



Automatic Compressor Sequencing

The control system records and displays individual compressor running hours and automatically distributes run time among all compressors in the system.

UL 508A Industrial Control Panel

Every chiller has a UL label certifying our panel design and components comply with UL 508A standards ensuring the panels are safe and consistent for reliable operation.

Color Touch-Screen Display

A high-resolution, high-speed, 7-inch color touch-screen with English text clearly shows chiller operation for quick and easy monitoring and control of the system.

MX SERIES VERSION 4.000	
NO ACTIVE MESSAGES	
SETPOINT	50.0
CONDENSER FLUID IN	85.0 °F
EVAPORATOR FLUID IN	60.0 °F
TO PROCESS FLUID	50.0 °F
PROCESS DELTA T	10.0 °F
STAGE DEMAND	100.0 %
CIRCUIT 1	
SLIDE VALVE %	100 %
COND OUT	95.0
EVAP OUT	50.0 °F
BACK	HOME
FULL	DETAIL
ALARMS	

Standard PLC Home Screen

CONNEX4.0 Ready Controls

Every chiller is equipped with an Ethernet port and is fully compatible with the CONNEX4.0 plant-wide equipment control and monitoring system.

Warranty

3 year PLC controller parts

1 year entire unit parts

12 months labor

One-day factory authorized start-up supervision

Standard Features

Rotary Screw Compressor

Direct-drive rotary screw compressor technology with proven process cooling performance and reliability provides outstanding performance and low maintenance.

Stainless Steel Evaporator

High-efficiency stainless steel plates with copper brazing provide maximum performance, long life, and an enhanced level of protection from harsh process conditions.

Evaporator Inlet Strainer

The evaporator inlet strainer removes any debris present in the process fluid to prevent costly downtime and repair due to a clogged chiller evaporator.

Modular Expandable System

Our modular system design provides for system expansion to over 750 tons using up to six chillers and six refrigeration circuits.

Compressor Protection Technology

Compressor protection technology provides start-to-start anti-recycle control logic to limit compressor cycling under low-loads to extend compressor life.

Accuchiller MX Central Chiller

Available Options

Rotary Non-Fused Disconnect Switch

Adds a 5 kA SCCR (Short Circuit Current Rating) rotary non-fused disconnect switch to the control panel for safe lockout of main power.

10-inch HMI

Replaces the standard 7-inch screen with a 10-inch, high resolution, color screen for larger presentation of the same menus and functions as the standard screen.

12 inch HMI

Replaces the standard 7-inch screen with a 12-inch, high resolution, color screen with a built-in industrial computer to allow for remote monitoring and control using Teamviewer software installed on any remote Windows based PC or smart phone.

12-inch HMI and CONNEX4.0 Master Controller

Replaces the standard 7-inch screen with a 12-inch, high resolution, color screen with a built-in industrial computer to allow for remote monitoring and control using Teamviewer software installed on any remote Windows based PC or smart phone. This package also adds a second PLC to allow for connection of up to 15 total Thermal Care Connex4.0 ready devices for many ways to interact with the connected equipment such as smart phone/tablet control, configurable email and text alerts for alarms, warnings, event alerts, and data collection.

BACnet or Lon Works Communications Port

Adds a ModBUS to BACnet or Lon Works gateway which is wired to a RS-485 connector on the chiller control panel.

Water Cooled Condenser Single-Circuit Chillers

	MXW50	MXW75	MXW100	MXW125
Cooling Capacity (tons) ¹	53	69	100	122
Set Point Range (°F)	20 to 75	20 to 75	20 to 75	20 to 75
Compressor (qty)	1	1	1	1
Process Fluid In/Out (in)	3	4	4	4
Condenser Water In/Out (in)	3	4	4	4
Length (in)	140	142	147	148
Width (in)	36	36	36	36
Height (in)	81	81	81	81
Shipping Weight (lbs)	2,965	3,915	4,315	5,020
Operating Weight (lbs)	3,145	4,095	4,575	5,330
MCA @ 460/3/60 (amps) ²	142	173	209	275
MOP @ 460/3/60 (amps) ³	250	300	350	450

¹Cooling capacity when cooling water with 50°F set point, 60°F return, 85°F condenser water, R-134a refrigerant.

²MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.

³MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

Remote Air-Cooled Condenser Single-Circuit Chillers

	MXR50	MXR75	MXR100	MXR125
Cooling Capacity (tons) ¹	49	65	93	114
Set Point Range (°F)	20 to 75	20 to 75	20 to 75	20 to 75
Compressor (qty)	1	1	1	1
Process Fluid In/Out (in)	3	4	4	4
Liquid Line Connection (in)	1 3/8	1 5/8	2 1/8	2 1/8
Discharge Line Connection (in)	2 1/8	2 5/8	2 5/8	3 1/8
Length (in)	134	137	137	137
Width (in)	36	36	36	36
Height (in)	81	81	81	81
Shipping Weight (lbs)	2,495	3,340	3,485	3,700
Operating Weight (lbs)	2,620	3,510	3,710	3,980
MCA @ 460/3/60 (amps) ²	142	173	209	275
MOP @ 460/3/60 (amps) ³	250	300	350	450

¹Cooling capacity when cooling water with 50°F set point, 60°F return, 95°F condenser air, R-134a refrigerant.

²MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.

³MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

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Remote Condensers

	LAVF-14412	LAVF-16410	LAVF-24410	LEV-26410
Chiller Used With	MXR50	MXR75	MXR100	MXR125
Number of Fans	4	6	8 (2 rows of 4 fans)	12 (2 rows of 6 fans)
Refrigerant Inlet Line (in)	3 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$ per row of fans	3 $\frac{1}{8}$ per row of fans
Refrigerant Outlet Line (in)	3 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$
Length (in)	220	328	220	342
Width (in)	45	45	91	91
Height (in)	61	61	61	61
Shipping Weight (lbs)	1,600	2,810	2,851	5,218
Operating Weight (lbs)	Varies based on system refrigerant charge and operating conditions			
MCA @ 460/3/60 (amps) ¹	14	22	29	43
MOP @ 460/3/60 (amps) ²	20	30	35	45

¹MCA is Minimum Circuit Amps, used for minimum wire size requirement.

²MOP is Maximum Overcurrent Protection, used for sizing main power protection device.



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Thermal Care is ISO-9001 Certified

Manufacturer reserve the right to change specification
or design without notification or obligation
MX Specification 00