

– weishaupt –

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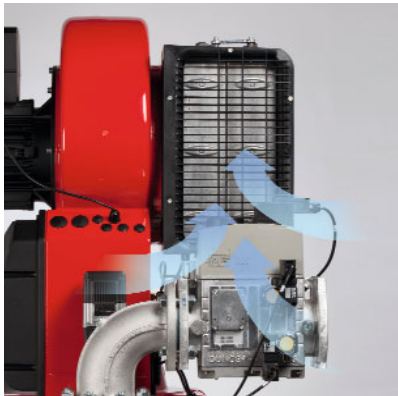
Information on vertically firing burners



Vertically firing monobloc burners

For steam, thermal-fluid and process plant (55 – 10,700 kW)

Vertically firing burners for any application



The gas solenoid valves are ideally positioned and benefit from additional cooling, thanks to their proximity to the air inlet



The ABE control and display unit should ideally be located in a control station close to the burner



An additional solenoid valve enables the combustion manager to test the air pressure switch, providing a continuously running fan or post purge facility to ensure maximal safety

Vertically firing Weishaupt burners have been especially designed for use on vertical plant, such as steam boilers, thermal fluid heaters, and process applications.

Reliable operation

Safety-critical components, such as the gas butterfly valve, stepping motors, gas solenoid valves and gas pressure switches, are securely located away from high-temperature zones to ensure their reliable operation.

The direct intake of combustion air,

which results in a circulation of the ambient air around the burner, provides additional cooling to these components. These key measures combine to guarantee maximal operational reliability.

Simple installation

The burner is supplied with a pre-assembled gas valve train suitable for all applications. Burner orientation can be rotated to any angle to accommodate any requirements for left or right-handed gas valve train alignment. This manner of installation means that the standard-

length cable connections can be used for all the various combustion managers (W-FM 50 / 54, W-FM 100 / 200).

Burner cooling with post-purge or continuously running fan

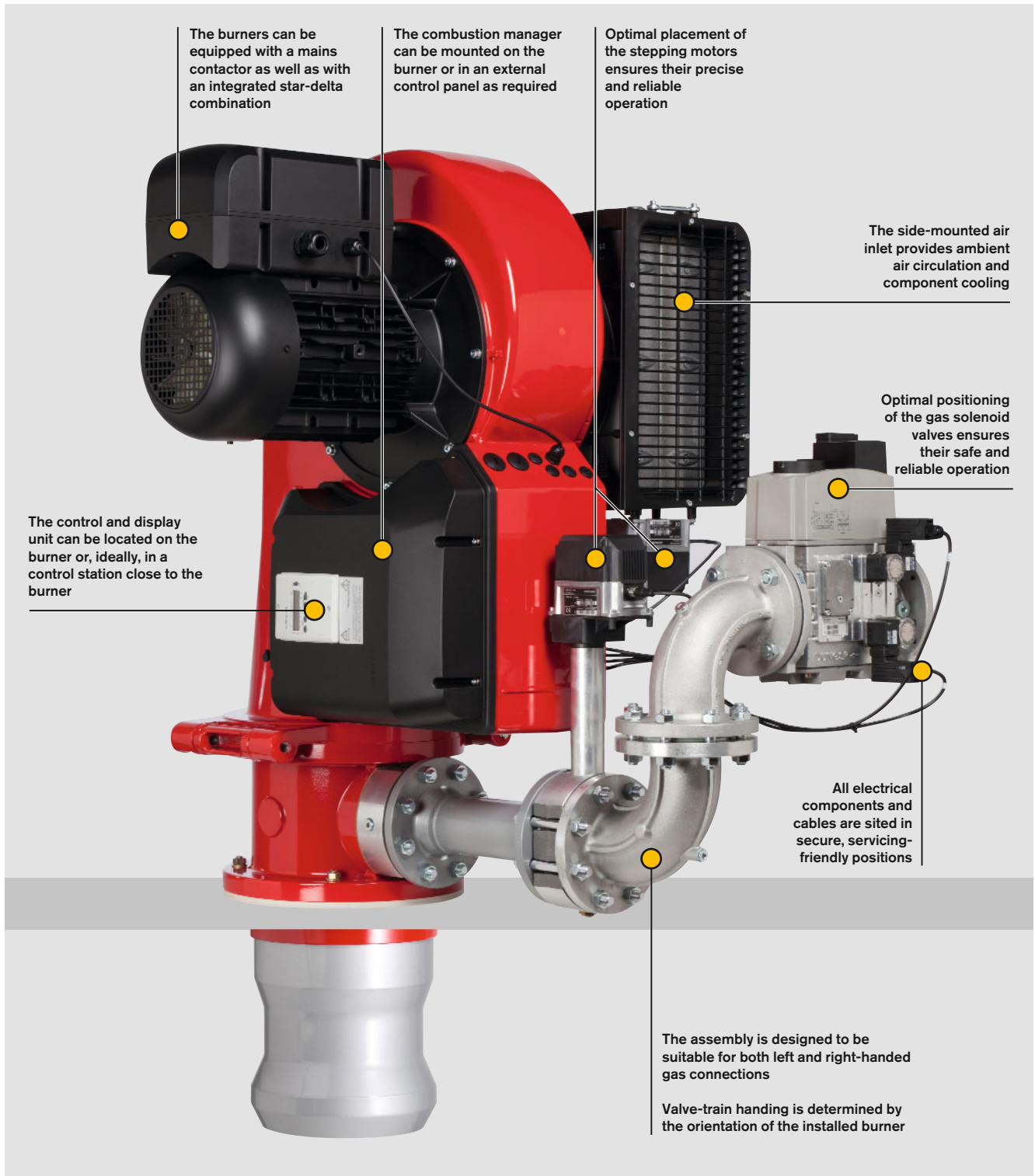
The vertical arrangement makes a longer post-purge time necessary for the burner. Depending on the back-flow of heat through the combustion chamber, the burner should be equipped for continuously running fan or an extended post-purge. The required air-damper position can be set via the combustion manager.

Vertically firing Weishaupt burners – additional equipment to standard burner

Burner series	Offset gas butterfly valve and offset DMV valve block ¹ Component part number	Solenoid valve for air pressure switch test with post purge or continuously running fan Component part number
monarch® WM-G (GL) 10 burner	250 032 96	250 030 21
monarch® WM-G (GL) 20 burner	250 032 95	250 030 21
monarch® WM-G (GL) 30 burner	250 032 93	250 030 21
Industrial G (RGL) 50/2 burner	290 014 52	290 000 31
Industrial G (RGL) 60/2 burner	290 014 51	290 000 31
Industrial G (RGL) 70/1 burner	290 014 51	290 000 31
Industrial G (RGL) 70/3 burner	290 014 51	290 000 31

¹⁾ Burners in this configuration have no CE Ident. or type approval numbers.

The advantages in detail: Digital precision even under extreme conditions



Overview of digital control variants

Equipment must comply with local regulations

Burner types	Combustion manager		ABE			Features						Options					
			Burner-mounted	In an external control panel	Burner mounted	In an external control station (ABE within 20 m of the burner)	In an external control station/panel (ABE within 100 m of the burner)	Post-purge time adjustable via W-FM (Factory presets in parentheses) Recommended > 15 min	A separate timer relay is required to achieve longer post-purge times	Direct start ¹⁾ set via the W-FM (Factory preset: normal start)	Suitable for intermittent operation	Suitable for continuous operation	4 – 20 mA input signal for capacity regulation	Data transfer via Modbus interface	Gas valve proving	Variable speed drive with externally located frequency converter	O ₂ trim
WM-G, WM-L 10 to 30	W-FM 50	●	●	●	●	●	0.2 s – 108 min (0.2 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 100	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 100 LM	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 200	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
WM-GL 10 to 30	W-FM 54	●	●	●	●	●	0.2 s – 108 min (0.2 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 100	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 100 LM	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 200	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
G, L, RGL 50 to 70/3	W-FM 100	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 100 LM	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●
	W-FM 200	●	●	●	●	●	0.2 s – 63 min (5.0 s)	●	●	●	●	●	●	●	●	●	●

● Standard ● Recommended ○ Optional LM = Capacity controller ABE = Control and display unit

¹⁾ In the event of a call for heat during the post-purge time, the burner restarts without a motor shutdown

