Moviboost Dual - Pressure Booster System

For Commercial Building Services Segment

Design

Moviboost Dual system is a pressure booster pump set with two identical horizontal multistage pumps connected in parallel to support the variable flow requirement. The system comes along with 2 nos. KSB's KHM/KM pumps including all necessary accessories & piping mounted on common base plate, 24L Global Water Tank (optional), 2 pressure switch or Changeover switch and control panel.

Features

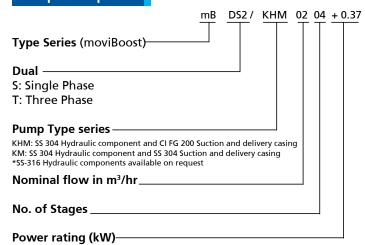
- Robust Construction
- Compact Design
- Stainless steel (SS304) hydraulic components
- Low Vibrations and noise
- High reliability
- Service friendly
- Wide usage
- IP 55 motor
- Class F insulation

Working Conditions

Medium temperature : +15°C ~ +70°C

Environmental temperature : ≤ 50°C

Pump Description



Operating data Parameters

For Single phase

a) Supply Voltage : 220 V +10% -10% b) Frequency : 50 Hz ± 10%

For Three phase

a) Supply Voltage : 380 V +10% -10% b) Frequency : 50Hz ± 10%

Pump protections

- Overload : Overload relay
- Short Circuit protection
- Dry run: Suction tank float switch / Pressure Switch (Provided loose. To be installed by customer)

Functional Details

- Two KHM horizontal multi stage, centrifugal, non-self-priming Monobloc pumps are used.
- Auto Mode: Pumps cascading through pressure switch, pumps may run in parallel also depending on pressure.
- Manual Mode: Pumps will run at full speed through optional switches provided for setting in manual mode.
- System operates automatically cascade control as function of pressure.
- Two pressure switches are provided for cut-in and cut-out of pumps within prescribed pressure range.
- MS CED coated headers which offers high corrosion resistance.
- Pressure gauge is provided for system pressure indication.
- Overload protection is by thermal overload protection (TOP-in motor for single phase) and over load relay (OLR).
- Dry run protection is provided with help of float switch (optional Level sensor).
- Factory fitted System.
- Fault indication for over load & dry run.

 IP Protection: Control Panel: IP 54 Motor: IP 55

- Indication for each pump ON / OFF is provided.
- Indication of power ON/OFF is provided

Scope of Supply

| Nos of Pumps | 2 Nos. | | |
|-------------------------------|-------------------|--|--|
| Cascade control panel | 1 Nos | | |
| Suction Headers/ Manifold | 1 Nos. | | |
| Pressure Switch | 2 Nos. | | |
| Pressure gauge | 1 Nos. | | |
| Float Switch | 1 Nos. | | |
| Tank | 1 Nos. (optional) | | |
| Electronic dry run protection | Optional | | |
| Change over switch | Optional | | |

List of indicators

Power On : Green Illuminated
Pump On / Off : Amber Illumined
Fault Condition : Amber Illumined

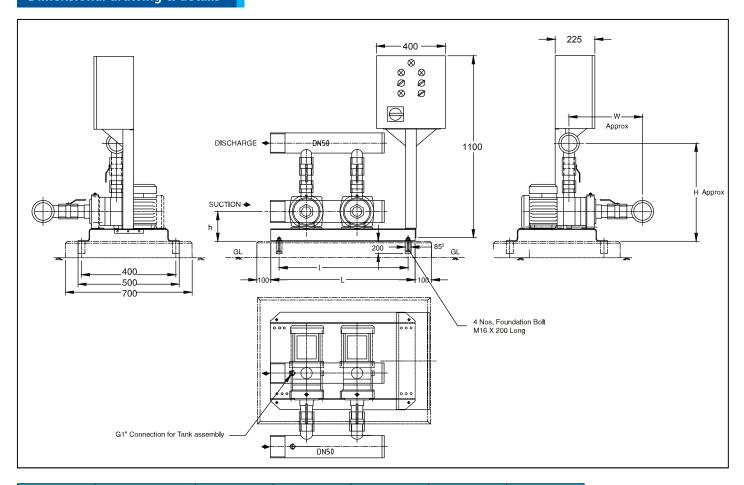


Applications

- Single booster
- Domestic water supply system
- Multi-jet pumps
- Temperature control
- Chemical industry
- Pharmaceutical industry
- Water treatment
- Washing and cleaning



Dimensional drawing & details



| L3 (W) | MODEL | L | I | Н | W | h |
|--|--|--|---|---|---|--|
| 104 | KHM2-20 | 560 | 470 | 593.5 | 288.5 | 150 |
| 122 | KHM2-30 | 560 | 470 | 593.5 | 288.5 | 150 |
| 140 | KHM2-40 | 560 | 470 | 593.5 | 288.5 | 150 |
| 158 | KHM2-50 | 560 | 470 | 593.5 | 288.5 | 150 |
| 176 | KHM2-60 | 560 | 470 | 593.5 | 288.5 | 150 |
| L3 (W) | MODEL | L | I | Н | W | h |
| 113 | KHM4-20 | 560 | 470 | 593.5 | 299.5 | 150 |
| 140 | KHM4-30 | 560 | 470 | 593.5 | 299.5 | 150 |
| 167 | KHM4-40 | 560 | 470 | 593.5 | 299.5 | 150 |
| 194 | KHM4-50 | 560 | 470 | 593.5 | 299.5 | 150 |
| 221 | KHM4-60 | 560 | 470 | 593.5 | 299.5 | 150 |
| L3 (W) | MODEL | L | I | Н | W | h |
| 78 | KHM8-10 | 790 | 700 | 697.5 | 312 | 170 |
| 108 | KHM8-15 | 700 | 700 | 697.5 | 312 | 170 |
| | KHIVIO-13 | 790 | 700 | 037.5 | U.2 | |
| 108 | KHM8-20 | 790 | 700 | 697.5 | 312 | 170 |
| | | | | | | - |
| 108 | KHM8-20 | 790 | 700 | 697.5 | 312 | 170 |
| 108 138 | KHM8-20 KHM8-25 | 790 790 | 700 700 | 697.5 697.5 | 312 312 | 170 170 |
| 108 138 138 | KHM8-20 KHM8-25 KHM8-30 | 790 790 790 | 700 700 700 | 697.5 697.5 697.5 | 312 312 312 | 170 170 170 |
| 108 138 138 168 | KHM8-20 KHM8-25 KHM8-30 KHM8-35 | 790 790 790 790 | 700 700 700 700 | 697.5 697.5 697.5 697.5 | 312 312 312 312 | 170 170 170 170 |
| 108 138 138 168 168 | KHM8-20 KHM8-25 KHM8-30 KHM8-35 KHM8-40 | 790 790 790 790 790 790 | 700 700 700 700 700 700 | 697.5 697.5 697.5 697.5 697.5 | 312 312 312 312 312 312 | 170 170 170 170 170 |
| 108 138 138 168 168 168 | KHM8-20 KHM8-25 KHM8-30 KHM8-35 KHM8-40 | 790 790 790 790 790 790 | 700 700 700 700 700 700 | 697.5 697.5 697.5 697.5 697.5 | 312 312 312 312 312 W | 170 170 170 170 170 170 |
| 108 138 138 168 168 168 L3 (W) 78 | KHM8-20 KHM8-25 KHM8-30 KHM8-35 KHM8-40 MODEL KHM12-10 | 790 790 790 790 790 790 L 790 | 700 700 700 700 700 700 | 697.5 697.5 697.5 697.5 697.5 H 697.5 | 312 312 312 312 312 312 W 312 | 170 170 170 170 170 170 h |
| 108 138 138 168 168 168 L3 (W) 78 108 | KHM8-20 KHM8-25 KHM8-30 KHM8-35 KHM8-40 MODEL KHM12-10 KHM12-15 | 790 790 790 790 790 L 790 790 | 700 700 700 700 700 700 I 700 700 | 697.5 697.5 697.5 697.5 697.5 H 697.5 697.5 | 312 312 312 312 312 312 W 312 312 | 170 170 170 170 170 170 170 h 170 170 |