



OMNICO ENGINEERING

INDUSTRIAL REFRIGERATION AND HVAC
Your Partner In Green Solutions

M&M
REFRIGERATION

Total solutions through
effective technology

SCREW

compressor packages





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H-Series Compressor (HOWDEN)



D-Series Compressor (Dunham Bush, Hartford)

STANDARD PACKAGE DESIGN

All Screw Compressor Packages are designed for a wide range of industrial refrigeration and HVAC purposes to ensure maximum reliability and efficiency, operational safety, trouble-free operation and easy maintenance.

Standard packages include the following main features:

- Highly efficient 3-stage oil separator with coalescing filter elements; oil separators fabricated to current **ASME codes** (certified U1/U3 reports included), and furnished with access manway, sight glasses for oil level inspection, electrical heating element, dual relief/safety valves, and oil drain valves
- Liquid injection oil cooling including stop valve, filter, solenoid valve, motorized expansion valve
- Suction strainer
- Suction and discharge check valves
- 15 micron oil filter
- High quality flexible coupling and coupling guard
- Stepless capacity control
- Microprocessor Control Panel (UL approved)

PACKAGE OPTIONS

- Compressor motor; Premium Efficiency (USA) NEMA open drip proof (IP23) is standard. Other enclosures available
- Compressor motor starter panels; solid state ("soft starter"), variable frequency drive, auto transformer, Y/D, or across-the-line. Many enclosures and voltages available
- Oil cooling options: Thermosyphon and water-cooled
- Single stage compressor package with factory installed economizer
- Economizer port valve station for flash economizer systems
- Dual oil filters
- Suction and discharge stop valves
- Dual compressor packages

ADDITIONAL PACKAGES

- M-Series (MYCOM compressor – Japan)
- K-Series (KOBELCO compressor – Japan)

H-Series Compressor Packages

M&M MODEL	Swept Vol. [m ³ /hr] at 3,000 rpm	Booster Ratings R717 -35°C / -5°C			High Stage Ratings R717 -5°C / +35°C			Economized Ratings R717 -35°C / +35°C			Approximate Dimensions L x W x H [m]	Approximate Weight Without Motor [kg]
		Q ₀ [kW]	P _e [kW]	COP	Q ₀ [kW]	P _e [kW]	COP	Q ₀ [kW]	P _e [kW]	COP		
H24 XRV-127-R1	293	61	15	4.1	198	47	4.2	55	39	1.4	2.6 x 1.2 x 1.7	900
H28 XRV-127-R3	397	85	20	4.3	276	64	4.3	80	52	1.5	2.6 x 1.2 x 1.7	900
H33 XRV-127-R4	489	106	25	4.2	346	80	4.3	102	65	1.6	3.0 x 1.1 x 1.8	1,350
H38 WRV-163/1.45	550	124	30	4.1	403	90	4.5	116	68	1.7	3.0 x 1.2 x 2.1	1,750
H42 XRVI-163/1.65	593	128	29	4.4	417	96	4.3	124	77	1.6	3.0 x 1.2 x 2.0	1,650
H48 WRV-163/1.8	680	154	36	4.3	500	109	4.6	146	84	1.7	3.2 x 1.3 x 2.1	1,750
H51 XRVI-163/1.93	710	155	35	4.4	504	114	4.4	150	93	1.6	3.2 x 1.3 x 1.9	1,700
H57 XRV-204/1.1	812	183	42	4.4	598	138	4.3	187	109	1.7	3.6 x 1.4 x 2.2	2,050
H58 WRV-204/1.1	815	190	46	4.1	619	141	4.4	180	104	1.7	3.6 x 1.4 x 2.5	2,250
H73 XRV-204/1.45	1,070	255	54	4.7	831	176	4.7	261	139	1.9	3.6 x 1.4 x 2.3	2,150
H74 WRV-204/1.45	1,095	258	62	4.2	841	190	4.4	248	142	1.7	3.6 x 1.4 x 2.5	2,450
H85 XRV-204/1.65	1,219	281	61	4.6	917	200	4.6	288	158	1.8	3.6 x 1.4 x 2.3	2,200
H86 WRV-204/1.65	1,220	285	66	4.3	928	203	4.6	275	152	1.8	3.6 x 1.4 x 2.5	2,550
H96 WRV-204/1.93	1,340	320	74	4.3	1,044	228	4.6	321	174	1.8	3.6 x 1.5 x 2.5	2,600
H97 XRV204/1.93	1,348	312	67	4.7	1,016	219	4.6	318	175	1.8	3.6 x 1.5 x 2.4	2,250
H112 WRVI-255/1.1	1,590	377	85	4.4	1,229	266	4.6	360	204	1.8	3.6 x 1.5 x 2.6	2,850
H131 WRVI-255/1.3	1,755	423	95	4.5	1,382	298	4.6	428	226	1.9	3.7 x 1.6 x 2.9	3,200
H146 WRVI-255/1.45	2,150	512	119	4.3	1,670	373	4.5	496	289	1.7	3.7 x 1.6 x 2.9	3,300
H168 WRVI-255/1.65	2,395	565	126	4.5	1,843	397	4.6	550	309	1.8	4.5 x 1.8 x 3.0	4,550
H193 WRVI-255/1.93	2,630	635	142	4.5	2,074	446	4.7	642	338	1.9	4.5 x 1.8 x 3.1	4,650
H221 WRV-255/2.2	3,190	751	171	4.4	2,449	533	4.6	741	419	1.8	4.5 x 1.8 x 3.1	4,800
H267 WRVI-321/1.32	3,830	909	209	4.3	2,970	665	4.5	904	490	1.8	5.8 x 1.9 x 3.4	7,500
H335 WRVI-321/1.65	4,790	1,138	259	4.4	3,713	823	4.5	1,118	625	1.8	5.8 x 1.9 x 3.4	7,800
H375 WRVI-321/1.93	5,260	1,279	290	4.4	4,177	923	4.5	1,305	698	1.9	5.8 x 2.0 x 3.8	9,300
H451 WRV-321/2.2	6,385	1,513	341	4.4	4,936	1,081	4.6	1,507	842	1.8	5.8 x 2.0 x 3.8	9,650

Ratings are based on 2,950 rpm, thermosyphon oil cooling, saturated suction temperature with 2°K liquid subcooling from condenser. 0.06 bar suction pressure drop and 0.04 bar discharge pressure drop for all packages.

Booster ratings with open flash intercooler. Economizer is open flash type (0.2 bar suction pressure drop and 3°K superheat).



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MORE ADVANCED COMPRESSOR AND SYSTEM CONTROL CAPABILITY

M&M (USA) is widely recognized as the industry leader in microprocessor control of screw compressors, standard and customized chiller packages.

Now the best compressor microprocessor control panel has been made 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 powerfall restart dramatically reduces operating cost
- Built-in open communications protocols include Allen Bradley DF1 and Mod Bus RT4
- Additional analogue and digital channels are available to control sequencing, condensers, evaporators and more directly from the compressor panel;
NO ADDITIONAL PANEL OR PC ARE REQUIRED!

STANDARD M&M COMPRESSOR CONTROL FEATURES

- Four suction pressure setpoints
- Eight setpoint 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 and 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 kW, previous day kWh
- Over 130 status, menu selections and data entry screens
- Over 60 available alarm and failure messages

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