

PRODUCT DATA SHEET

Model: **PZWT21D**
*Packaged Water-Cooled
21 Ton Chiller*



Legacy Chillers, Inc.
851 Tech Drive
Telford, PA 18969
Toll-Free: (877) 988-5464

**R454A
Refrigerant**

STANDARD ON ALL LEGACY CHILLER MODELS:
Pentra Microsmart, Programmable Logic Controller (PLC)
with HMI Touch Screen Display.

with Stainless Steel Tank



Front View



Back/Side
View

Standard Features:

- Conforms to UL 60335-2-40:2022 Ed.4
UL 60335-1:2016 Ed.6
- CSA C22.2 # 60335-1:2016 Ed.2
- CSA C22.2 # 60335-2-40:2022 Ed.4
- Single Point Power Connection
- Pentra Microsmart, Programmable Logic Controller (PLC) with easy to use HMI touch screen display
- STAINLESS STEEL, brazed plate evaporator
- Scroll compressor with crankcase heater
- Suction Accumulator
- Liquid line drier, sight glass, solenoid
- Electronic expansion valve
- Manual high pressure cutout
- Water flow switch
- Hot Gas Bypass Capacity Control
- 24V control transformer
- Control circuit fusing
- Condenser(s): Coaxial up to PZWT21D
- Condenser(s): Shell and Tube on models larger than 21 ton
- Compressor motor contactor
- Painted - Powder Coated (Most Models), galvanized sheet metal cabinet
- 1/2" insulation on all water and refrigerant lines
- Complete refrigerant charge from factory
- Factory Performance Test prior to shipment



Options:

- VFD Compressor Control
- Copeland Digital Scroll Compressor
- Remote Idec touchscreen control panel
- 5 Port Ethernet Switch
- BacNet Gateway
- Process Pump VFD Controller
- 4 year extended compressor warranty
- Casters (factory mounted)
- Condenser water regulating valve
- 115 volt (rain tight) service outlet
- Non Fused Disconnect
- Phase Monitor, line voltage monitor offering protection against phase loss/reversal, unbalance and hi/lo voltage
- Compressor fusing
- Compressor Sound Cover
- Factory installed evaporator heat tape freeze protection
- Low flow by-pass valve
- Fused, STAINLESS STEEL process pump
- Dual system pump with manual changeover (some models)
- Dual system pump with auto changeover (some models)
- Pump suction isolation valve
- Water pressure gauge set
- Water Flow Meter
- Auto city water changeover panel with filter
- Tank City Water Makeup
- Stainless steel, SCH80 PVC or Polypropylene piping for deionized and reverse osmosis water systems
- Door Mounted HMI weather proof cover

Tank

- STAINLESS STEEL storage tank with 1/2 inch insulation
- Fused, STAINLESS STEEL re-circulation pump for tank operation with ball valve and cleanable strainer
- Tank pressure relief valve, vent and drain hose bibs

Tank Options

- Storage tank sight glass
- Tank low liquid level indicator with dry contacts

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Dimensional & Electrical Table (Dual Circuit)

Chiller Model	Nominal BTUH	Length Inches	Width Inches	Height Inches	Power			Compressor Qty.	RLA ea.	LRA ea.	Recirculation Pump FLA	MCA	MOP	Reservoir Gal.	Chiller Fluid Conn	Weight Pounds
					Voltage	Phase	Freq.									
PZWT21DF7					208/230	3	60		38.6	239	4.66	92	125			
PZWT21DH7	240000	85	34	70	460	3	60	2	18.6	125	2.11	44	60	120	1.5 "FPT	1450
PZWT21DI7					575	3	60		13.1	80	1.69	31	40			

Capacity Table (Refrigerant R454A)

Model	COMPRESSOR	COND(°F)	105		
		LWT (°F)	TONS	KW	EER
21D	YB68KAE	42	18.8	18.5	12.2
		44	19.6	18.5	12.7
		45	20.0	18.6	12.9
		50	21.3	18.7	13.7

- Capacities on this chart are based on refrigerant R454A. Lower leaving water or low ambient can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
- KW input is for compressor(s) only.
- EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor (s), condenser fan motor (s) and control power.



Product Dimensional Drawing

**R454A
 Refrigerant**

