

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair or calibration,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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Changing the Temperature/Process Setpoint

CSC232:

The CSC32 incorporates a PID digital setpoint controller. In the default mode the digital display indicates the temperature or process known as (PV) Process Variable. Holding down the * "MODIFY" key causes the display to show the current programmed setpoint known as (SV) Setpoint Variable. To make changes to setpoint press and hold the * "MODIFY" key, then press the ▲ "INCREASE" or ▼ "DECREASE" key to make the your change. In this mode, holding the ▲ "INCREASE" or ▼ "DECREASE" key for an extended period will cause the setpoint to advance more rapidly the longer you hold it.



Modify Key
Press/hold to view change setpoint



Increase Key
Press in conjunction with Modify Key to increase setpoint



Decrease Key
Press in conjunction with Modify Key to decrease setpoint

CSi232:

The CSi32 incorporates a PID digital setpoint controller. In the default mode the digital display indicates the temperature or process known as (PV) Process Variable. Pushing the ⌂ "MENU" key once causes the display to show SP1. With SP1 on the display press the ⌂ "ENTER" key to show the current programmed setpoint known as (SV) Setpoint Variable. To make changes to the setpoint press the ▲ "INCREASE" or ▼ "DECREASE" key followed by "ENTER" ⌂ to store the change. In this mode, holding the ▲ "INCREASE" or ▼ "DECREASE" key for an extended period will cause the setpoint to advance more rapidly the longer you hold it.



Menu Key
Press to access setpoint



Decrease Key
Press to decrease setpoint



Increase Key
Press to increase setpoint.



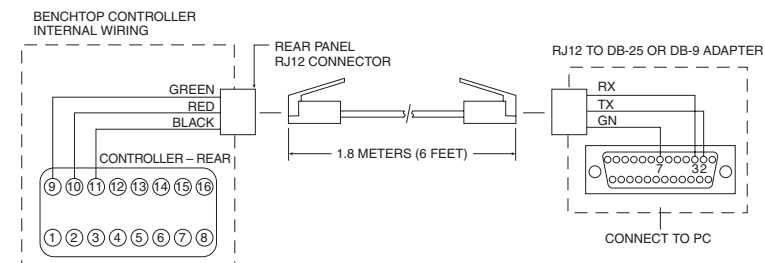
Enter Key
Press to stow changes in setpoint

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RS-232 or RS-485 Communication

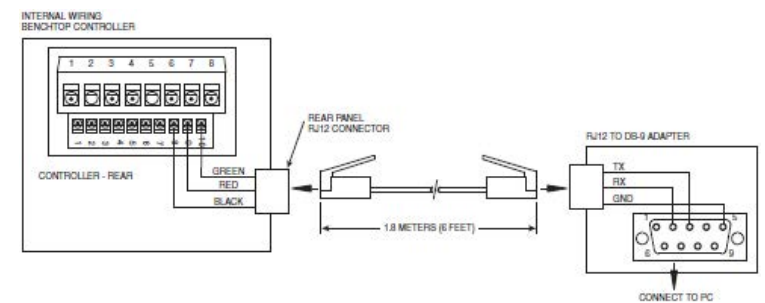
Your controller unit has been factory pre-wired and configured for ease of use with an RJ12 rear panel connection that will require no additional wiring. An interface cable, Part No. DB25-R12 is included with your unit for easy connection between your benchtop controller and PC.

CSC32:



Communications Cable Connections – Internal Wiring

CSi32:



Communications Cable Connections – Internal Wiring

QUICK START

For complete product manual:
www.omega.com/manuals/manualpdf/3506.pdf



CSi32/CSC32 SERIES Mini Benchtop Controllers



omega.com info@omega.com

Servicing North America:

U.S.A.: OMEGA Engineering, Inc., One Omega Dr.
P.O. Box 4047, Stamford, CT 06907-0047 USA
Toll-Free: 1-800-826-6342 (USA & Canada Only)
Customer Service: 1-800-622-2378 (USA & Canada Only)
Engineering Service: 1-800-872-9436 (USA & Canada Only)
Tel: (203) 359-1660 Fax: (203) 359-7700
e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, human applications.

START HERE

Using This Quick Start Manual

Use this Quick Start Manual with your CSC32 or CSi32 series Mini Benchtop Controller for easy set-up and basic operation. For detailed information refer to the User's Guide (CSC32: #M3506, CSi32: #M4640) or accompanying manuals included with your unit.

Included Reference Material

CSC32 Series:

- CN9500 Autotune Temperature Controllers Manual #M2897
- Software Communications Manual #M2896 (Communications models only)

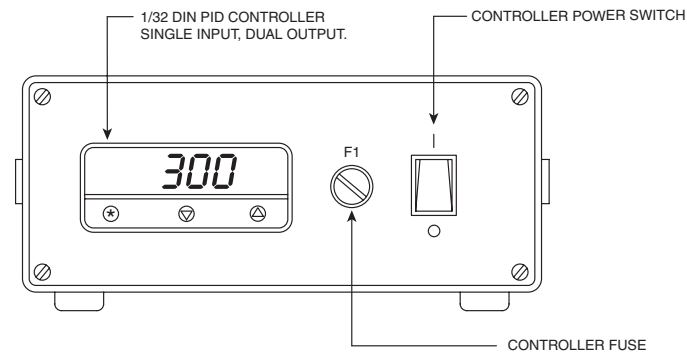
CSi32 Series:

- iSeries Temperature & Process Controllers Manual #M3355
- Communications Manual M#3397 (Communications models only)

General Description

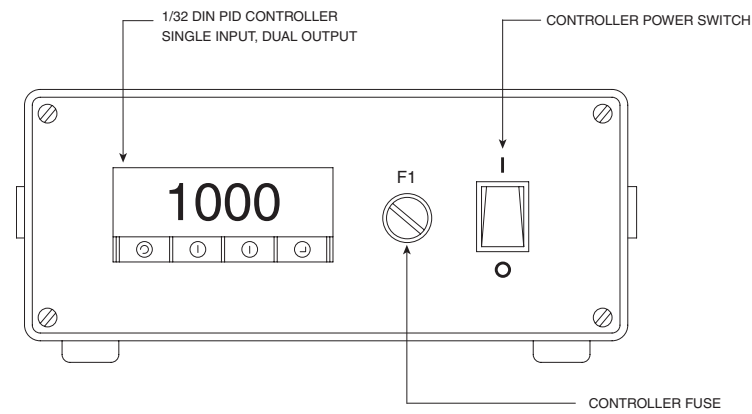
Your CSC32/CSi32 series benchtop controller is ideal for laboratory use and applications requiring portable temperature or process control. Pre-wired input and output receptacles on the rear panel enable quick and easy connections to main ac power, signal input, control output and two way digital communications. These controllers are factory configured and calibrated for a dedicated input type by model number.

Front Panel View



CSC32 Front Panel

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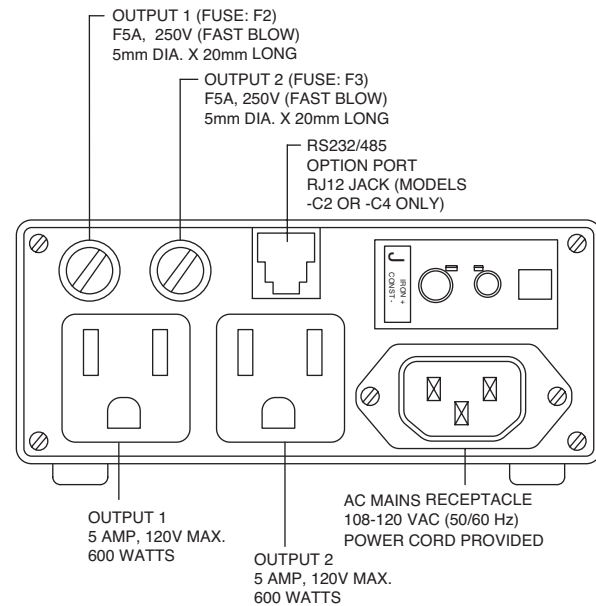


CSi32 Front Panel

Controller Rear View

Applicable for the following models:

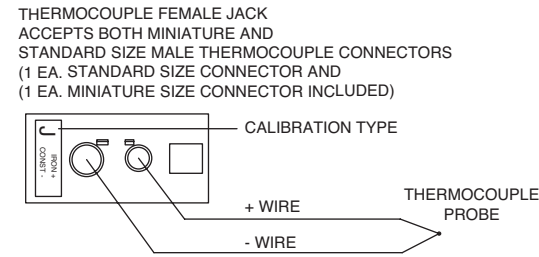
- | | |
|-------------------|---------------|
| CSC32K (-C2, -C4) | CSi32K (-C24) |
| CSC32J (-C2, -C4) | CSi32J (-C24) |
| CSC32E (-C2, -C4) | CSi32E (-C24) |
| CSC32T (-C2, -C4) | CSi32T (-C24) |
| CSC32R (-C2, -C4) | CSi32R (-C24) |
| CSC32S (-C2, -C4) | CSi32S (-C24) |
| CSC32N (-C2, -C4) | CSi32N (-C24) |



CAUTION:

Controller input type is factory set and calibrated to the model number you have ordered. Do not change the controller's thermocouple input type programming. Incorrect readings and/or control will result.

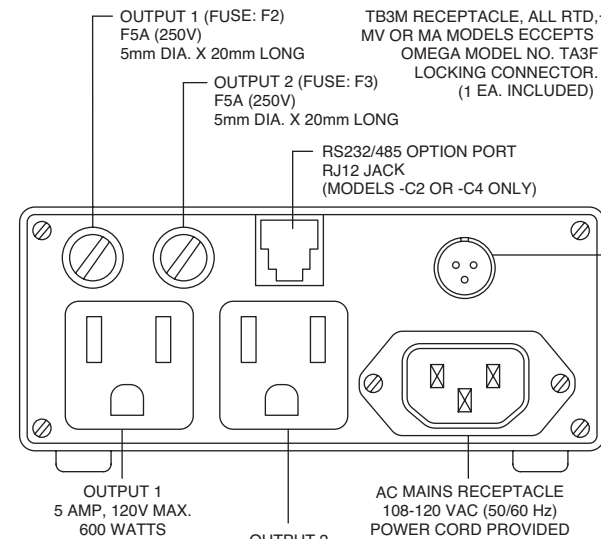
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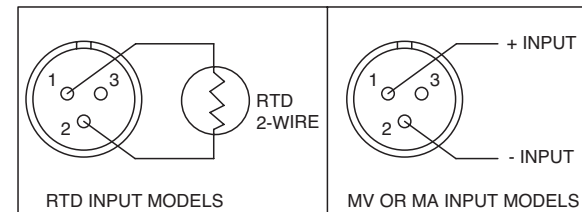
Mounting

Applicable for the following models:

- CSC32RTD (-C2, -C4)
- CSC32MV (-C2, -C4)
- CSC32MA (-C2, -C4)



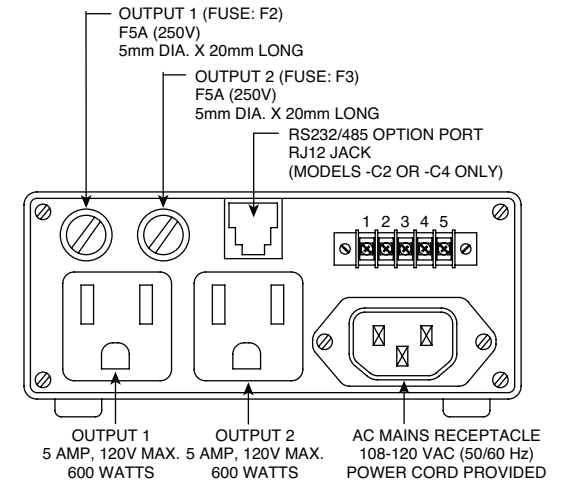
INPUT CONNECTOR WIRING



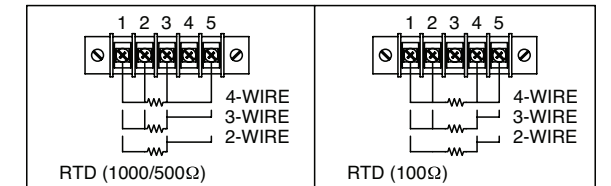
4

Applicable for the following models:

- CSi32RTD (-C24)
- CSi32MV (-C24)
- CSi32MA (-C24)

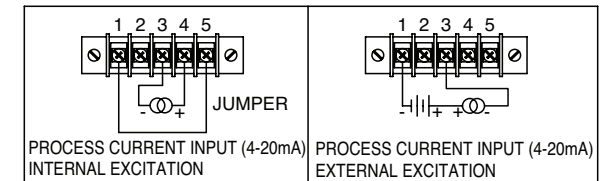


INPUT CONNECTOR WIRING



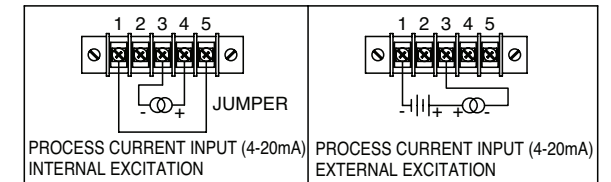
RTD Model

INPUT CONNECTOR WIRING



MA Model

INPUT CONNECTOR WIRING



MV Model