

Precision Cooling
For *Business-Critical Continuity™*

Liebert® Challenger™ ITR
In-The-Row Precision Cooling



Liebert Challenger ITR: A Complete Environmental Solution

As the IT world continues to expand its use of rack-based equipment, you are facing an increased demand for cooling solutions designed for row-based installations.

Protect your rack-based IT equipment with a complete environmental solution – Liebert Challenger ITR. The Liebert Challenger ITR (In-The-Row) is an extension of the Liebert Challenger™ 3000 precision environmental cooling system, designed for use between server racks or at the end of a row. It draws hot air in through the extended rear door and supplies chilled conditioned air through a low profile, cold aisle discharge plenum.

Flexibility

Liebert Challenger ITR is designed for flexibility in installation, configuration, operation and maintenance.

- Low profile, cold aisle discharge plenum is easily reconfigured to change supply air direction, and is designed to accommodate overhead IT cabling.
- Adjustable cooling capacity allows you to match the heat load to reduce compressor cycling.
- Split system configurations remove compressor noise from the data center for quieter operation.
- Offers two levels of microprocessor control systems.
- Fits aesthetically in the row – same depth as common server racks (1100mm – 43”).
- Offers a full range of configurations – self-contained or split systems; air, water, glycol, GLYCOOL™ and chilled water cooling.
- Customizable, with two humidifier and four reheat options.
- Provides enhanced temperature control with optional SCR-controlled reheat.

Ideally suited for

- Data centers
- Network closets
- Raised or non-raised floors

Internal baffles direct air into the cold aisle.



Convenient filter access through the hinged rear door.

Higher Availability

The new Liebert Challenger ITR includes the high availability features that data center managers are looking for in today's cooling systems.

- Based on a proven cooling platform – Liebert Challenger 3000.
- Compatible with Liebert remote monitoring and control products.
- Requires only front and rear door access, minimizing the footprint requirements while providing ample room for service..
- Features reliable refrigeration components, such as a scroll compressor and V-Frame evaporator coil, all factory pre-piped, wired, and tested in a rugged, easy-access tubular-steel frame.

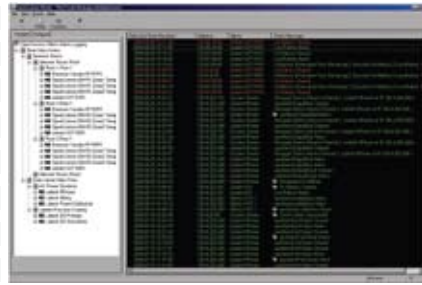
Lowest Total Cost of Ownership

Liebert Challenger ITR addresses ownership costs with better design and operating efficiency.

- Utilizes energy efficient scroll compressor.
- Minimizes short cycling and other wasteful operating patterns with fast response microprocessor controls.
- Energy efficient GLYCOOL configuration utilizes low outdoor temperatures to reduce compressor operation.



■ System data and alarms are viewed on the LCD display of the microprocessor control panel



■ The system may also be monitored remotely with the addition of the Liebert IntelliSlot Web/485 Card with Adapter

Liebert Challenger ITR is a true precision cooling system, supplying the features demanded by electronic equipment in rack applications.

Monitoring	Monitoring and control of system operation are available from the unit-mounted control panel. Remote network-based monitoring and control is available through the optional Liebert IntelliSlot Web/485 Card with Adapter. Compatible with the Liebert family of monitoring products.
Temperature Control	Controls the environment to the requirements of sensitive electronics to prevent damage caused by temperature extremes.
Humidity Control	Rapid response, precise Infrared Humidifier or Steam Generating Humidifier available to control humidity to the levels required by sensitive electronics.
Space Considerations	Accommodates low ceilings and overhead cabling. Same depth as standard racks. Minimal service clearance requirements.
Energy efficiency	Scroll compressor and microprocessor control system work together to operate at maximum efficiency. GLYCOOL option offers reduced compressor operation for colder climates.
Sound	Operates at 85dBA – the quietest operation of any row-based cooling system.
Service/Maintenance	Generous service allowances are built into the cabinet design, speeding service and maintenance. Filter maintenance can be performed by your onsite personnel.
Cooling Method	Available in air, water, glycol, GLYCOOL, and chilled water cooling configurations – install the system that meets your needs.
24x7x365 Operation	Durable components designed for 24/7 operation.



Liebert Challenger ITR can be placed between cabinets in the row, or at the end of a row, on raised or non-raised floors. This flexibility, along with the multiple cooling configurations, allows the system to easily conform to your application.

Ensuring The High Availability Of Mission-Critical Data And Applications.

Technical Specifications	
Input AC Specifications	
Voltage - Phase - Frequency	200 - 3 - 50, 208 - 3 - 60, 230 - 3 - 50 or 60, 380 - 3 - 60, 380/415 - 3 - 50, 460 - 3 - 60, 575 - 3 - 60
General Specifications	
Cooling Types	Air, water, glycol, GLYCOOL, chilled water
Nominal Capacity — kw	23 or 33
Mounting Location	In-The-Row — Floormount
Compressor	
Qty	1
Location	Unit or Heat Rejection
Type	Scroll
# of cooling circuits	1
Refrigerant Type	R22
Physical Data	
Unit Height, inches (mm)	91 (2313)
Unit Width, inches (mm)	32.5 (826)
Unit Depth, inches (mm)	43 (1100)
Unit Footprint, ft² (m²)	9.7 (0.9)
Feature Set	
Blower Type	Centrifugal
Air Distribution Type	Horizontal Flow
Humidifier Type	Infrared, Canister
Reheat Types	2-stage electric, SCR electric, Hot Water, Hot Gas
Control Type	Advanced Microprocessor (AM) or Advanced Microprocessor with Graphics (AG)
Service Access	Front & Rear
Heat Rejection	Condenser, Condensing Unit, Drycooler, Water Tower, CW loop
Agency/Certification/Conformance	
Agency Approval	CSA
Warranty	
Labor Standard	90 days after start-up; 1 year optional
Parts Standard	1 Year
Compressor Standard	1 Year
Unit Standard	1 Year

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