



# FAULT FINDING

FAULT	PROBABLE CAUSE	RECOMMENDED SOLUTIONS
<b>A</b> Excessive leak from expansion drain pipe (hot water).	Requirement for balanced pressure to mixing point is not adhered to. Incorrect or unbalanced installation.	Balanced hot and cold supply. If possible, fit a spring-loaded non-return valve after the vacuum breaker to the hot water outlet of the cylinder.
<b>B</b> Excessive leak or continuous drip from expansion drain pipe (cold water).	Geysier thermostat is not switching off.	Switch off electricity supply to the geyser. Turn on hot tap for a few seconds. Wait five minutes and check whether the drip has stopped- if not, the valve requires servicing or cleaning.
<b>C</b> Full bore flow through expansion drain pipe, but no cold/hot water when the installation is completed.	There is foreign matter on the main seat. The main seat is worn. Valve direction is installed incorrectly.	Clean the valve.  Replace cartridge (Fig.2). Reverse the valve body. Water <b>must</b> flow in the direction of the arrow on the valve body.
<b>D</b> Insufficient or no cold/hot water.	Strainer is blocked. Stopcock in main supply is partly or fully closed. Inadequate system pressure.	Clean strainer. (Fig.2). Open stopcock fully.  See Installation General Requirements.
<b>E</b> Water hammer during valve opening.	Undersized piping. Valve direction is installed incorrectly. The piping is loose. Air is trapped inside the pipe. Excessive pressure drop in the system.	Increase pipe size. Reverse the valve body. Water <b>must</b> flow in the direction of the arrow on the valve body. Secure all piping. Fit an automatic air release valve. Increase pipe size.
<b>F</b> Vibration in system.	Excessive water velocity. Loose washer plate assembly in the stopcocks. Faulty washer in the tap, stopcock or mixer.	Increase pipe size. Secure loose washer plate assembly on all stopcocks.  Locate and replace washer.

MULTI PCV INSERT.01/2019



*Pressure Control Valve  
with Integral Isolating Valve  
and Expansion Relief Valve*



**RECOMMENDED INSTALLATION  
& SERVICE INSTRUCTIONS**

## Electrolux SA (Pty) Ltd

3 Aberdeen Rd, Industrial Sites,  
Benoni, South Africa.  
Tel: (011) 897 4600.



[www.electrolux.co.za](http://www.electrolux.co.za)

## BASIC REQUIREMENTS

**A**

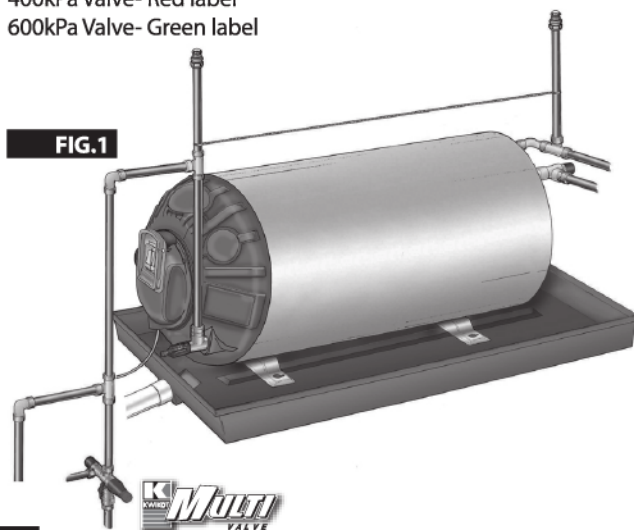
### BALANCED PRESSURE:

Hot and cold water pressure must be of equal pressure to all mixers, mixing point showers or hand showers. This is achieved by supplying the cold water on the low pressure side of the pressure control valve.

**B**

### VALVE SETTINGS AND COLOUR CODES:

200kPa Valve- Black label  
400kPa Valve- Red label  
600kPa Valve- Green label



**C**

### ANTI-SIPHON LOOP:

An anti-siphon loop is required on all systems, balanced and unbalanced (see Fig.1.) The horizontal supply pipe must be higher than the top of the cylinder. The balanced cold draw-off must be connected on the downstream side of the pressure control valve.

**D**

### DRIP TRAY:

SANS 151 specification for a Hot Water Cylinder (HWC) requires that the cylinder be mounted within a drip tray and the vacuum breakers and all other valves are installed over the drip tray (see Fig.1.)

**E**

### EXPANSION RELIEF VALVE:

Normal expansion is approximately 1,5% to 4% of volume of water heated per heating cycle.

### THE DRAIN RELIEF PIPE MUST:

1. be piped at a decline.
2. not be interconnected with the Safety (T&P) Valve drain pipe.
3. not discharge into the drip tray.
4. discharge with visible flow and not be a potential nuisance.
5. be protected against frost.
6. expansion drain pipe to be braced.

**NOTE:** Expansion will take place when water is heated.

**F**

### VACUUM BREAKER

To prevent geyser siphoning, geyser collapse and to facilitate servicing, vacuum breakers must be fitted to the inlet and outlet of a HWC as per Fig.1.

## INSTALLATION

### GENERAL REQUIREMENTS:

1. All pipes must be flushed clean, before putting the system into operation. The expansion relief valve must be removed for flushing purposes.
2. Water flow must be in the direction of the arrow on the Multi valve body.
3. The valve must be easily accessible for servicing.
4. The relief drain connection must allow for the relief drain pipe to be pulled to one side, when removing the working parts. Allow a minimum clearance of 100mm for parts removal.
5. **DO NOT** install a stopcock or non-return valve between the HWC and the Multi pressure control valve.
6. **DO NOT** install a stopcock or non-return valve between the HWC and the vacuum breakers, on either the hot or cold side.
7. To minimise temperature change and excessive drop in volume, ensure that the supply pipes are adequately sized.
8. The inlet pipe size to the Multi valve is to be the same size as the connection fitting on the valve.
9. An in-line strainer is fitted on the cartridge.

## MULTI VALVE PERFORMANCE

1. Maximum inlet pressure: 2000kPa.
2. The pressure control valve is factory-preset and **REQUIRES NO ADJUSTMENT.**
3. Pressure rating: 2, 4 and 6 bar.
4. Operating temperature: max 60°C

## CHECKING AND CLEANING

### WHEN TO SERVICE:

1. Insufficient flow rate of water.
2. Continual drip through expansion drain.

### DISASSEMBLY OF THE VALVE:

1. Turn off the water supply to the valve by means of the integral isolating valve.
2. Unscrew and remove the pressure reducing cartridge (Fig.2).

### CLEANING:

1. Only use cold water for any cleaning work.
2. Rinse the main seat area.
3. Pull the strainer mesh off the cartridge and rinse with water, then push it back on.

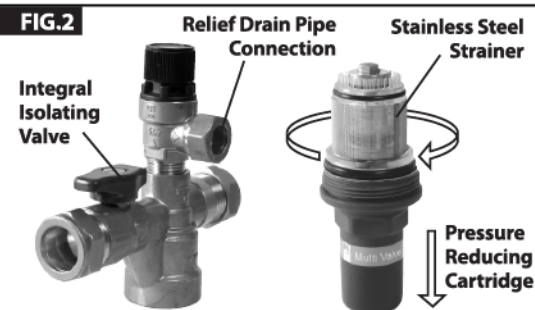
### REASSEMBLY OF THE VALVE:

1. Screw the cartridge back into the valve body.
2. There must be no gap between the valve body and the shoulder of the cartridge cap.
3. The valve's pressure setting will not be altered with cleaning.
4. Turn on the water supply at the integral isolating valve.

## REPLACEMENT PARTS

KHN3.102C	Cartridge for Pressure Reducer 200kPa
KHN3.104C	Cartridge for Pressure Reducer 400kPa
KHN3.106C	Cartridge for Pressure Reducer 600kPa
KH2.152C	Cartridge for Expansion Relief Valve 200kPa
KH2.154C	Cartridge for Expansion Relief Valve 400kPa
KH2.156C	Cartridge for Expansion Relief Valve 600kPa
KH3.105	Replacement Stainless Steel Strainer

**FIG.2**



## WARRANTY

Two year warranty from date of purchase (proof of purchase invoice to be supplied), against manufacturing defects and such goods will be replaced at **ELECTROLUX'S** discretion free of charge.