

PRODUCT DATA SHEET

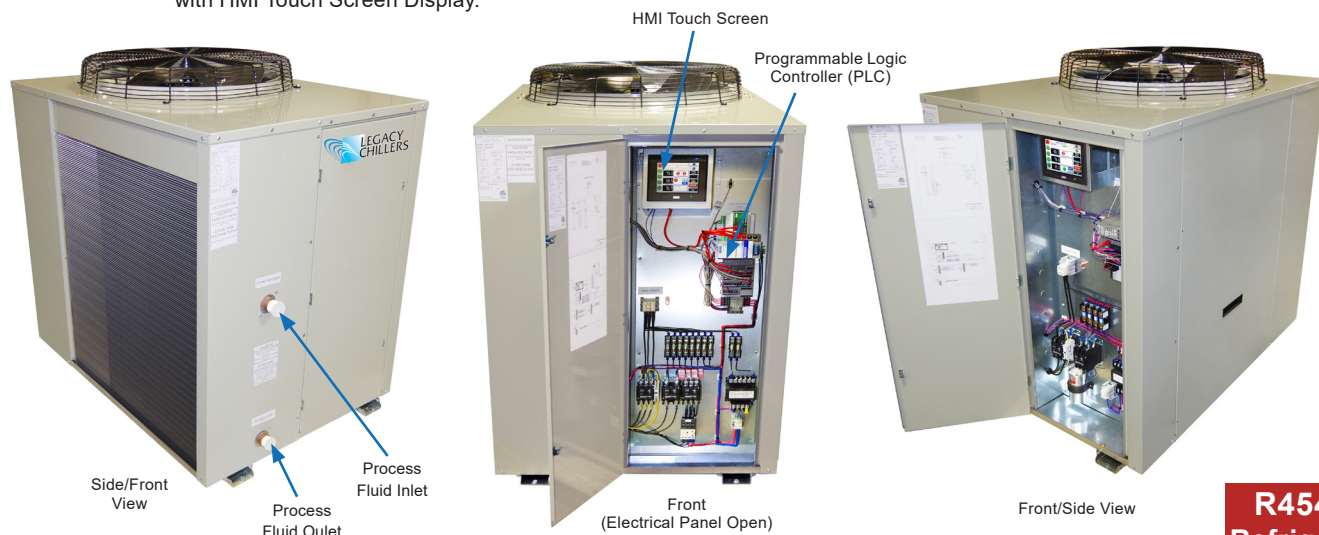
Model: **PZA4.5S**
*Packaged Air-Cooled
4.5 Ton Chiller*



Legacy Chillers, Inc.
851 Tech Drive
Telford, PA 18969

Toll-Free: (877) 988-5464

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



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 22.2 # 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 by-pass capacity control**
- **24V control transformer**
- Direct drive condenser fan motor
- Rust resistant, high CFM, aluminum condenser fan blade
- Condenser(s): copper tube/aluminum fin
- Compressor motor contactor
- Condenser motor and control circuit fusing
- **Painted (Powder Coated), galvanized sheet metal cabinet**
- 1/2" insulation on all water and Low pressure refrigerant lines
- Complete refrigerant charge from factory
- **Factory Performance Test prior to shipment**



Options:

- **VFD Compressor Control (Hot Gas Bypass Removed)**
- **Copeland Digital Scroll Compressor (Hot Gas Bypass Removed)**
- **Remote Idec touchscreen control panel**
- **5 Port Ethernet Switch**
- **BacNet Gateway**
- **STAINLESS STEEL Process Pump**
- **Process Pump VFD Controller**
- 4 year extended compressor warranty
- Casters (factory mounted)
- 115 volt (rain tight) service outlet
- Non Fused Disconnect
- Phase/voltage monitor
- Compressor fusing
- Compressor Sound Cover
- Flooded cond. w/receiver/head pressure control (0°F)
- Flooded cond. w/**Heated** receiver/head pressure control (-20°F)
- Pump suction isolation valve(s)
- Water pressure gauge set
- Copper finned condenser coil (coastal protection)
- Coastal powder coat paint protection
- E-Coat Condenser Coil (coastal protection)
- Water Flow Meter
- Auto city water changeover panel with filter
- Stainless steel, SCH80 PVC or Polypropylene piping for deionize and reverse osmosis water systems
- Door Mounted HMI weather proof cover

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Packaged Air-Cooled
4.5 Ton Chiller



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Dimensional & Electrical Table (Single Circuit)

| Chiller Model | Nominal BTUH | Length Inches | Width Inches | Height Inches | Power | | | Compressor Qty. | RLA ea. | LRA ea. | Fan Motor | | MCA | MOP | Chiller Fluid Conn. | Weight Pounds |
|---------------|--------------|---------------|--------------|---------------|---------|-------|-------|-----------------|---------|---------|-----------|---------|-----|-----|---------------------|---------------|
| | | | | | Voltage | Phase | Freq. | | | | Qty. | FLA ea. | | | | |
| PZA4.5SE8 | 51700 | 46 | 34 | 48 | 208/230 | 1 | 60 | 1 | 27.9 | 175 | 1 | 3.8 | 39 | 60 | 1 "FPT | 490 |
| PZA4.5SF8 | | | | | 208/230 | 3 | 60 | | 19.9 | 128 | | 3.8 | 29 | 45 | | |
| PZA4.5SH8 | | | | | 460 | 3 | 60 | | 8.7 | 63 | | 1.5 | 12 | 20 | | |
| PZA4.5S18 | | | | | 575 | 3 | 60 | | 6.4 | 50 | | 1.72 | 10 | 15 | | |

Capacity Table (Refrigerant R454C)

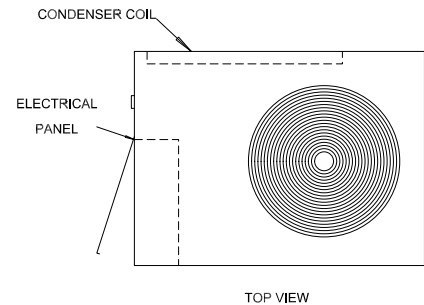
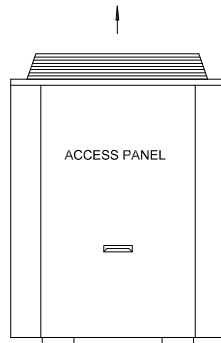
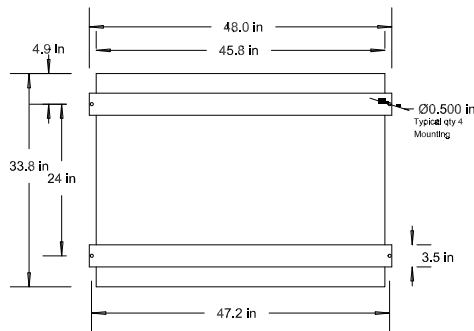
| Model | COMPRESSOR | AMB (°F) | 80 | | | 90 | | | 95 | | | 100 | | | 105 | | |
|-------|------------|----------|----------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|
| | | | LWT (°F) | TONS | KW | EER | TONS | KW | EER | TONS | KW | EER | TONS | KW | EER | TONS | KW |
| 4.5S | YB34KAE | 42 | 4.4 | 4.2 | 12.8 | 4.2 | 4.6 | 11.0 | 4.1 | 4.8 | 10.2 | 3.9 | 5.0 | 9.4 | 3.8 | 5.2 | 8.6 |
| | | 44 | 4.6 | 4.2 | 13.3 | 4.4 | 4.6 | 11.4 | 4.2 | 4.8 | 10.6 | 4.1 | 5.0 | 9.8 | 3.9 | 5.2 | 9.0 |
| | | 45 | 4.7 | 4.2 | 13.6 | 4.5 | 4.6 | 11.7 | 4.3 | 4.8 | 10.8 | 4.2 | 5.0 | 10.0 | 4.0 | 5.3 | 9.2 |
| | | 50 | 5.2 | 4.2 | 15.0 | 4.9 | 4.6 | 12.9 | 4.8 | 4.8 | 11.9 | 4.6 | 5.0 | 11.0 | 4.5 | 5.3 | 10.1 |

- Capacities on this chart are based on refrigerant R454C. 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.

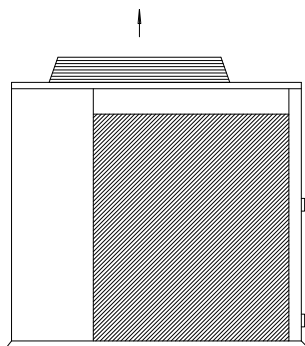


Product Dimensional Drawing

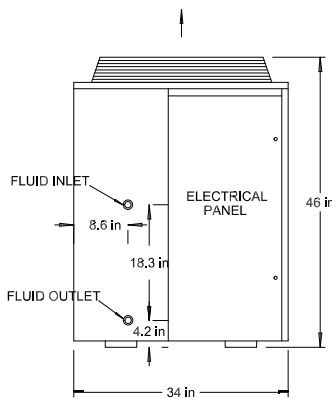
R454C
Refrigerant



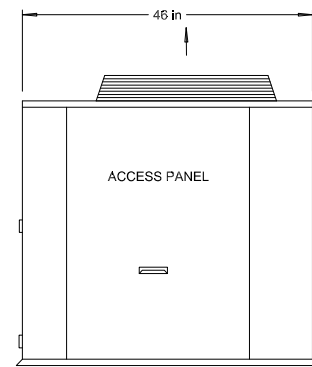
BACK VIEW



LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW