

Ascend[®] Air-to-Water Heat Pump

A perfect fit to meet your sustainability goal and efficiency targets.



Model ACX – 140-230 tons cooling 1500-2500 MBh heating

Plug into building decarbonization. Trane's air-to-water heat-pump provides cooling or heating from one all-electric source. Traditional heating which directly burns fossil fuel energy is a primary source of building emissions.¹ The Ascend air-to-water heat pump is an effective—and affordable—first step forward to decarbonize. Move away from fossil fuel combustion for heating and tap into the nation's lower-carbon grid that's transitioning to clean, renewable energy.

Operate more sustainably

Because heat pumps move heat rather than generate heat, ACX can be three-times more energy efficient than other forms of electric heating.² Ascend ACX brings Trane's proven, economical heat pump technology platform up to scale to provide heating and cooling for larger commercial buildings. It's all-electric heating and cooling is smart when you're striving to meet regulations, attain certifications or achieve a net zero energy building.

Next gen, low global warming refrigerant R-454B future reduces direct emissions from greenhouse gasses.

Meet efficiency targets

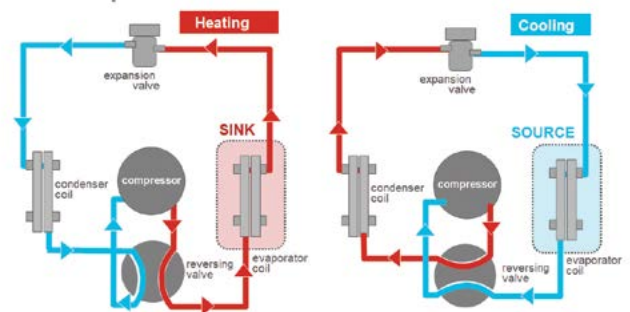
The Ascend ACX air-to-water heat pump achieves high energy efficiency for cooling as well as heating as a result of its boiler-free heating.

- Heating efficiency meets ASHRAE[®] 90.1-2019: 2.77 COP
- Cooling meets ASHRAE 90.1-2019
- Full and part load efficiency meets most building codes
- Variable speed fans, Intermediate Discharge Valves on the compressor, EC fan motors and braze plate evaporator enhance efficiency



3X more efficient than electric boilers.

Heat Pumps



Heat pumps use electricity to move energy around to cool or heat the space. In cooling mode, they move heat inside your building to outside. In heating mode, a reversing valve changes the flow of energy and moves outside energy (even if its cold outside) to inside the building.

1. EPA. Sources of Greenhouse Gas Emissions. 2019
2. Trane Self-Paced Learning. Decarbonization/Electrification of HVAC Systems. APP-CMC074-EN

Reliable comfort, even in colder climates

ACX is built on Trane's Ascend® chiller platform and Trane® controls knowledge and expertise to provide consistent quality and reliability. The common platform facilitates maintenance, servicing and sourcing of components. Couple that with Trane heat pump innovation and ACX delivers reliable comfort in a wide range of climates. The heat pump can provide hot water temperatures up to 140 degrees Fahrenheit and operate down to 0 degrees Fahrenheit ambient temperatures.

Post-installation, Trane can stay on as your local service and maintenance partner—providing ongoing system optimization and component sourcing.

- Maintenance-free, long-lasting permanent magnet condenser fan motors
- Rapid Restart™ capability
- Dual circuited unit
- Trane energy analysis and 24/7 system monitoring services

The Right Sound for the Right Environment

Noise from the heat pump won't detract from your building's indoor environmental quality. Trane's acoustical engineers have driven Ascend sound down, making it quiet enough to address indoor environmental quality concerns in health care and school environments. With Trane, low sound is standard.

- Compressor attenuation
- Quiet variable speed fans
- EC fan motors run silently at part load

People come first. Ascend ACX helps you create an environment that's both comfortable and quiet.

ACX is built on Trane's Ascend chiller platform for consistent reliability and quality.



Transverse "V" condenser coils have easy access for cleaning and service.

Trane's Ascend heat pump technology provides reliable heating or cooling.

Trane controls offer connectivity, flexibility, and serviceability advantages that other controls simply can't match, enabling optimal unit performance to deliver reliable and efficient operations.

Remote Connectivity for optimal performance and uptime

Building data is collected by the Symbio 800 unit controller to remotely monitor, troubleshoot, schedule and control the ACS chiller 24 hours a day. The Symbio® 800 unit controller features factory programmed Adaptive Control™ performance algorithms that respond to a variety of conditions to maximize efficient chiller plant operation.

Symbio 800 integrates seamlessly and securely with your building automation system, leveraging secure remote IP connectivity (BACnet, Modbus®) and optional Air-Fi® wireless technology and LonTalk® communication protocols for simplified equipment monitoring and management.

Define your requirements. Select performance to match.

Ascend® ACX comes with an impressive list of standard features and a wide range of options. Trane can build your heat pump to meet your requirements for efficiency, cost and acoustics.

- Scroll compressor helps make electrification more affordable and practical without compromising efficiency or sound
- Wide operating map meets load in extreme conditions
- System ready features such as integrated unit defrost operation (defrost and heating modes) and ice making capabilities
- Multiple sound packages allow you to choose the level of sound treatment you need
- Fin and tube coil enables a smaller footprint
- Pump package provides simplified design package
- Energy measurement provides reliable performance readings

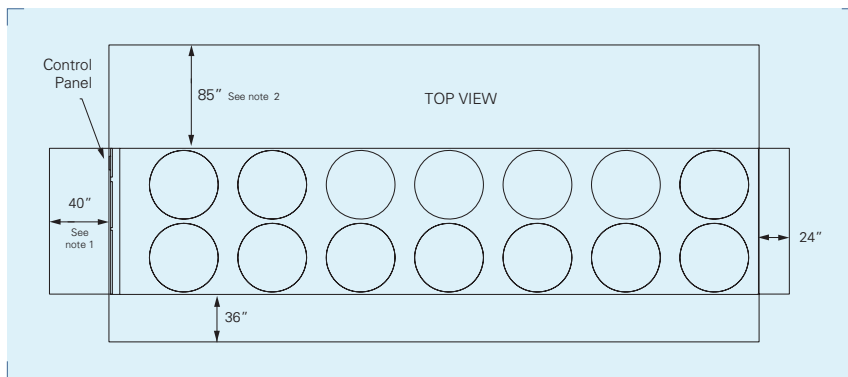
General Data

SIZE	RATED POWER	FULL LOAD EER / IPLV EER	OPERATING WEIGHT (LB)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	FLOW (GPM)		WATER CONNECTION (IN)	MCA	MOP
							MIN	MAX			
140	208	ASHRAE 90.1 2019 Compliant	8254	229	88	98	168	504	4	629	700
	230		8254	229	88	98				622	700
	460		8254	229	88	98				285	350
	575		8254	229	88	98				233	250
160	208		8254	229	88	98	192	576	4	693	800
	230		8254	229	88	98				686	800
	460		8254	229	88	98				313	350
	575		8254	229	88	98				257	300
180	208		9992	282	88	98	216	648	4	805	1000
	230		9992	282	88	98				800	1000
	460		9992	282	88	98				367	400
	575		9992	282	88	98				300	350
200	208	9992	282	88	98	240	720	4	877	1000	
	230	9992	282	88	98				868	1000	
	460	9992	282	88	98				398	450	
	575	9992	282	88	98				325	350	
215	208	11171	335	88	98	258	774	4	953	1000	
	230	11171	335	88	98				943	1000	
	460	11171	335	88	98				433	500	
	575	11171	335	88	98				354	400	
230	208	11171	335	88	98	276	828	4	1017	1200	
	230	11171	335	88	98				1007	1200	
	460	11171	335	88	98				460	500	
	575	11171	335	88	98				378	400	

* Weight and dimension can change depending on options selected.

- Minimum entering hot water temperature set point: 68°F
- Maximum leaving hot water temperature set point: 140°F
- Minimum leaving chilled water temperature set point: 40°F
- Maximum leaving chilled water temperature set point: 65°F

Service Clearances - No Obstructions Above Unit



Notes:

A full 40 inches clearance is required in front of the control panel. Must be measured from front of panel, not end of unit base.

Clearance of 85 inches on the side of the unit is required for coil replacement. Preferred side for coil replacement is shown (left side of the unit, facing control panel), however, either side is acceptable.

Learn more at trane.com



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.

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