

# PRODUCT DATA SHEET

Model: **PZA38M**

*Packaged Air-Cooled  
38 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
- Scroll compressor with crankcase heater
- Suction accumulator
- Water flow switch
- 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
- Galvanized sheet metal cabinet & frame
- Complete refrigerant charge from factory
- **Factory Performance Test prior to shipment**

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



## Options:

- Remote Idec touchscreen control panel
- Industrial VPN Router
- 5 Port Ethernet Switch
- BacNet Gateway
- Process Pump VFD Controller
- VFD Compressor Control on primary compressor
- EC Condenser Fan Motors (micro processor controlled)
- Non Fused Disconnect
- 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
- Hot gas by-pass capacity control
- 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

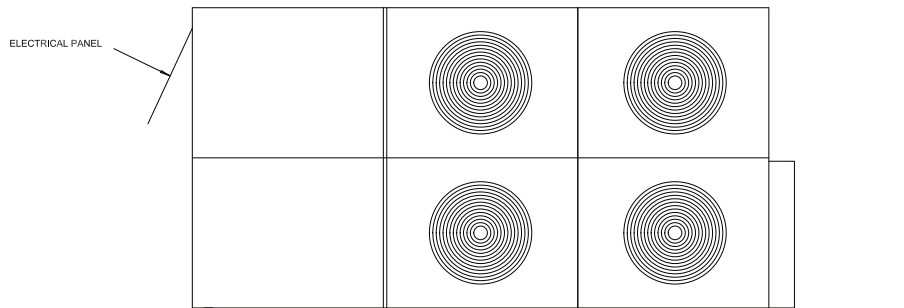
Chiller Models	Length Inches	Width Inches	Height Inches	Power			Compressor		RLA ea.	LRA ea.	Fan Motor		MCA	M.O.P	Chiller Fluid Conn.	Weight Pounds		
				Voltage	Phase	Freq.	Qty.	HP			Qty.	FLA.						
PZA38MF5	176.5	88	55	208/230V	3	60Hz	4	10	37.2	239	4	7	186.1	200	3" FPT	4800		
PZA38MH5				460V	3	60Hz			17.2	125		3.5					87.1	100
PZA38MI5				575V	3	60Hz			12.4	80		2.8					63.9	70

## Capacity Table (Refrigerant R407C)

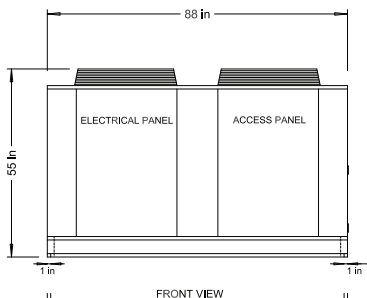
Model	Compressor	LWT °F	80°F			90°F			95°F			100°F			105°F		
			TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
38M	ZB76KCE	20.0	22.3	29.0	9.2	20.7	33.2	7.5	20.0	35.4	6.8	19.3	37.4	6.2	18.7	39.6	5.7
		25.0	25.5	29.0	10.6	23.7	33.4	8.5	22.8	35.6	7.7	22.0	37.6	7.0	21.2	39.8	6.4
		30.0	29.2	29.2	12.0	27.0	33.6	9.6	26.0	35.6	8.8	25.0	37.8	7.9	24.0	40.0	7.2
		35.0	33.0	29.2	13.6	30.7	33.6	11.0	29.5	35.8	9.9	28.3	38.0	8.9	27.2	40.4	8.1
		42.0	39.7	29.6	16.1	37.0	34.0	13.1	35.7	36.2	11.8	34.3	38.4	10.7	33.0	40.8	9.7
		44.0	41.3	29.6	16.8	38.7	34.0	13.6	37.3	36.2	12.4	36.0	38.4	11.3	34.7	40.8	10.2
		45.0	42.0	29.8	16.9	39.7	34.0	14.0	38.3	36.2	12.7	36.7	38.6	11.4	35.3	40.8	10.4
50.0	46.7	30.0	18.7	44.0	34.4	15.3	42.7	36.6	14.0	41.0	39.5	12.5	39.7	41.2	11.6		

- 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.

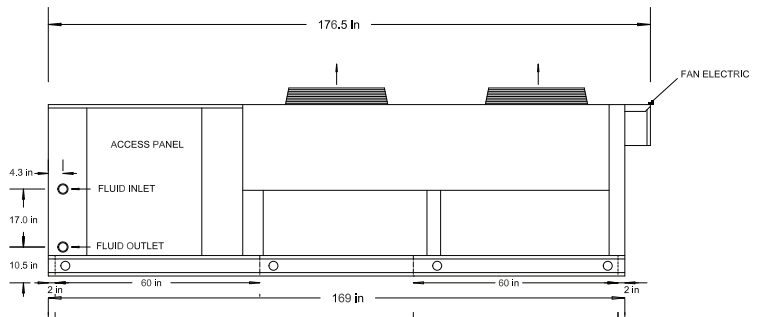
## Product Dimensional Drawing



TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW

Qty 8 Mounting  
 .438 Dia