

Trane® Series L[™] CenTraVac[™] Chillers

For elevated chilled-water temperature applications 400 – 1,800 tons







The Trane Series L CenTraVac chiller:

For ultimate performance, maximum uptime and the lowest total cost of ownership



We're proud to introduce the newest addition to the Trane® centrifugal chiller product portfolio: the Trane Series L™ CenTraVac™ chiller.

Trane understands that industrial processes and data center equipment have unique cooling requirements, which is why we developed the Trane® Series L™ CenTraVac™ chiller. It's uniquely designed to efficiently meet your elevated-temperature cooling needs and continues the Trane commitment to provide the right technology for the right application at the right time — a commitment that began more than 100 years ago.

Industry-leading efficiencies for your crucial cooling needs

Many types of industrial processes and data center equipment depend on elevated-temperature cooling. To meet the specific needs of elevated chilled-water temperature applications, Trane optimized the Series L chiller's compressor technology to deliver water cooled to 60°F – 70°F with up to 35 percent better efficiency.

For efficient, reliable elevatedtemperature cooling, you can count on the Trane Series L CenTraVac chiller.

Reliability you can count on

You can be confident that your Series L chiller is designed, manufactured and proven to provide exceptional reliability. Through simplicity in design, Trane centrifugal compressors achieve the industry's highest reliability rating: 99.7 percent. And, like every other Trane CenTraVac chiller, each Series L chiller is custom built, following rigorous quality-control procedures. Before shipping, we extensively test each chiller — a process you are invited to personally witness at our La Crosse, Wis., manufacturing facility. For added peace of mind, Series L chillers are available with an industry-leading 10-year parts, labor and refrigerant warranty — 100 percent backed and fulfilled by Trane.



Designed, engineered and built to last

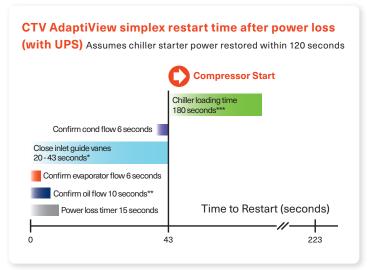
- Direct drive with a robust two-bearing design for better reliability with fewer moving parts.
- Semi-hermetically sealed motor operates in a clean and cool environment and eliminates the need for shaft seals.
- Tracer AdaptiView[™] controls keep the chiller operating under even the most challenging conditions.

Up and running: Integrated rapid restart capabilities help your equipment keep its cool

A loss of cooling capacity can be costly — which is why Series L chillers are designed to integrate seamlessly with uninterruptible power supplies (UPS) and have the shortest restart times in the industry.

In the event of a power interruption, the chiller defaults to its rapid restart mode, optimizing electrical and mechanical variables, including guide vane position. This not only helps the chiller get back online faster, but it also provides the least amount of load on your building's electrical infrastructure — which can make a big difference if your building has a backup generator.

Even under extreme conditions, CenTraVac chiller restart times have been verified at as few as 43 seconds, as shown in the chart below. Thanks to fast restart times like these, you can substantially minimize the risks of financially devastating damage to assets caused by overheating due to power outages.



*Function of chiller load **Oil pump on UPS ***Estimated time to 80% load

Of course, the truest test of a chiller's restart capabilities is the amount of time it takes to resume full-load cooling — and this is where the Series L chiller really shines. An 80 percent cooling load can be achieved in less than three minutes after power restoration: your assurance that the cooling capacity your equipment depends on is just a few minutes away.

Intelligence and efficiency: Smart solutions for lower energy bills

A chiller's controller is paramount to its ability to maximize efficiency. Trane is committed to continual advancement; our fourth-generation Tracer AdaptiView controls allow the Series L chiller to operate with maximum efficiency under all operating conditions.

With integrated Trane Adaptive Control™ algorithms and an easy-to-use Tracer AdaptiView display, the Series L chiller delivers dependable cooling performance, with minimum energy use and maximum cost savings.

Superior accuracy and reaction times

Tracer AdaptiView controls are our most advanced ever, delivering unprecedented accuracy and the fastest reaction times.



Open-protocol design

This strategy allows the AdaptiView controller to work with any building automation system without the need for gateways (BACnet®, Modbus RTU or LonTalk®).

Industry-leading control enhancements

Feed-forward controls, an enhanced flow management package, integrated communication with our Adaptive Frequency™ drive system and an enhanced variable primary flow management algorithm all contribute to more efficient and reliable operation.

Trane CenTraVac chillers:

A strong legacy of industry-leading environmental design

Trane® Series L™ CenTraVac™ chillers continue a long legacy of innovative environmental design that's built into every Trane CenTraVac chiller. The highest efficiency, lowest documented leak rate and low-pressure design deliver the best performance with the lowest environmental impact in the industry—and result in a chiller design that has been recognized by the U.S. Environmental Protection Agency three times, including a "Best of the Best" award in 2007.







1998 EPA Climate Protection Award



1992 EPA Stratospheric Ozone Protection Award

Trane Series L CenTraVac chillers are a building owner's greatest resource in creating personal comfort and ensuring continuous business operations without overburdening our planet's limited resources.

Higher efficiency for lower environmental impact—

The Series L chiller's high energy efficiency means lower energy bills, lower associated greenhouse gas emissions and greater assurance and certainty for building owners to meet increasing public and regulatory demand for greener, more efficient buildings.

Leak-Tight Warranty—A low-pressure design virtually eliminates the possibility of a refrigerant leak into the atmosphere, which is why we confidently back each CenTraVac chiller installed in the United States or Canada with a standard Leak-Tight Warranty, under which Trane will furnish refrigerant to replace any refrigerant lost due to a leak during the customer's first five years of ownership.

Low refrigerant charge—The CenTraVac chiller design uses an advanced refrigerant delivery system that results in a refrigerant charge that's nearly half the amount required by competitive designs, minimizing the manufacturing needs for the refrigerant and the associated environmental impact.

Visit Trane.com/SeriesL to learn more about the Trane Series L CenTraVac chiller.



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*.