## TRENT

### CHILLERS





HOOK UP &

Capacities available from

#### 2 to 7 tons

2 Stage Capacity Control
Scroll Compressors
Energy Savings Features
Floating Head Pressure Control
Built-in Pump and Check Valve
Controller Pre-Programmed
Low Temperature Kit Included
Swept Fan Blade Design
Variable Speed Fan Motor
Hydrophobic Coated Coil



# YEAR-ROUND OUTDOOR OPERATION

#### TYPICAL APPLICATIONS

Industrial
Injection molding
Food industry
Breweries
Wineries
Motor Control rooms
Small Data rooms
Server closets
Meeting rooms
Laboratories
Clean rooms

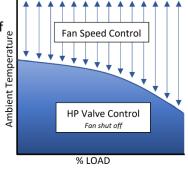


Model	TC024_2	TC036_2	TC048_2	TC060_2	TC084_2
Nom Capacity	2	3	4	5	7
Capacity (Btu/h)	25,300	35,500	48,500	58,000	79,200
Ref Type	R410a	R410a	R410a	R410a	R410a
Fan Blades / qty	24" - 5	24" - 5	24" - 5	24" - 5	24" - 5
Fan speed control	yes	yes	yes	yes	yes
Fan Motor (W)	350	350	350	1050	1050
Cond Coil Coating	yes	yes	yes	yes	yes
Supply / Return (F)	54 / 44	54 / 44	54 / 44	54 / 44	54 / 44
Pump Motor (HP)	0.805	0.805	0.805	0.805	0.805
Flow (gpm) @ 60 ft head	6	8	10	16	18
Supply Line NPT	1"	1"	1"	1"	1"
Return Line NPT	1"	1"	1"	1"	1"
Length (in)	34.5	34.5	34.5	34.5	34.5
Width (in)	34.25	34.25	34.25	34.25	34.25
Height (in)	32.5	32.5	32.5	32.5	32.5
Height + Fan (in)	37.25	37.25	37.25	37.25	37.25

#### **Head Pressure Control**

High/Med Amb temp – Fan speed control Low Amb temp – Valve control: Fan turned off



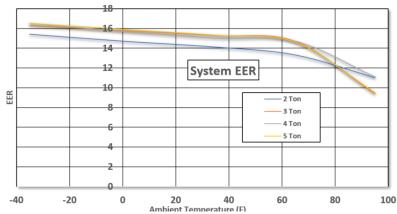


#### **Hydrophobic Coating**

Effectively inhibits dust & bacterial accumulation

#### **Large Capacity Coil**

7mm tubes makes for a very effective ref charge and coil





#### **Trent Chiller**

The Trent Chiller is a compact packaged chiller complete with standard features typically found only in larger capacity chillers.

The design is a self-contained single circuit two-stage capacity with head pressure control. Effective system control for both high temperature summer conditions and low temperature winter days.

The unit is built complete with centrifugal circulating pump with built-in flow switch and check valve.

Installation is simple, just hook up the power and piping, then start up the unit. All Chillers are run tested before leaving the factory.



#### **Water Side**

The water side is complete with a twostage stainless centrifugal pump, brazed plate HX, check valve, flow switch, entering and leaving temp sensors.



#### **Electrical Controls and Safeties**

The Trent Chiller is fully wired, programed and functional.
There a number of built-in controls and fault monitoring:

High and low pressure switches, flow switch, off set start up delay, phase monitoring, fused contactor, short cycling, low voltage, freeze stat, minimum run times, etc.





#### **Alarm Log**

The alarm log for the power and short cycling alarms are available through the Fault Finder software, showing time/date, sequence, quantity. A separate connector kit is sold separately.

#### **Power Supply**

The Trent Chiller is available in 4 different power supply options

Model	Nom Cap	208/1/60 230/1/60	208/3/60 230/3/60	460/3/60	575/3/60
TC024_2	2	•	•	•	•
TC036_2	3	•	•	•	•
TC048_2	4	•	•	•	•
TC060_2	5		•	•	•
TC090_2	7		•	•	•

#### **Configurations**

Order the chiller as needed from basic to full options.

Options	Description	
Base Configuration	Two-stage scroll compressor, Hydrophobic Coating on Condenser, Swept blade, fixed speed fan, HP and low pressure switches, Freeze stat, min run timer, controller, flow switch, low voltage sensor, phase loss sensor.	
Pump Kit	Centrifugal pump 60 ft head available	
Modulating head press	Variable speed fan and speed controller	
Low Temp Kit	Kit HPC Valve, Receiver, check valve	



## FEATURES & BENEFITS

#### 2 Stage

Increases the continuous run time of the compressor which in turn increases the life expectancy. Also, the two-stage system runs at substantially more efficient conditions.

#### **Floating Head Pressure Control**

Head pressure is lowered to optimal conditions to increase the EER. Hottest summer days, coldest winter days or shoulder seasons.

#### **Centrifugal Pump / Flow Switch**

Two stage stainless steel impeller centrifugal pump, check valve and flow switch ensures proper flow for the evaporator.

#### **Variable Speed Fan Motor**

Variable speed external rotor motor ball bearing design allows for long life and substantial energy reduction.

#### **Swept Fan Blade Design**

High energy efficiency blade design allows for a quiet operating sound as well as extended fatigue life.

#### **Head Pressure Control Valve**

When the ambient conditions get very cold it will ensure the compressor is still running within the operating envelope.

#### **Vertical Discharge**

Allows multiple units to be located next to each other without cross-contaminating hot discharge air.

#### **Hydrophobic Coated Coil**

7mm coil tube combined with Hydrophobic coating makes the condenser coil very effective and suitable for adverse installation conditions.

#### **Suction Accumulator**

Used to eliminate the chance of slugging the compressor during fringe operating conditions.

#### Filter/Drier

Built-in, ensures refrigerant is continuously filtered and any moisture is captured to keep it fresh.

#### **Cabinet**

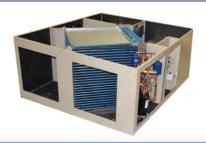
Rugged 12 GA base completes the powder coated cabinet. Large service access doors.

#### **Other Products**

## **U**TRANSOM

#### TRENT CHILLER

- Capacities available from 2 to 7 ton
- Year-round operation
- · Floating head pressure control
- 2 Stage scroll compressors
- Energy savings features
- Low temperature kit included
- Brazed Plate HX
- Built-in centrifugal pump
- Flow switch
- Swept fan blade design
- Variable speed fan



#### **TOPAZ MHP**

- Heat Recovery and Heat Pump unit
- 500- 3200 CFM
- Flat Plate HX recovers most of the heat
- Heat Pump generates higher heat
- EC backwards curved blowers
- Tube and fin heat pump coils
- Defrost accessories
- Indoor and Outdoor model



#### SIMCOE ASHP

CO2 High Temp Air Sourced Heat Pump

- Capacities up to 600 MBH
- 190F Leaving Water Temp
- Operating range -20 to 120 F
- Variable capacity
- · Potable water to boiler
- Modular configuration
- Back up elec heater
- Integral Pump
- Reversing
- High static blower option



#### **LAMBERT CHILLER**

Capacities available in

#### 20 to 80 ton

- Up to 12 modules
- Redundancy N+1, N+2
- Capacity control
- High turn down
- Brazed plate heat exch.
- Water cooled
- Pre-made modular header
- Scroll compressors, dual circuit
- Smallest footprint



#### **SEVERN WSHP**

High Temp Water Sourced Heat Pump

- Capacities up to 1100 MBH
- 180F Leaving Water Temp
- Operating range 30 to 110 F
- Cascade system
- Staged capacity
- Potable water or boiler
- Modular configuration
- Reversing
- Front serviceable



#### **RAWSON CHILLER**

- Capacities available from 10 to 80 ton
- · Year-round operation
- · 2 Stage control
- · Energy saving features
- Low temperature kit included
- Brazed Plate HX
- Built-in centrifugal pump
- Flow switch
- Swept fan blade design



#### **HATCH ASHP**

High Temp Air Sourced Heat Pump

- Capacities up to 300 MBH
- 140F Leaving Water Temp
- Operating range -20 to 110 F
- Variable capacity
- Potable water to boiler
- Modular configuration
- Back up elec heater
- Integral Pump
- Reversing
- High static blower option

