



Titan

Condensing heat generator with high power modulation, for outdoor use

- High power condensing heat generator with a **modulation range of up to 1/40**. Designed for installation in a central heating plant or **unprotected outdoors**.
- Heat exchange unit made up of a **string of aluminium-silicon alloy elements** designed to obtain maximum exchange efficiency and low pressure drops on the water circuit. Each element is complete with circulation unit and burner.
- The combustion units are of the complete premixing type, with a micro-flame burner with very low polluting emissions (Class 6 according to EN 15502-1). The generator can run on **Methane gas or LPG**
- Generator protection systems: Double sensor (delivery and return) system for operation at **constant ΔT** / Flue gas safety sensor / Water pressure switch with minimum threshold at 0.8 bar
- Hydraulic unit with **three-way shut-off valve for discharge into the atmosphere** on the return circuit and non-return valve on the delivery
- Air / Flue gas circuit with suction at the installation site and **clapet flue gas non-return valve** for sizing the pressurised manifold
- Four sturdy **floating wheels fitted as standard** to facilitate unloading and movements within the thermal power plant. All wheels are equipped with adjustment and locking systems.
- TITAN has been designed to be installed **both indoors and outdoors even without any weather protection**. It can be connected to the system on the right or left side and it is delivered complete with blind flanges.
- The electronic control supplied as standard with TITAN is able to: **configure the switch-on** and switch-off sequence of the individual heating units / manage a heating system with **two direct zones or one direct zone and a DHW storage tank** / adjust the power or temperature with the **0 - 10V signal** / remote the signal of any safety locks / restore normal operation remotely
- Combined with the **THETA+** temperature control kit, it is possible to manage: **up to eight generators in cascade** / a system with three heating circuits (of which **two mixed and one direct**) / the production of domestic hot water with an **external storage tank** / a second energy source (solar thermal, biomass, etc.)

Boiler code	Boiler model
OMCMEAWD	TITAN 120
OMCMFAWD	TITAN 150
OMCMJAWD	TITAN 225
OMCMLAWD	TITAN 300
OMCMMAWD	TITAN 370
OMCMNAWD	TITAN 450
OMCMPAWD	TITAN 520
OMCMQAWD	TITAN 600

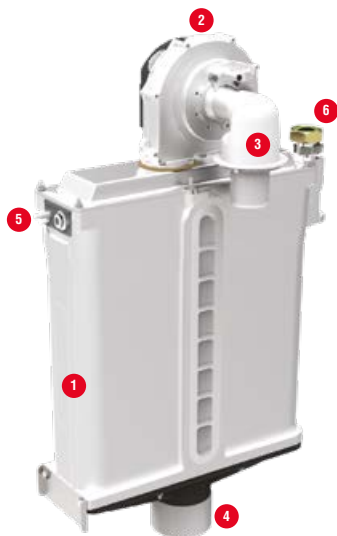
MODEL			120	150	225	300	370	450	520	600
Heat input	Max/Min	kW	115,0 / 14,0	142 / 15.5	213 / 15.5	284 / 15.5	355 / 15.5	426 / 15.5	497 / 15.5	568 / 15.5
Heat output (80°C/-60°C)	Max/Min	kW	112,8 / 13,7	139.2 / 13.7	208.8 / 13.7	278.4 / 13.7	348.1 / 13.7	417.7 / 13.7	487.3 / 13.7	556.9 / 13.7
Max heat output (50°C/-30°C)	Max/Min	kW	120,2 / 15,1	148.4 / 15.1	222.6 / 15.1	296.8 / 15.1	371 / 15.1	445.2 / 15.1	519.4 / 15.1	593.6 / 15.1
Modulation ratio	Max/Min		8 / 1	10 / 1	15 / 1	20 / 1	25 / 1	30 / 1	35 / 1	40 / 1
Efficiency 80°C-60°C	Pmax%/Pmin%		98.0 / 97.7							
Efficiency 50°C-30°C	Pmax%/Pmin%		104.5 / 108.2							
Reduced load 30%	%		108.8							
NOx class			6							
Weighted NOx (O ₂ = 0%)		mg/kWh	42							
Weighted CO (O ₂ = 0%)		mg/kWh	19							
Operating pressure	Pmax/Pmin	bar	6 / 0.8							
Degree of protection		IP	X05							
Power supply		V/Hz	230V - 50Hz							
Net weight		kg	215	220	260	295	360	400	470	505

Components description



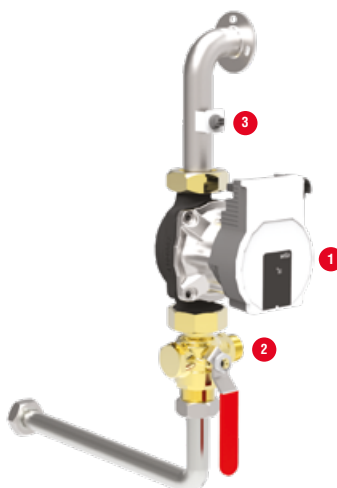
TITAN

- 1 Heat exchanger with aluminium-silicon alloy elements
- 2 Total premix combustion unit
- 3 System return unit
- 4 System flow unit
- 5 Air bleed valve
- 6 Hydraulic pressure safety sensor



THERMAL MODULE

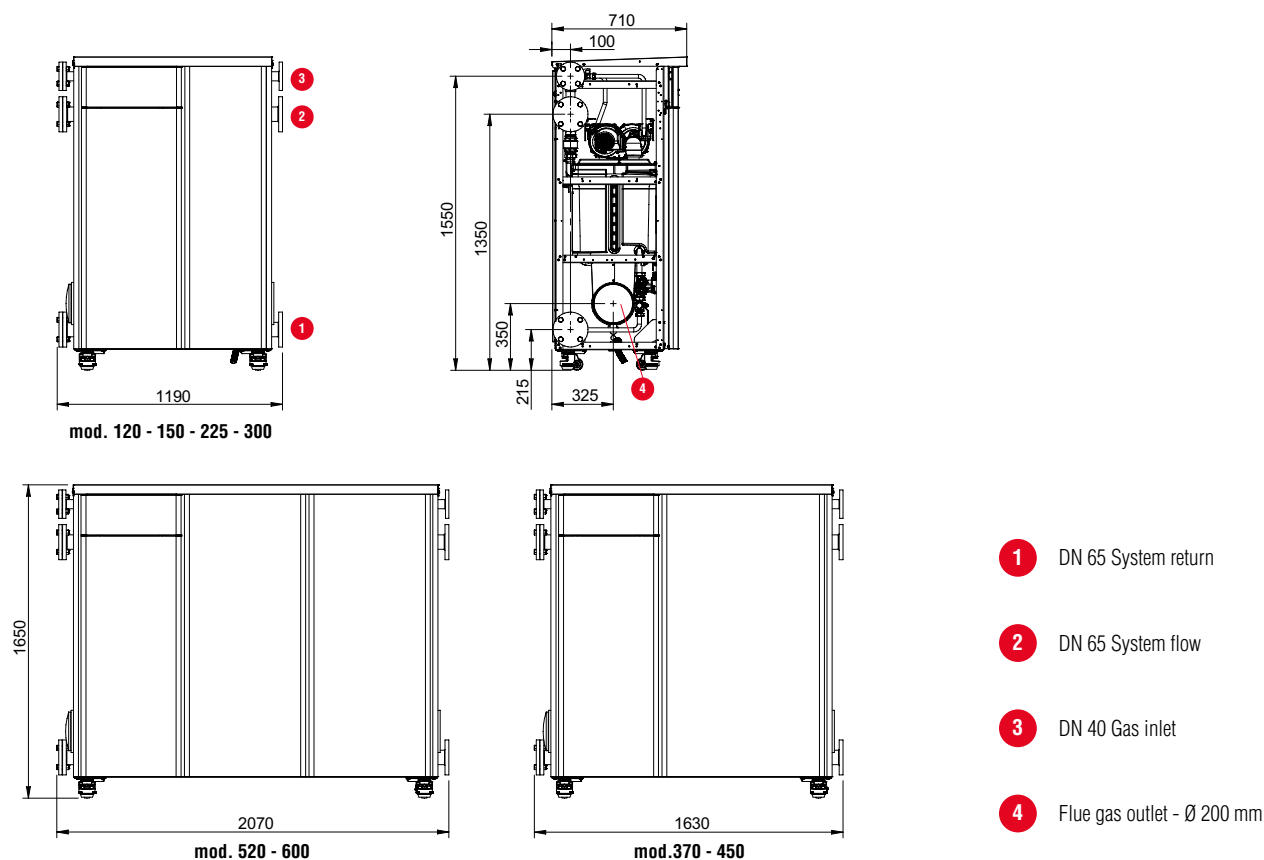
- 1 High performance heat exchanger with aluminium-silicon alloy elements. Each element can exchange up to 75 kW
- 2 Premix type combustion unit with modulating fan. Front burner with micro-flame and very low polluting emissions (NOx class 6).
- 3 FLUE GAS NON-RETURN VALVE. On the suction circuit there is a valve with a mobile damper which prevents the flue gases from going back into the room through the boiler. This allows for the combustion gases to be discharged while pressurised and, consequently, for the flue system to have a smaller diameter compared to traditional vacuum systems.
- 4 Condensation collection collector
- 5 Ignition electrodes and flame sensor
- 6 Delivery temperature sensor



SYSTEM CIRCULATION / RETURN UNIT

- 1 High-efficiency modulating circulator. Max. head 8 metres
- 2 3-way valve with discharge into the atmosphere on each thermal module for safe disconnection.
- 3 System return temperature sensor

Dimensions and connections



ACCESSORIES on request for configuration according to the design specifications

Code	Description	Code	Description
1KWMA11W	additional sensor for boiler and/or system delivery for cascade configurations with and without hydraulic separator	042057X0	INAIL connection (complete with equipment) DN65 PN16
043005X0		013017X0	
046062X0	Empty technical cabinet for outdoor use	041076X0	PPS smoke pipe M/F length 500 mm - 200 mm
013018X0	external probe	041062X0	PPS smoke pipe M/F length 1000 mm - 200 mm
042086X0	Hydraulic separator DN 40 (up to 150 kW)	041060X0	90° elbow M/F, PPS - 200 mm
042078X0	Hydraulic separator DN 65 (from 151 kW up to 300 kW)	-	plate exchanger, see sizing and selection page
042089X0	Hydraulic separator connection kit (from 151 kW up to 300 kW)	-	See chapter "Accessories - Water treatment"
042080X0	Hydraulic separator DN 100 (from 301 kW up to 600 kW)	-	Condensate neutraliser kit (see dedicated section among accessories)
042088X0	Hydraulic separator connection kit (from 301 kW up to 600 kW)		