

# PRODUCT DATA SHEET

Model: **PZA52D**  
*Packaged Air-Cooled  
52 Ton Chiller*



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



Access Door

## STANDARD ON ALL LEGACY CHILLER MODELS:

Pentra Microsmart, Programmable Logic Controller  
(PLC) with HMI Touch Screen Display.  
(Located inside front electrical cabinet)



Access Door

Electrical Cabinet

Access Door

## Standard Features:

- ETL listed to UL1995 & CAN/CSA C22.2 No. 236-11, 4th edition, 10/14/2011
- 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
- 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
- 1/2" insulation on all water and Low pressure refrigerant lines
- Liquid line drier, sight glass, solenoid, TXV
- Complete refrigerant charge from factory
- **Factory Performance Test prior to shipment**

## Options:

- Copeland Digital Scroll Compressor (*Hot Gas Bypass Removed*)
- Remote Idec touchscreen control panel
- Industrial VPN Router
- 5 Port Ethernet Switch
- BacNet Gateway
- STAINLESS STEEL Process Pump
- Process Pump VFD Controller
- VFD Compressor Control (*Hot Gas Bypass Removed*)
- 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)
- Dual process pumps with auto changeover
- 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
- Door Mounted HMI with weather proof cover

**Easy to Use  
Touch Screen Display  
on all Legacy Chiller  
Models**



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## Dimensional & Electrical Table (Dual Circuit)

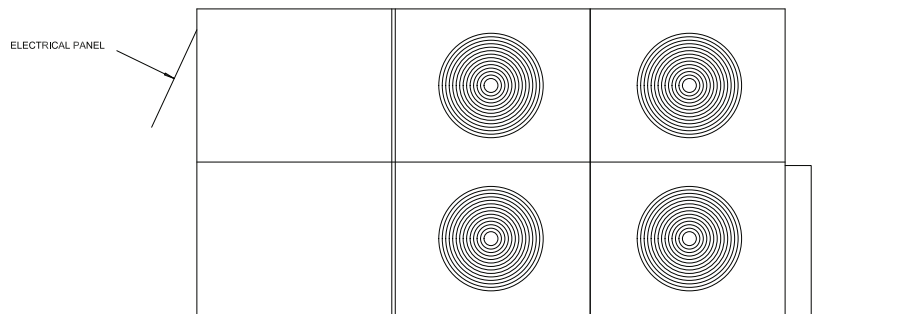
Chiller Models	Length Inches	Width Inches	Height Inches	Power			Compressor		RLA ea.	LRA ea.	Fan Motor		MCA	M.O.P	Chiller Fluid Conn.	Weight Pounds
				Voltage	Phase	Freq.	Qty.	HP			Qty.	FLA.				
PZA52DF5	176.5	88	55	208/230V	3	60Hz	2	30	109	599	4	7	300	350	3" FPT	5200
PZA52DH5				460V	3	60Hz			53.2	310		3.5	150	175		
PZA52DI5				575V	3	60Hz			42.3	239		2.8	110	125		

## Capacity Table (Refrigerant R407C)

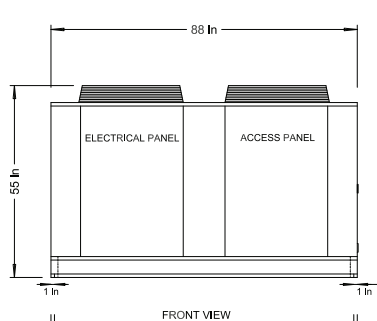
Model	Compressor	LWT °F	80°F			90°F			95°F			100°F			105°F		
			TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
52D	ZR380KCE	20.0	30.8	44.0	9.3	28.3	49.6	7.7	Out of Compressor Range			Out of Compressor Range			Out of Compressor Range		
		25.0	35.3	44.4	10.4	32.5	49.8	8.6	31.2	53.0	7.8	Out of Compressor Range			Out of Compressor Range		
		30.0	40.2	45.0	11.5	37.2	50.4	9.6	35.7	53.2	8.8	34.2	56.4	8.0	Out of Compressor Range		
		35.0	45.3	45.6	12.7	41.2	50.8	10.7	40.5	53.8	9.8	38.8	57.0	8.9	37.2	60.4	8.1
		42.0	53.3	48.4	11.9	49.8	53.2	10.1	48.0	56.1	9.4	46.0	58.8	8.9	44.2	61.5	8.2
		44.0	55.7	49.1	12.1	52.1	54.1	10.3	50.2	56.7	9.6	48.2	59.3	9.0	46.2	62.0	8.4
		45.0	57.0	49.0	12.3	53.3	54.5	10.4	51.3	56.9	9.7	49.3	59.5	9.1	47.3	62.2	8.5
		50.0	63.3	50.5	12.9	59.3	55.5	11.0	57.2	58.4	10.4	55.0	59.9	9.8	52.8	63.4	9.1

- Capacities on this chart are based on refrigerant R407C. 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.

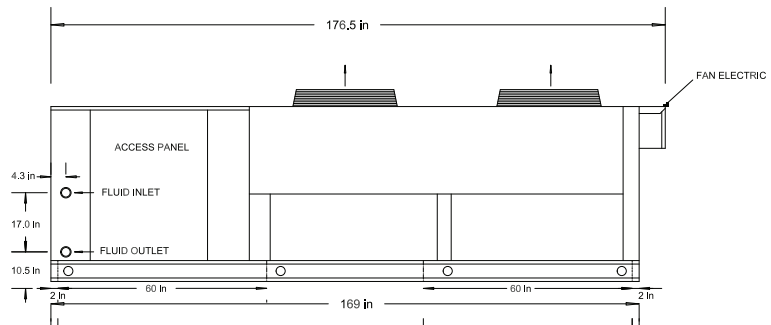
## Product Dimensional Drawing



TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW

Qty 8 Mounting  
 .438 Dia