

KETKO PRODUCT RANGE

KETKO eva™
INSTANT WATER HEATER



KETKO eva™
INSTANT WATER HEATER



KETKO eva™
INSTANT WATER HEATER



3 Litre Horizontal

KETKO magnus™
STORAGE WATER HEATER



KETKO gas
GAS WATER HEATER



KETKO capri™
DIGITAL INSTANT WATER HEATER



KETKO capri™
DIGITAL INSTANT WATER HEATER



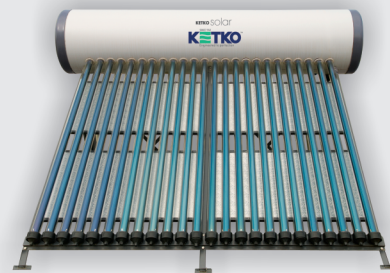
KETKO capri™
Online 13/18 kW



KETKO capri™
Online 21/24 kW



KETKO solar
SOLAR WATER HEATER



SINCE 1941
KETKO™
Engineered to perfection

Electric Storage Water Heater

KETKO magnus™
6 / 10 / 15 / 25 / 35 / 50 Litre

USER MANUAL | WARRANTY CARD



SINCE 1941
KETKO™
Engineered to perfection

ELECTRIC | GAS | SOLAR
WATER HEATERS

Ketko San Pvt. Ltd.

CIN: U31200MH1990PTC058167

Corp. Office:

21, Suryodaya Mills Compound,
Tardeo Road, Mumbai 400034, India.

T: 022-4344 7403

E: info@ketko.in • W: www.ketko.in

Customer Care No.: 022 4344 7455/56

Manufacturing Unit:

Survey 43,
Plot No. 2, Lonavala,
Nangargaon,
Pune 410401,
India.



- Safety devices
- Outstanding features
- Specifications
- Electrical connections
- Installation
- Operating procedure

KETKO and **KETKO** are trademarks owned by Ketko San Pvt. Ltd.

KETKO IS A STORY OF PURE ENTREPRENEURSHIP.



Ketko Fast Login *Whats App* Contact Number 90293 26600

Step 1 : Simply write down your Name, Address, Tel Contact details, Sellers Name, Type of problem with respect to your Ketko water heater and click image photo of this paper.

Step 2 : Click photo images of the following a) Purchase Invoice Copy b) Stamped Warranty Card Copy c) Inspection Rating Label of the water heater

d) Installed water heater with the wire connection to the electrical point.

Step 3 : Now simply send all the above images as Whats App to 90293 26600

Step 4 : You will receive a Complaint Login Number confirming your details as well guidance on what steps will be taken to solve your Ketko water heater problem.

At any point if you want to speak to a

Ketko customer service executive you can message your Name and Complaint Number with a Whats App stating " Request for Ketko Call Back" on 90293 26600

• **Additional charges on extended warranty above 2 Years for entire product. Please contact on +91 8879864422. www.ketko.in**

Terms and Conditions : Inner Tank Warranty Related Important Information.

The Product warranty is for 2 Years and if the Tank Warranty is for a longer period above 2 Years as per different models then is warranty is, subject to the Terms and Conditions as follows.

1) Installation must be appropriate as mentioned in the Instruction Manual and Warranty Card and by an Authorized Person Only after taking into consideration the site conditions.

2) Within the 2 Year warranty period, if the product malfunctions or stops working due to above point no:1 not being implemented then the spare parts as well as labour charges are applicable at actuals and will not be covered under warranty.

3) In case of manufacturing defect of the Tank, that is even though the Warranty is for a longer period above 2 Years as per different models as mentioned then the tanks will be replaced as free part only but the Labour Charges will be applicable for changing of this tank after the 2 years product warranty.

This KETKO product is warranted for a period of 2 Years from the date of purchase, subject to the following conditions:

- The warranty is only against manufacturing defects.
- The warranty does not cover breakage or damage to bakelite / plastics / rubber / porcelain / glass parts, indicator lamp, supply cord, plating chipping or peeling, enamel, coating and denting of any appliance once delivered.
- The warranty also does not apply to normal wear and tear of parts damages resulting from misuse, accident, negligence or mishandling on the part of the customer, or due to voltage

fluctuations. The warranty does not cover and the company shall not be liable for any consequential loss or damage

- The warranty also does not apply if the appliance is not installed and maintained properly or is opened or handled by anyone other than our authorized service personnel. Subject to the above, the unit will be repaired free of cost provided the unit is returned at your cost to the nearest office / service centre of our marketing agency / dealer, along with this warranty card.
- This card should be completed, signed and stamped by the dealer from whom the appliance has been purchased, and accompanied by the signed cash memo of the dealer.

Warranty Network

Authorized service telephone numbers (**Customer Care No. 022 4344 7455/66**) are mentioned on the back cover and if the site of installation is away from area covered by the authorized centers the customer will have to send the unit at his/her cost to the nearest center along with the warranty card and the bill copy and also collect the same at his cost once the unit is repaired. This is applicable within and also after the warranty period. Warranty will not be offered for damages occurred due to wrong installation. Also any other damages occurring at the customers site, the company is not liable to pay any charges what so ever.

IMPORTANT:

- In units where there is no manufacturing fault then visit, service and spare part charges are extra and the applicable to be paid by the customer. (Plumbing, wiring, dry heating, leakage faults). Also in case of manufacturing defect the company service is limited to replacing of faulty spare parts only and not complete replacement of the entire unit. Also, if the unit needs to be taken to the service center then the freight and plumbing needs to be carried out by the customer and will not be done by the Company.
- This is domestic water heater and if it is used for commercial or industrial use, the warranty is limited to maximum 6 months from date of purchase (only with invoice purchase proof.) Warranty limited to repairs only.

Pioneering efforts of over seventy years comes with its own achievements. We always remained at the cusp of innovation with many firsts to our credit:

- First to launch 3 phase water heater manufactured commercially.
- First to introduce flosensor technology in water heaters.
- First to introduce microprocessor chips with digiflo and electronic water heaters.
- First to have the most extensive range of instant water heaters and industrial water heaters with a capacity upto 500 litres.

Quality in manufacturing is a no compromise attitude with us. Only the best materials from reputed companies are used, right from stainless steel inner tanks to heating elements, to brass safety valves, and even to the minutest screws and bolts. What's more, with engineering skills acquired by our shop floor personnel over the years, every water heater that leaves our facility is engineering perfected to the last detail.

Super customisation for individuals is another of our hallmark. In fact, we are the only company which can do it. Whether it is the size of the water heater unit, or water heaters of higher kilo-wattage, we rise to every challenge. This has bestowed us with some high net worth clientele that includes celebrities, industrialists and institutions of repute, plus bespoke solutions for HNI residences and customized offerings for several architects and interior specialists.

Ketko Water Heaters. Truly engineered to perfection. For rich, rewarding and refreshing bathing experiences.

Rajesh Ramesh Krishna Sorap
Managing Director

Yatin Ramesh Krishna Sorap
Managing Director

COMPANY COPY

CUSTOMER COPY

WARRANTY CERTIFICATE

WARRANTY CERTIFICATE

IMPORTANT INSTRUCTIONS

This is not valid without dealer stamp and bill copy

This is not valid without dealer stamp and bill copy

Customer Name:

Customer Name:

Address:

Address:

.....

.....

.....

.....

Tel :..... Mobile no:

Tel :..... Mobile no:

Email :.....

Email :.....

Bill No:	Bill Date:	Serial No:
.....

Bill No:	Bill Date:	Serial No:
.....

Dealer Stamp

Product Details

Dealer Stamp

Product Details

1. Read installation and operating instructions carefully before use.
2. Service the unit at least once a year.
3. Ensure proper earthing.
4. Plumbing and electrical work to be done by authorized persons only.
5. When the water heater is being used for the first time, allow the flow of water through outlet and only then switch 'ON' the power supply. (This is very important as the heating element can fuse within a few seconds without water.) This condition is called dry heating and is not covered under warranty terms.
6. Use a pressure reducing valve in case inlet water pressure is more than 3 BAR or 50 psi, for safety, although the water heaters are designed to withstand 8.5 BAR (standard model) and 10 BAR (heavy gauge model) water pressure.
7. The working of the thermostat should be checked once in a while by ensuring that the orange lamp glows 'ON' and 'OFF' by closing the tap keeping the switch 'ON'.
8. Confirm that the total load does not exceed your sanctioned load and that your electrical installation is suitable for the extra load of the heater.
9. Please use 32 amps. D.P. (MCB*) switch and not a three pin top. This is for models till 6 kW.
10. Do not provide a non-return valve at the outlet in case of pressure type installation.
11. In case the fusible plug has operated and water flows out, switch 'OFF' the power supply immediately and contact the nearest Ketko sales or service station.
12. Safety valve, thermostat, thermal cutout are preset and sensitive devices. By tampering them you could damage the unit and this could prove dangerous. This should be strictly avoided.

KETKO is not responsible for damages caused by wrong installation, faulty material, using supply of substandard water or for not following instructions in this manual particularly. (Water hardness shall be less than 90 p.p.m.).

* Miniature Circuit Breaker



PARTS OF A INDUSTRIAL WATER HEATER

WARRANTY CERTIFICATE

WARRANTY CERTIFICATE

WARRANTY PROCEDURE

WARRANTY PROCEDURE

Outer Casing

Rust-proof / resistant ABS plastic or MS jacket or SS 304.

Inner Tank

Constructed from stainless steel sheet. T.L.G. welded hydraulically tested.

Heating Elements

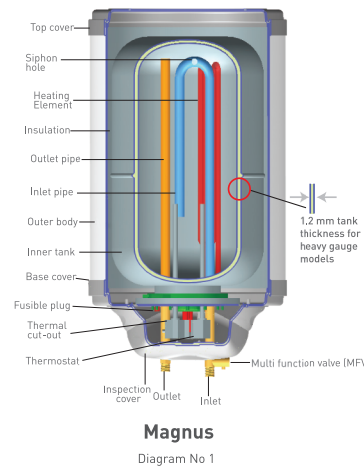
Mineral filled, tubular, copper sheated and nickel plated. Can be removed and replaced easily without opening the apparatus plate and while the water heater is in its installed position. (in most models.)

Thermostat

An adjustable stem type automatic thermostat rated at 15 or 20 amps. suitable for 250 volts AC supply with temperature range between 25°C to 75°C. conforming to IS 3017.

Thermal Cut-out

Stem type with snap action switch, which will operate below boiling temperature i.e. 90°C +/- 6°C with manual reset knob.



Pilot Lamps

Neon gas-filled indicating lamp which shows the accurate function of thermostat / thermal cut-out as well as power supply. Orange lamp 'ON' indicates heater 'ON' & red lamp 'ON' indicates thermal cut-out has operated.

Thermal Insulation

Non-hygroscopic and fire resistant fiberglass wool or PUF is provided between two casings to minimise heat loss.

Multi Function Valve -

a) Safety release valve: When the pressure inside the tank or inlet is more than 1 BAR of the rated pressure, this device operates and it opens & starts dripping water (refer page No. 12, Sr. No.5 & 6)

b) Vacuum valve: This device also provides vacuum protection to the tank upto certain level and withstands 66 kpa /6.6N /cm² /0.67kg /cm²

c) Non return valve: This also works as a non - return device

d) Drainage valve: This works as drainage in some models

However if the pressure / vacuum is much more than rating then the tank can crack / collapse which is out of scope of warranty, since the safety systems can protect the tank only upto a certain level.

Fusible Plug

Most industrial water heaters are provided with this. In a rare case if the thermostat & cut-out fail to operate this plug melts & releases hot water through the tube. It helps avoid any unforeseen happening.

For registration of warranty of 2 Years, kindly follow the following steps:

1. Photo copy of purchase invoice
2. Photo copy of existing warranty certificate with serial number page
3. Original tear off attachment for extended warranty to be registered (completely filled with postage stamp)
4. Empty unused envelope with customer's self address and postal stamp

WARRANTY: Once registered, this card will be posted back. On receipt of this card, customer has to intimate our service centre(Tel No. / email on back page)

Note: This warranty is on spare parts only. This warranty does not cover labour charges and transportation expenses.

The customer has to courier the company copy (see overleaf) within 2 months of purchase to avail of warranty

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Customer has to send this completed page to the company within 2 months of purchase

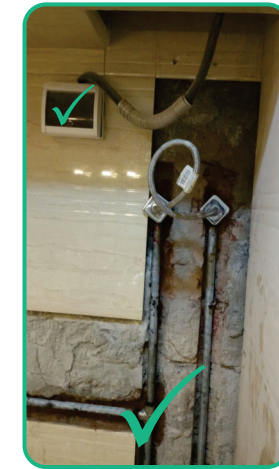


MAGNUS TECHNICAL SPECIFICATIONS AND DIMENSIONS

CAUTION WARNING

TECHNICAL DETAILS DECLARED VALUE

Sr. No	FEATURES	STANDARD LENGTH (Mixing factor 30% for all below models)							LONG DESIGN				
		M6	M10	M15	M25	M35	M50						
1	Model	M6	M10	M15	M25	M35	M50						
2	Capacity (Litre)	6	10	15	25	35	50						
3	Power Supply	230 Volts, 50Hz Single phase AC only											
4	Wattage (kW)	3	3	3	3	3	3						
5	Pressure Standard guage	8.5 BAR = 123 psi = 85m pressure. Safety release valve set to operate between 8.5 to 9.5 BAR											
6	Pressure Heavy guage	10 BAR = 145psi=100m pressure. Safety release valve set to operate between 10 to 11 BAR											
7	Insulation	Heavy duty pad glass wool / PUF (depends on model)											
8	*Time in mins for 35°C rise	8	12	25	40	55	80						
9	Reheating time in mins	7	11	23	38	52	76						
10	Dimensions C	520	550	650	840	740	940						
11	Dimensions D	254	305	305	305	356	356						



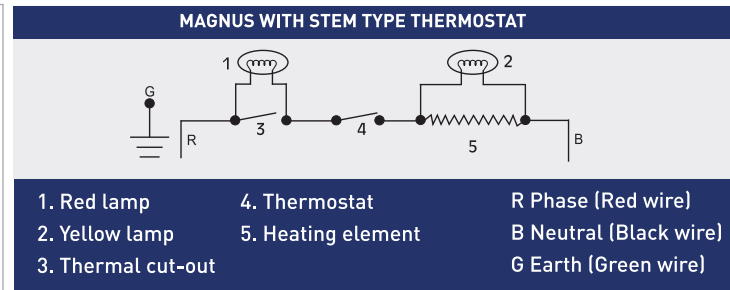
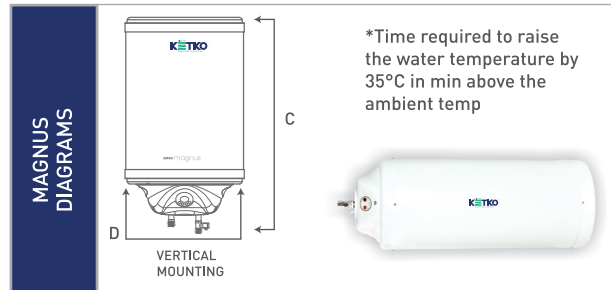
Use G.I plumbing Pipes only



Do not use CPVC Pipes.

After Use switch of the mains, allow cold water to flow through the outlet then put the tap off.

DECLARED VALUE FOR INDUSTRIAL TYPE ELECTRIC WATER HEATERS AS PER IS: 2082					Mixing factor 30% for all models
Capacity (litres)	Loading (watts)	Mean hot water output °C	Reheating Time (minutes)	Time needed for 35°C Temp rise heating up from cold state (time in minutes)	
6	3000	45	7	8	
10	3000	45	11	12	
15	3000	45	23	25	
25	3000	45	38	40	
35	3000	45	52	55	
50	3000	45	76	80	



TYPES OF INSTALLATION

Industrial type water heaters can be used as:

VERTICAL SINGLE POINT TYPE WATER HEATER

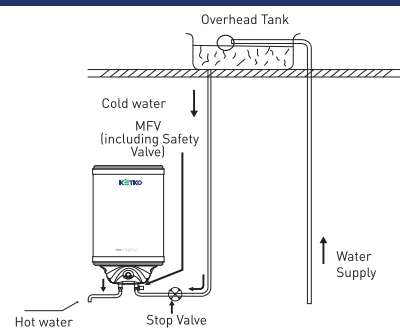


Diagram No 5

Single point type

Single point type water heaters supply hot water at a single (one) point only. The outlet spout is always open. No cock or temporary extension should be fitted to the outlet spout. The hot water flow is controlled by a cock fitted on the inlet cold water pipe. This type of a water heater can be connected directly to the municipal water mains or to an overhead tank and does not require a vent pipe [Diagram 5].

VERTICAL MULTI POINT WATER HEATER WITH PRESSURE REDUCING VALVE WITHOUT VENT PIPE

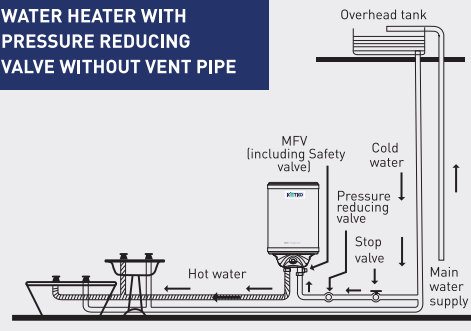


Diagram No 6

Multi point type

These water heaters supply hot water to several points. The hot water flow is controlled by a cock fitted at each service point. The water heater must not be connected directly to the municipal water mains but to an overhead tank fitted with a ball cock. It must also be provided with either a vent pipe or pressure reducing valve. The pressure type water heater is designed for either vertical wall mounting or horizontal wall/floor mounting [Diagrams 6, 7 and 8]

VERTICAL MULTI POINT-TYPE WATER HEATER WITH VENT PIPE

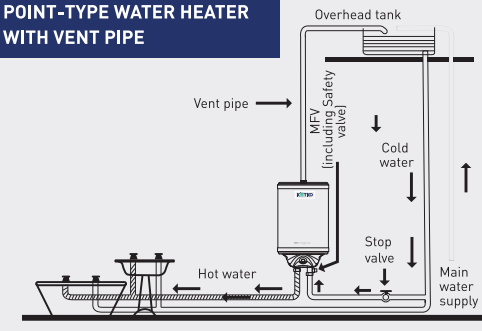


Diagram No 7

CORRECT DISPOSAL OF THE PRODUCT

(Waste Electrical & Electronic Equipment)

(Applicable in countries with separate collection systems.) This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. Remote, etc.) should not be disposed off with other household waste at the end of their working life.

To prevent possible harm to the environment or the human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, manufacturer or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

For more information on safe disposal and recycling visit govt. website.



EXTRA SAFETY MEASURES RECOMMENDED

Solutions in case of hard water

1. Check if the plumbing line supplying water to the heater is wrongly connected to sanitary line.
2. Tanker water and bore well water can be avoided.
3. Keep the temperature setting as low as possible after consultation with company service centre.
4. After use, switch OFF the power supply & let cold water flow through the heater so that hot water does not remain stored hot at all times which helps avoid scale.
5. Have the heater serviced & cleaned more often i.e. 4, 6, 8, months as per water quality condition from the service centre.
6. Ask the company to install special heating element suitable for hard water.

Note:

Water heater returned during the warranty period with faults which are directly related to scaling, or dry heating will be subject to repair charges.

HOW TO OPERATE YOUR INDUSTRIAL WATER HEATER

Step nos 1, 2, 3 to be followed for the first time after installation, so there is water inside the tank and does not result in dry heating of the heating element.

1. Leave the hot water tap open.
2. Allow cold water to pass through the inlet. When it is filled, cold water will flow out through the hot water tap.
3. Close the hot water tap.
4. Now switch on the power supply. The Yellow lamp will glow indicating that the heater is switched on.
5. Time taken for the cold water inside the tank to rise to 35°C will depend on the capacity of the model purchased (read page 12)
6. If you require hot water early in the morning, it is advisable to switch on the heater the previous night itself. The thermostat will switch off the power supply as soon as the water temperature increases by approximately 35°C. Since the water heater is well insulated, the water will remain hot through the night and the

thermostat will switch ON again only when you start drawing hot water in the morning. The switch can be left on throughout the day if hot water is required at all times.

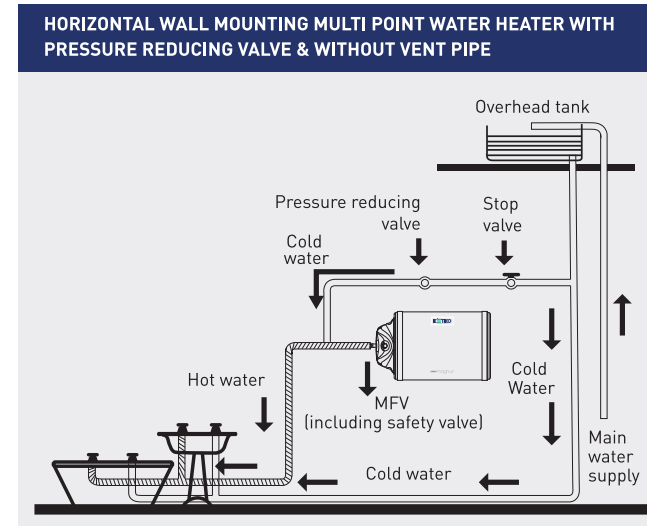
7. It is advisable to switch off the unit when not in use to increase the life of the unit & save electricity.
8. For magnus mega Contact us on info@ketko.in on 88798 64422

Maintenance

1. It is advisable to service the water heater once a year and to use genuine parts when replacement is necessary.
2. When using the heater, strictly follow the instructions provided in the printed literature.
3. If any change of part or original company settings are made then the company holds no responsibility on the results & also warranty stands void.

TYPES OF INSTALLATION

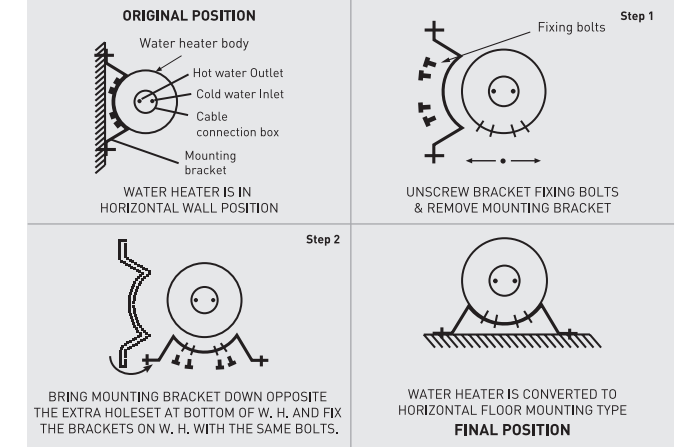
Industrial type water heaters can be used as:



Precautions for Horizontal models

When a horizontal convertible model is mounted on the wall or floor, please ensure that the mounting brackets are fixed to the water heater at the appropriate places (Refer to diagram 9)

HOW TO CONVERT HORIZONTAL WALL TO HORIZONTAL FLOOR



How to convert horizontal wall to horizontal floor

In case of the horizontal wall-mounted water heater, the inlet and outlet connections must match with the water heater i.e. left / right / floor. To convert the horizontal wall-mounted model into a floor model, follow the steps indicated in diagram 9. Please ensure that this is done by an authorised person only.

PLEASE CHECK THE FOLLOWING BEFORE INSTALLATION

1. Firm earthing connection to the appliance
2. Confirm that your electrical installation is suitable for the extra load of this appliance.
3. Do not connect earthing wire on water supply pipe.
4. Please use a 32 AMP D.P (Double Pole) MCB switch and avoid using a plug & socket.
5. Electrical input supply shall be 230 volts / 50Hz /AC only.
6. In case of hard water areas, refer to page No. 11.
7. While installing the water heater please check if the plumbing connection is from left or right or vertical or floor type. In case of incorrect installation the heating element will fuse. (called dry heating)
8. Water heater should be installed by an experienced plumber as per the diagrams and instructions supplied.

Ensure the Electrical Meter, MCB switch and Electrical Wiring are as per the table mentioned below:

ELECTRICAL RATING TABLE				
kWatt	Phase	Recommended	MCB rating in Amp	Electric meter rating in Amp
		Wiring size in sq mm		
2	1	2.5	20	20
3	1	2.5	20	20
4	1	4	32	32

CORRECT METHOD OF WIRE CONNECTION



Water Heater wires should be directly connected to the MCB Terminals



X Three Pin Plug Socket

Wrong Method of Wire Connection



X Three Pin Top



X AC Plug Socket Distribution

PLEASE CHECK THE FOLLOWING BEFORE INSTALLATION

09. Make sure that the supporting wall or structure is strong enough to withstand the weight of the heater when filled with water.
10. For easy servicing, enough space should be provided between the wiring side of the water heater and the adjacent wall. (at least 600mm) and from the ceiling too.
11. Feed tank which feeds water to the heater must be at least three feet (measure from the bottom of the tank) higher than the highest hot water branch or the outlet or the top of the heater. The inlet and outlet pipes of the water heater should be connected through copper connection for easy servicing and do not use union coupling or fixed plumbing.
12. The length of the hot water (outlet) pipe between the heater and different hot water taps must be kept as short as possible.
13. The water pressure head at the inlet should not exceed 60 ft. in case the water pressure head exceeds this limit, a pressure reducing valve must be installed at the inlet pipe. [Refer to page No. 12, Sr. No. 5 & 6 for model & pressure rating].
14. For plumbing please use teflon tape and avoid using plumbers putty or such sealants.

STEPS TO CHECK WATER PRESSURE

Please check water pressure before installing the water heater in the following steps.

- a) If the inlet water pressure to the water heater is above 4 BAR (in case of standard model) and 6 BAR (in case of heavy gauge model) then it is advisable to install a quality pressure reducing valve at the inlet.
- b) If the pipeline of cold water from the main water tank to the water heater is of 15 mm in internal diameter then it is all right but if it is more than 15 mm then please convert the same to 15 mm.
- c) If a Pressure Pump is installed at site & pressurised water is supplied at the inlet of the water heater then please ensure to use heavy gauge model (HG) and also that the automatic pressure switch is set at 4 BAR (58 psi) maximum, this is due to the fact that after heating the pressure in the tank increases further by about 2-4 BAR. If any variation in pump pressure or over shoot due to heating occurs then this will result in pressure in the tank reaching the maximum safety release valve setting between 10 to 11 BAR.
- d) In case of pressure pump installation please use a higher storage capacity water heater i.e. (50 litres to 100 litres) & Heavy Gauge model. This is due to the pressure pump by which hot water will be displaced at a faster rate hence will result in a problem of shortage of hot water, which can be solved by using a higher capacity water heater or by using a medium capacity water heater but higher kWatt Power water heater, which are available (6, 8, 12, 18, 24 kWatt) as part of magnus mega multi phase water heaters.