

LOW TEMPERATURE WATER-COOLED CHILLERS

Low Temperature Water-Cooled Chillers are designed for processes requiring a cooling capacity to -40°F (-80°F upon request) and a capacity of 558 tons.

The Low Temperature Water-Cooled Chiller is shipped completely wired, piped, tested and ready to install and contains a semi-hermetic screw compressor with features as:

- Automatic capacity control via a Modulating Unloading Valve which decreases energy consumption
- Three moving parts (two rotor assemblies and the capacity controlling slide valve)
- Ability to ingest amounts of liquid refrigerant which leads to resistance of liquid slugging
- Compressor Accelerated Life Test
- Precise Rotor Tip Clearance reduces the leakage between high and low pressure cavities during compression Pump motor solid state overload protection
- Superior part-load performance
- PID chilled water set-point through Slive Valve Modulation
- Step capacity control

The Low-Temperature Water-Cooled Outdoor Chillers feature:

- Heavy-duty structural steel frame
- Welded and flanged construction
- A.S.M.E coded, shell & tube style evaporator
- A.S.M.E coded steel shell/copper tube style condenser
- Pressure relief valve
- R407C Refrigerant
- Replaceable core-type filter/drier
- Suction, discharge, oil pressure gauges/ isolation valves per refrigerant circuit compressor
- Carbon steel reservoir
- Close coupled, cast iron chiller and process pump, TEFC motor
- NEMA 12 enclosure
- Digital PLC Control & Display

The Low Temperature Water-Cooled Chiller delivers optimum chiller performance and is engineered, designed and manufactured to meet your exact specifications. With a cooling capacity of -40°F (-80° upon request) our low temperature chillers feature top-quality non-proprietary parts and are factory tested prior to shipment.

Other features of the Low-Temperature Water-Cooled chillers include:

- Temperatures to -80°F (upon request)
- Heavy duty structural steel frame
- Schedule 40CS pipe
- Welded and flanged construction
- Hanbell semihermetic helical screw compressor
- Electronic modulating HGBP valve capacity control
- A.S.M.E. coded, shell & tube style evaporator
- A.S.M.E. coded steel shell copper tube type condenser with pressure relief valve
- Suction, discharge, oil pressure gauges/isolation valves per compressor
- Sight glass moisture indicator
- Replaceable core-type filter/drier
- Oil cooler
- Economizer
- Cylindrical sealed reservoir with carbon steel flanges
- Nitrogen blanket controls
- Close coupled, cast iron chiller pump with TEFC motor
- Close coupled, cast iron process pump with TEFC motor
- Pump service valve
- Discharge pressure transducer
- UL 508 panel
- NEMA 12 enclosure for safety controls/contactors
- Non-fused disconnect (lockable)
- High and low pressure safety controls
- 24 VDC control
- Phase monitor
- Digital PLC Control & Display

Budzar Industries also designs and manufactures specialized equipment for non-standard applications. Our engineers have extensive experience in process chilling and heating applications for such industries as: chemical, defense, energy, extraction, food, medical, pharmaceutical, plastics, rubber, tire and semiconductor. We take the time to understand your current and future needs and design solutions targeting high quality and fast payback.

PROGRAMMABLE LOGIC CONTROLLER PROVIDES:

PROGRAMMABILITY

- Software may be customized, transferred from a personal computer and updated via programming key

DISPLAYED INSTRUMENTATION INFORMATION

- Pump discharge pressure and flow
- Compressor suction pressure, temperature and superheat
- Liquid refrigerant temperature and sub-cooling
- Evaporator inlet and outlet temperature
- Compressor pump status

CONTROLLER FUNCTIONS

- Selectable controlled parameter (supply or return temperature)

HIGH TECHNOLOGY

- All alarm situation, values of the monitored parameters and the status of the controlled devices are saved for service/maintenance review
- Troubleshooting information is displayed when circumstances require assistance
- The controller identifies marginal operating conditions and adjusts chiller operation



Refer to www.Budzar.com for ISO Certificate with specific details.



LOW TEMPERATURE WATER-COOLED CHILLERS

OPTIONS AVAILABLE

- Dual refrigeration circuit
- Remote Alarm
- Side Screens
- Tank by Number of Gallons
- Packaged Systems with integrated tank and pumps(s) for a complete chiller plant

| 507R • 10°F Superheat • 85°F Condenser Water • Economized | | | | | | | | | | | | | | |
|---|------------|-----|------------------------|-------|----------------|------------------------|-------|----------------|-------------------------|------|----------------|-------------------------|------|----------------|
| Model | Compressor | | 10°F (-12°C) Fluid Out | | | -10°F (-23C) Fluid Out | | | -30°F (-34°C) Fluid Out | | | -50°F (-45°C) Fluid Out | | |
| | HP | GPM | BTUH | Tons | Cond Water GPM | BTUH | Tons | Cond Water GPM | BTUH | Tons | Cond Water GPM | BTUH | Tons | Cond Water GPM |
| LTW-40 | 60 | 45 | 352010 | 29 | 47 | 257940 | 21.5 | 40.0 | 179793 | 15.0 | 32.0 | 106127 | 8.8 | 23.0 |
| LTW-50 | 70 | 50 | 405531 | 33.8 | 65 | 297980 | 24.8 | 53.0 | 208439 | 17.4 | 41.0 | 123832 | 10.3 | 28.0 |
| LTW-60 | 80 | 60 | 458640 | 38 | 93 | 337060 | 28.1 | 50.0 | 235971 | 19.7 | 52.0 | 140690 | 11.7 | 33.0 |
| LTW-80 | 90 | 80 | 505810 | 42.2 | 75 | 371461 | 31.0 | 62.0 | 259887 | 21.7 | 49.0 | 154621 | 12.9 | 26.0 |
| LTW-100 | 100 | 100 | 615342 | 51 | 121 | 452008 | 37.7 | 92.0 | 316388 | 26.4 | 70.0 | 188625 | 15.7 | 45.0 |
| LTW-125 | 125 | 125 | 670715 | 56.7 | 124 | 564575 | 47.0 | 84.0 | 396862 | 33.1 | 70.0 | 246612 | 20.5 | 53.0 |
| LTW-150 | 160 | 150 | 935535 | 78 | 178 | 672818 | 56.1 | 116.0 | 475926 | 39.7 | 92.0 | 292833 | 24.4 | 66.0 |
| LTW-200 | 200 | 200 | 1240684 | 102.6 | 241 | 904016 | 75.3 | 184.0 | 632776 | 52.7 | 140.0 | 377250 | 31.4 | 90.0 |
| LTW-250 | 250 | 250 | 1361430 | 114 | 250 | 1129150 | 94.1 | 167.0 | 793724 | 66.1 | 140.0 | 492824 | 41.1 | 105.0 |
| LTW-300 | 320 | 300 | 1867070 | 155.6 | 360 | 1345636 | 112.1 | 235.0 | 951852 | 79.3 | 185.0 | 585666 | 48.8 | 135.0 |

UNITS AVAILABLE FROM BUDZAR INDUSTRIES



Stationary Hot Oil



High Volume Hot Water



Tower & Tank Sets



Biowaste Decontamination Systems



Ammonia Chiller



Propane Chiller



Low Temperature Process Chillers to -85°C



Clean Steam Sampling Cart



Standard and Custom Temperature Control Modules



Cold Storage Room



CIP Systems



Reactor Temperature Control Systems from -85°C to +200°C