

# Product Information Packet

## Model AHP-1 202CP

Solid State Cold Plate

without Temperature Control

Part #1-3092-0-000

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-4:30 pm Central Time.

Included in this packet you will find:

Installation Notes for Air Conditioners

Product Literature and Specifications

Assembly Drawing # 1200-A-A249

Wiring Drawing # SK141045

Installation Drawing # 1200-B-F56

Warranty Information



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# AHP-1200CP Cold Plate

Air Cooled  
Bench Top

General Purpose 120 VAC, 240 VAC Input  
225 Watts

## FEATURES

- Direct contact cooling as much as 46 °C below room temperature
- Weighs only 19 lbs. (8.6 kg)
- Bench top or enclosure mounting
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Mounts in any orientation



## INCLUDES

- Integral power supply (120 VAC input)
- Cold plate mounting taps
- Rubber feet
- Power input cord

## SPECIFICATIONS

MODEL	PART NUMBER	NOTES	PERFORMANCE RATING BTU/HR	VOLTAGE VAC 50/60 HZ	CURRENT AMPS.	WEIGHT LBS. (KG)	TEMP. CONTROL	OPERATING AMBIENT °C
AHP-1200CP	1-3090-0-000	Cool only	830-950	120	4.0	18(8.2)	None	-15/+60
AHP-1200CP	1-3050-0-000	Cool only	830-950	120	4.0	18(8.2)	EXT*	-15/+60
AHP-1200CPHC	1-3050-1-000	Heat/Cool	830-950	120	4.0	18(8.2)	EXT*	-15/+60
AHP-1202CP	1-3092-0-000	Cool only	830-950	240	2.5	23(10.5)	None	-15/+60
AHP-1202CP	1-3052-0-000	Cool only	830-950	240	2.5	23(10.5)	EXT*	-15/+60
AHP-1202CPHC	1-3052-1-000	Heat/Cool	830-950	240	2.5	23(10.5)	EXT*	-15/+60

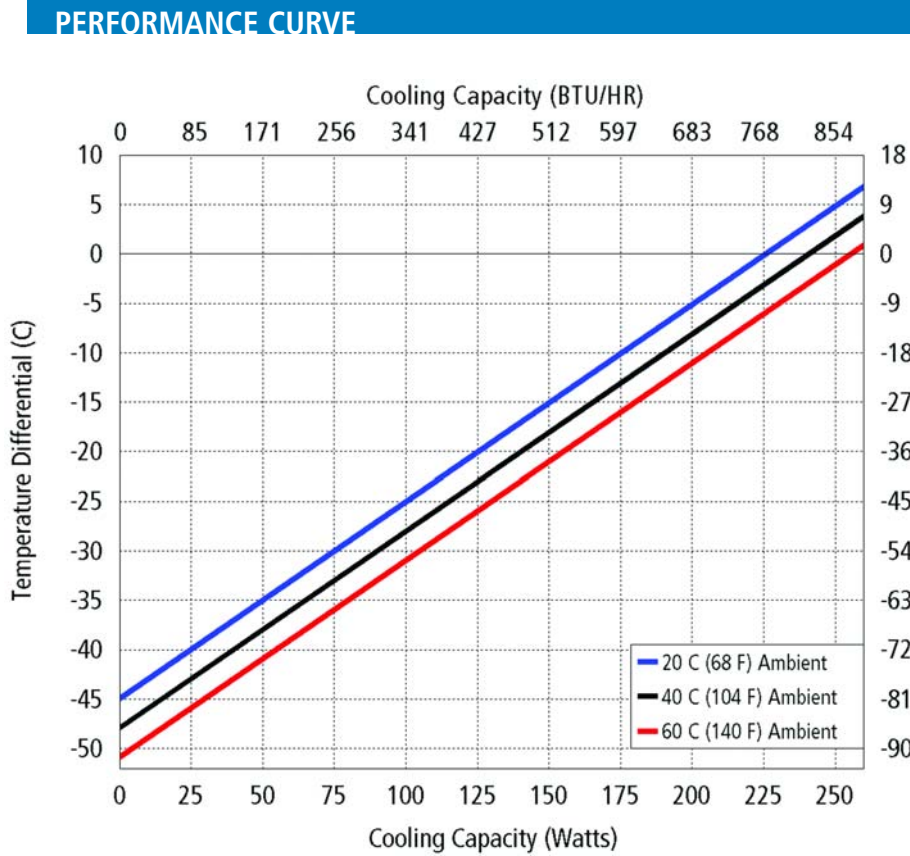
\* Unit is set for 5-32 VDC external control signal

**AHP-1200CP****ENVIRONMENTS**

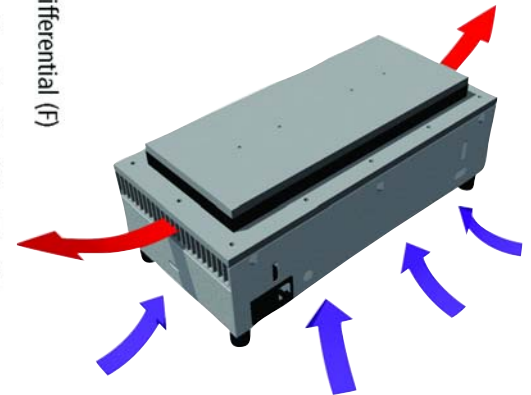
Bench top  
Factory  
Industrial/OEM

**COOLING CAPACITY**

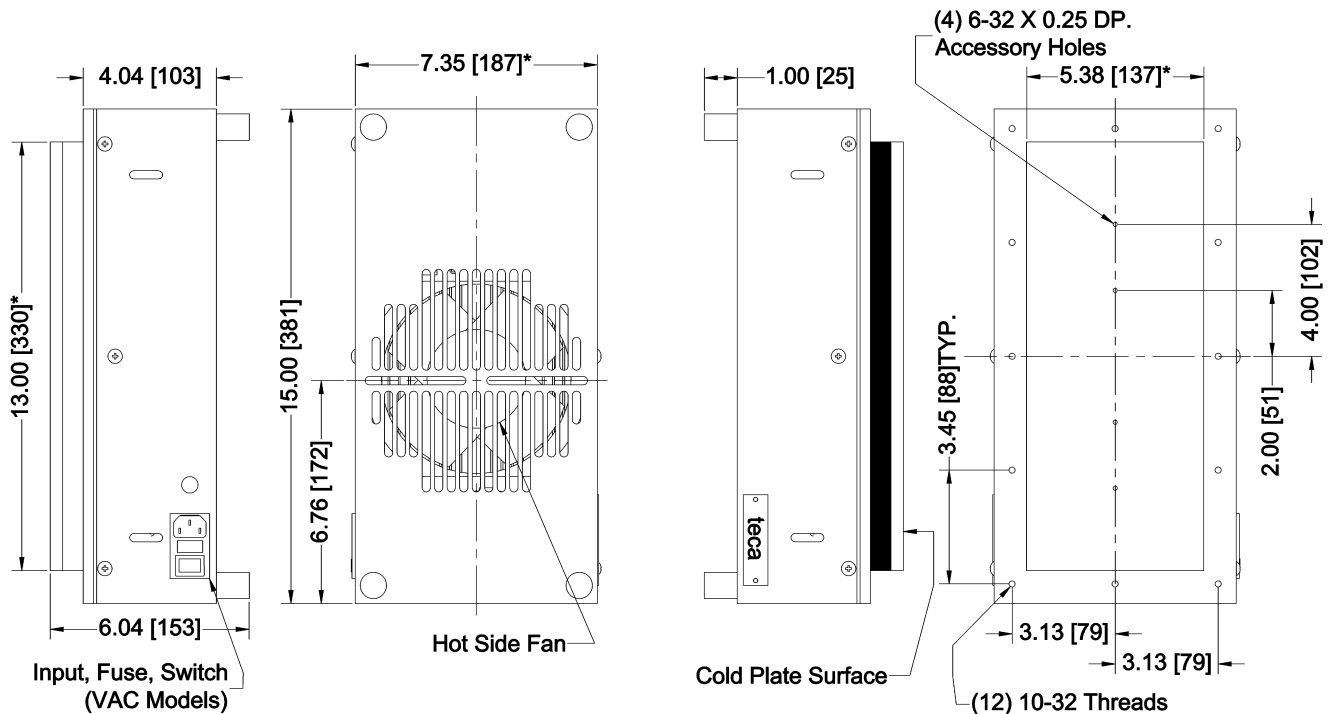
225 Watts @ 0 °C ΔT



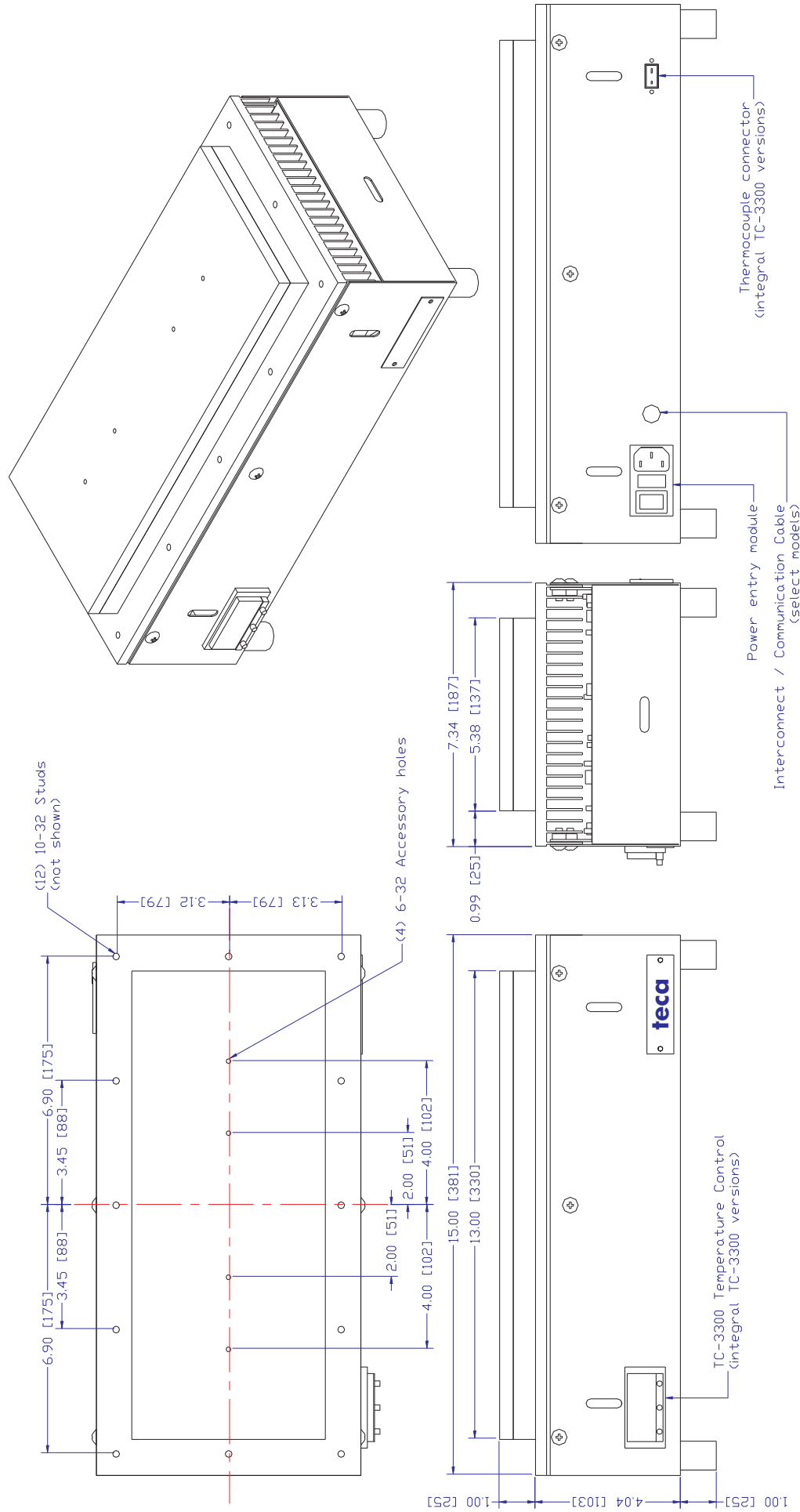
Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Cold Plate	$y = .199x - 44.9$	$y = .199x - 47.9$	$y = .199x - 50.8$



Ambient Air Path

**DIMENSIONS**

\* Dimension does not include hardware and sealant.  
Dimension: Inches [Millimeters]



Note:

- Dimensions: Inches [Millimeters]
- Dimensions do not include hardware

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HEREIN IS THE  
CONFIDENTIAL PROPERTY  
OF TECA CORP. RECIPIENT  
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INFORMATION IN ANY  
UNAUTHORIZED MANNER.

FINISH:

DECIMALS  
:XX +/-  
:XXX +/-

ANGLE  
+/-  
FRACTION  
+/-

MATERIAL:

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:

**THERMOELECTRIC COOLING AMERICA CORP.**

AHP-1200CP SERIES  
ASSEMBLY

DRAWN BY: AA

DATE: 06/24/05

SCALE: D6478

DRAWING #

1200-B-A249

MASTER:

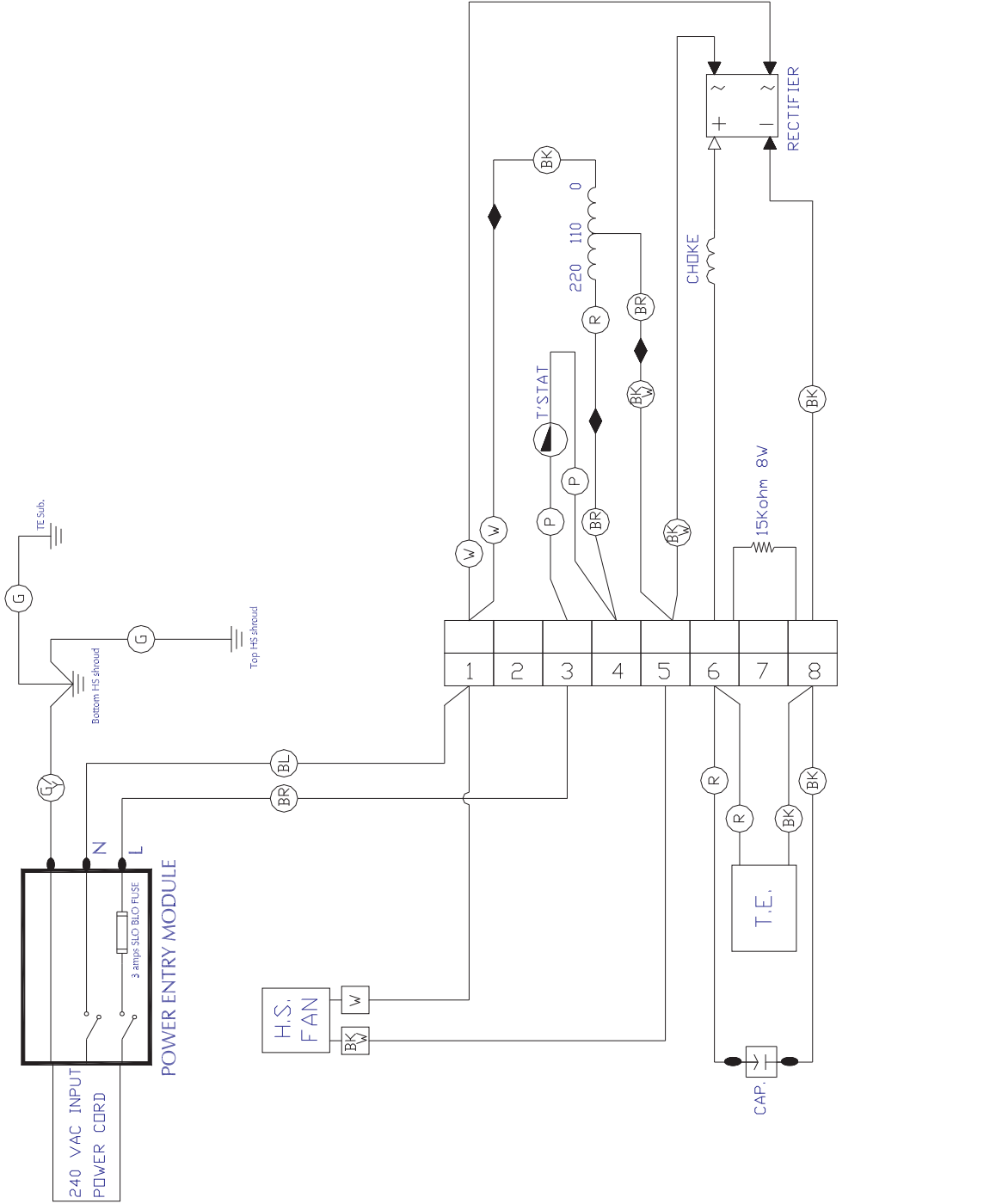
REV  
LEVEL

DESCRIPTION

Date

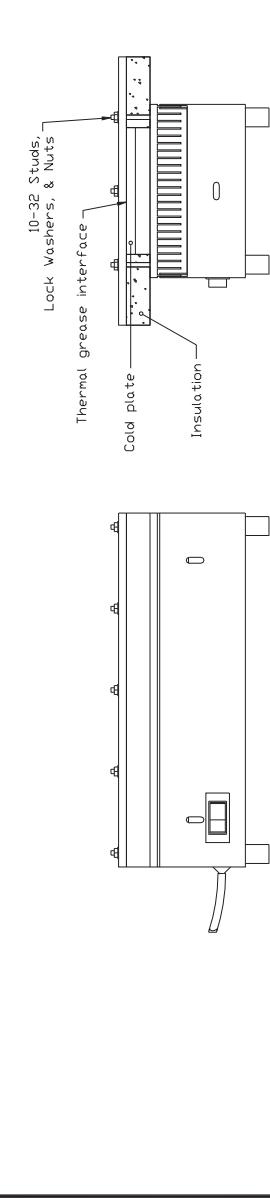
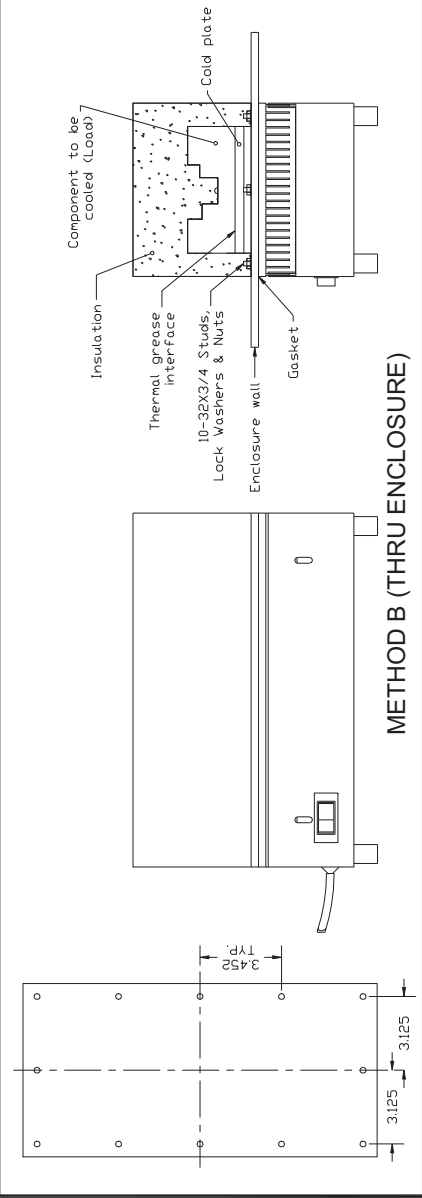
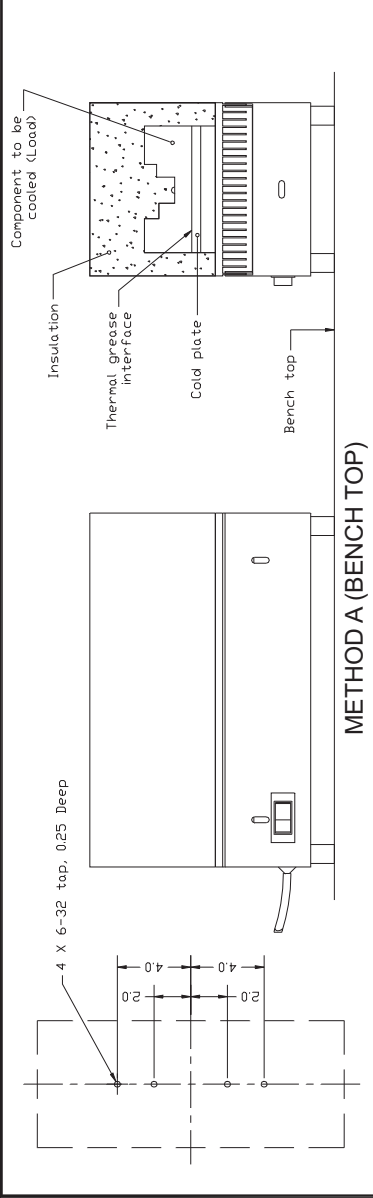
APPROVED

SHEET



- INDICATES RED FORK TERMINAL
- INDICATES BLUE QUICK CONNECT
- INDICATES RED QUICK CONNECT
- INDICATES BLUE RING TERMINAL
- INDICATES RED RING TERMINAL
- INDICATES SMALL RED RING TERMINAL
- INDICATES SOLDER CONNECTION
- INDICATES CLOSED END SPLICE
- INDICATES 18 AWG. WIRE
- INDICATES 22 AWG. WIRE

THERMOELECTRIC COOLING AMERICA CORP.		AHP-1202CP WITHOUT TEMPERATURE CONTROL		WIRING DIAGRAM		DRAWING #		REV LEVEL	
INFORMATION DISCLOSED HEREIN IS THE CONFIDENTIAL PROPERTY OF TECA CORP. RECIPIENT SHALL NOT USE THE INFORMATION IN ANY UNAUTHORIZED MANNER.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES ARE:		DATE: 10/27/14		SCALE	
FINISH:		MATERIAL:		DECIMALS		ANGLE		MASTER: 1200-A-E83	
Date		APPROVED		.XX +/-		FRACTION		SHEET	
DESCRIPTION		Date		.XXX +/-		+/-		1200-A-E83	
REV		Date		+/-		+/-		1200-A-E83	



Note: Do not use this method. Over compression may cause irreversible damage to the thermoelectrics and void the warranty.

## INSTALLATION INSTRUCTIONS

- 1- Choose Mounting Method (A or B).
- 2- Prepare mounting surface/component as indicated. Ideal component surface flatness is  $\pm 0.01$  T.I.R.
- 3- Spread an even, approximately 10 MIL, layer of thermal grease (Dow type 340 or equivalent) on both thermal contact surfaces (component and cold plate). A speedball rubber roller works well for this.
- 4- Install unit without sliding against mating surface using stainless steel screws and lock washers if available. Rotate slightly to "seat" them. Torque screws until snug. Do not overtighten.
- 5- Fit insulation around cold plate surfaces as required.
- 6- If desired, caulk insulation to seal and secure insulation.
- 7- Connect power per appropriate wiring diagram.

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	DECIMALS	XX +/-	ANGLE	+/-	AHP-1200CP	INSTALLATION INSTRUCTION
FINISH	XX +/-	XX +/-	FRACTION	+/-	DRAWN BY	AA
					DATE	05/24/00
					SCALE	1200-B-F56
					MASTER	MASTER
					REV	LEVEL
					SHEET	SHEET

## 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.