DATA SHEET

RGMAT E R8 5/4 F KK Pump Station

Main Features	
Description	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 equipped with a set of three G 6/4" ball valves with union nuts, making repairs/disassembling easier, without the need to drain the system. The Load Unit consists of: • RPA 25-8 Pump, • TSV5 BMF 6/4 M x 5/4 F Load Valve w. outer threads and automatic bypass balancingu, • three G 6/4" ball valves with union nut, • thermometer, • insulation.
Working fluid	Water; water–glycol mixture (max. 1:1). pH range 6.5–8.5. We recommend placing a filter with a mesh size of max. 0.6 mm upstream of the pump – e.g. Magnet FilterBall – see the Catalogue for codes.
Installation	On return piping, min. dist. of the pipe axis from a wall is 100 mm.

Codes	Boiler output
22048 – for valve opening temperature 55 °C	max. 55 kW
22049 – for valve opening temperature 65 °C	max. 40 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
Control Range of the Load Valve	opening temperatur +5 °C
Load valve Kvs (A ►AB direction)	7.3 m³/h
Load valve Kvs (B ►AB direction)	7.3 m³/h
Pump motor protection	integrated
Overall dimensions	350 x 185 x 155 mm
Total weight	4.2 kg
Connections	3 x G 5/4" F

Electric Data	
Power supply	230 V, 50 Hz
Max. power input	65 W
Max. current	0.65 A
IP rating	IP44
Power cable length	3 m

Materials	
Insulation	EPP RG 60 g/l
Load Valve and fittings	brass
Thermostatic element and plug seal	EPDM
Load Valve cone seal	NBR

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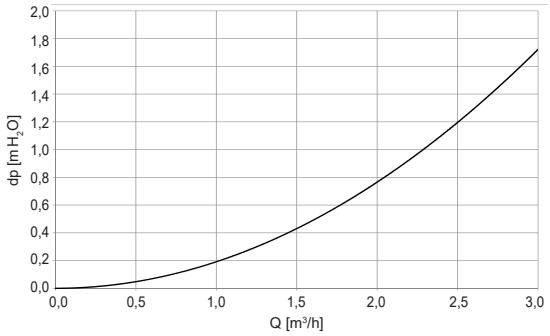
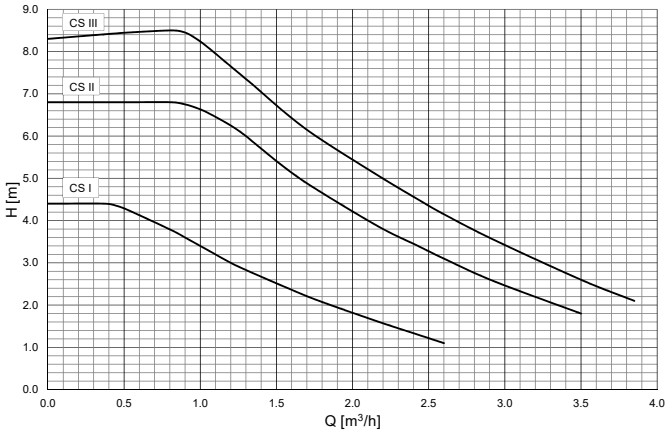
Valve pressure drop diagram

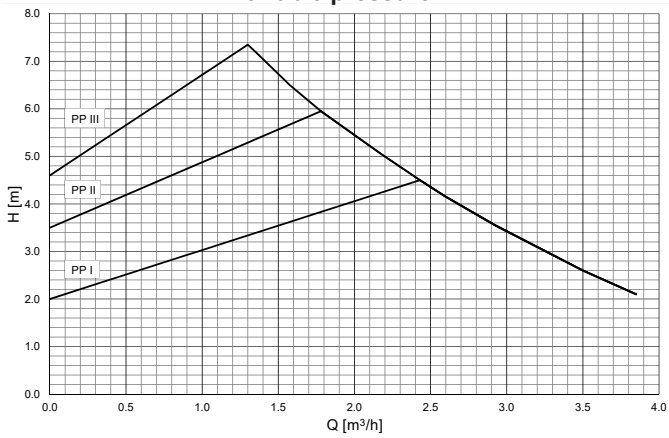


Pump performance curves

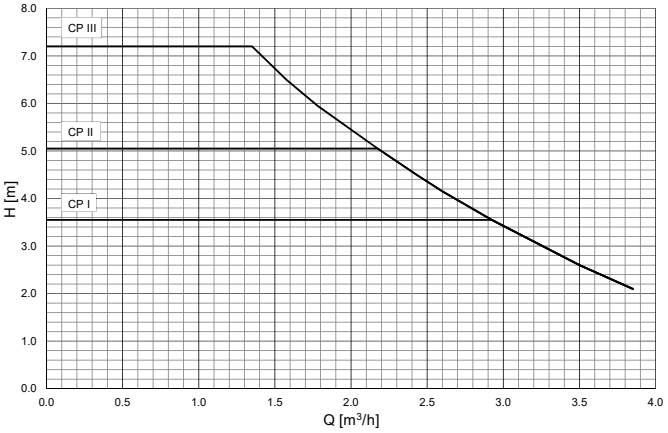
Constant speed



Variable pressure



Constant pressure



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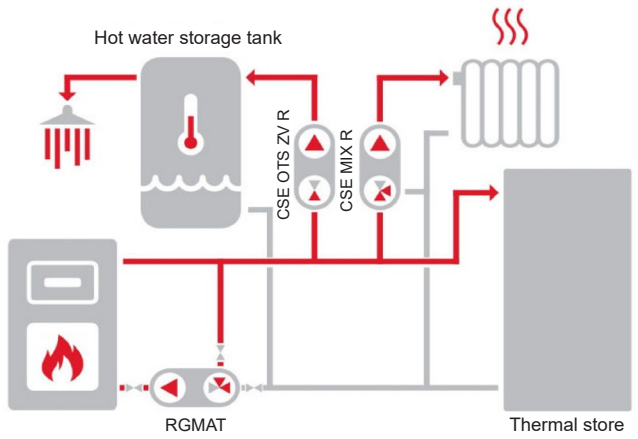
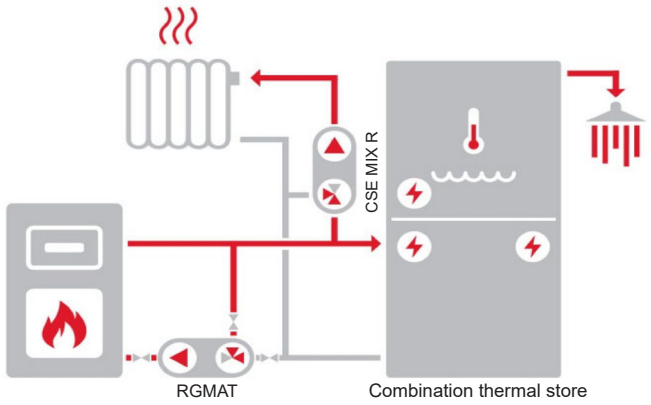
Example of possible connection I



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

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