# Fan Forced Wall Heater R23SH/R23DH/T23WH Series



# **AIMPORTANT INSTRUCTIONS**

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- 1. Read all instructions before using the heater.
- 2. The heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. The trim around the heater outlet becomes hot during heater operation. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 ft (0.9 m) from the front of the unit and keep them away from the sides and rear.
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the unit is left operating and unattended.
- 4. Do not operate any heater after it malfunctions. Disconnect power at the service panel and have the heater inspected by a reputable electrician before reusing.
- 5. Do not use outdoors.
- 6. To disconnect the unit, turn the controls off, and then switch off at main power supply panel.
- 7. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage to the heater.
- 8. To prevent a possible fire, do not block air intake or exhaust in any manner.
- All electrical heaters have hot and arcing or sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
- Do not modify this heater. Use it only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.

# **SAVE THESE INSTRUCTIONS**

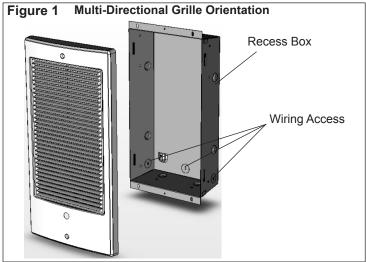
# X Installation Instructions

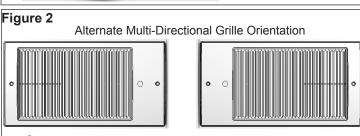
**WARNING:** To reduce the risk of fire, do not store or use gasoline or other flammable vapors or liquids in the vicinity of the heater.

♠ CAUTION: High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 3 feet (0.9 m) from the front of the heater.

This heater is designed for permanent installation only. Care should be taken to install according to the following instructions. All required clearances should be maintained. In addition all electrical wiring and connections should comply with local electrical codes.

! NOTE: It is extremely important to read all information labels. Care must be taken to ensure that the heater is rated the same voltage as the electrical supply wires. Failure to do so could result in unsafe heater operation as well as damage to the unit. If replacing an existing heater, check the labels of the old heater to ensure the voltage of the new heater is compatible.





! NOTE: Maintain a minimum clearance of 8" from adjacent walls, floors and ceilings on all four sides of the grille

All units should be controlled by means of a regulating thermostat. Certain models only are provided with built in thermostats. Check the *Model Key Information* section for verification. Wall thermostats should comply with the voltage and wattage of all heaters on the circuit.

All installations require the following components:

- 1) Recess Box (Model 1011650100)
- 2) Heater Assembly (See nameplate Label)
- 3) Grille

An optional Surface Mount Box is available for installations that are not recessed in wall cavity.

### Step 1 - Placement

All units are designed for placement in either interior or exterior walls. Care should be taken to provide a minimum of 8" clearance from floors, ceilings and adjacent walls. Once installed, the airflow through the heater should not be blocked in any way. Maintain 3' (91.4cm) clearance of objects from the front of unit. Maintain a spacing of 3' (91.4cm) between heaters in order to prevent re-circulation of heated air. Insulation surrounding the back and sides of the recess mount box will not affect performance. Ensure insulation is rated for temperatures up to 185°F (85°C).

! NOTE: Certain flooring and wall covering materials (particularly those incorporating clear vinyl materials tend to distort at temperatures in the vicinity of 140°F (60°C). Material shall be checked prior to installation to determine if discoloration will occur. Units are not approved for placement in floors or ceilings. Do not install in any area where combustible vapors,

gases, dusts or liquids are present. Fire or explosion may occur.

## Step 2 – Mounting The Recess Box

Determine the desired orientation of unit. Provide an opening in wall 14 ¼" x 8 1/8" x 3" (36.2cm x 20.6cm x 7.6cm) deep, minimum. Care should be taken to install the recess box in the correct orientation to accommodate grille. **Note the position of the electrical entry knockouts and orient recess box according to Figure 1.** Ensure all required clearances are met.

Ensure recess box flanges are flush with the finished wall surface. For new construction, the sides of the recess box are marked with guidelines to allow for ½" (1.3cm) and 5/8" (1.6cm) drywall thickness if drywall is to be added at a later date. Secure recess box to studs with screws using holes provided on sides or flange of recess box. Remove appropriate electrical knockout and secure supply wire using an approved strain relief connector leaving 6" (15.2cm) of wire leads in the recess box.

## Step 3 - Mounting the Heater Assembly

Insert the heater assembly into the recess box ensuring that the tab on the heater assembly slides into the slot in the recess box. Ensure the heater assembly is fully seated and secure to the recess box using the captive screw provided.

Be careful not to handle the heater where the cutout is located.

### **Step 4 – Electrical Connections**

**WARNING:** Hazard of severe shock.

**A** CAUTION: Disconnect all power coming to heater at main service panel before wiring or servicing.

Turn off power supply at the electrical panel. Route supply wires from circuit breaker through wall thermostat to heater. For models with <u>built in thermostat</u> route from circuit breaker to heater.

Supply wire must be of **two wire plus ground** variety, with a rating capable of handling all loads on the circuit. Supply wire should be rated for a minimum of 140°F (60°C). Make electrical connection according to relevant wiring diagrams. Make connections using approved wire nut connectors and secure the grounding wire to the ground screw on the heater chassis.

## Step 5 - Secure the Front Panel

If your unit has a built in thermostat remove the plug on the front panel. Fasten the Front Grille using the screws provided. It is important to note that the front grille is oriented in the required positions shown in Figure 1 and on the Multi – Directional grille. For units with built in thermostat push knob onto thermostat shaft through plug hole.

# Operation and Maintenance

**WARNING:** This heater must be properly installed before it is used.

▲ WARNING: Disconnect power and heater has cooled before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

! NOTE: This heater should not be operated with an accumulation of dust or dirt on or in the unit, as this can cause a build up of heat and eventual damage. For this reason the heater must be inspected regularly, depending upon conditions and at least at yearly intervals.

For units with built in thermostats, rotate the thermostat knob fully clockwise. Heater should activate. When the room reaches the desired temperature, slowly rotate the knob counterclockwise until unit shuts off. The heater will automatically cycle around this preset temperature setting.

All units contain a Manual Reset High Temperature Cutout, which will shut the heater off in the event of abnormally high operating temperatures. The high temperature cutout can be reset by switching the main power off and waiting five minutes before switching it to back on. In addition a Red Warning Light will activate providing a visual warning. If this condition exists, disconnect all power to the unit and call a licensed electrician for service. Do not use heater until the problem is determined and corrected. ENSURE POWER TO THE UNIT IS DISCONNECTED PRIOR TO SERVICING OR PERFORMING CLEANING.

# **Warranty**

The Manufacturer warrants the heater and components of the enclosed product against any defect in material or workmanship for a period of two years from the date of purchase, with the exception of the elements which are warranted to be free from defect in material and workmanship for ten years. In full satisfaction of any claims under this Warranty the Manufacturer will repair or replace without charge, in its factory or in the field as it alone may decide, any parts which in its opinion are defective.

The Manufacturer shall not be responsible for any transportation or shipping costs in relation to such repair or replacement except as specifically assumed by it. Misuse of this product or repairs by persons other than the Manufacturer's authorized personnel without the Manufacturer's written approval, will void this Warranty.

This Warranty is in lieu of all other warranties or conditions whether expressed or implied including but not limited to those of merchantability or fitness for purpose and shall constitute the sole remedy of the Purchaser and the sole liability of the Manufacturer in respect of the sale of the product, whether in the nature of breach or breach of fundamental term, or of negligence or otherwise.

The Manufacturer shall not be liable for any special, indirect or consequential damages or for any damages resulting from removal or replacement of a small wall heater subject to warranty claim without the Manufacturer's authorization.

This Warranty is transferable by the original consumer purchaser of the product. Any claims under this Warranty must be submitted in writing to the Service Manager, Dimplex North America Ltd., 1367 Industrial Rd., Cambridge, Ontario N1R 7G8, Canada.

www.dimplex.com

# **Model Key Information**

PRODUCT LEGEND: X YY WW VV B T C Z														
X		YY		ww		VV		В		Т	С		Z	
R23	RETAIL	SH	SINGLE ELEMENT	05	500	07	240	В	BULK PACKAGING	T THERMOSTAT	С	WALL CAN	W	WHITE
T23	COMMERCIAL TRADE	DH	DOUBLE ELEMENT	07	750	10	240						Α	ALMOND
		WH	SINGLE ELEMENT	10	1000	11	120							
			12	1250	21	208								
				15	1500	31	240/208							
				20	2000									

## R23SH & T23WH Models Wiring Diagram

Basic Heater Field Connection

High Limit Black

S L1

Ground

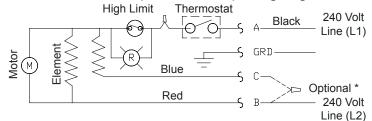
(120V Marked N)

White: 120V

! NOTE: All units rated for 240/208 V provide 76% wattage of 240V rating when connected to 208 V.

Black: 240V/208V

## R23DH Models (Double element) Wiring Diagram



! NOTE: For reduced heat output do not connect wire C to 240 V line (L2). Wire C must be capped off using a wire nut supplied by the customer when not used.

Cat. No.	Volts	Wattage	Connections
R23DH2010	240	2000W	L1-A, L2-B & C
		1000W	L1-A, L2-B ONLY*
R23DH1507	240	1500W	L1-A, L2-B & C
		750W	L1-A. L2-B ONLY*

# Replacement Parts

# **Single Element Part Numbers**

	120V	208V	240V or 240V/208V		
500W	2200520100RP	N/A	2200520700RP		
750W	2200520200RP	N/A	2200520800RP		
1000W	2200520300RP	N/A	2200520900RP		
1250W	2200521200RP	2200521300RP	2200521400RP		
1500W	2200520400RP	N/A	2200521000RP		
2000W	2200520500RP	2200520600RP	2200521100RP		
Double Element					

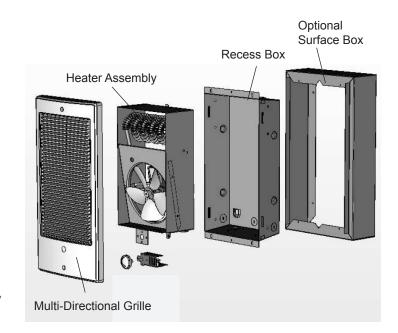
Double Lielliell			
240/208V 2	2000/1500W		00F
240/208\/ 1	500/1125\//	22005408	UUE

#### Grille

Multi - Directional Grille - White
Motors
120V models2000280300RP
208V models2000280200RP
240/208V models 2000280100RP
<b>Fan Blade</b>
<b>High Limit Cutout</b>
Recess Mount Box

#### Accessories

Single Pole Thermostat Kit	. TWHT1
Double Pole Thermostat Kit	. TWHT2
Surface Mount Box - Almond	TWHSBA
Surface Mount Box - White	<b>TWHSBW</b>



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