

RGMAT EA W6 Load Unit


Main Features	
Description	<p>This Load Unit is intended for systems with solid-fuel boilers and fireplaces. The Load Valve integrated in the Load Unit keeps the min. incoming temperature to a boiler (fireplace) above the flue gas condensation temperatures, which prevents low-temperature corrosion of the boiler combustion chamber. This way the Load Unit contributes to a significant reduction in tarring and boiler fouling, to an increase in the efficiency of fuel combustion and to extension of the boiler service life.</p> <p>The Load Unit consists of:</p> <ul style="list-style-type: none"> • Wilo PARA 25/6 SC Pump • TSV3 Load Valve with manual bypass balancing • ball valve with union nut • thermometer • insulation
Working fluid	water; water/glycol mixture (max. 1:1) or water-glycerine mixture (max. 2:1)
Installation	on return piping, min. distance of the pipe axis from a wall is 100 mm; a flow balancing valve shall be installed and adjusted at the inlet to port B of the TSV3 load valve

Codes	boiler output
18699 for TSV3 valve opening temperature of	max. 25 kW at ΔT 20 K and the balancing valve fully open
18701 for TSV3 valve opening temperature of	max. 25 kW at ΔT 20 K and the balancing valve fully open

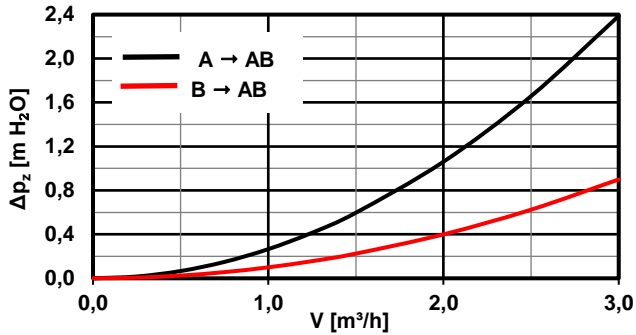
Technical Data	
Fluid working temperature	5-95 °C
Max. working pressure	6 bar
Min. working pressure	0.5 bar
Ambient temperature	5-40 °C
Max. relative humidity	80 %, non condensing
Insulation material	EPP RG 60 g/l
Control range of the load valve	opening temperature + 5 °C
Load valve Kvs (A ► AB direction)	6.2 m ³ /h
Load valve Kvs (B ► AB direction)*	10.1 m ³ /h
Max. pump speed	4300 rpm
Pump speed control	frequency converter
Pump motor protection	integrated
Overall dimensions	325 x 140 x 155 mm
Total weight	3.1 kg
Connections	3 x G 1" F

* with balancing valve fully open

Electric Data	
Power supply	230 V, 50 Hz
Power input (min./max.)	3/43 W
Current (min./max)	0.04/0.44 A
Energy Efficiency Index	≤ 0.21 by EN 16 297/3
IP rating	IPX4D

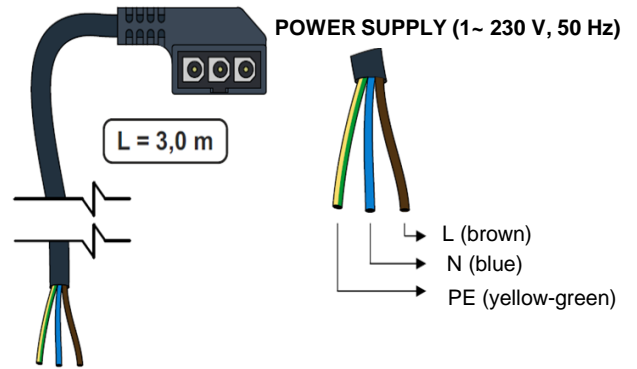
RGMAT EA W6 Load Unit

Valve Pressure Drop Diagram

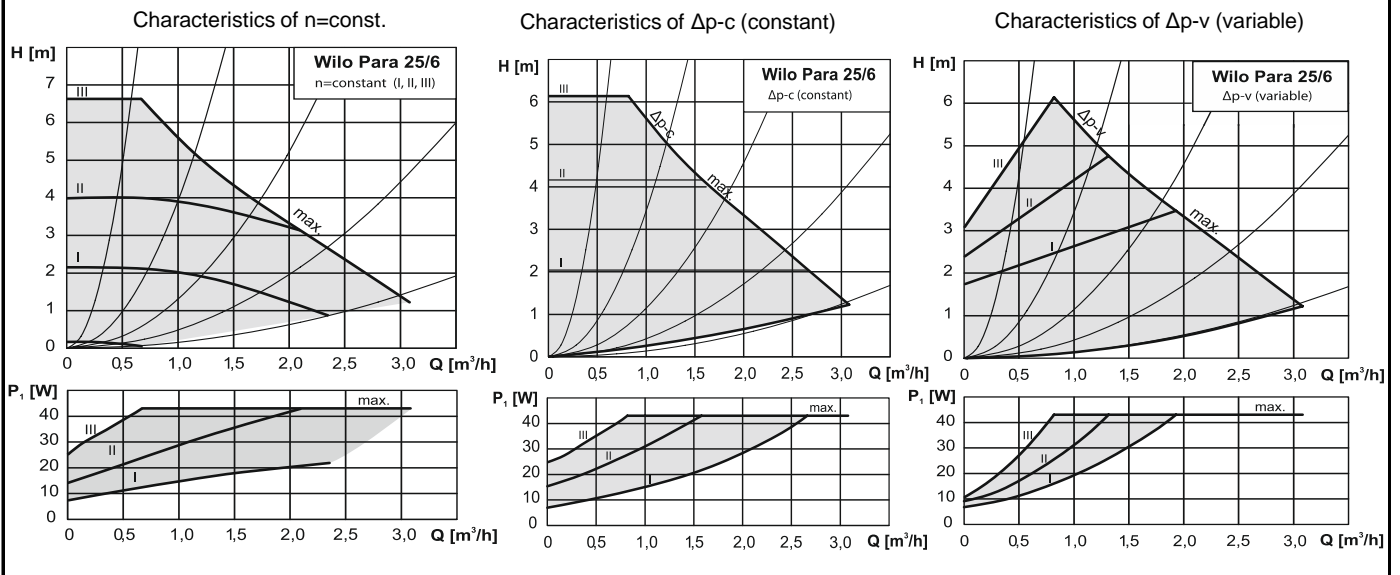


Kvs value and thus also the pressure drop in the B → AB direction depends on the setting of the balancing valve on bypass

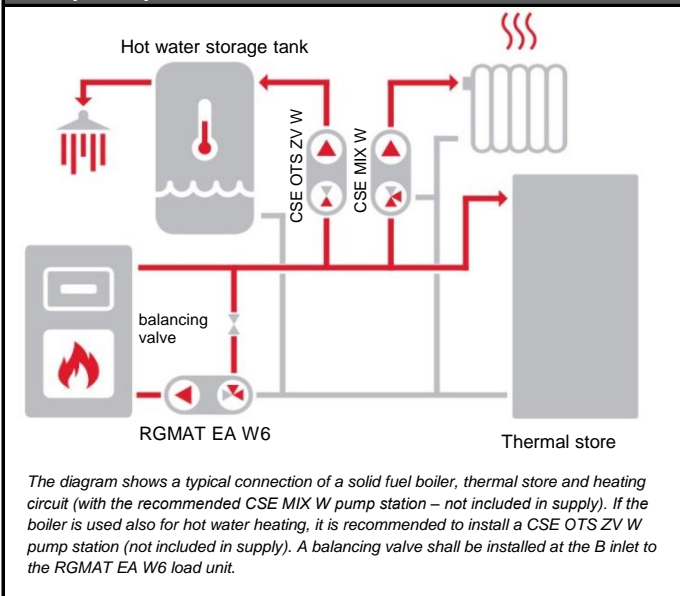
Pump Wiring



Pump performance curves

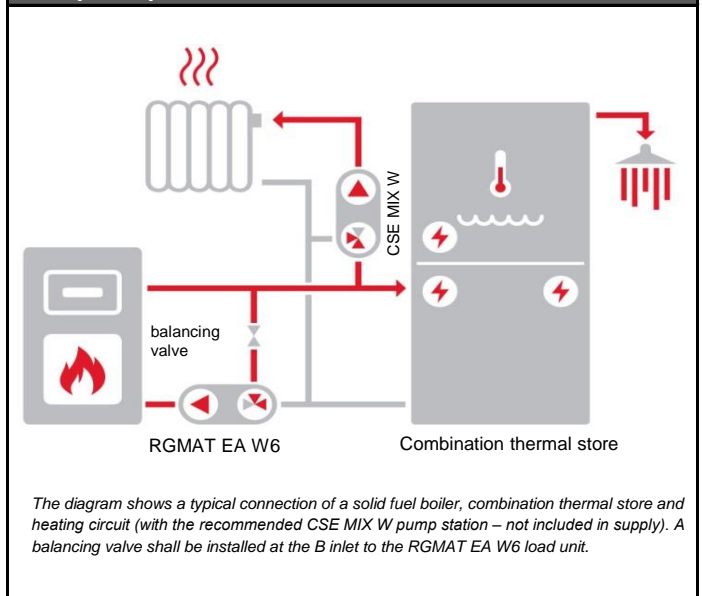


Example of possible connection I



The diagram shows a typical connection of a solid fuel boiler, thermal store and heating circuit (with the recommended CSE MIX W pump station – not included in supply). If the boiler is used also for hot water heating, it is recommended to install a CSE OTS ZV W pump station (not included in supply). A balancing valve shall be installed at the B inlet to the RGMAT EA W6 load unit.

Example of possible connection II



The diagram shows a typical connection of a solid fuel boiler, combination thermal store and heating circuit (with the recommended CSE MIX W pump station – not included in supply). A balancing valve shall be installed at the B inlet to the RGMAT EA W6 load unit.