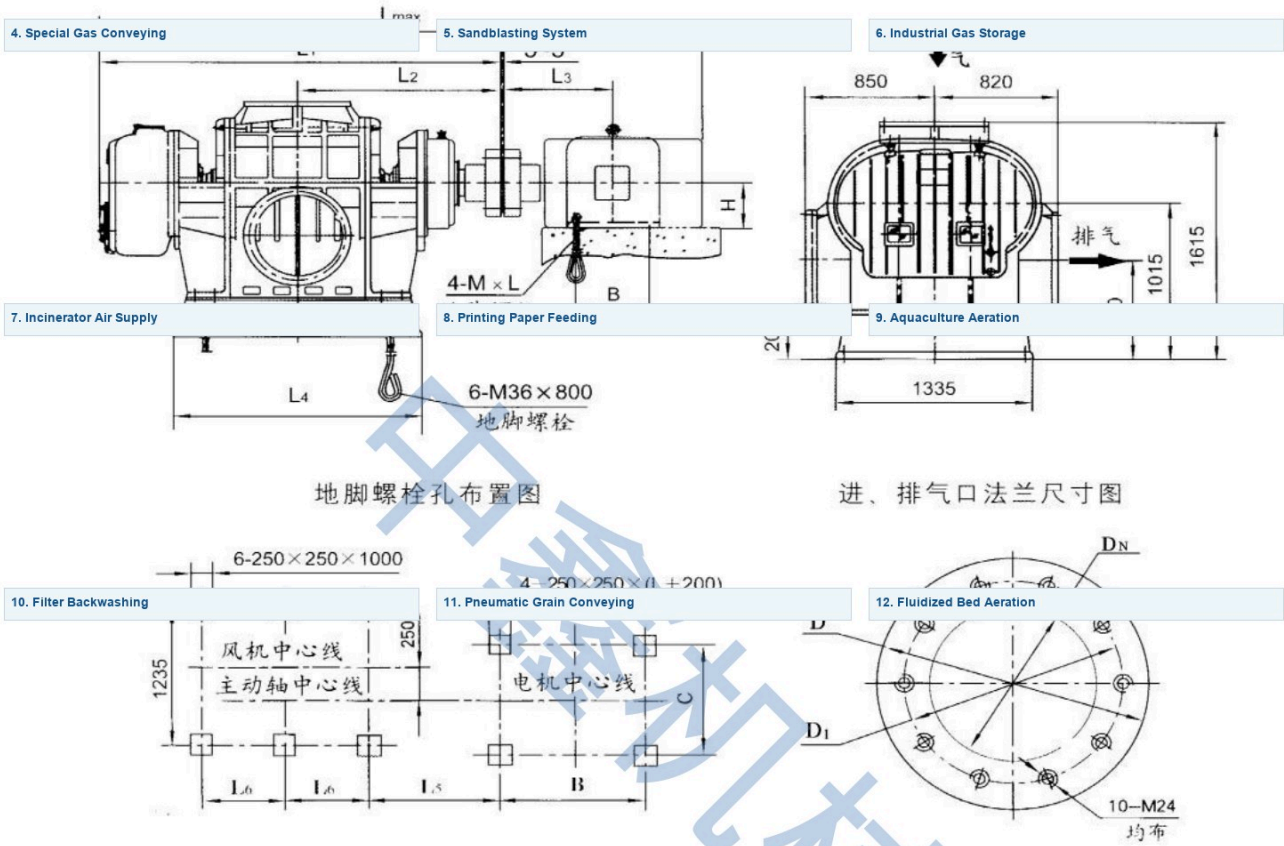
Notes: Motor dimensions correspond to standard Y-series and high-voltage 6000V motors.

Typical Industrial Applications & Noise Characteristics

Application Scenarios & Engineering Acoustic Data

Typical Industrial Applications (12 Core Scenarios)

1. Gas Combustion Support
2. Wastewater Treatment
3. Electroplating Tank Agitation



MSR Series Roots Blower Noise Level Curves & Acoustic Data

| 风机型号  | Lmax | L1   | L2   | L4   | L6  | DN  | D2  | D2  |
|-------|------|------|------|------|-----|-----|-----|-----|
| L93WD | 4915 | 2726 | 1335 | 1720 | 800 | 550 | 655 | 705 |
| L94WD | 5055 | 2866 | 1405 | 1860 | 870 | 600 | 705 | 755 |

配套电机尺寸表

| 电机<br>型号<br><br>尺寸 | Y315    |     | Y355 |     | Y400    | Y450 | JS         |            |      |     |         |        |            |
|--------------------|---------|-----|------|-----|---------|------|------------|------------|------|-----|---------|--------|------------|
|                    | M       | L   | M    | L   |         |      | 116<br>117 | 127<br>128 | 137  | 138 | 1410-10 | 1410-8 | 157<br>158 |
| C                  | 508     |     | 610  |     | 710     | 800  | 610        | 710        | 790  |     | 940     |        | 1000       |
| B                  | 457     | 508 | 560  | 360 | 1000    | 1120 |            | 650        | 660  | 760 | 870     | 970    | 820        |
| H                  | 315     |     | 355  |     | 400     | 450  | 355        | 450        | 550  |     | 560     |        | 630        |
| M×L                | M24×400 |     |      |     | M30×630 |      |            | M24×400    |      |     | M36×800 |        |            |
| L2                 | 619.5   | 645 | 709  | 744 | 1050    | 1170 |            | 820        | 840  | 890 | 1005    | 1055   | 950        |
| L3                 | 931     |     | 969  |     | 1090    | 1150 | 969        | 1035       | 1050 |     | 1110    |        | 1080       |

Notes: 1. Noise measured at 1.0m distance with standard silencer attached. 2. Noise levels vary with piping length, bends, and ambient environment.