

UPZCP-1

Single-zone pump control

Installation and operating instructions



English (US) Installation and operating instructions

Original installation and operating instructions.

These installation and operating instructions describe Grundfos UPZCP-1. Sections 1-3 give the information necessary to be able to unpack, install and start up the product in a safe way.

Sections 3-7 give important information about the product, as well as information on service, fault finding and disposal of the product.

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1. General warning

WARNING



Prior to installation, read these installation and operating instructions. Installation and operation must comply with local regulations and accepted codes of good practice.

This booklet should be left with the owner of the pump for future reference and information regarding its operation.

WARNING



The use of this product requires experience with and knowledge of the product.

Persons with reduced physical, sensory or mental capabilities must not use this product, unless they are under supervision or have been instructed in the use of the product by a person responsible for their safety. Children must not use or play with this product.

1.1 UPZCP-1

UPZCP-1 is a single-zone pump control relay for domestic hydronic heating systems. The relay provides control when zoning with pumps or low voltage zone valves.

1.2 Limited warranty

Products manufactured by GRUNDFOS are warranted to the original user only to be free of defects in material and workmanship for a period of 24 months from date of installation, but not more than 36 months from date of manufacture. GRUNDFOS' liability under this warranty shall be limited to repairing or replacing at GRUNDFOS' option, without charge, F.O.B. GRUNDFOS' factory or authorized service station, any product of GRUNDFOS' manufacture. GRUNDFOS will not be liable for any costs of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim. Products which are sold but not manufactured by GRUNDFOS are subject to the warranty provided by the manufacturer of said products and not by GRUNDFOS' warranty. GRUNDFOS will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair, or if the product was not installed in accordance with GRUNDFOS printed installation and operating instructions.

To obtain service under this warranty, the defective product must be returned to the distributor or dealer of GRUNDFOS products from which it was purchased together with proof of purchase and installation date, failure date, and supporting installation data. Unless otherwise provided, the distributor or dealer will contact GRUNDFOS or an authorized service station for instructions. Any defective product to be returned to GRUNDFOS or a service station must be sent freight prepaid; documentation supporting the warranty claim and/or a Return Material Authorization must be included if so instructed.

MANUFACTURER WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, OR EXPENSES ARISING FROM INSTALLATION, USE, OR ANY OTHER CAUSES. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THOSE WARRANTIES DESCRIBED OR REFERRED TO ABOVE. EXCEPT AS EXPRESSLY HEREIN PROVIDED THE GOODS ARE SOLD "AS IS", THE ENTIRE RISK AS TO QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AND PERFORMANCE OF THE GOODS IS WITH THE BUYER, AND SHOULD THE GOODS PROVE DEFECTIVE FOLLOWING THEIR PURCHASE, THE BUYER AND NOT THE MANUFACTURER, DISTRIBUTOR, OR RETAILER ASSUMES THE ENTIRE RISK OF ALL NECESSARY SERVICING OR REPAIR.

Some jurisdictions do not allow the exclusion or limitation of implied warranties of merchantability and fitness for a particular purpose, of incidental or consequential damages and some jurisdictions do not allow limitations on how long implied warranties may last or require you to pay certain expenses as set forth above. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from jurisdiction to jurisdiction.

1.3 Symbols used in this document



WARNING

If you do not observe these safety instructions, it may result in personal injury.



WARNING

If you do not observe these instructions, it may lead to electric shock with consequent risk of serious personal injury or death.

2. Receiving the product

Examine the components carefully to make sure no damage has occurred to the pump during shipment.

3. Installing the product

WARNING



Electrical shock and potential circuit damage. Disconnect power supply before beginning installation. All wiring must comply with national and local electrical codes, ordinances and regulations. Failure to follow electrical codes could result in serious personal injury, death, and property damages.

3.1 Mechanical installation

3.1.1 Installing the base

Attach the base firmly to the wall surface with four screws and anchors using the key holes provided.

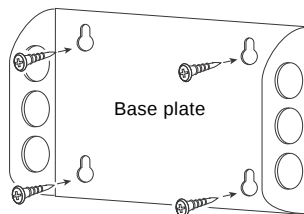


Fig. 1 Attach the base plate to the wall with screws and anchors

TM06 5597 5015

3.2 Electrical connection

3.2.1 Overview

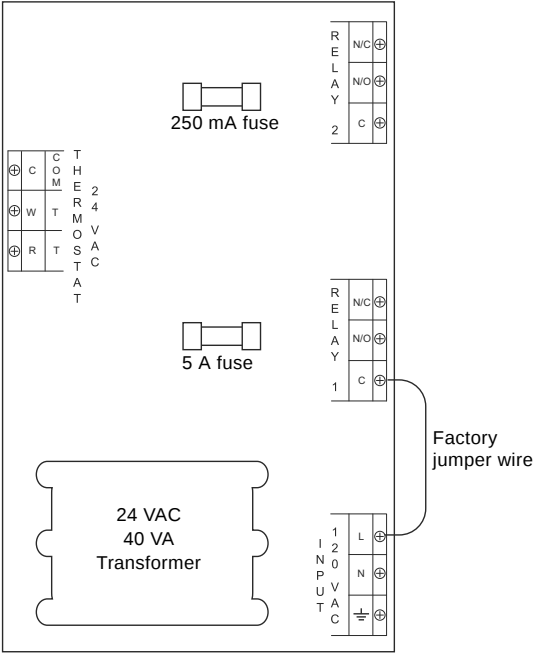


Fig. 2 UPZCP-1 electrical board layout

TM05 5595 5015

3.2.2 Wiring

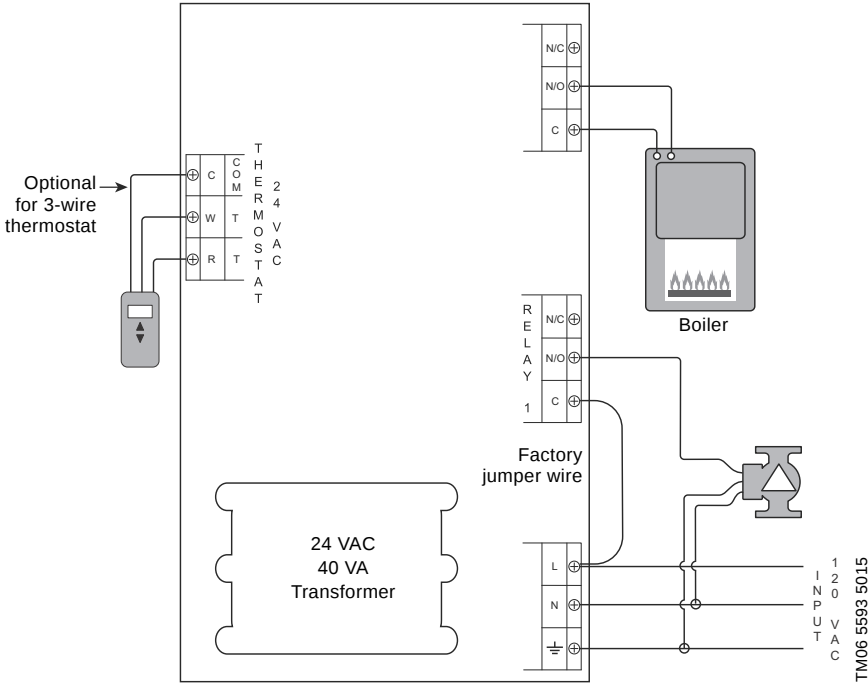


Fig. 3 UPZCP-1 single-zone, one thermostat

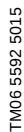


Fig. 4 UPZCP-1 multiple zones

4. Starting up the product

4.1 LED diagnostics

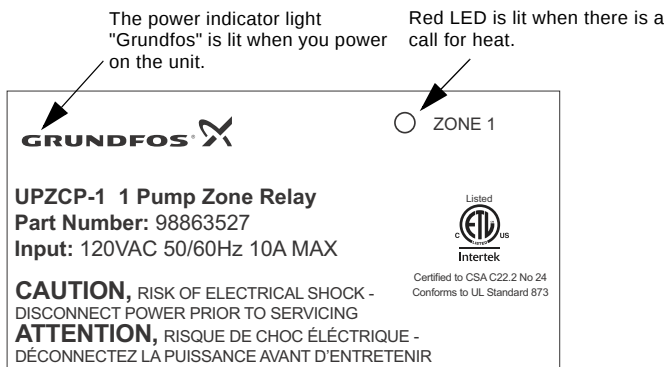


Fig. 5 Indicator lights located on the control plate

5. Product introduction

5.1 Features and benefits

- Compatible with 2-, 3-, and 4-wire low voltage controllers or thermostats.
- Wiring ease with 120 VAC, ground and low voltage screw terminal inputs.
- Low voltage end-switch output terminals for the zone valves.
- Front facing LED indicator lights on the cover.
- Side mounted terminal connections for ease of wiring and installation.

5.2 Identification

5.2.1 Part number

Model	Description	Part number
UPZCP-1	Single pump zone control	98863527

5.2.2 Production code

The production code represents the date of manufacture. You find the production code on the circuit board and the carton label.

Example:

PC 1542 = year 2015, week 42.

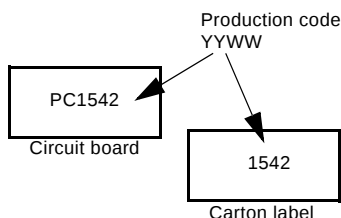


Fig. 6 Locating production code

6. Servicing the product

6.1 Service parts

Part	Description	Part number
5 A fuse	Kit, UPZC pump fuse, 5-pack	98996468
250 mA fuse	Kit, UPZC transformer fuse, pump board 250 mA, 5-pack	98996472
500 mA fuse	Kit, UPZC transformer fuse, pump board 500 mA, 5-pack	98996473

7. Technical data

UPZCP-1 single zone pump control relay	
Model	UPZCP-1
Part number	98863527
Input power 60 Hz	120 VAC
Transformer voltage	24 VAC, 40 VA, Class 2
Thermostat output [A]	0.125
Maximum single phase motor rating, per zone [A]	5
Maximum combined load rating: output @120 VAC [A]	10
Temperature range (storage) [°F (°C)]	50-100 (10-38)
Temperature range (maximum operation) [°F (°C)]	0-100 (-18 - +38)
Maximum operating humidity range [%] RH	90
Number of knockouts	6
Size of knockouts [in. (mm)]	0.875 (22)
Dimensions, W x H x D [in. (mm)]	5.93 x 4.80 x 2.36 (151 x 122 x 60)
Approvals	CSA 22.2 No. 24/UL Standard 873
Relay type	Sealed
Cover panel	ABS - fire rated
Base material	Galvanized steel
Terminal block (side mounted)	PA66
Front display lights	LED

8. Disposing of the product

This product or parts of it must be disposed of in an environmentally sound way:

1. Use the public or private waste collection service.
2. If this is not possible, contact the nearest Grundfos company or service workshop.

Subject to alterations.

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