

**Global-Tek (Singapore) Pte Ltd**

---

**G-TEK**

**GT-BH18 EXTERNAL BOOSTER HEATER**

**INSTALLATION & OPERATION  
MANUAL**

---

# CONTENT

**OVERVIEW.....2**

**SPECIFICATION.....2**

**MAIN COMPONENTS.....2**

**INSTALLATION.....3**

**Power Connection.....4**

**Water Connection.....4**

**INITIAL OPERATION.....4**

**OPERATION PROCEDURE.....5**

**MAINTENANCE.....5**

**TROUBLE SHOOTING.....6**

**CIRCUIT DIAGRAMS.....7**

## OVERVIEW

GT-BH18 is an external booster heater designed for use in conjunction with all door type and conveyor type (with incoming hot water) dish washers, aiming at providing an adequate final rinse temperature for every wash.

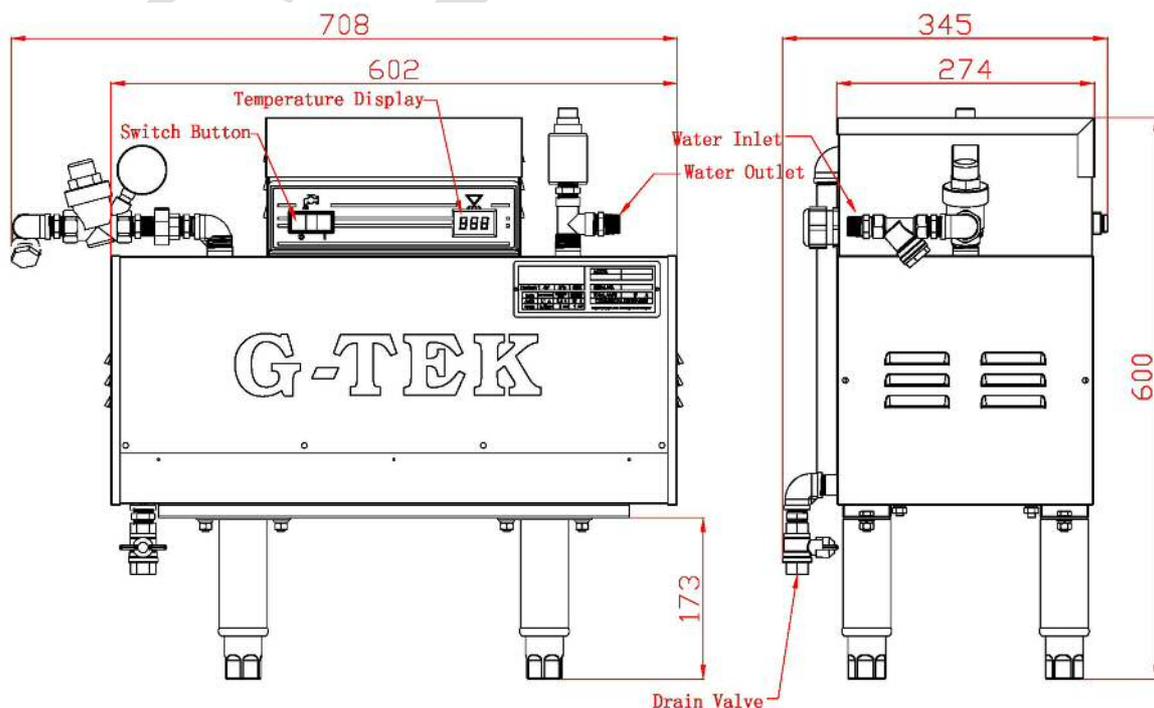
This equipment is equipped with 2 X 9 kW heating elements while cold water will be heated to the desired temperature for rinsing. For conveyor machines with cold incoming water, it is advised that a larger power output such as the models GT-BH27 or GT-BH45 be used to ensure temperature can heat up in time.

Users are advised to read carefully this Operation Manual before use.

## SPECIFICATIONS

1. Dimension: Width 708 mm X Depth: 345 mm X Height: 597 mm
2. Incoming Temperature: 10-65°C
3. Outgoing Temperature: 82-90°C
4. Incoming Pressure: 1-6 kg/cm<sup>2</sup>
5. Flow Rate: 11.4 lit/min
6. Electrical Heating: 18 kW(28 Amp)

## MAIN COMPONENTS

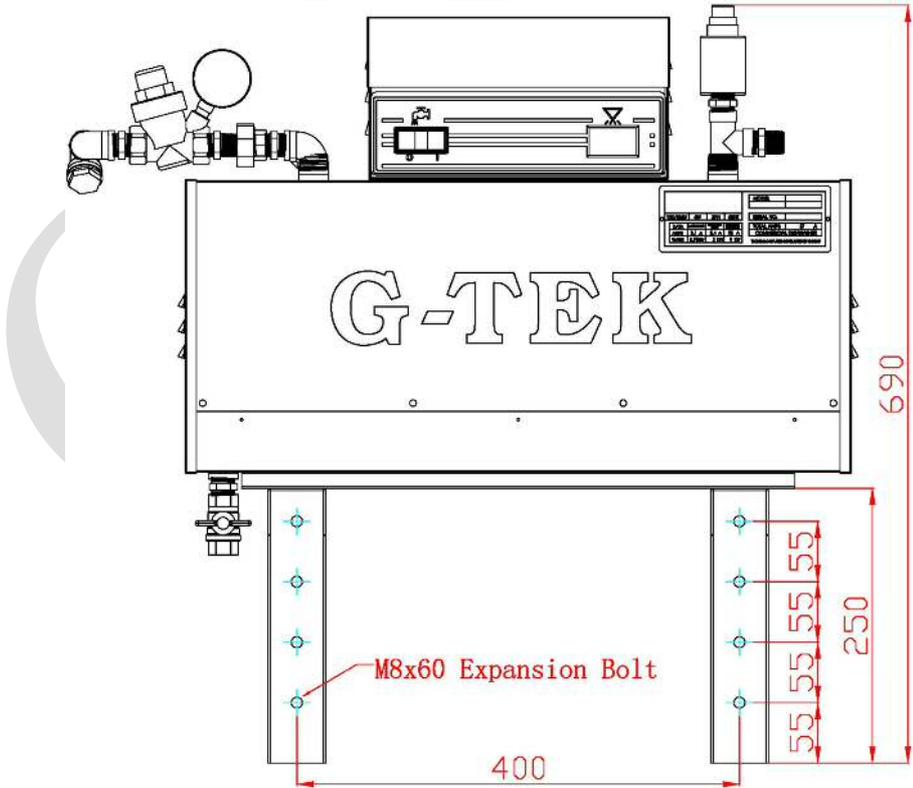


## INSTALLATION

Before installation, please read this manual sent along with this booster heater, make sure to verify the electrical power supply. Right after the packing is opened, please examine the heater immediately for any damage caused during transportation. If any, please keep all the packing materials, and inform the supplier within 3 days.

It is important to put the booster heater at the right place for operation. Before deciding a proper position, please consider the connection of power supply, water supply, drainage,, working tables and detergent dispenser (to be provided), as well as the required space for maintenance and servicing, and ceiling height for opening the panel. Make sure the location of the heater be avoided from water spillage and collide with any other kitchen equipments or accessories such as racks and trolleys.

In the event that the booster heater be mounted on the wall, the given wall-mount must be installed with 6 to 8 M8 x 80 expansion bolts. (Refer to Diagram 2 below)



## 1. POWER CONNECTION:

- ⚡ Warning: All connection of electricity and grounding must comply with any applicable ordinance of the national or local electrical law.
- ⚡ Warning: Shut off power supply, hoist caution sign nearby, to alert anyone **NOT** to power on. Please read carefully the electrical wiring diagram as shown on the machine case, properly connect power cables with the designated terminals.
- ⚡ Warning: An independent isolator must be used for this booster heater.

## 2. WATER CONNECTION:

- ⚡ Warning: Water pipe connection must comply with relative local hygiene safety ordinances and plumbing code.
- Incoming water inlet: G3/4"
- Incoming Pressure: 1-6 kg/cm<sup>2</sup>
- Outgoing water inlet: G3/4"
- Connect the water from the Pressure Relief Valve to drain

## **INITIAL OPERATION**

1. Before starting the operation, make sure the water in the wash tank is drained off and drain valve is open and all manual incoming water valves are turned on. Then switch on the power of the dish washer to fill up the tank.
  2. When the tank is full, run a few empty racks and adjust the incoming pressure of the booster heat to 1-6 kg/cm<sup>2</sup>.
- ⚡ Warning: Shut off power supply before the heater is completely filled up with water. Failing to do so will seriously damage the heater.
3. Observe the temperature if it is in the range of 82-90°C after running for 10 minutes.
  4. Check if there is any leakage and fix it immediately.

## **OPERATION PROCEDURE**

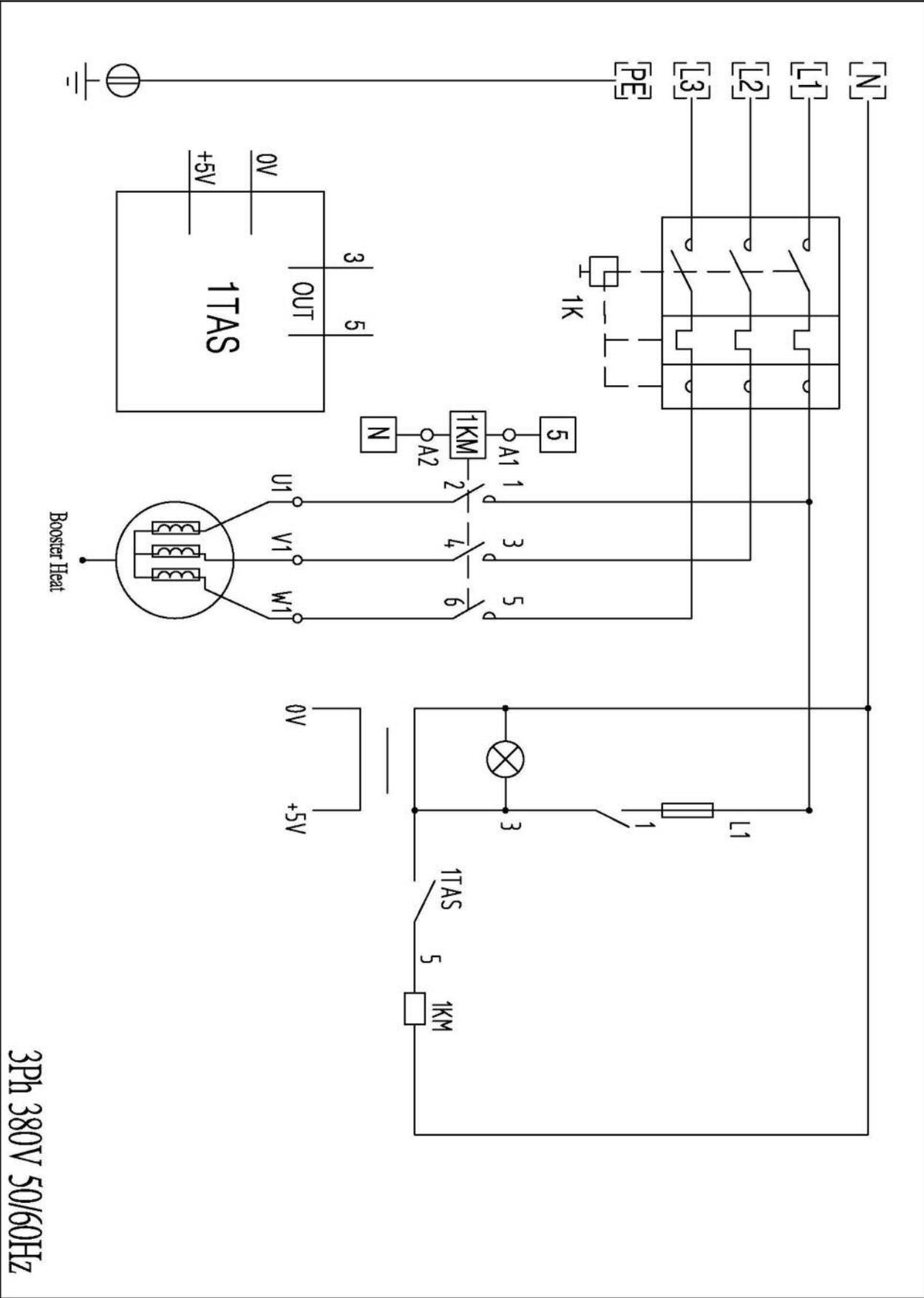
1. Turn on the incoming water valve before switch on the power.
  2. Switch on the power supply of the dish washer first then the booster heater.
  3. When the incoming pressure to the booster heater is lower than 1 kg/cm<sup>2</sup>, DO NOT use the booster heater as it will affect the final rinse result.
- ⚡ Warning: Incoming water temperature must not exceed 65°C and pressure must not exceed 10 Bar. Failure to do so may result in the damage of the heater.
- ⚡ Warning: Do NOT adjust the pressure regulator once the pressure is set. Exceeded pressure will result in damaging the heater. If pressure is found abnormal, please consult local service center.
4. Switch off the power supply of the heater first then the dish washer once daily cleaning work is finished.
  5. Shut off the incoming water valve then the power supply.
  6. 6. Conduct daily cleaning of the dish washer.
- ⚡ Warning: Do NOT adjust the thermostat of the heater at will while it is already factory preset.

## **MAINTENANCE**

1. Clean the debris of the line strainer on a 2 to 3 weeks basis.
2. Descale the internal part of the heater with appropriate chemical in 2 months' interval.

## TROUBLE SHOOTING

Problem	Probable Cause
Inadequate rinsing temperature or heater does not work	<ol style="list-style-type: none"> <li>1. Isolator not working</li> <li>2. Fill valve of the dish washer not working properly.</li> <li>3. Pressure regulator malfunctioning or pressure too high.</li> <li>4. Heating element full of lime scale.</li> <li>5. Pressure Relief Valve defected.</li> <li>6. Thermostat not working properly.</li> </ol>
Rinse temperature too high	<ol style="list-style-type: none"> <li>1. Line strainer is blocked.</li> <li>2. Thermostat not working properly.</li> </ol>
No water coming out from heater	<ol style="list-style-type: none"> <li>1. Line strainer may be blocked.</li> <li>2. Solenoid valve of the dish washer not working properly.</li> </ol>
No power supply to heater	Fuse is blown



3Ph 380V 50/60Hz