

PRODUCT DATA SHEET

Model: **PSA33D**

*Packaged Air-Cooled
33 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**
- Data Recording Memory Card
- **STAINLESS STEEL**, brazed plate evaporator
- **SEMI-HEMETIC** compressor with crankcase heater and vibration spring mounting kit
- Compressor discharge and suction pipe vibration eliminators
- Suction Accumulator
- Liquid sight-glass, solenoid, TXV and replaceable core drier
- Water flow switch
- 24V control transformer
- Fan cycle control (+40°F)
- Direct drive condenser fan motor
- Rust resistant, high CFM, aluminum condenser fan blade
- Condenser(s): copper tube/aluminum fin, Floating Tube™
- **5 year condenser warranty against tube sheet leaks**
- Compressor motor contactor
- Individual condenser motor contactors and fusing
- Condenser control panel with factory mounted door interrupt disconnect switch
- Galvanized steel sheet metal cabinet
- 1/2 inch insulation on all water and refrigerant lines
- Operating Refrigerant charge from factory
- **Factory Performance Test prior to shipment**



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

Options:

- **Compressor Cylinder Unloading**
- **Remote Idec touchscreen control panel**
- **Industrial VPN Router**
- **5 Port Ethernet Switch**
- **BacNet Gateway**
- **Process Pump VFD Controller**
- 4 year extended compressor warranty
- 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
- Flooded cond. w/receiver/head pressure control (0°F)
- Heated, flooded cond. w/receiver/head pressure control (-20°F)
- Factory installed evaporator heat tape freeze protection
- Fused, STAINLESS STEEL process pump
- Dual process pump with manual changeover
- Dual process pump with auto changeover
- Pump suction isolation valve
- Water pressure gauge set
- Water Flow Meter
- Copper finned condenser coil (coastal protection)
- BohnGuard™ coated condenser coil (coastal protection)
- Epoxy or Phenolic coated fins (coastal protection)
- Door Mounted HMI with weather proof cover

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Dimensional & Electrical Table (Dual Circuit)

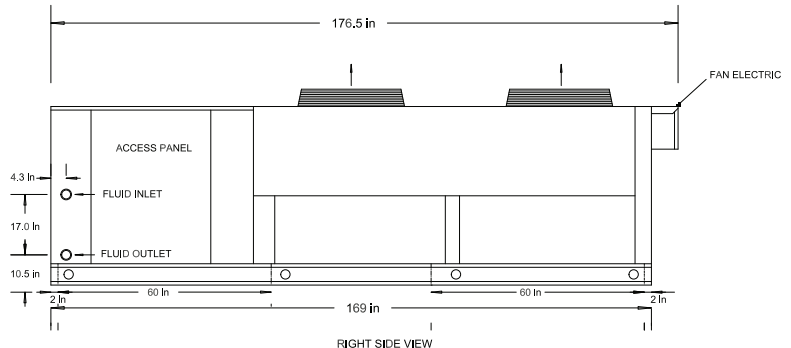
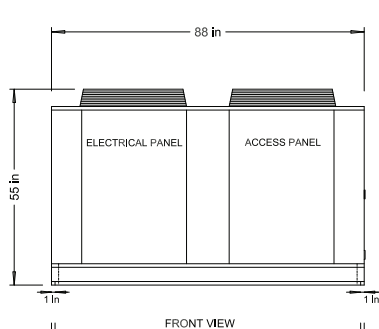
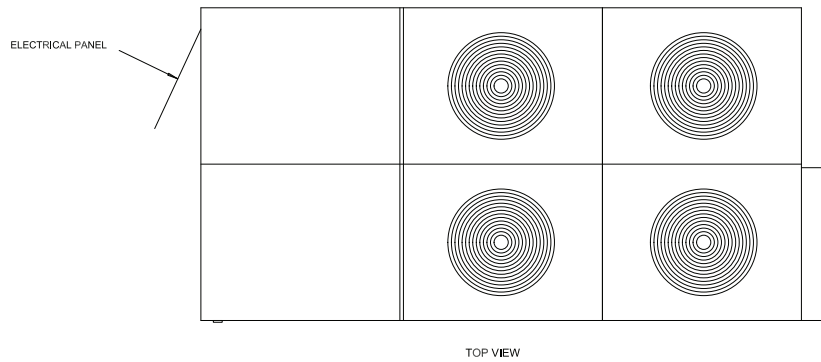
Chiller Models	Length Inches	Width Inches	Height Inches	Power			Compressor		RLA ea.	LRA ea.	Fan Motor		MCA	M.O.P	Chiller Fluid Conn.	Weight Pounds
				Voltage	Phase	Freq.	Qty.	HP			Qty.	FLA.				
PSA33DF5	176.5	88	55	208/230V	3	60Hz	2	17	76.9	374	4	7	225	250	2" FPT	4700
PSA33DH5				460V	3	60Hz			38.5	187		3.5	110	125		
PSA33DI5				575V	3	60Hz			30.1	135		2.8	80	100		

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
33D	4DBNR20ME	42.0	35.7	33.9	10.0	32.5	36.7	8.5	31.0	38.1	7.9	29.5	39.4	7.3	28.1	40.8	6.7
		44.0	37.3	34.2	10.4	34.2	37.2	8.8	32.5	38.6	8.2	31.0	40.0	7.6	29.4	41.4	7.0
		45.0	38.2	34.3	10.6	34.8	37.4	9.0	33.3	38.8	8.3	31.8	40.2	7.7	30.2	41.6	7.1
		50.0	42.7	34.7	11.7	39.2	38.1	9.9	37.5	39.7	9.2	35.7	41.4	8.4	34.0	42.8	7.8

- 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



Qty 8 Mounting
 .438 Dia