

# **Accuchiller MX Central Chiller**



# 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.

### **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.



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

- 1 year entire unit parts
- 1 year labor

### **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.

### 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 Communications Port**

Adds a ModBUS to BACnet 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) <sup>1</sup>	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) <sup>2</sup>	142	173	209	275
MOP @ 460/3/60 (amps) <sup>3</sup>	250	300	350	450

<sup>&</sup>lt;sup>1</sup>Cooling capacity when cooling water with 50°F set point, 60°F return, 85°F condenser water, R134a or R513A refrigerant.

# Remote Air-Cooled Condenser Single-Circuit Chillers

Remote 7th Coolea Condenser Single Circuit Cimicis							
	MXR50	MXR75	MXR100	MXR125			
Cooling Capacity (tons) <sup>1</sup>	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 <sup>3</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>			
Discharge Line Connection (in)	2 <sup>1</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 5/8	3 <sup>1</sup> / <sub>8</sub>			
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) <sup>2</sup>	183	234	310	390			
MOP @ 460/3/60 (amps) <sup>3</sup>	329	421	558	702			

<sup>&</sup>lt;sup>1</sup>Cooling capacity when cooling water with 50°F set point, 60°F return, 95°F condenser air, R134a or R513A refrigerant.

<sup>&</sup>lt;sup>2</sup>MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.

<sup>&</sup>lt;sup>3</sup>MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

<sup>&</sup>lt;sup>2</sup>MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.

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# **Remote Condensers**

	LAVF-14412	LAVF-16410	LAVF-24410	LAVF-25410		
Chiller Used With	MXR50	MXR75	MXR100	MXR125		
Number of Fans	4	6	8 (2 rows of 4 fans)	10 (2 rows of 5 fans)		
Refrigerant Inlet Line (in)	21/8	2 5/8	21/8 per row of fans	21/8 per row of fans		
Refrigerant Outlet Line (in)	21/8	2 5/8	21/8 per row of fans	21/8 per row of fans		
Length (in)	220	328	220	274		
Width (in)	45	45	91	91		
Height (in)	61	61	61	61		
Shipping Weight (lbs)	1,600	2,810	2,851	4,046		
Operating Weight (lbs)	Varies based on system refrigerant charge and operating conditions					
MCA @ 460/3/60 (amps) <sup>1</sup>	14	22	29	36		
MOP @ 460/3/60 (amps) <sup>2</sup>	20	30	35	45		

<sup>&</sup>lt;sup>1</sup>MCA is Minimum Circuit Amps, used for minimum wire size requirement.

<sup>&</sup>lt;sup>2</sup>MOP is Maximum Overcurrent Protection, used for sizing main power protection device.