

# Product Information Packet

## Model LHP-300 CPHC

Solid State Liquid Cooled Cold Plate, Heat/Cool

Part #3-7095-1-000

Thank you for your purchase. Information has been enclosed regarding the installation, specifications, and wiring of your solid-state assembly. Please read and follow all instructions carefully before installation. Only qualified technicians should install this equipment.

If you have any questions regarding your equipment, please do not hesitate to call us at 773-342-4900, and we will be happy to assist you. We are open from 8:30 am-5:00 pm Central Time.

Included in this packet you will find:

Product Literature and Specifications

Assembly Drawing # LHP300-B-A18

Wiring Drawing # LHP300-A-E22

Installation Drawing # LHP300-B-F10

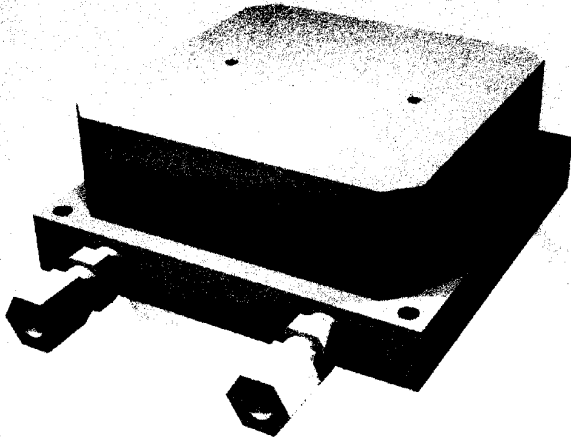
Warranty Information

The logo for teca, featuring the word "teca" in a bold, lowercase, sans-serif font with a registered trademark symbol (®) to the upper right.

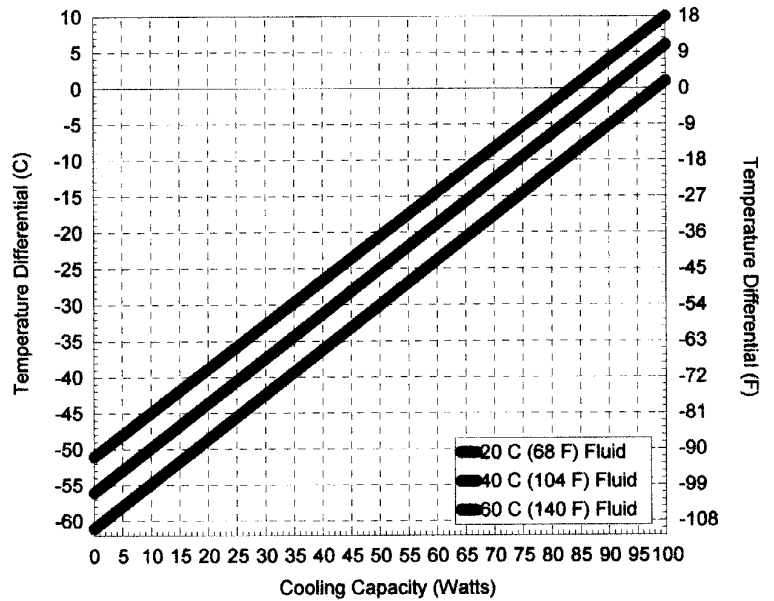
ThermoElectric Cooling America Corporation • 4048 W. Schubert Ave. • Chicago IL (USA) 60639  
Phone: 773-342-4900 Fax: 773-342-0191 • [www.thermoelectric.com](http://www.thermoelectric.com) • [teca@thermoelectric.com](mailto:teca@thermoelectric.com)

# LHP-300CP

280-335 Btu/Hr  
Liquid Cooled Cold Plate



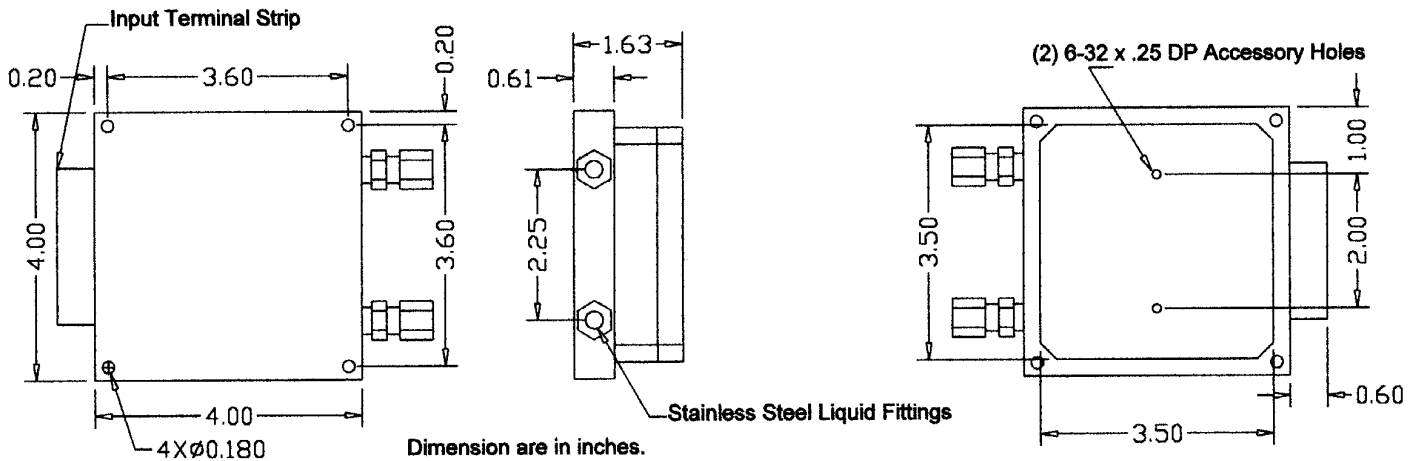
## Performance:



Fluid Temp.	20°C	40°C	60°C
Cold Plate	$y = .62x - 51$	$y = .62x - 56$	$y = .62x - 61$
	$y = \Delta T (^{\circ}C) \quad x = \text{Capacity (Watts)}$		

## Specifications

Model	Part Number	Notes	Performance Rating (BTU/hr)	Voltage	Current (Amps)	Heat Voltage	Weight Lbs. (Kg)	Minimum Flow (GPM)	Operating Range (°C)
LHP-300CP	3-7095-0-000	Cool only, no temperature control	280-335	24	4.5	N/A	1.8 (.81)	0.2	0/+70
LHP-300CPHC	3-7095-1-000	Heat/Cool, no temperature control, 72 Watts Heat	280-335	24	4.5	24 VDC	1.8 (.81)	0.2	0/+70
LHP-300CPHC	3-7099-1-000	Heat/Cool, no temperature control, 72 Watts Heat	280-335	24	4.5	120 VAC	1.8 (.81)	0.2	0/+70

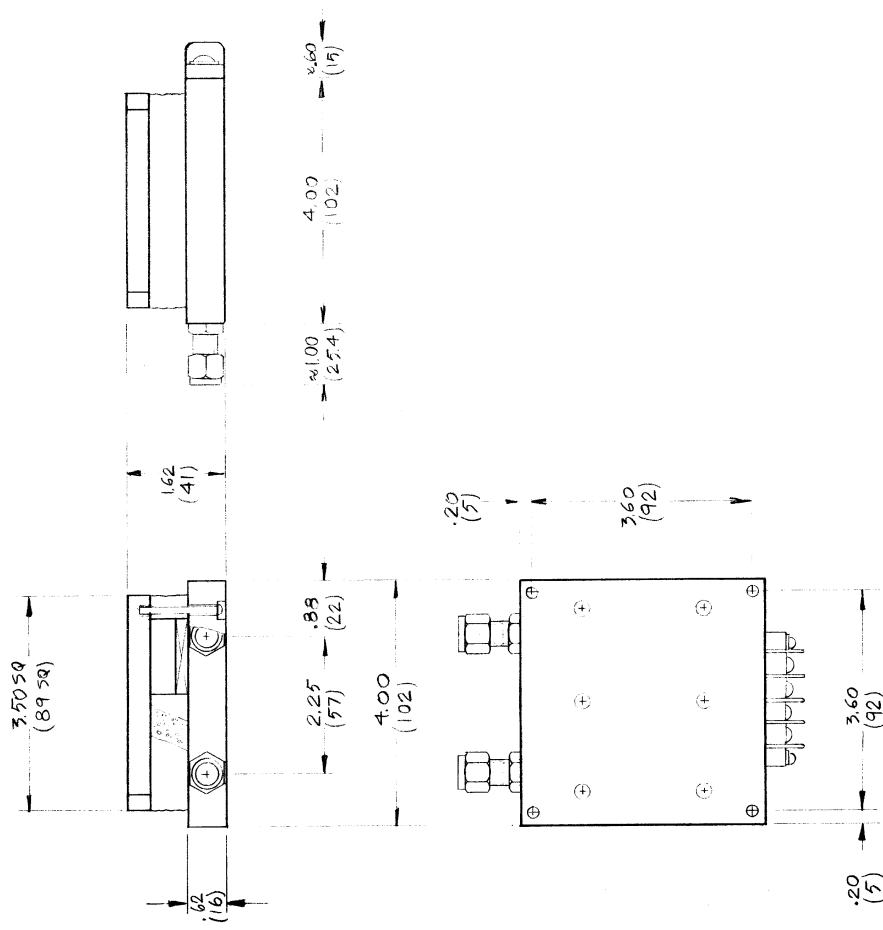


**teca**<sup>®</sup>


Call us toll free at 888-TECA-USA (832-2872)

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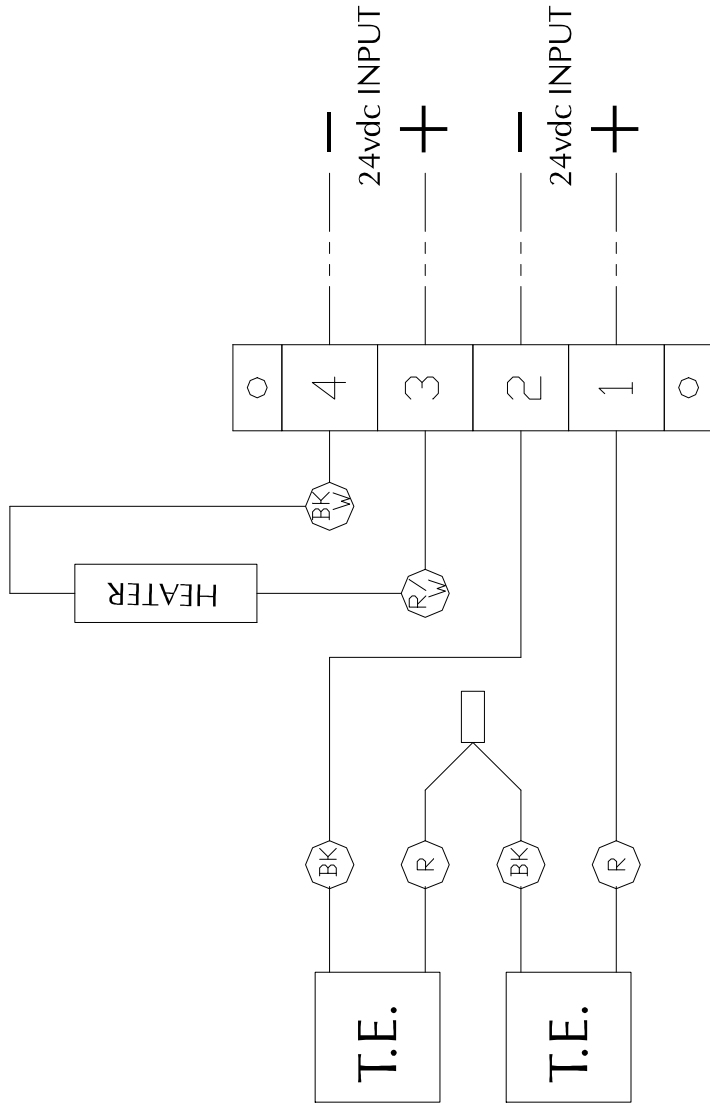
LTR	DESCRIPTION	DATE	APPROVED



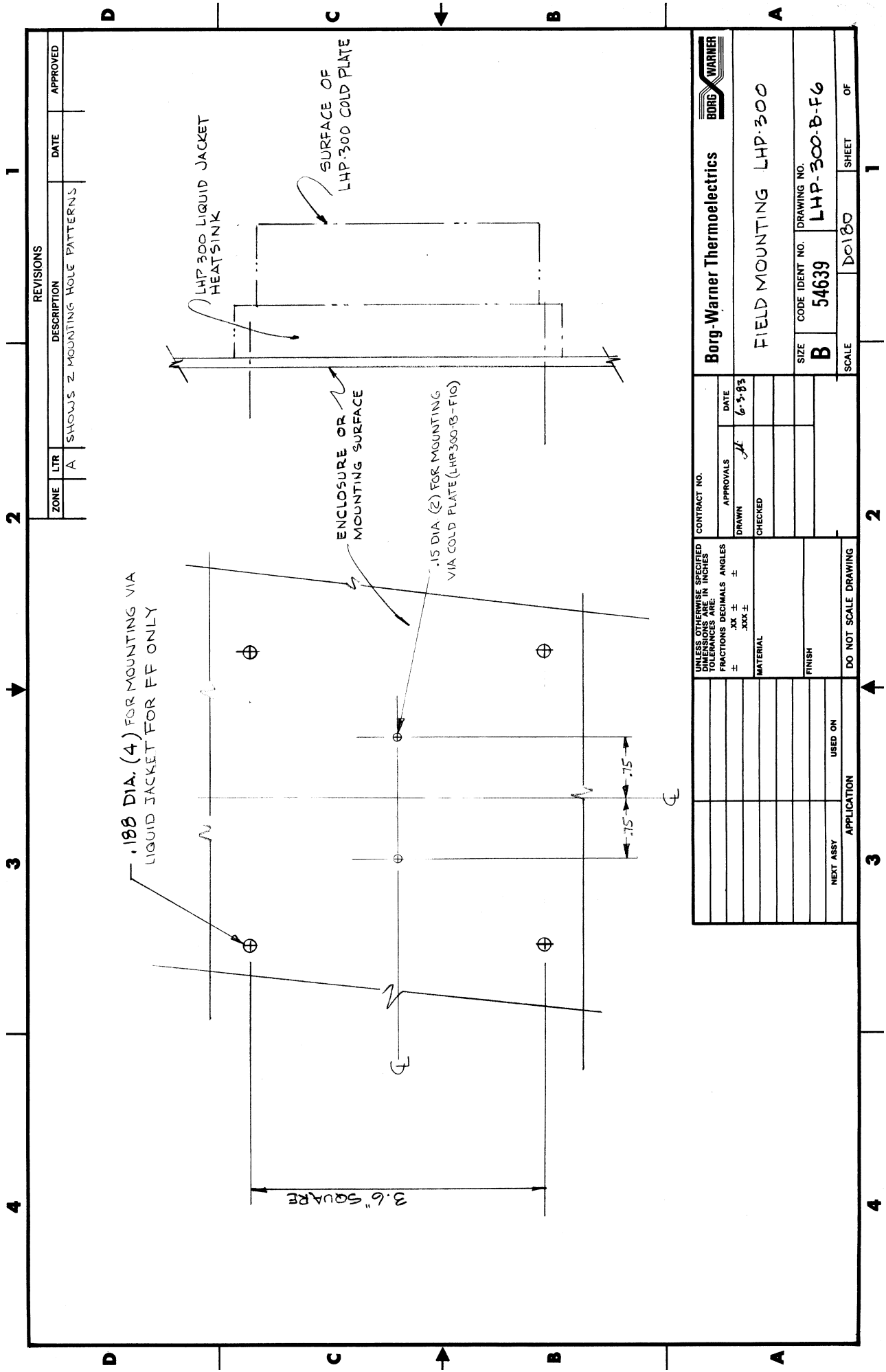
NOTE: DIMENSIONS IN INCHES (MILLIMETERS)

 ThermoElectric Cooling America Corp.	
LHP 300 CP ASSEMBLY	
SIZE	DRAWING NO.
B	LHP 300-B-A18
MATERIAL	FINISH
APPROVALS	DATE
DRAWN IN	04-23-90
CHECKED	
SCALE 1/2	SHEET 00156
	OF

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
FRACTIONS: DECIMALS: ANGLES  
XX ± .015 °  
XXX ± .005



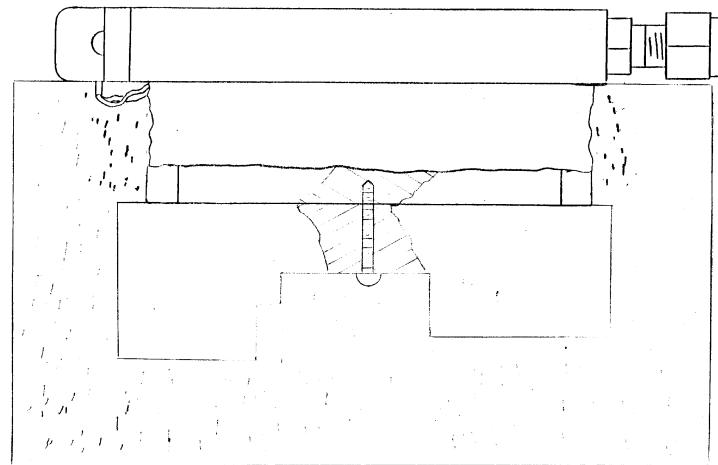
<p><b>INFORMATION DISCLOSED HEREIN IS THE CONFIDENTIAL PROPERTY OF TECA CORP. RECIPIENT SHALL NOT USE THE INFORMATION IN ANY UNAUTHORIZED MANNER.</b></p> <p>FINISH:</p>		<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES ARE:</p> <table border="1"> <tr> <td>DECIMALS</td> <td>ANGLE</td> </tr> <tr> <td>.XX +/-</td> <td>+/-</td> </tr> <tr> <td>.XXX +/-</td> <td>FRACTION</td> </tr> <tr> <td></td> <td>+/-</td> </tr> </table> <p>MATERIAL:</p>		DECIMALS	ANGLE	.XX +/-	+/-	.XXX +/-	FRACTION		+/-	<p><b>THERMOELECTRIC COOLING AMERICA CORP.</b></p> <p>LHP-300 CPHC w/24vdc HEAT WIRING DIAGRAM</p>	
DECIMALS	ANGLE												
.XX +/-	+/-												
.XXX +/-	FRACTION												
	+/-												
<p>DRAWN BY: AA</p> <p>DATE: 10/25/00</p>		<p>DRAWING #</p> <p>LHP300-A-E22</p>		<p>REV LEVEL</p>									
<p>DESCRIPTION</p>		<p>SCALE</p> <p>D5520</p>		<p>SHEET</p>									
REV	Date	APPROVED	<p>MASTER: LHP300-A-E20</p>										



REVISIONS		DATE	APPROVED
ZONE	DESCRIPTION		
LTR			
A	SHOWS Z MOUNTING HOLE PATTERNS		

		<b>Borg-Warner Thermoelectrics</b>	
FIELD MOUNTING LHP-300		CONTRACT NO.	DATE
SIZE <b>B</b>	CODE IDENT NO. <b>54639</b>	DRAWN <i>JL</i>	6-5-83
DRAWING NO. <b>LHP-300-B-F6</b>	SCALE <b>D0180</b>	CHECKED	
SHEET <b>1</b>	OF		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES			
± .XX ± .XXX ±			
MATERIAL			
FINISH			
NEXT ASSY APPLICATION		DO NOT SCALE DRAWING	
USED ON			

APPLICATION		REVISION	
NEXT ASSY	USED ON	DESCRIPTION	DATE



INSTALLATION INSTRUCTIONS

1. Cut and drill mounting holes as per appropriate field assembly mounting drawing.
2. Insure clean, flat mounting surface.
3. Spread evenly 10 mil coating of thermal grease (Dow type 340 or equivalent) on both thermal contact surfaces with speedball rubber roller.
4. Install unit without sliding against mating surface using Stainless Steel screws if available and lock washers. Torque screws until snug. Do not over tighten.
5. Connect 1/8" water lines.
6. Inspect for water leaks.
7. Fit 1" insulation around margin of frame and exposed area of cooled surface.
8. Caulk insulation to seal and secure insulation.
9. Inspect for leaks and alignment.
10. Connect power. (1) Black is -DC for T.E.  
(2) Red is +DC for T.E.  
(3) Blue is 110 VAC (LHP-300HC only)  
(4) White is 110 VAC (LHP-300HC only)  
(REFER TO DWG. \* LHP 300-B-E 7)
11. Caution: Do not operate unit without water flow.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± .XX ± ± .XXX ± ±		CONTRACT NO. APPROVALS DRAWN AB CHECKED		DATE 12-2-82	
MATERIAL FINISH		SIZE B		DRAWING NO. LHP-300 B-F10	
DO NOT SCALE DRAWING		SCALE D0184		SHEET OF	
				<b>ThermoElectrics</b>	
INSTALLATION INSTRUCTIONS VIA GOLD PLATE LHP-300CP VIA GOLD PLATE					

## LIMITED WARRANTY

In the event a defect in material or workmanship is discovered in any of TECA's products within one year after the date they are delivered to Buyer, and if: (a) TECA is notified of the defect in writing by certified mail within 14 days of the date of discovery; (b) TECA may then either, at its sole discretion, inspect the product at Buyer's location, or require that the product be made available at Buyer's expense at TECA's premises for TECA's inspection within 14 days of the date of notification; and (c ) the products are defective and the defects result from faulty materials and/or workmanship and not in any way from accident, misuse, misapplication, mishandling, modification, or alteration by the Buyer or the shipper, then TECA shall, at its sole option, repair or exchange defective products free of charge to Buyer, or credit to buyer the price of the defective products. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE EXCLUDED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL TECA BE LIABLE FOR ANY CLAIM BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER DAMAGES WHETHER SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOST PROFITS, BUSINESS INTERRUPTION, OR LOSS OF BUSINESS OR CUSTOMER RELATIONSHIPS.

## RETURNED GOODS, RESTOCKING CHARGES

In order to return merchandise for any reason ( repair, replacement, or credit) a return authorization number must be issued by TECA. New merchandise may not be returned for credit beyond 60 days from shipment. Charges for incidental or other damages may also be made. All returned goods must be sent freight prepaid. A restocking charge of 15% will apply. On special equipment and custom modified equipment orders, additional incremental cancellation charges may be made.