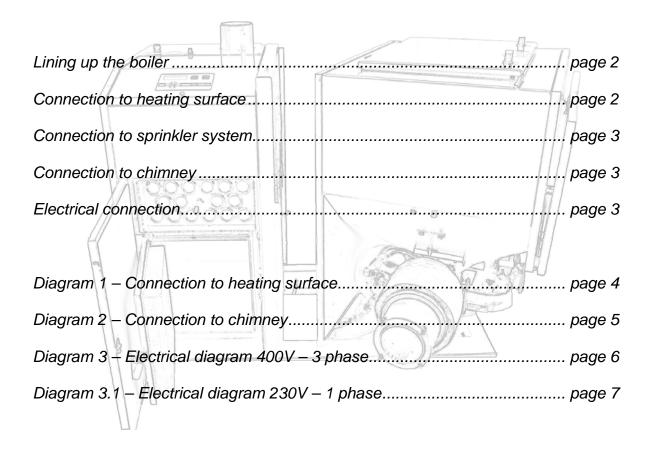
MANUAL FOR INSTALLATION Cpi 12

Version 2.3 – May 2011

This manual should be read carefully before the installation commences!



R

Nørrevangen 7 • DK-9631 Gedsted • Phone +45 98645222 • Fax. +45 98645244 Mail: twinheat@twinheat.dk • Web: www.twinheat.dk



Lining up the boiler

NOTICE: the minimum measures in the "boiler room" must be kept, in order to operate the fuel store as intended.

The boiler is delivered on a pallet, ready for installation.

The pallet with boiler is to be placed in the boiler room by means of a fork lift truck, ore the like. When the boiler is placed in the boiler room, on the floor, it must be blocked up to horizontal level. (Use a spirit level!)

The figure shows the minimum measures (in mm.) that must be kept in the boiler room, in order to operate the fuel store as intended.

The boiler room must have an air inlet!

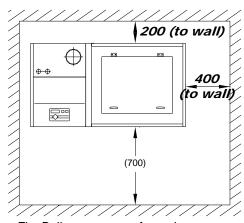


Fig: Boiler room seen from above

Connection to heating surface

See diagram 1

The water returning to the boiler must always be <u>at least 60°C</u> If the above is not respected the corrosion of the steel in the boiler can increase and the life expectations will be reduced.

The boiler can bee connected to a closed expansion vessel, as well as to an open expansion vessel.



Connection to sprinkler system

See diagram 1

The sprinkler system at the boiler must be connected to constant water supply $G\frac{1}{2}$ ", trough a shutoff valve. The connection piece is to be found at the backside base.

Make sure that the supply pipe/hose is free of dirt ore the like!

When the system is connected and the water supply is open, it has to be tested. Disconnect the hose to the auger channel and test the sprinkler valve by pressing the red hood, at button of the valve.

After testing the sprinkler system it is important to check that the valve is closing properly! (Dirt ore the like, in the valve seat, can prevent this)

Connection to chimney

See diagram 2

The flue pipe must be insulated with a 50 mm fire resistant mat, to avoid that the flue gasses are condensing in it.

It is highly recommended to mount a draught stabilizer on the flue pipe, ore directly in the chimney. The draught stabilizer is to be adjusted to 10 Pa. (See diagram 2)

Recommended chimney dimensions

Internal diameter chimney	Height chimney	
App. Ø130mm	4-6 metre above boiler	

Electrical connection

See diagram 3 / 3.1

The connection must have its own separate electrical switch!

The boiler can be built for either 400V 3 phase or 230V single phase connection.

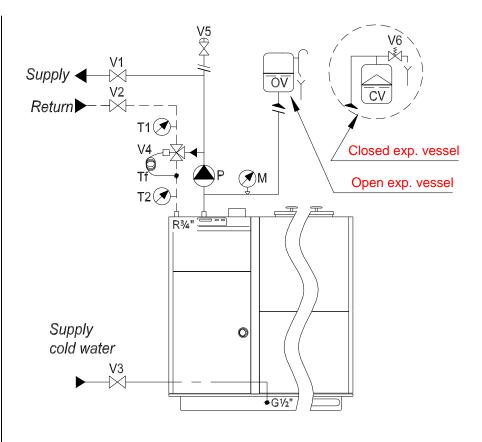
Check boiler data plate for electrical connection.



Diagram 1 - Connection to heating surface

TWIN HEAT boiler shunt

The temperature sensor(Tf) is to be strapped on to the pipe and insulated afterwards



\bowtie	Shutoff valve	V1-V3	Shutoff valve at: supply, return and supply cold water
	3-ways thermostatic mixing valve (shunt)	V4	The "shunt" is to provide a homogenous temperature of the return water, to the boiler (60-70°C)
Ê	Air relief	V5	Placed where needed
	Safety valve 2,5 bar	V6	
	Thermometer	T1-T2	
	Temperature sensor	Tf	For regulating the mixing valve
๎๎๛	Manometer	M1	Manometer for boiler pressure
	Pump	Ρ	Circulating pump for boiler and heating surface



Diagram 2 – Connection to chimney

* Prefabricated module chimney should not be placed on top of the flue outlet, as this allows rainwater or condense water to run directly down into the heat exchanger of the boiler, where it will cause corrosion !!

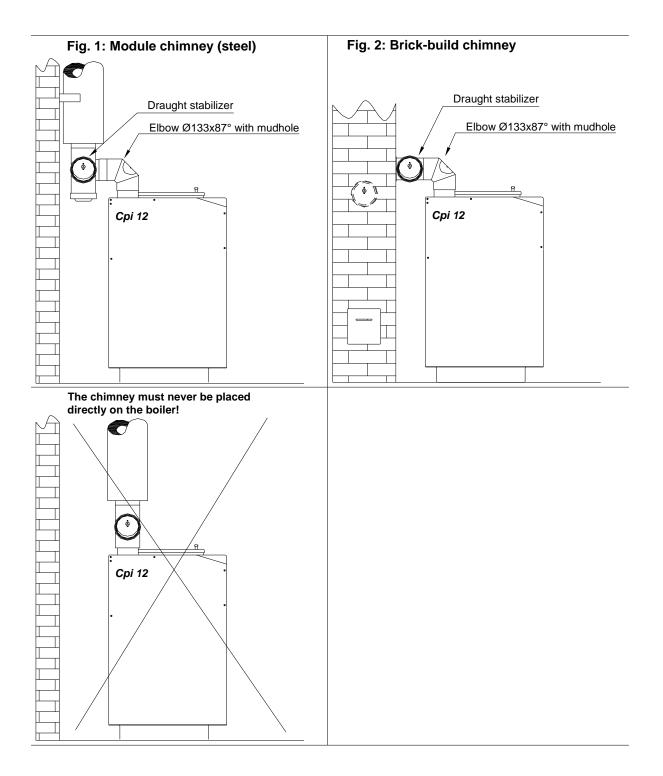




Diagram 3 – Electrical diagram 400V – 3 phase

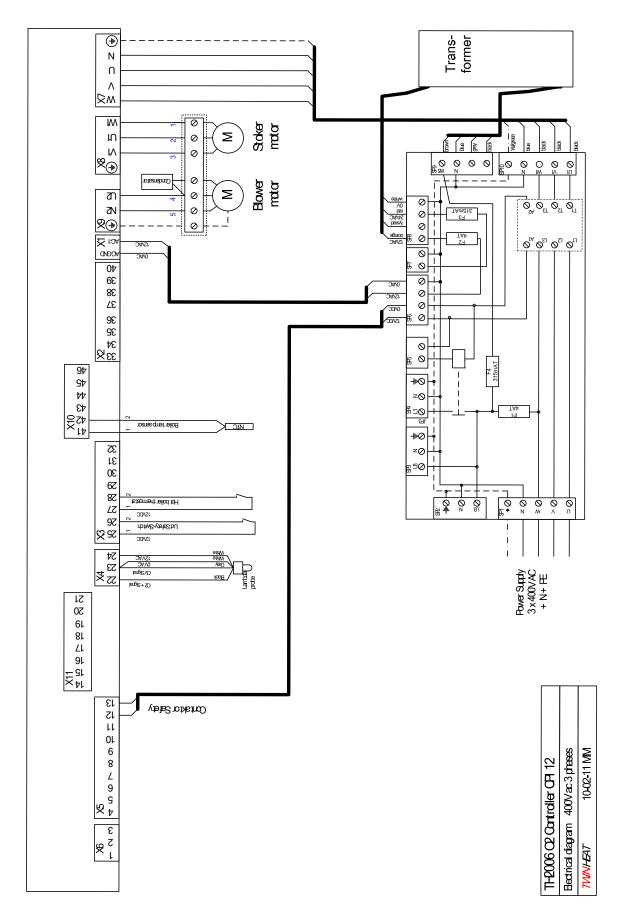




Diagram 3.1 – Electrical diagram 230V – 1 phase

