

Product Information Packet

Model TLC-1200

Custom 24 VDC Solid State Liquid Chiller

For Remote Temperature Control

Part # 6-3055-0-000

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 8:00 am-4:30 pm Central Time.

Included in this packet you will find:

Installation Notes for Air Conditioners

Product Literature and Specifications

Assembly Drawing # SK110405

Wiring Drawing # SK150129

Alternate TE Wiring # SK110404

Warranty Information



ThermoElectric Cooling America Corporation
4048 W. Schubert Avenue • Chicago, IL (U.S.A.) 60639
Ph: 773/342-4900 Fx: 773/342-0191
sales@thermoelectric.com www.thermoelectric.com

TLC-1200

Liquid Chiller

Air Cooled

General Purpose 24 VDC input
162 Watts

FEATURES

- Two separate fluid cooling circuits
- Weighs only 20 lbs. (9.1 kg)
- Mount through bench top or enclosure wall
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Mounts in any orientation
- 3/8" OD Stainless steel tubing



INCLUDES

- Internal H-Bridge for reverse polarity operation on heat/cool versions
- Rubber feet
- Power input leads

SPECIFICATIONS

| MODEL | PART NUMBER | PERFORMANCE RATING BTU/HR | VOLTAGE VDC | CURRENT AMPS. | WEIGHT LBS. (KG) | MAX OPERATING AMBIENT | HEATING OPTION | TEMP. CONTROL | FLUID TEMP RANGE °C |
|------------|--------------|---------------------------------|----------------|------------------|---------------------|-----------------------------|----------------|------------------|---------------------------|
| TLC-1200 | 6-3095-0-000 | 830-950 | 24 | 9.0 | 20 (9.1) | 50 °C(+122 F) | Cool Only | None | -5/65 |
| TLC-1200 | 6-3055-0-000 | 830-950 | 24 | 9.0 | 20 (9.1) | 50 °C(+122 F) | Cool Only | EXT* | -5/65 |
| TLC-1200HC | 6-3055-1-000 | 830-950 | 24 | 9.0 | 20 (9.1) | 50 °C(+122 F) | Heat/Cool | EXT** | -5/65 |

* Unit is set for 5-32 VDC external control signal, relay included

** Unit is set for 5-32 VDC external control signal, H-Bridge relay(s) included

TLC-1200

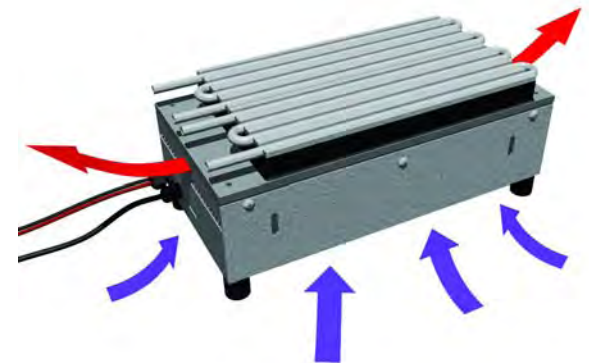
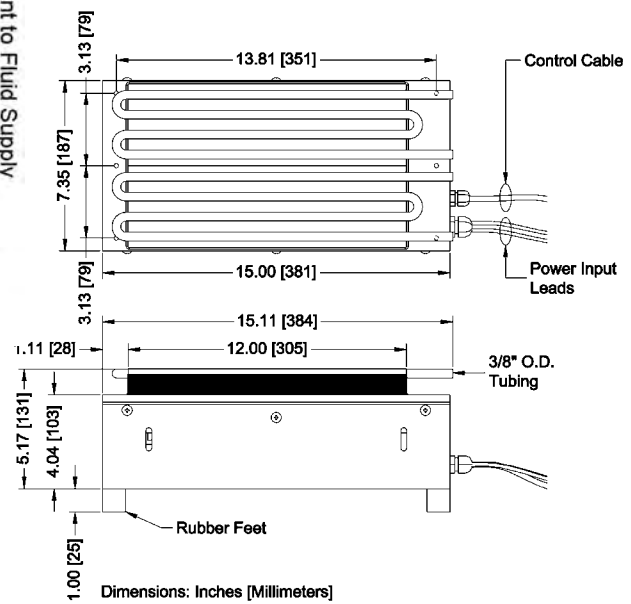
ENVIRONMENTS

Bench top
OEM
Industrial

COOLING CAPACITY

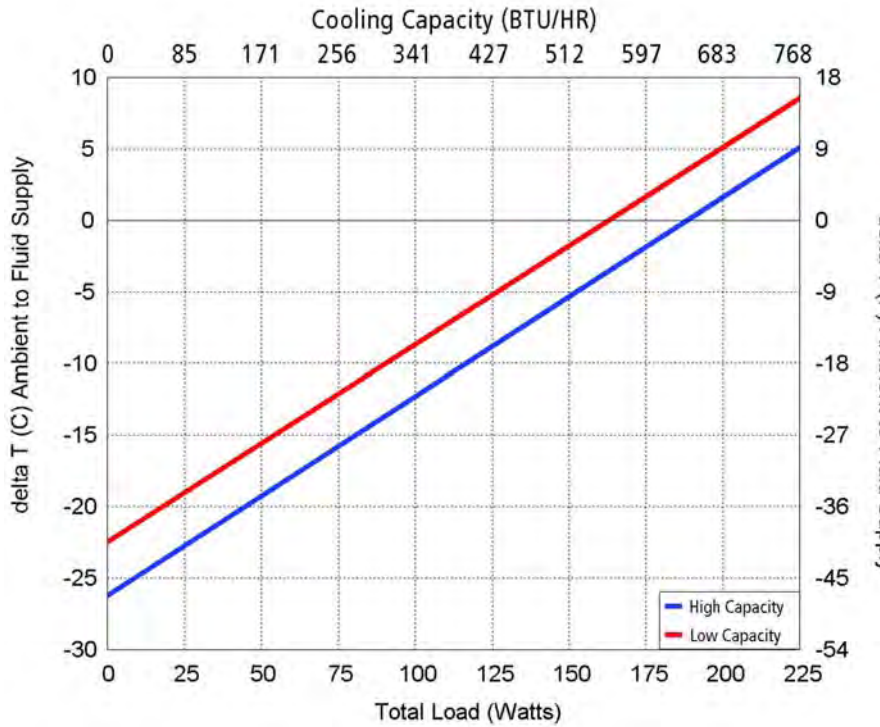
162 Watts @ 0 °C ΔT (standard)
190 Watts @ 0 °C ΔT (high capacity)

DIMENSIONS

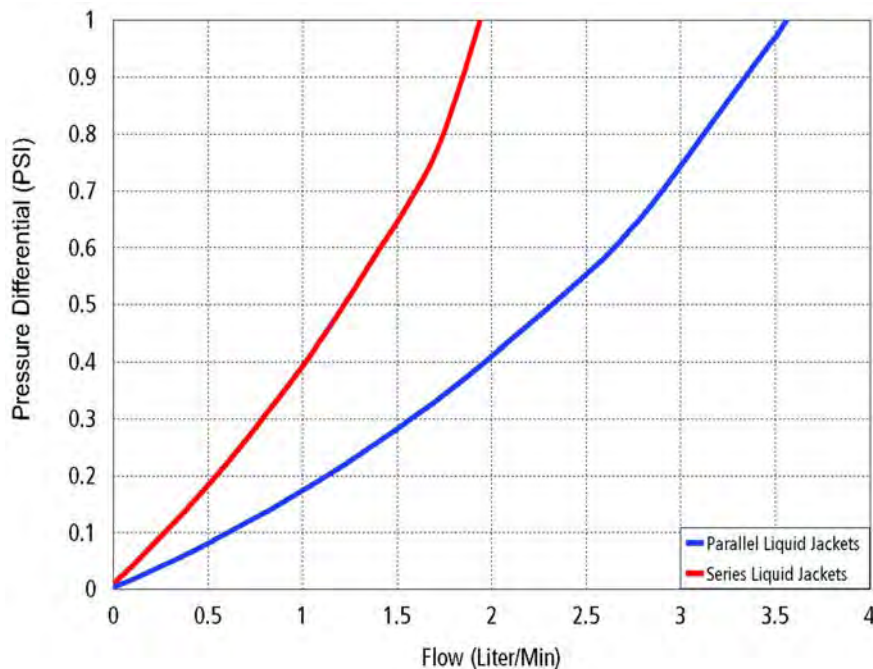


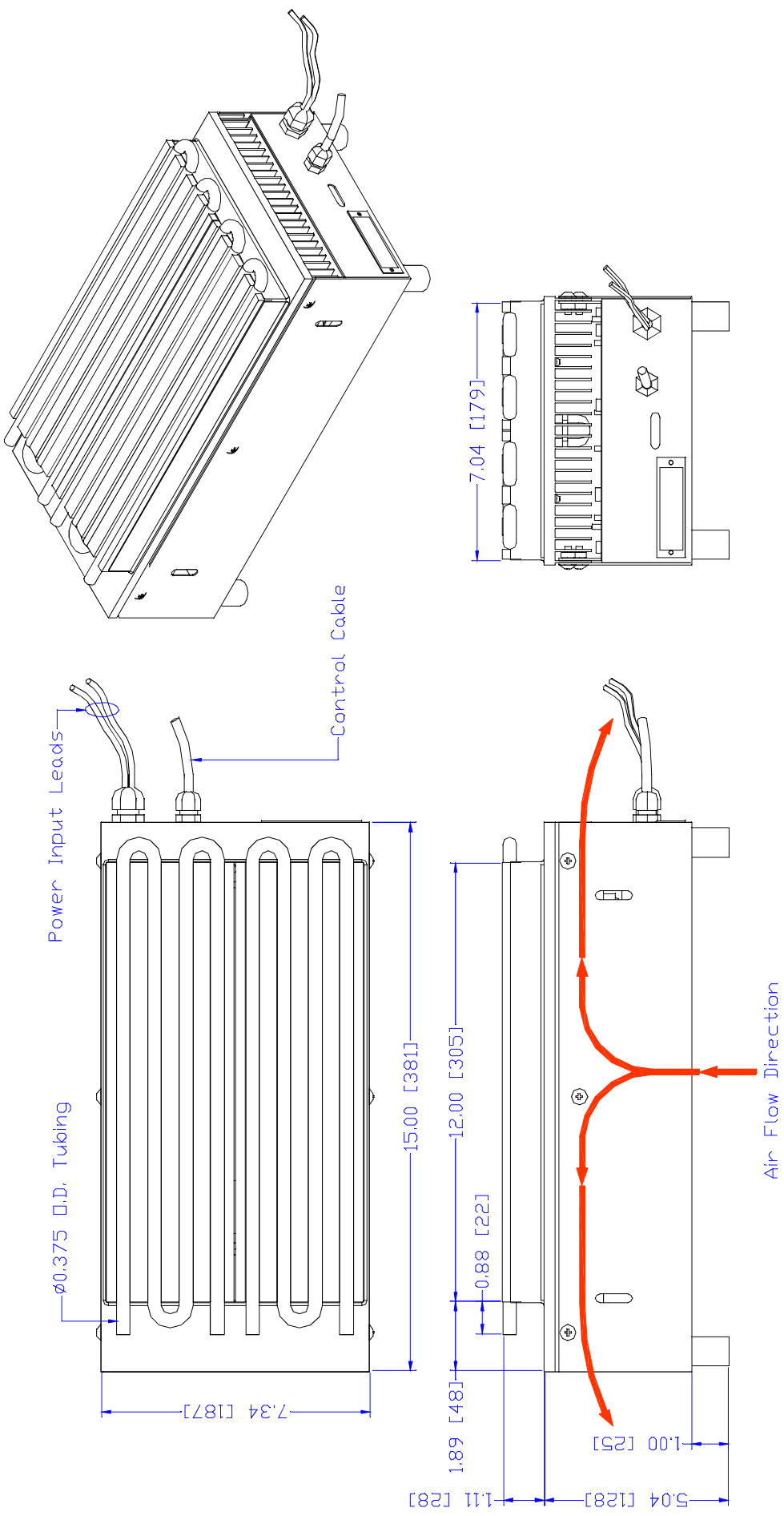
Ambient Air Path

PERFORMANCE CURVE



FLOW CHARACTERISTICS





Notes:

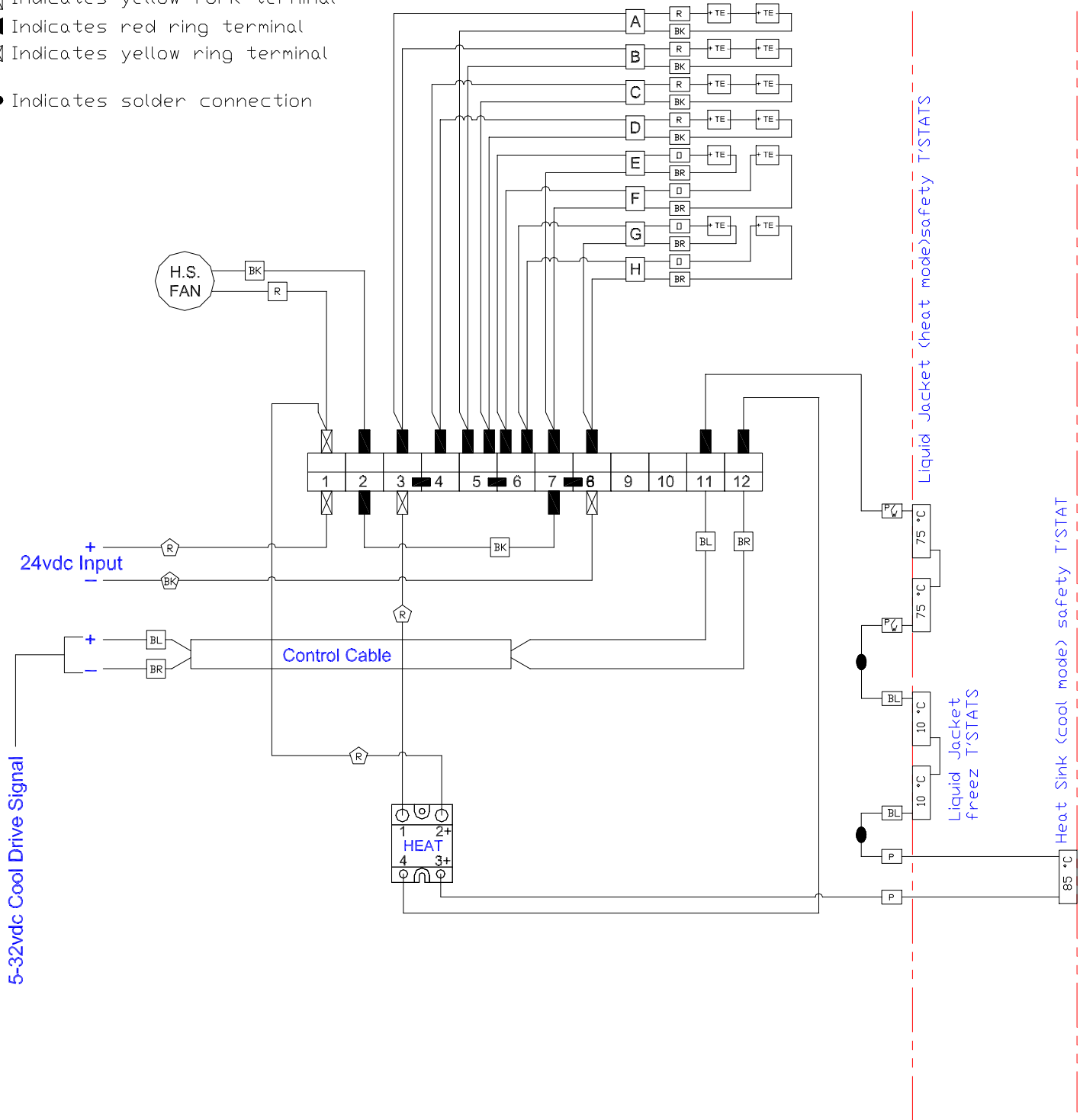
- Dimension: Inches [Millimeters]
- Dimensions do not include hardware and sealant thickness.

| REV | DESCRIPTION | Date | APPROVED | | | | | | |
|---|-------------|---|----------|--------------|-----------------|---------|-----|----------|-----------------|
| <div>INFORMATION DISCLOSED HEREIN IS THE CONFIDENTIAL PROPERTY OF TECA CORP. RECIPIENT SHALL NOT USE THE INFORMATION IN ANY UNAUTHORIZED MANNER.</div> <div>FINISH:</div> | | <div>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:</div> <table><tr><td>DECIMALS</td><td>ANGLE</td></tr><tr><td>.XX +/-</td><td>+/-</td></tr><tr><td>.XXX +/-</td><td>FRACTION +/-</td></tr></table> <div>MATERIAL:</div> | | DECIMALS | ANGLE | .XX +/- | +/- | .XXX +/- | FRACTION +/- |
| | | | | DECIMALS | ANGLE | | | | |
| | | | | .XX +/- | +/- | | | | |
| | | | | .XXX +/- | FRACTION +/- | | | | |
| | | | | DRAWN BY: 11 | | | | | |
| DATE: 04/04/11 | | | | | | | | | |
| D8004 | | | | | | | | | |
| DRAWING # SK110405 | | | | | | | | | |
| REV LEVEL | | | | | | | | | |
| SHEET | | | | | | | | | |
| MASTER: SK110401 | | | | | | | | | |

⬡ Indicates 12 AWG wire
□ Indicates 22 AWG wire

■ Indicates red fork terminal
⊠ Indicates yellow fork terminal
● Indicates red ring terminal
⊞ Indicates yellow ring terminal
● Indicates solder connection

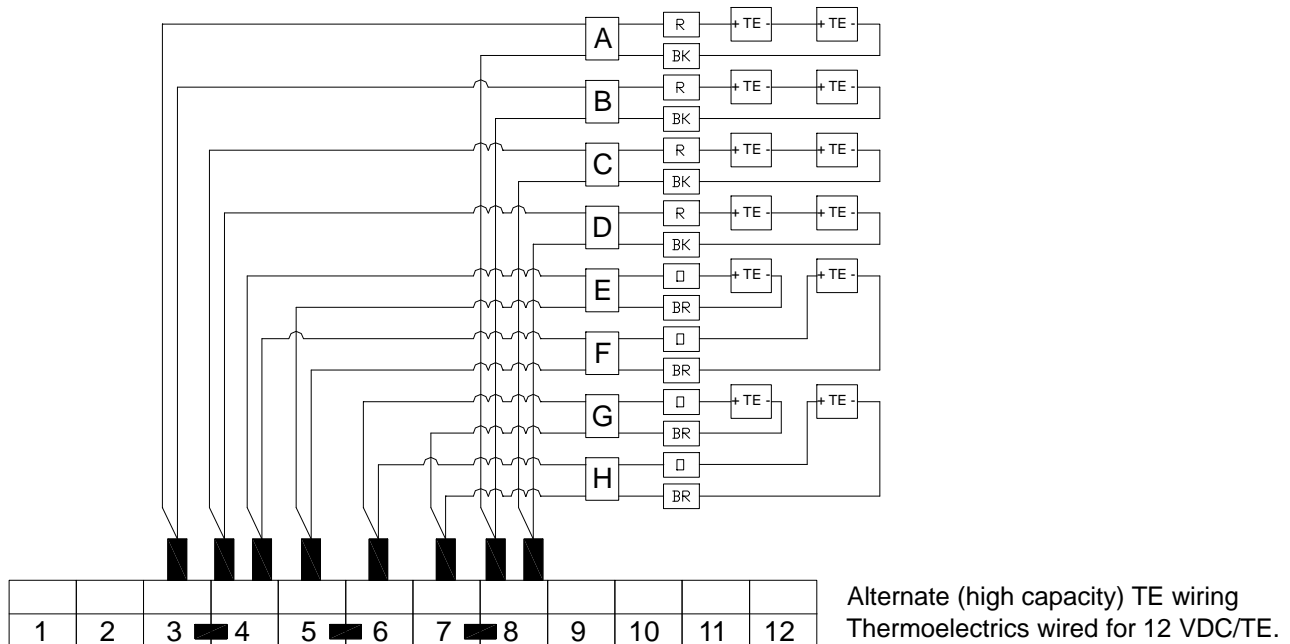
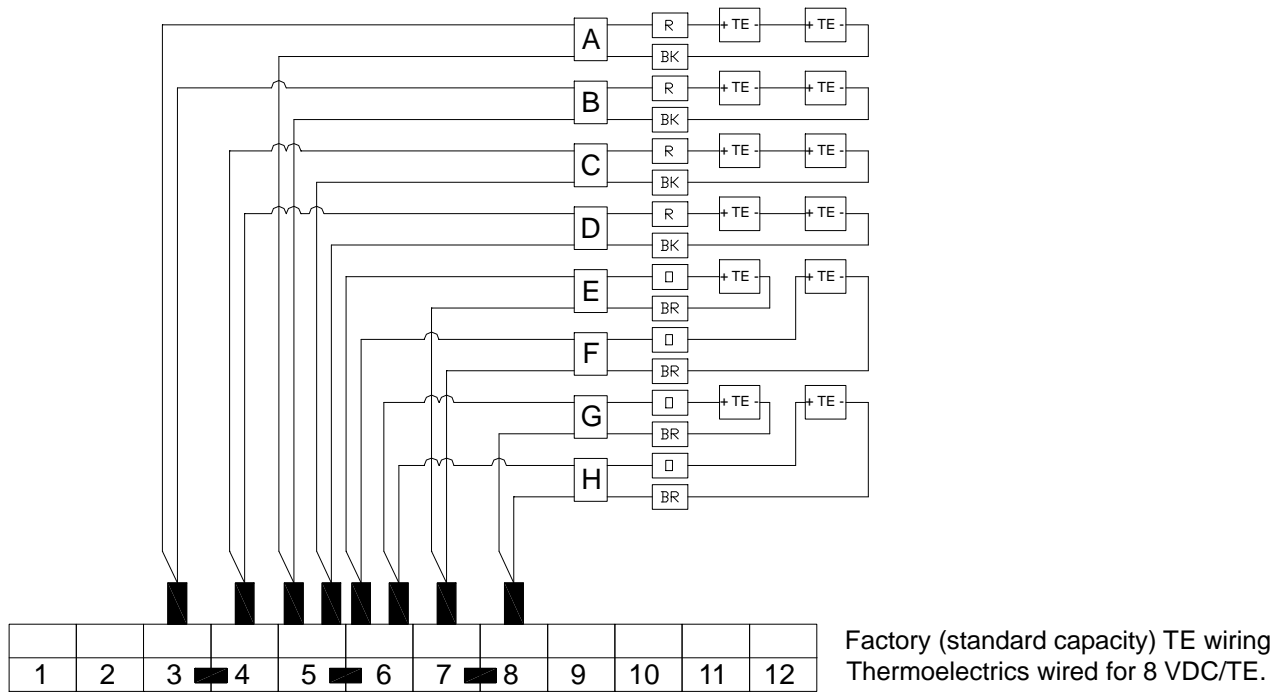
| REV | DESCRIPTION | Date | APPROVED |
|-----|-------------|------|----------|
| | | | |



Factory wired for high efficiency (8 VDC/TE) Reference drawing # SK110404.

| | | | | | | |
|---|---|-----------|---|----------|-------|--|
| 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: | | THERMOELECTRIC COOLING AMERICA CORP. | | | |
| | DECIMALS | ANGLE | TLC-1200 SET UP FOR REMOTE CONTROL WIRING DIAGRAM | | | |
| | .XX +/- | +/- | | | | |
| .XXX+/- | FRACTION | +/- | | | | |
| FINISH: | MATERIAL: | DRAWN BY: | DRAWING # | | REV | |
| | | AA | SK150129 | | LEVEL | |
| | | DATE: | | | | |
| | | 01/29/15 | | | | |
| | | S0028 | SCALE | MASTER: | SHEET | |
| | | | | SK110403 | | |

| REV | DESCRIPTION | Date | APPROVED |
|-----|-------------|------|----------|
| | | | |



| | | | | | | | |
|---|---|------------------------|---|--|-----------|----------|--------------|
| 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: | | THERMOELECTRIC COOLING AMERICA CORP. | | | | |
| | | | TLC-1200 STANDARD AND ALTERNATE TE WIRING | | | | |
| | DECIMALS | ANGLE | | | | | |
| | .XX +/- .XXX +/- | +/- FRACTION +/- | | | | | |
| FINISH: | MATERIAL: | | DRAWN BY: | | DRAWING # | | REV LEVEL |
| | | | AA | | | | |
| | | | DATE: | | SK110404 | | |
| | | | 04/04/11 | | | | |
| | | | D8003 | | SCALE | MASTER: | SHEET |
| | | | | | | SK110403 | |

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.