



# SCROLL PACKAGED WATER COOLED CHILLERS



**1 to 47 Nominal Tons**

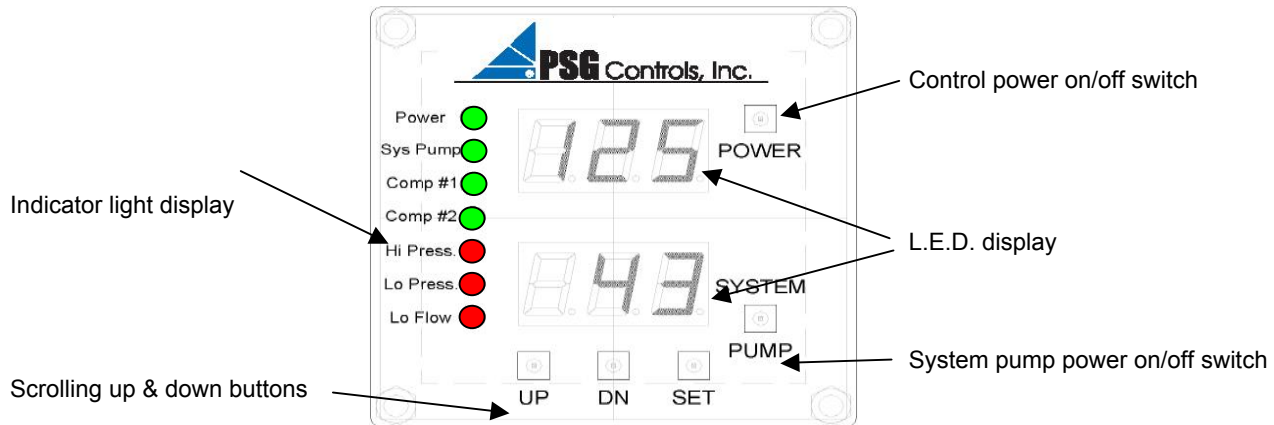


**MEA# 57-04E**

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

Visit us on the web [www.Legacychillers.com](http://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





## 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



## PWC & 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**



PWC60S model shown



PWCT12S model shown

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

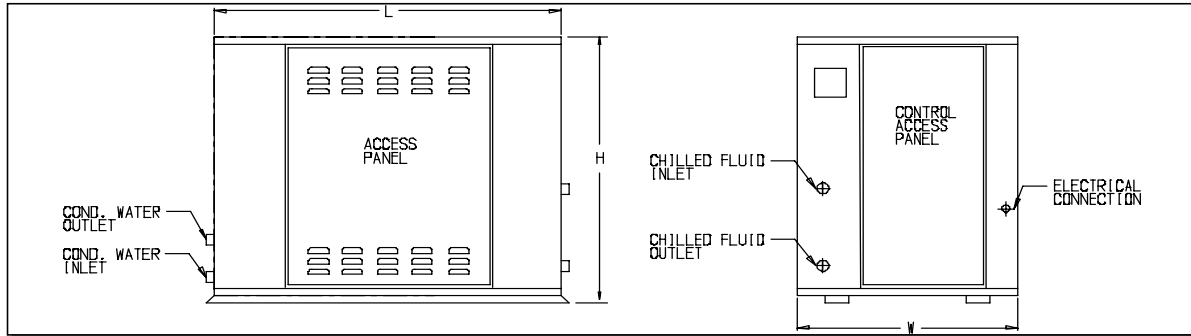
### Additional Available Options on Tank Models Only

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

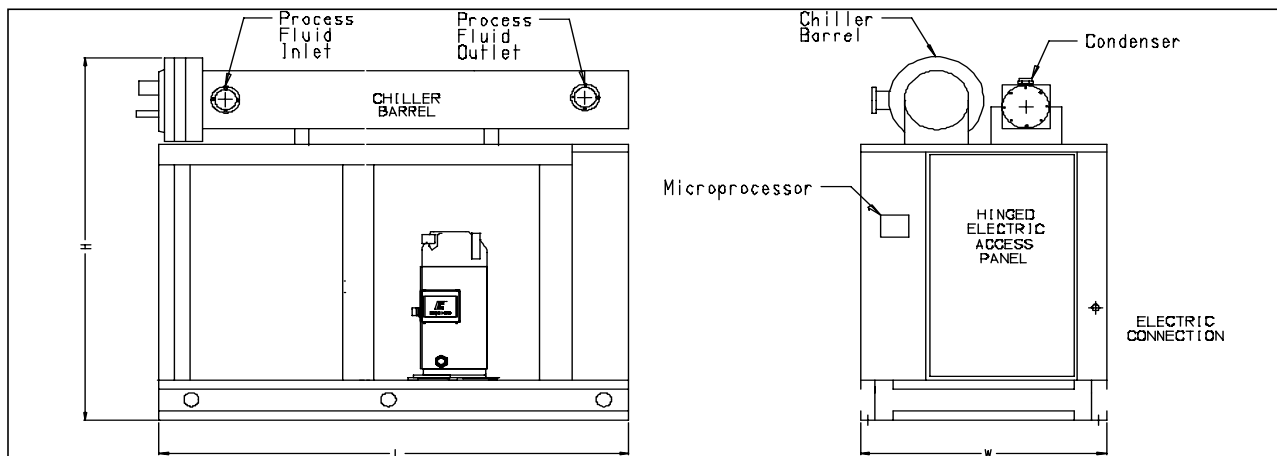
## PWC DIMENSIONAL & ELECTRICAL SPECIFICATIONS

### Single circuit packaged water cooled chiller

Legacy Model	BTUH @ 105°F cond. 45°F Lwt	Length Inches	Width Inches	Height Inches	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Weight Pounds							
							Qty.	HP												
12S2-S2-Z	16,000	44	28	37	3/4" FPT	3/4" FPT	1	1.3	10	42	15	15	185							
18S2-S2-Z	23,000							2.0	13.6	61.0	20	20	8.6	55.0	15	15	210			
18S2-T3-Z								4.3	27.0	15	15									
18S2-T4-Z																				
24S2-S2-Z	26,000							2.5	15.7	73.0	20	25	8.2	63.0	15	15	225			
24S2-T3-Z								4.3	31.0	15	15									
24S2-T4-Z																				
30S2-S2-Z	38,000				56			1" FPT	1" FPT	1	3.5	20.7	127.0	30	35	235				
30S2-T3-Z											4	13.9	88.0	20	30	7.1	44.0	15	15	315
30S2-T4-Z																				
36S2-S2-Z	44,500										4	25.0	132.0	35	40	7.4	47.5	15	15	350
36S2-T3-Z											5	30.1	175.0	40	50					
36S2-T4-Z																				
48S2-S2-Z	54,200	56						1.25" FPT	1.25" FPT	1	5	8.9	63.0	15	15	370				
48S2-T3-Z											6	20.7	156.0	30	35	27.9	129.0	35	45	425
48S2-T4-Z																				
50S2-S2-Z	61,000										8	32.1	195.0	45	50					
60S2-T3-Z											9	16.4	95.0	25	25					
60S2-T4-Z																				
70S2-T3-Z	84,500				56			1.25" FPT	1.25" FPT	1	8	33.6	225.0	45	50	650				
80S2-T3-Z											10	17.3	114.0	25	30					
80S2-T4-Z																				
80S2-T3-Z	97,800										10	42.0	239.0	60	70					
90S2-T3-Z											12	19.2	125.0	25	30					
90S2-T4-Z																				
120S2-T3-Z	130,500	56						1.25" FPT	1.25" FPT	1	12	47.0	245.0	60	80	1095				
120S2-T4-Z																				



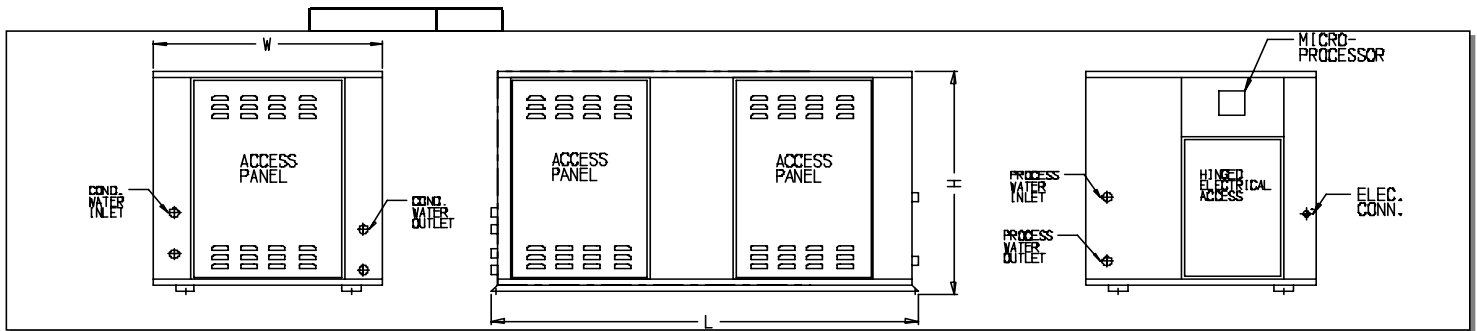
Legacy Model	BTUH @ 95°F amb. 45°F Lwt	Length Inches	Width Inches	Height Inches	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Weight Pounds
							Qty.	HP					
180S2-T3-Z	167,000	85	34	60	2" MPT	2" MPT	1	15	55.2	425.0	70	90	2000
180S2-T4-Z								20	27.2	187.0	35	45	2100
250S2-T3-Z	235,000				20			81.0	505.0	110	125	2100	
250S2-T4-Z					25			34.0	225.0	45	50	2200	
300S2-T3-Z	284,000				25			87.9	500.0	110	150	2200	
300S2-T4-Z					25			43.0	250.0	50	70	2200	



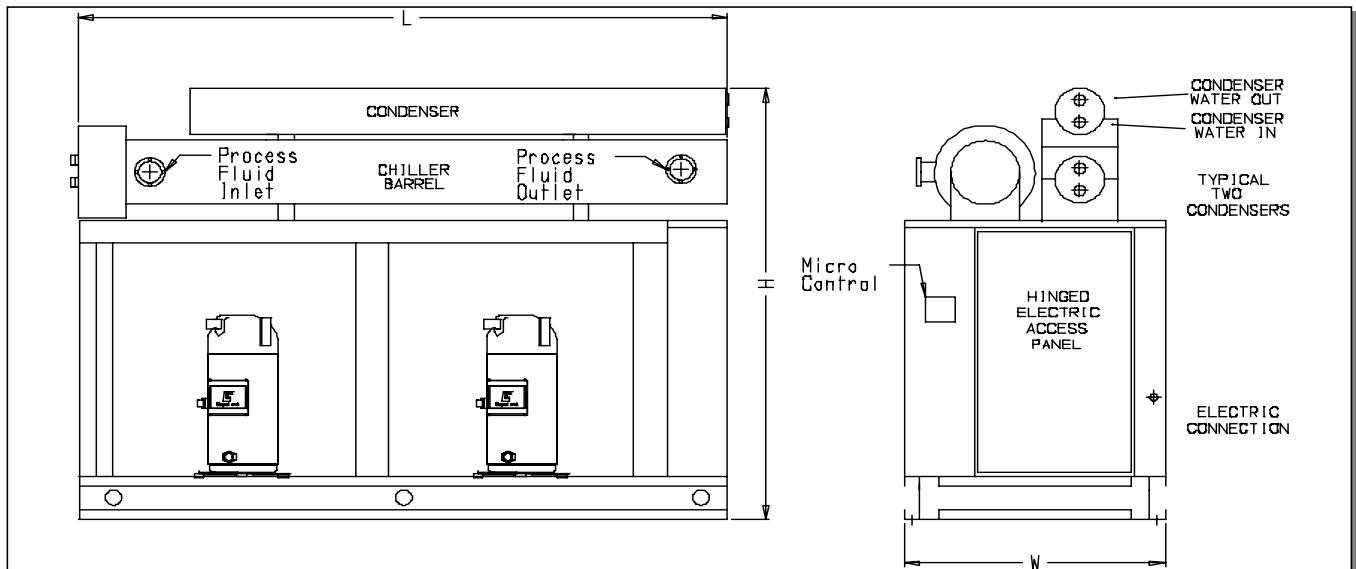
## PWC DIMENSIONAL & ELECTRICAL SPECIFICATIONS

*Dual circuit packaged water cooled chiller*

Legacy Model	BTUH @ 105°F cond. 45°F Lwt	Length Inches	Width Inches	Height Inches	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Weight Pounds												
							Qty.	HP																	
72D2-S2-Z	88,000	65	34	38	1.25" FPT	1" FPT	2	4	25.0	132	60	80	665												
72D2-T3-Z									15.0	115	35	45													
72D2-T4-Z									7.4	47.5	20	20													
96D2-S2-Z	108,000								65	34	38	1.25" FPT	1" FPT	5	30.1	175	70	90	875						
96D2-T3-Z															20.7	115	50	60							
96D2-T4-Z															8.9	63	25	25							
100D2-S2-Z	120,000			65	34	38									1.25" FPT	1" FPT	6	27.9	129	70	90	900			
120D2-T3-Z																		20.7	156	50	60				
120D2-T4-Z																		11.5	70	30	35				
140D2-T3-Z	168,400										65	34	38					1.25" FPT	1" FPT	8	32.1	195	80	100	1300
140D2-T4-Z																					16.4	95	40	50	
160D2-T3-Z																					33.6	225	80	100	
160D2-T4-Z	194,000	65	34			38	1.5" FPT	1.25" FPT							9	17.3					114	40	50	1400	
180D2-T3-Z																42.0					239	90	125		
180D2-T4-Z																19.2					125	45	60		
240D2-T3-Z	260,000								65	34			38	1.5" FPT		1.25" FPT		10	47.0		245	110	150	1510	
240D2-T4-Z																			22.1		125	50	70		

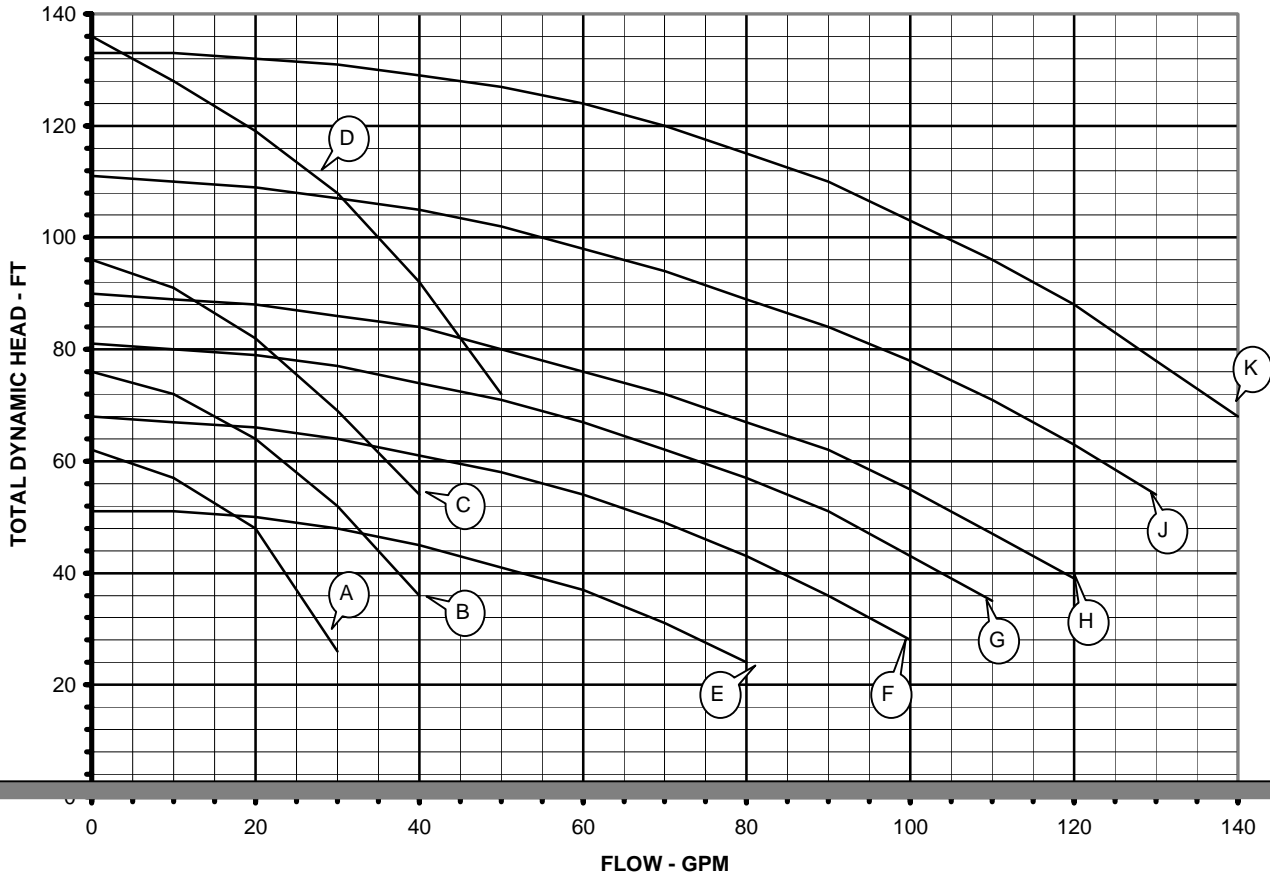


Legacy Model	BTUH @ 105°F cond. 45°F Lwt	Length Inches	Width Inches	Height Inches	Process Fluid Conn.	Condenser Water Conn.	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Weight Pounds				
							Qty.	HP									
360D2-T3-Z	334,000	85	34	77	2.5" MPT	2" MPT	2	15	55.2	425	125	175	3000				
360D2-T4-Z									27.2	187	70	80					
500D2-T3-Z	469,000								77	3" MPT	2" MPT	20	81.0	505	200	250	3300
500D2-T4-Z				34.0	225	80							110				
600D2-T3-Z	569,000			85	34	77							3" MPT	2" MPT	25	87.9	500
600D2-T4-Z									43.0	250	100					125	



## 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](http://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: \_\_\_\_\_