

Total solutions through effective technology

SCREW Compressor/packages





H-Series Compressor



D-Series Compressor

STANDARD PACKAGE DESIGN

All M&M screw compressor packages are designed for a wide range of industrial refrigeration purposes to ensure maximum reliability and efficiency, operational safety, trouble-free operation and easy maintenance. Standard screw compressor packages include the following common main features:

- Highly effective three-stage oil separator with coalescing filter elements; oil separators constructed according to current ASME codes, and furnished with access manway, sight glasses for oil level inspection, electrical heating element, dual relief valves, and oil drain valves
- Liquid injection oil cooling including stop valve, strainer, solenoid valve, motorized expansion valve
- Suction strainer
- Suction and discharge check valves
- 15 micron oil filter
- High quality flexible coupling and OSHA-approved coupling guard
- Stepless capacity control
- M&M Microprocessor Control Panel

AVAILABLE PACKAGE OPTIONS

- Compressor motor; open drip proof is standard, other enclosures available
- Compressor motor starters: solid state, variable frequency drive, auto-transformer, wye-delta, or across-the-line; many enclosures and voltages available
- Oil cooling options: thermosyphon and water-cooled
- Single stage compressor package with factory installed DX economizer
- Economizer port valve station for flash economizer systems
- Dual oil filters
- Suction and discharge stop valves
- Dual compressor packages

In addition, M&M screw compressors can be provided with other refrigeration system components such as evaporators, condensers, and pressure vessels in a factory-assembled, pre-piped and pre-wired package.

ADDITIONAL PACKAGES

M-Series (Mycom)

H-Series Compressor

| M&M Model | Swept Vol. (CFM) at 3550 RPM | Booster Ratings R717 -40°/ +20°F | | High Stage Ratings R717 +20°/ +95°F | | Economized Ratings R717 -40°/ +95°F | | Approximate Dimensions | Approximate Weight Without | Suction | Discharge |
|--------------|------------------------------------|--|-----|---|------|---|------|---------------------------|-------------------------------|------------|------------|
| | | TR | ВНР | TR | ВНР | TR | ВНР | LxWxH | Motor (Lbs) | Connection | Connection |
| H24 | 207 | 18 | 22 | 67 | 76 | 17 | 60 | 102" x 48" x 65" | 2000 | 2" | 2" |
| H28 | 280 | 25 | 31 | 93 | 104 | 24 | 82 | 102" x 48" x 65" | 2000 | 3" | 2" |
| H33 | 345 | 31 | 38 | 116 | 130 | 30 | 102 | 120" x 44" x 70" | 3000 | 3" | 2½" |
| H38 | 390 | 36 | 44 | 136 | 145 | 35 | 105 | 120" x 48" x 82" | 3850 | 5" | 2½" |
| H42 | 420 | 38 | 45 | 143 | 156 | 38 | 121 | 120" x 48" x 77" | 3650 | 5" | 2½" |
| H48 | 480 | 44 | 56 | 169 | 176 | 44 | 128 | 127" x 50" x 84" | 3900 | 5" | 3" |
| H51 | 500 | 45 | 53 | 172 | 187 | 46 | 145 | 127" x 51" x 75" | 3700 | 6" | 3" |
| H57 | 573 | 53 | 64 | 201 | 225 | 56 | 172 | 140" x 55" x 87" | 4550 | 6" | 3" |
| H58 | 575 | 55 | 69 | 207 | 230 | 53 | 160 | 140" x 55" x 98" | 5000 | 6" | 3" |
| H73 | 756 | 74 | 82 | 278 | 287 | 78 | 219 | 140" x 55" x 90" | 4700 | 6" | 4" |
| H74 | 775 | 74 | 93 | 281 | 310 | 73 | 219 | 140" x 55" x 98" | 5400 | 8" | 4" |
| H85 | 860 | 81 | 93 | 307 | 327 | 86 | 249 | 140" x 55" x 92" | 4850 | 6" | 4" |
| H86 | 860 | 82 | 99 | 311 | 330 | 81 | 235 | 140" x 55" x 98" | 5600 | 8" | 4" |
| H96 | 950 | 92 | 111 | 349 | 372 | 95 | 272 | 140" x 60" x 100" | 5700 | 8" | 4" |
| H97 | 952 | 90 | 102 | 340 | 356 | 95 | 278 | 140" x 60" x 94" | 5000 | 6" | 4" |
| H112 | 1120 | 108 | 129 | 410 | 437 | 106 | 318 | 140" x 60" x 104" | 6300 | 8" | 5" |
| H131 | 1240 | 122 | 145 | 461 | 489 | 126 | 358 | 144" x 63" x 113" | 7000 | 8" | 5" |
| H146 | 1520 | 147 | 182 | 557 | 613 | 146 | 451 | 144" x 63" x 116" | 7250 | 10" | 5" |
| H168 | 1690 | 162 | 193 | 615 | 652 | 162 | 481 | 177" x 70" x 120" | 10000 | 10" | 6" |
| H193 | 1855 | 182 | 217 | 691 | 732 | 189 | 533 | 177" x 70" x 122" | 10250 | 10" | 6" |
| H221 | 2255 | 216 | 261 | 817 | 879 | 218 | 652 | 177" x 70" x 122" | 10550 | 10" | 6" |
| H267 | 2705 | 261 | 325 | 988 | 1112 | 263 | 807 | 228" x 75" x 135" | 16500 | 10" | 8" |
| H335 | 3380 | 326 | 402 | 1237 | 1377 | 328 | 1013 | 228" x 75" x 135" | 17250 | 12" | 8" |
| H375 | 3715 | 367 | 451 | 1390 | 1543 | 383 | 1125 | 228" x 80" x 150" | 20500 | 12" | 8" |
| H451 | 4510 | 434 | 531 | 1644 | 1807 | 438 | 1406 | 228" x 80" x 150" | 21250 | 14" | 10" |

Ratings are based on water cooled or thermosyphon oil cooling, saturated suction temperature °F, with 10°F liquid subcooling from condenser. Booster ratings with liquid cooling to intermediate temperature. Economizer is flash type. Dimensions and weights are based on R717 high stage with thermosyphon oil cooling. All ratings are at 3550 RPM.

D-Series Compressor

| M&M | Swept Vol. (CFM) at 3550 RPM | Booster Ratings R717 -40°/ +20°F | | High Stage Ratings R717 +20°/ +95°F | | Economized Ratings R717 -40°/ +95°F | | Approximate Dimensions | Approximate Weight Without | Suction | Discharge |
|-------|------------------------------------|--|-----|---|-----|---|-----|---------------------------|-------------------------------|------------|------------|
| Model | | TR | ВНР | TR | ВНР | TR | ВНР | LxWxH | Motor (Lbs) | Connection | Connection |
| D27 | 278 | 23 | 33 | 99 | 110 | 22 | 76 | 102" x 48" x 65" | 2350 | 4" | 2" |
| D39 | 398 | 32 | 47 | 144 | 158 | 31 | 107 | 120" x 48" x 77" | 3875 | 4" | 2½" |
| D53 | 544 | 51 | 66 | 204 | 217 | 51 | 149 | 140" x 55" x 87" | 4450 | 5" | 3" |
| D75 | 775 | 74 | 95 | 293 | 312 | 74 | 213 | 140" x 55" x 90" | 4700 | 5" | 4" |
| D93 | 932 | 90 | 114 | 353 | 375 | 91 | 257 | 140" x 60" x 94" | 5000 | 5" | 4" |
| D103 | 1061 | 96 | 126 | 392 | 428 | 94 | 292 | 140" x 60" x 100" | 5700 | 8" | 4" |
| D126 | 1265 | 116 | 150 | 469 | 510 | 115 | 349 | 144" x 63" x 113" | 6450 | 8" | 5" |
| D151 | 1516 | 142 | 180 | 566 | 612 | 141 | 418 | 144" x 63" x 113" | 6600 | 8" | 5" |
| D163 | 1668 | 157 | 199 | 626 | 674 | 158 | 451 | 177" x 70" x 120" | 9500 | 8" | 6" |
| D192 | 1911 | 182 | 228 | 721 | 772 | 184 | 528 | 177" x 70" x 120" | 9650 | 8" | 6" |
| D223 | 2263 | 217 | 270 | 854 | 916 | 221 | 632 | 177" x 70" x 120" | 9900 | 8" | 6" |

Ratings are based on water cooled or thermosyphon oil cooling, saturated suction temperature $^{\circ}$ F, with 10° F liquid subcooling from condenser. Booster ratings with liquid cooling to intermediate temperature. Economizer is flash type. Dimensions and weights are based on R717 high stage with thermosyphon oil cooling. All ratings are at 3550 RPM.





MORE ADVANCED COMPRESSOR AND SYSTEM CONTROL CAPABILITY

M&M is widely recognized as the industry leader in microprocessor control of screw compressors and refrigeration systems. Now we've made the best compressor microprocessor control panel even better:

- Back-lighted display
- Real-time, animated graphic
- "At A Glance" technology alerts the user of problems by automatically displaying the active alarms/failures screen
- Increased ramp start features based on discharge pressure, motor amps and capacity allow for greater compressor control
- Comprehensive set of energy management features such as extensive setpoints, scheduling, ramp start and powerfail restart dramatically reduces operating cost
- Built-in open communications protocols include
 Allen Bradley DF1 and Mod Bus RT4
- Additional analog and digital channels are available to control sequencers, condensers, evaporators and more directly from the compressor panel; no additional panels or PC are required

STANDARD M&M COMPRESSOR CONTROL FEATURES

- Four suction pressure set points
- Eight set point changes per day
- Seven different daily schedules
- Operation log records all operating parameters every 30 seconds for the previous two hours
- Trend log provides 255 sets of the same operating parameters at an operator-selected interval
- Alarm & failure logs display the last 100 messages, irrespective of time of occurrence

- User logs display the last 50 user logins
- Password security system: up to 10 users, with flexible levels of security assigned to each compressor function
- Ramp loading for smooth start-up and loading of the compressor
- Energy consumption data: instantaneous motor kW, demand kW, daily kWh, previous day kWh
- Over 130 status, menu selections and data entry screens
- Over 60 available alarm and failure messages

