

# Domusa Heat Pump Booster Element Installation Instructions

#### CHNZ Electric Element Kit Product Code = TSE3KITD

### **Kit Contents:**

- TSE3 3kW Element with Sensor Pocket and Cover
- TSE3T 3kW Element Thermostat LP Copper 7" with reset
- VPRESRELF Pressure Relief 1/2" x 3/4" 3 Bar
- HMHBRB3215 Brass Reducing Bush 32x15mm

#### **Installation Instructions:**

(internal installation only)

1. Install the pressure relief valve directly on the buffer tank. If installing off the top port, use a tee to accommodate the air vent installation along with the pressure relief valve.

It is extremely important that the pressure relief valve cannot be isolated from the vessel/element.

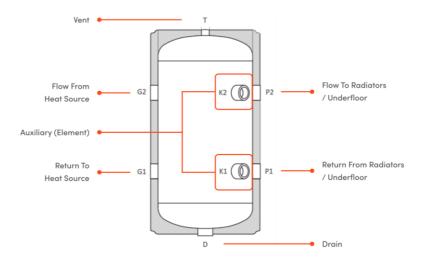
Please also ensure that a suitable drain is installed for the pressure relief valve.

2. Install the electric element directly into one of the lower ports (G1, K1, P1). \*Please note, you may need to remove the Black plastic trim around the element port to enable the element to seat correctly.

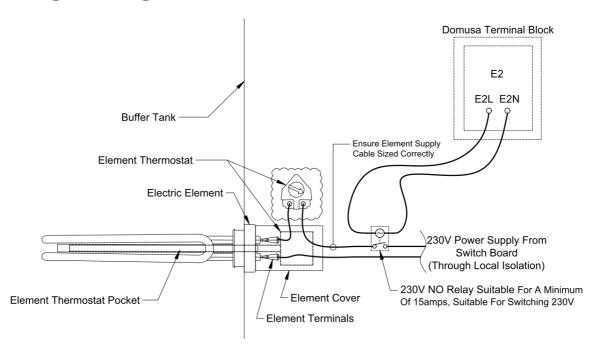


- 3. As shown on the below wiring diagram connect the electric element through the Element thermostat and then wire it to a NO relay switched by E2 (E2L, E2N) terminals of the Domusa heat pump. The relay must be rated to switching 230V with a minimum of 15amps, and switched by 230V Coil. The relay can be mounted on the DIN rail inside the heat pump.
- 4. Common settings for the thermostat high limit would be:
  - Underfloor System = Thermostat set to 55°C
  - Radiator System = Thermostat set to 75°C.

## **Buffer Tank Drawing:**



## **Wiring Drawing:**





## **Heat Pump Parameters to Change**

Parameter	Function Description	Value	
		Default	Set To
P22	Outside temperature for the activation of the Heating "backup" energy source (E2).	0°C	As per Table*
P24	Hysteresis activating E1 and E2	5°C	5°C
P36	Waiting time for turning on the E1 and E2 back-ups.	15 Min	30 min
P81	Mode of operation for auxiliary or back-up power sources (E1, E2).	0	0

<sup>\*</sup>Set P22 As per table below, or as specified in the system design – check with CHNZ Engineering if in doubt.

# **P22 Regional Settings**

Region	Recommended P22 Setting (°C)	
Northland	8	
Auckland	8	
Waikato	5	
Bay of Plenty	4	
Gisborne	6	
Hawke's Bay	4	
Taranaki	6	
Wanganui	3	
Manawatu	4	
Wairarapa	3	
Wellington	5	
Nelson Bays	3	
Marlborough	2	
West Coast	5	
Canterbury	2	
Timaru - Oamaru	0	
Otago	1	
Southland	2	