SELF-CONTAINED INDOOR WATER-COOLED CHILLERS

Self-Contained Indoor Water-Cooled Chillers (WP Series) with capacities from 10 to 40 nominal tons requiring fluid temperatures from +20°F to +60°F are designed to deliver accurate, reliable and efficient process cooling for a variety of industries including chemical, energy, medical, pharmaceutical, plastic, rubber and tire.

The Self-Contained Indoor Water-Cooled Chiller is shipped completely wired, piped, tested and ready to install and features:

- Copeland high efficiency "Discus" Semi-Hermetic Compressor
- Cylinder unloading and Hot-gas bypass capacity control
- ASME Coded Steel-shell and copper-tube evaporator heat exchanger
- ASME Coded Steel-shell and copper-tube condenser with removable heads
- Condenser water regulating valve
- Automatic Recycling Pumpdown
- Sentronic oil pressure safety control
- Mild steel divided tank reservoir with external insulation and internal epoxy coating
- Liquid-level sightglass
- Automatic water make-up solenoid valve with float switch and shut-off valve
- NEMA 1 rated electrical enclosure
- Control circuit step-down transformer
- Easily adjutable solid state construction temperature controller
- Allen Bradley motor starter(s)/contactors with manual reset
- High pressure refrigeration safety control
- Unit indicator lights for "at a glance" monitoring ease; ("Run" & "Failed" annuncuation lights) and operating switches mounted in the enlosure door
- Low-Pressure Freezestat with manual reset (shuts unit down below a certain setpoint to prevent freeze damage)
- Flowswitch (shuts unit down when flow through the evaporator is lost)

The Self-Contained Indoor Water-Cooled Chillers (WP Series) are built for top performance and engineered for bottom line control.

The WP Series chillers with a Programmable Logic Controller (PLC) incorporates the chiller unit and a pumping reservoir into a common industrial-duty skidded package.

The water pumping reservoir greatly stabilizes the supply water temperatures, which is integral to the chiller. The reservoir "buffers" the return water temperature variations possibly caused by cyclical loads.

The water pumping reservoir features two (2) recirculation pumps. The first pump, dedicated to water supply to the chiller evaporator, ensures a proper flow-through the chiller regardless of flow conditions. The second pump is a "high-flow" that pumps at twice the rate of the chiller supply pump. The "high-flow" pump minimizes temperature gradients across the process and increases product consistency and quality.

Supply fluid temperature stability is increased wtih a liberally sized, insulated, and an internally epoxy coated fluid reservoir.

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 rfrigerant 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 cyclune (air-cooled units)

HIGH TECHNOLOGY
- All alarm situation, values of the monitore 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

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BUDZAR INDUSTRIES, LLC.

ENGINEERING PRECISION

SELF CONTAINED WATER-COOLED INDOOR CHILLERS

OPTIONS AVAILABLE

- •TEFC Motor
- •NEMA 4
- Process Water Bypass Valve
- •Single Pump Design
- •Dual Pump Design

Model		WP-1110	WP-1515	WP-1620	SP-2430	WP-3640
Capacity @ 50° LWT	Tons	11.0	16.5	22.0	33.0	44.0
Scroll Compressor	HP	10	15	20	30 (15 ea)	44 (4 at 10 ho)
Chiller Flow @	GPM/PSI	24/25	40/25	52/25	79/35	105/25
Chiller Pump	HP	1.0	1.5	1.5	2.0	3.0
Process Flow	GPM/PSI	24/50	40/50	70/58	79/50	154/53
Process Pump	HP	3.0	5.0	5.0	7.5	7.5
Connections (NPT)						
Supply	Inches	1.5	2.0	2.0	2.5	3.0
Return	Inches	1.5	2.0	2.0	2.5	3.0
Condenser (85°F Tower Water)	GPM	30	48	52	75	105
Connections (NPT)	Inches	1.3	1.5	1.5	2.0	2.5
Nameplate Amps @ 460/3/60		29	39	44	61	86
Total Power Input	kW	15	19	20	32	43
Unit Efficiency (EER)	BTU/WATT	8.56	9.26	9.97	9.49	10.13
Holding Tank size	GALLONS	150.0	150.0	150.0	220.0	350.0
Operating Weight (Approx)	LBS	3,400	3,600	3,750	4,600	6,750
Dimension						
Length	Inches	92.0	92.0	92.0	92.0	115.0
Width	Inches	38.0	38.0	38.0	50.0	50.0
Height	Inches	73.0	73.0	73.0	73.0	73.0
Shipping Weight	LBS	2,600	2,800	2,850	3,100	3,850

All data based upon standard rating condtion of cooling water from 60°F to 50°F with 85°F @ 85°F condenser entering water with a 10°F rise.

Increase capacity 10% for water cooled

Budzar Industries reserves the right to discontinue or change specificaitons without notice, consistent with sound engineering practice and current industrial standards.

UNITS AVAILABLE FROM BUDZAR INDUSTRIES

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

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