

LOW TEMPERATURE OUTDOOR AIR-COOLED CHILLERS

Low Temperature Outdoor Air-Cooled Chillers are designed for processes requiring a cooling capacity to -40°F.

The Low Temperature Air-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
- Ability to ingest amounts of liquid refrigerant which leads to resistance of liquid slugging
- 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 Slide Valve Modulation
- Maintain chiller water supply within $\pm 1/2$ °F of set-point
- Step capacity control

The Low-Temperature Air-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 Air-Cooled Chiller delivers optimum chiller performance and relies on ambient air to deliver accurate temperature control. 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 Air-Cooled chillers include:

- Temperatures to -80°F (upon request)
- Heavy duty structural channel frame rails
- Welded and flanged construction
- Electronic modulating HGBP valve
- Suction, discharge, oil pressure gauges
- Sight glass moisture indicator
- Replaceable core-type filter/drier
- Cylindrical sealed reservoir with carbon steel flanges
- 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)
- Head pressure control via fan motor cyclone (air-cooled units)

HIGH TECHNOLOGY

- All alarm situation, values of the monitor 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 AIR-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 • 95°F Ambient Air • Economized										
Model	Compressor		-6.7°C (20°F) Fluid Out 40% EG/Water		-17.8°C (0°F) Fluid Out 50% EG/Water		-28.9°C (-22°F) Fluid Out 60% EG/Water		-40°C (-40°F) Fluid Out PSF10cST	
	HP	GPM	Tons	BTUH	Tons	BTUH	Tons	BTUH	Tons	BTUH
LTA-40	60	45	36.5	437691	27.3	327482	17.9	235874	12.6	150811
LTA-50	70	50	42.8	513098	32.1	384964	23.1	276948	14.8	177419
LTA-60	80	60	48.1	577114	36.1	433037	26.0	311609	16.8	201011
LTA-80	90	80	52.8	633894	39.6	475179	28.5	341595	18.3	219855
LTA-100	100	100	65.1	781383	48.8	586163	35.0	419848	22.5	269439
LTA-125	125	125	69.8	837156	62.8	753668	44.7	535966	28.8	346116
LTA-150	160	150	97.3	116175	71.8	861933	62.3	627680	34.0	408038
LTA-200	200	200	130.2	1562766	97.7	1172326	70.0	839686	44.9	538878
LTA-250	250	250	139.5	1674312	125.6	1507336	89.3	1071932	57.7	692232
LTA-300	320	300	194.7	2336350	143.7	1723866	104.6	1255360	68.0	816076

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