

RGMAT E W8 5/4 F KK 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. The Load Unit is completed with a set of three ball valves with union nut to facilitate repair or removing individual components without draining the system.</p> <p>The Load Unit consists of:</p> <ul style="list-style-type: none"> • Wilo PARA 25/8 SC Pump • TSV5B 6/4Mx5/4F Load Valve with aut. bypass balancing • 3 ball valves 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

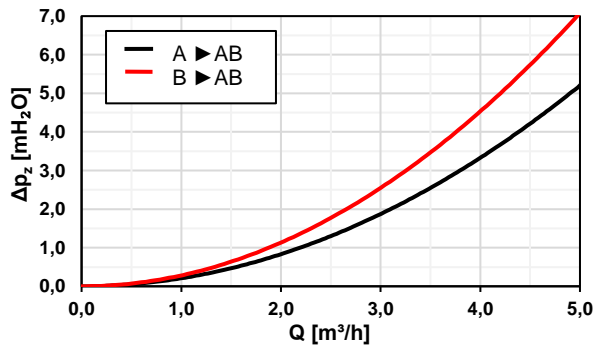
Codes	boiler output
18654 for valve opening temperature 55 °C	max. 59 kW
18657 for valve opening temperature 65 °C	max. 43 kW

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)	7 m³/h
Load valve Kvs (B ► AB direction)	6 m³/h
Max. pump speed	4800 rpm
Pump speed control	frequency converter
Pump motor protection	integrated
Overall dimensions	390 x 210 x 165 mm
Total weight	4.6 kg
Connections	3 x G 5/4" F

Electric Data	
Power supply	230 V, 50 Hz
Power input (min./max.)	2/75 W
Current (min./max)	0.03/0.66 A
Energy Efficiency Index	≤ 0,21 by EN 16 297/3
IP rating	IPX4D

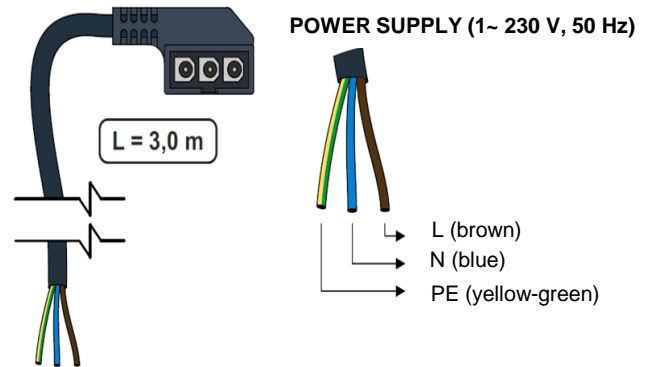
RGMAT E W8 5/4 F KK Load Unit

Valve Pressure Drop Diagram

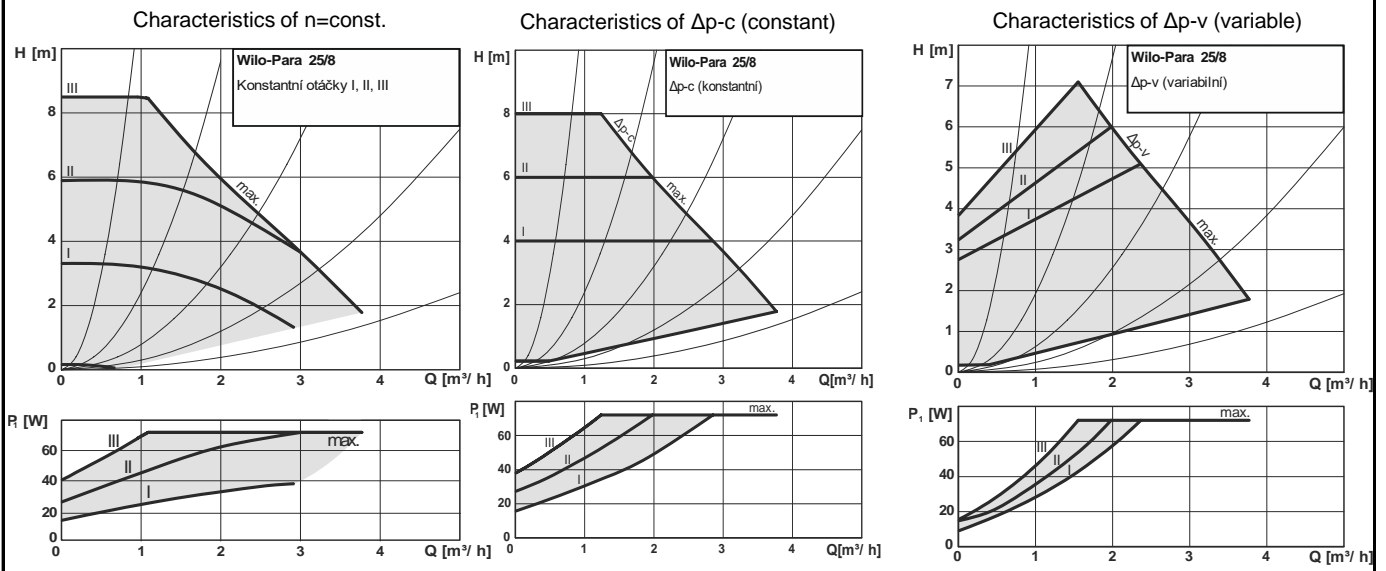


The pressure drop value moves between the two curves depending on the mixing ratio during mixing.

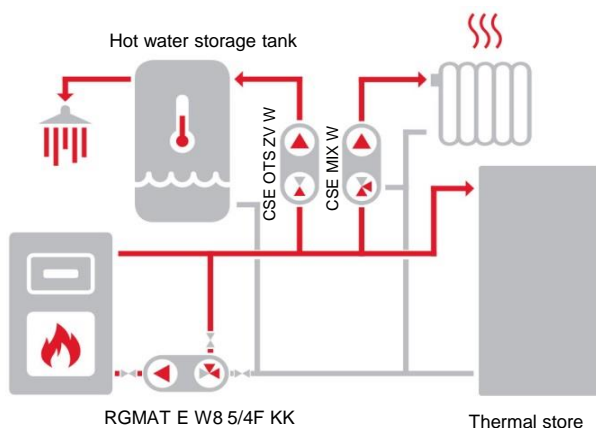
Pump Wiring



Pump performance curves

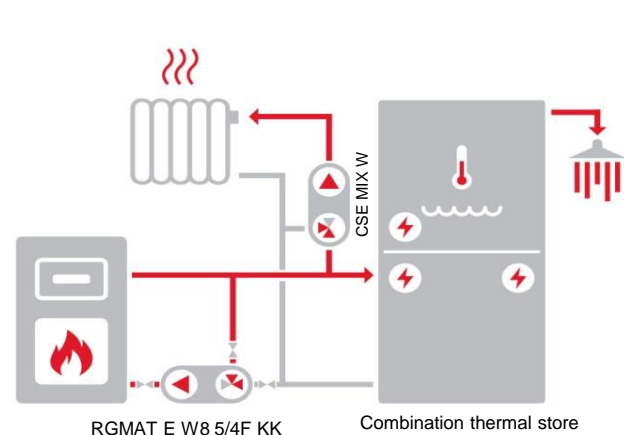


Example of possible connection I



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).

Example of possible connection II



The diagram shows a typical connection of a solid fuel boiler, combination thermal store and a heating circuit (with the recommended CSE MIX W pump station – not included in supply).