



SCROLL PACKAGED WATER COOLED CHILLERS



1 to 47 Nominal Tons

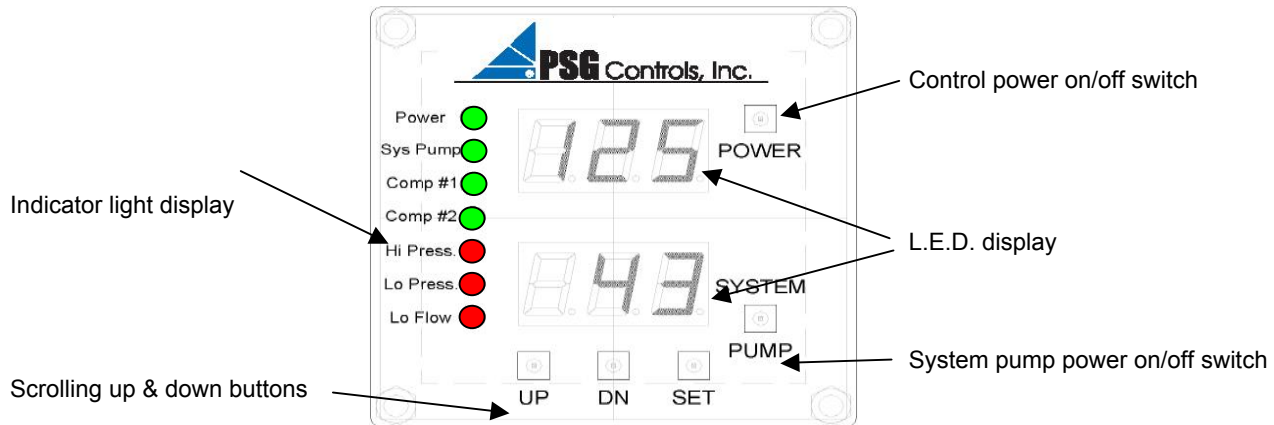


MEA# 57-04E

Legacy Chiller Systems, Inc. • PH (877) 988-5464 • FX (240) 214-8303

Visit us on the web www.Legacychillers.com

MICROPROCESSOR STANDARD FEATURES



Features:

- Control operates to a +/- 1°F accuracy.
- Powered from the chiller 24volt control circuit. No high voltage interference.
- 1 or 2 compressor control capability
- Operates and displays in °F or °C
- Controls chiller on inlet or outlet temperature
- Scroll through set up and review mode
- 30 second compressor time delay to prevent short cycling and nuisance faults
- 60 second hot gas solenoid delay to prevent false hot gas feeding during compressor start up.
- Lock out relay shuts down the chiller when control fault settings activate
- Automatic compressor lead lag on dual circuit chillers
- Weather resistant for outdoor use.
- Basic chiller functionality for ease of set up and operation.
- Factory default function code to reset the controller to the initial factory settings

- Two L.E.D. display windows.
 - a) Inlet & outlet temperature during chiller operation
 - b) Displays refrigerant high and low pressure in review mode
 - 1) no cap tubes to break causing a loss of refrigerant and down time
 - 2) No refrigerant recovery to change out the pressure transducer

- Indicator lights
 - a) Chiller control power on/off switch with green indicator.
 - b) System pump on/off switch with green indicator.
 - c) Compressor run indicator lights
 - d) High and low refrigerant pressure red fault indicator
 - e) Low fluid flow red indicator

- Display flashes all chiller faults.
 - a) Safety faults:

High fluid temperature outlet alarm	- (display only - does not shut down the chiller)
Low fluid temperature outlet alarm	- (shuts down the chiller and requires manual reset)
High refrigerant pressure	- (shuts down the chiller and requires manual reset)
Low refrigerant pressure	- (shuts down the chiller and requires manual reset)
Low water flow through evaporator	- (shuts down the chiller and automatically resets when flow is restored)

- Monitors and logs compressor run hours



NOMENCLATURE

Example: P WC T 30 S 2 - T3 - Z

P P = Packaged

WC WC = Water Cooled Condenser

T T = Tank Model

30 Nominal Capacity MBTUH Ex. 12 = 12,000 BTUH Etc.

S S = Single Circuit Unit D = Dual Circuit Unit M = Three Circuit Unit

2 1 = R134a 2 = R22 6 = R404A, R507

T3 Electrical Requirement
S2 = 208/230-1-60 S6 = 220-1-50
T3 = 208/230-3-60 T7 = 200/208-3-50
T4 = 460-3-60 T9 = 380-3-50
T5 = 575-3-60

Z Compressor Type Z = Scroll S = Semi-Hermetic

Low ambient, or lower leaving water temperatures, can require the recirculation of glycol solutions or other fluid blends. These solutions can effect unit capacities. Please consult the factory on these or other special applications for proper sizing.



TYPICAL LIST OF APPLICATIONS

Commercial & Industrial Process Cooling

- Commercial Air Conditioning
- Oil Cooling
- Injection Molding Cooling
- Plating Process cooling
- Welding Machine cooling
- Computer Room Air Conditioning
- Laser cooling
- Dry Cleaning Machine Cooling
- Jacket Cooling
- Water Cooled Condenser Cooling
- X-Ray Developer Cooling
- Photo Process Cooling

Medical Process Cooling

- M.R.I Magnet Cooling
- Operating Room Air Conditioning
- P.E.T Scan Cooling
- C.A.T. Scan Cooling
- Lab Testing
- Hypothermia Blankets

Food Process Cooling

- Bakery Process Cooling
- Brewery Process Cooling
- Winery Process Cooling
- Drinking Water Fountain Cooling
- Batch Cooling With 34°F Water For Mixing Ingredients
- Fruit And Vegetable Washing
- Ice Machine Pre-Cooling

Residential A/C Chiller, 2 Thru 15 Ton Single Phase 208-230 Volts

- (2) Through (5) Ton Single Circuit
- (6) Through (10) Ton Dual Circuit
- (15) Ton Three Circuit



PWCT CHILLER STANDARD FEATURES AND OPTIONS

Standard Features (All Models)

- **STAINLESS STEEL** brazed plate evaporator on models 12S - 120S and models 72D - 240D
- **Shell & tube** chiller barrel on models 180S - 300S and models 360D - 600D
- **Legacy Microprocessor controller** (see page 6 for details)
- **Scroll** compressor with crankcase heater
- Condenser(s): coaxial steel / copper tube
- Suction accumulator
- Water flow switch
- Hot gas by-pass capacity control
- Liquid line drier, sightglass, solenoid, TEV
- 24V control transformer
- Compressor motor contactor
- Control circuit fusing
- "Hard start kit" (single phase units only)
- Painted galvanized sheet metal cabinet on models with brazed plate evaporator
- 1/2" insulation on all water and refrigerant lines
- Full refrigerant charge from factory
- Computerized factory run test under load conditions
- **MEA# 57-04E**



PWCT12S

Additional Features On Tank Models Only

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

AVAILABLE OPTIONS (All Models)

- | | |
|--|---|
| <ul style="list-style-type: none"> • Fused STAINLESS STEEL system process pump • Dual system process pump with auto or manual changeover • Compressor fusing • 4 Year extended compressor warranty • Casters (factory mounted) • 115 volt service outlet (rain tight) • Fused disconnect • Phase monitor • Condenser water regulating valve(s) | <ul style="list-style-type: none"> • Water flow meter • Semi-hermetic compressor • Special piping for de-ionized and reverse osmosis water systems • Factory installed heat tape freeze protection thermostatically controlled <ul style="list-style-type: none"> • Auto city water changeover panel • Low flow bypass valve • Water pressure gauge set |
|--|---|

Additional Available Options on Tank Models Only

- | | |
|---|---|
| <ul style="list-style-type: none"> • Storage tank sight glass • City water make up solenoid | <ul style="list-style-type: none"> • Tank low liquid level indicator with dry contacts |
|---|---|

PWCT DIMENSIONAL & ELECTRICAL SPECIFICATIONS

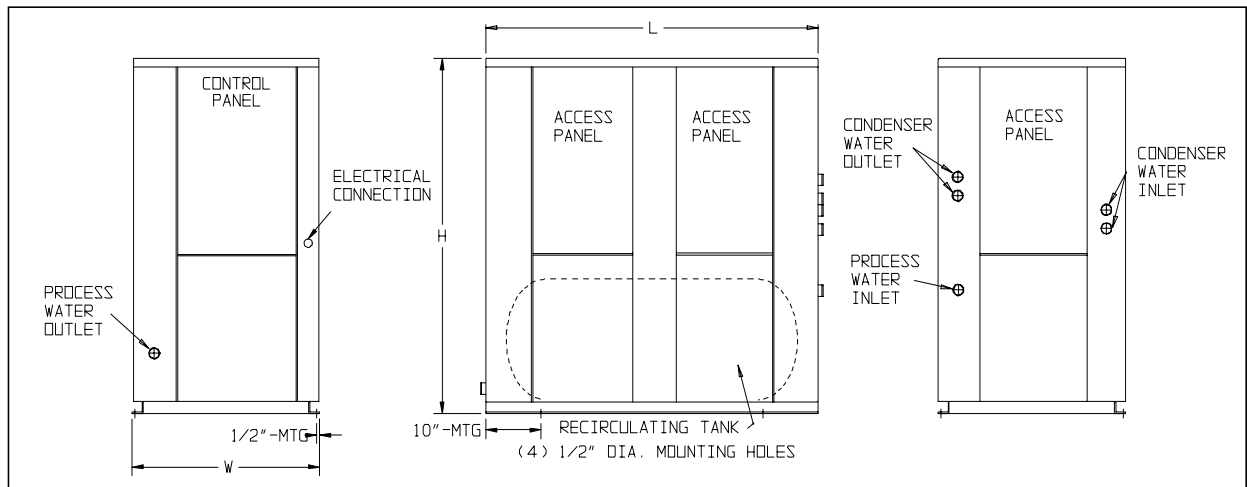
Packaged water cooled chiller with tank

Single Circuit

Legacy Model	BTUH @ 105°F cond. 45°F Lwt	Length Inches	Width Inches	Height Inches	Tank Gal.	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	Evap Pump FLA	MCA	M.O.P.	Weight Pounds												
								Qty.	HP																		
12S2-S2-Z	14,700	36	34	53	30	3/4" FPT	3/4" FPT	1	1.3	10	42	5.1	20	25	500												
18S2-S2-Z	21,500									13.6	61.0	5.1	25	35	2.0	8.6	55.0	5.1	20	20	505						
18S2-T3-Z										4.3	27.0	1.3	15	15		2.5	15.7	73.0	5.1	25	40	525					
18S2-T4-Z										24,200	8.2	63.0	5.1	20			20	3.5	4.3	31.0	1.3		15	15			
24S2-S2-Z											36,000	20.7	127.0	5.1			35		50	4	13.9		88.0	5.1	25	35	545
24S2-T3-Z												41,200	7.1	44.0			1.3		15		15		5	25.0	132.0	5.1	
24S2-T4-Z						50,000	15.0		115.0				5.1	25			35		6		7.4			47.5	1.3	15	
30S2-S2-Z	55,500						30.1		175.0				5.1	45	70		8				20.7			115.0	5.1	35	
30S2-T3-Z							62,000		8.9				63.0	1.3	15	20					9	27.9		129.0	5.1	40	
30S2-T4-Z									78,500	20.7			156.0	5.1	35	50		10				11.5		70.0	1.3	20	
36S2-S2-Z										91,000	32.1		195.0	6.7	50	70				12		16.4		95.0	1.7	25	35
36S2-T3-Z											106,000	33.6	225.0	7.9	50	80						1	17.3	114.0	2.0	25	40
36S2-T4-Z		122,000	42.0	239.0	10.0	70		100				1	19.2	125.0	2.8	30			45								
48S2-S2-Z	120S2-T3-Z		47.0	245.0	10.0	70		110					1	22.1	125.0	2.8	35		50				1200				
48S2-T3-Z			120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8		35		50						
48S2-T4-Z				120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8	35		50						
50S2-S2-Z					120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8	35	50						
50S2-T3-Z						120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8	35	50					
50S2-T4-Z		120S2-T4-Z					22.1	125.0	2.8	35	50	1						22.1	125.0	2.8	35	50					
60S2-S2-Z	120S2-T4-Z						22.1	125.0	2.8	35	50		1					22.1	125.0	2.8	35	50					
60S2-T3-Z			120S2-T4-Z				22.1	125.0	2.8	35	50			1				22.1	125.0	2.8	35	50					
60S2-T4-Z				120S2-T4-Z			22.1	125.0	2.8	35	50				1			22.1	125.0	2.8	35	50					
70S2-T3-Z					120S2-T4-Z		22.1	125.0	2.8	35	50					1		22.1	125.0	2.8	35	50					
70S2-T4-Z						120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8	35	50					
80S2-T3-Z		120S2-T4-Z					22.1	125.0	2.8	35	50	1						22.1	125.0	2.8	35	50					
80S2-T4-Z	120S2-T4-Z						22.1	125.0	2.8	35	50		1					22.1	125.0	2.8	35	50					
90S2-T3-Z			120S2-T4-Z				22.1	125.0	2.8	35	50			1				22.1	125.0	2.8	35	50					
90S2-T4-Z				120S2-T4-Z			22.1	125.0	2.8	35	50				1			22.1	125.0	2.8	35	50					
120S2-T3-Z					120S2-T4-Z		22.1	125.0	2.8	35	50					1		22.1	125.0	2.8	35	50					
120S2-T4-Z						120S2-T4-Z	22.1	125.0	2.8	35	50						1	22.1	125.0	2.8	35	50					

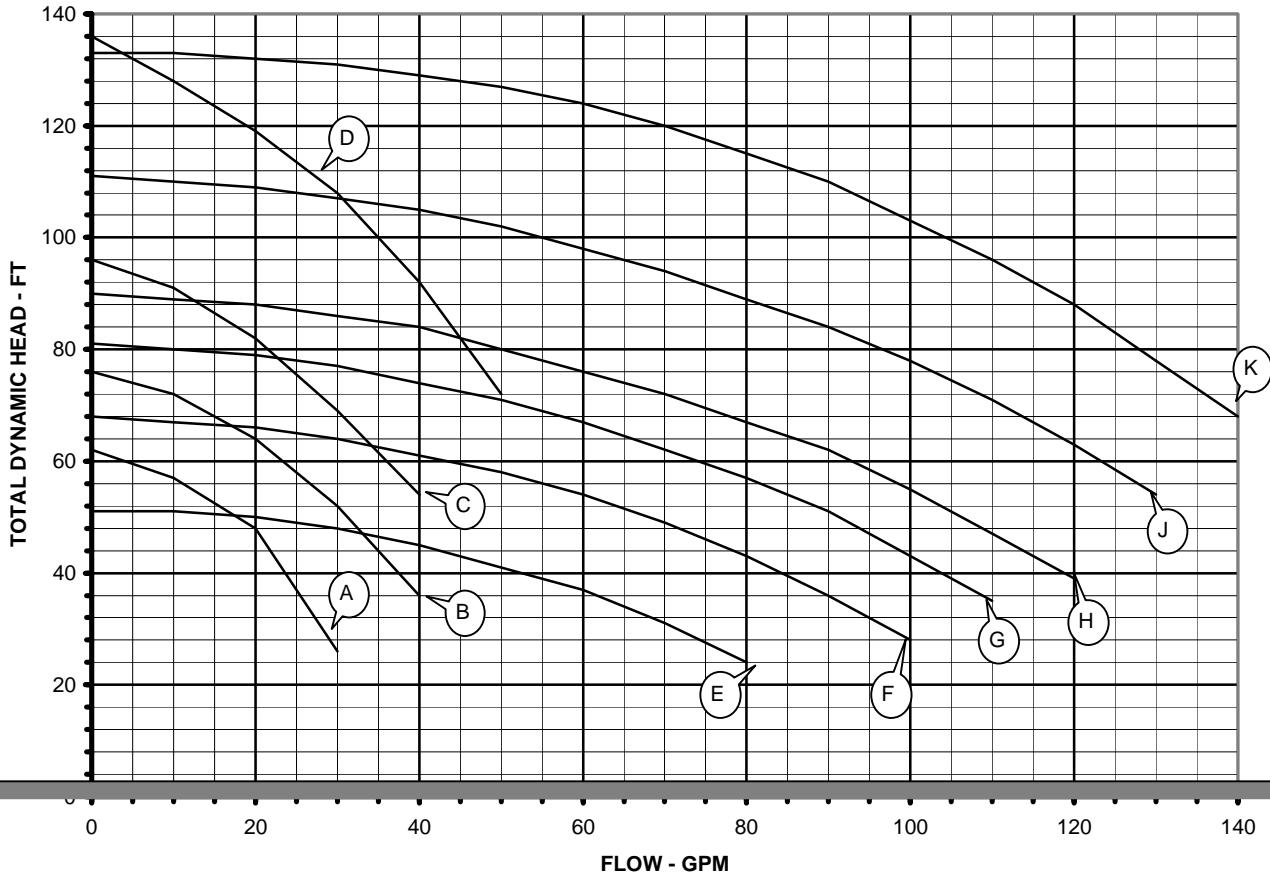
Dual Circuit

Legacy Model	BTUH @ 95°F amb. 45°F Lwt	Length Inches	Width Inches	Height Inches	Tank Gal.	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	Evap Pump FLA	MCA	M.O.P.	Weight Pounds		
								Qty.	HP								
72D2-S2-Z	82,000	85	34	64	60	1.25" FPT	1" FPT	2	4	25.0	132	6.7	70	80	990		
72D2-T3-Z										15.0	115	6.7	45	50			
72D2-T4-Z										7.4	47.5	1.7	20	25			
96D2-S2-Z	100,000	85	34	64	90			1.5" FPT	1.25" FPT	2	5	30.1	175	10.0	80	100	1190
96D2-T3-Z												20.7	115	10.0	60	70	
96D2-T4-Z												8.9	63	2.8	25	30	
100D2-S2-Z	112,000	85	34	64	90	1.5" FPT	1.25" FPT			2	5	27.9	129	10.0	80	100	1400
120D2-T3-Z	124,800											20.7	156	10.0	60	70	
120D2-T4-Z	140D2-T3-Z											11.5	70	2.8	30	40	
140D2-T4-Z	158,000	85	34	64	90			1.5" FPT	1.25" FPT	2	8	32.1	195	10.5	90	110	1950
160D2-T3-Z	183,000											16.4	95	3.2	40	50	
160D2-T4-Z	180D2-T3-Z											33.6	225	7.9	90	110	
180D2-T4-Z	210,000	85	34	64	135	1.5" FPT	1.25" FPT			2	9	17.3	114	2.0	45	50	2050
240D2-T3-Z	244,000											42.0	239	5.6	110	125	
240D2-T4-Z	240D2-T3-Z											19.2	125	2.8	50	60	
240D2-T4-Z	244,000	85	34	64	135			1.5" FPT	1.25" FPT	2	12	47.0	245.0	13.3	125	150	2700
240D2-T3-Z	244,000											22.1	125.0	4.5	60	70	
240D2-T4-Z	244,000											22.1	125.0	4.5	60	70	



Standard Available Stainless Steel Process System Pumps

1MS & 2MS PUMPS



- | | | | | |
|--------------|----------------|--------------|----------------|------------|
| A) 1/3HP 1MS | C) 3/4HP 1MS | E) 3/4HP 2MS | G) 1-1/2HP 2MS | J) 3HP 2MS |
| B) 1/2HP 1MS | D) 1-1/2HP 1MS | F) 1HP 2MS | H) 2HP 2MS | K) 5HP 2MS |

** Legacy chillers are not limited to the pumps shown on this curve. Contact the factory @ (877) 988-5464 with the flow and head pressure requirements to have the proper pump selected for your application.

Certain applications may require the use of glycol (antifreeze) depending on cooling requirements and / or low ambient temperatures. These fluids affect chiller capacities and may require heat exchanger adjustments. Please consult the factory for assistance.



Due to manufacturer's policy of continuous product improvement, the manufacturer reserves the right to make changes without notice.

Along with the complete line of standard products that Legacy Chiller Systems Inc. offers, we also have the ability to custom build equipment to each customer's specifications. Please contact the factory or your Legacy representative for your special application.

Visit us on the web www.legacychillers.com



484 Main Street #1
Diamond Springs, Ca. 95619
Ph 530-344-1105 Fax: 240-214-8303

CREDIT APPLICATION

BILLING NAME: _____
ADDRESS: _____
CITY / STATE: _____ ZIP CODE: _____
PHONE #: _____ FAX #: _____

PRINCIPAL #1 NAME, TITLE/FUNCTION (please print or type)

SOCIAL SECURITY # OR TAX ID#: _____

PRINCIPAL #2 NAME, TITLE/FUNCTION (please print or type)

SOCIAL SECURITY # OR TAX ID#: _____

TRADE REFERENCES: NAME, ADDRESS & TELEPHONE # MUST BE COMPLETED

1. NAME: _____
ADDRESS: _____
CITY / STATE: _____ ZIP CODE: _____
PHONE#: _____ FAX#: _____

2. NAME: _____
ADDRESS: _____
CITY / STATE: _____ ZIP CODE: _____
PHONE#: _____ FAX#: _____

3. NAME: _____
ADDRESS: _____
CITY / STATE: _____ ZIP CODE: _____
PHONE#: _____ FAX#: _____

BANK REFERENCES IMPORTANT! ACCOUNT NUMBER MUST BE FURNISHED

NAME: _____
ADDRESS: _____
CITY / STATE: _____ ZIP CODE: _____
PHONE#: _____ ACCOUNT# _____
NAME OF PERSON TO CONTACT: _____

THIS BUSINESS IS A (please check)

_____ CORPORATION _____ PARTNERSHIP _____ PROPRIETORSHIP

_____ CONTRACTOR _____ INDUSTRIAL _____ OTHER

OTHER COMPANY INFORMATION:

BUSINESS OPERATED UNDER PRESENT OWNERSHIP SINCE: 19/20 _____
PRODUCTS/SERVICES RENDERED: _____
HOW MANY PEOPLE DO YOU EMPLOY ON PAYROLL?: _____
PERSON TO CONTACT REGARDING: PURCHASES: _____
PERSON TO CONTACT REGARDING: PAYMENTS: _____
PURCHASE ORDERS ARE (check one): _____ REQUIRED _____ NOT REQUIRED

SALES TAX STATUS

_____ NOT EXEMPT _____ EXEMPT#

IF TAX EXEMPT PLEASE ATTACH A SIGNED TAX EXEMPTION CERTIFICATE

THE FOLLOWING TERMS OF SALE ARE AGREED TO AND ACCEPTED:

1. Unless specifically stated on our invoice, all purchases carry Net 20 Terms.
2. To any invoice not paid in accordance with its terms, there shall be added thereto, a late charge at the rate of 2% per month or the maximum rate permitted by law if less than 2% per month on the unpaid balance for each month, or fraction of a month, that such balance remains unpaid.
3. In the event of default in payment, and our account is placed with a collection agency or attorney, we agree to pay all cost of collection. If our delinquent account is placed with an attorney, we agree to pay all cost incurred in collection together with attorney's fees in an amount equal to 25% of such unpaid balance, or the maximum amount permitted by law if less than 25%.

SIGNATURE: _____

PRINT NAME: _____ TITLE: _____

DATE: _____

PERSONAL GUARANTEE

The undersigned, jointly severally and personally, in consideration of your extending credit to the applicant, do hereby agree to pay for all goods sold to applicant, in the event of default by applicant, you shall be entitled to look to us for payment without prior demand or notice and without first having attempted to collect from applicant. In the event you engage the services of an attorney to collect any sum of money due hereunder, or to enforce or defend your rights hereunder, you shall be entitled to collect reasonable attorney's fees from the undersigned. The liability of the undersigned shall not be affected by any extensions or indulgences granted applicant or by releasing or surrendering any security given by the applicant. The undersigned agree to give you written notice by Certified Mail in the event of any changes in the ownership of applicant's business or the form of applicant's business organization.

NAME: _____ DATE: _____

PRINT OR TYPE

SIGNATURE: _____