

–weishaupt–



SC **MONDOCOM** SRL

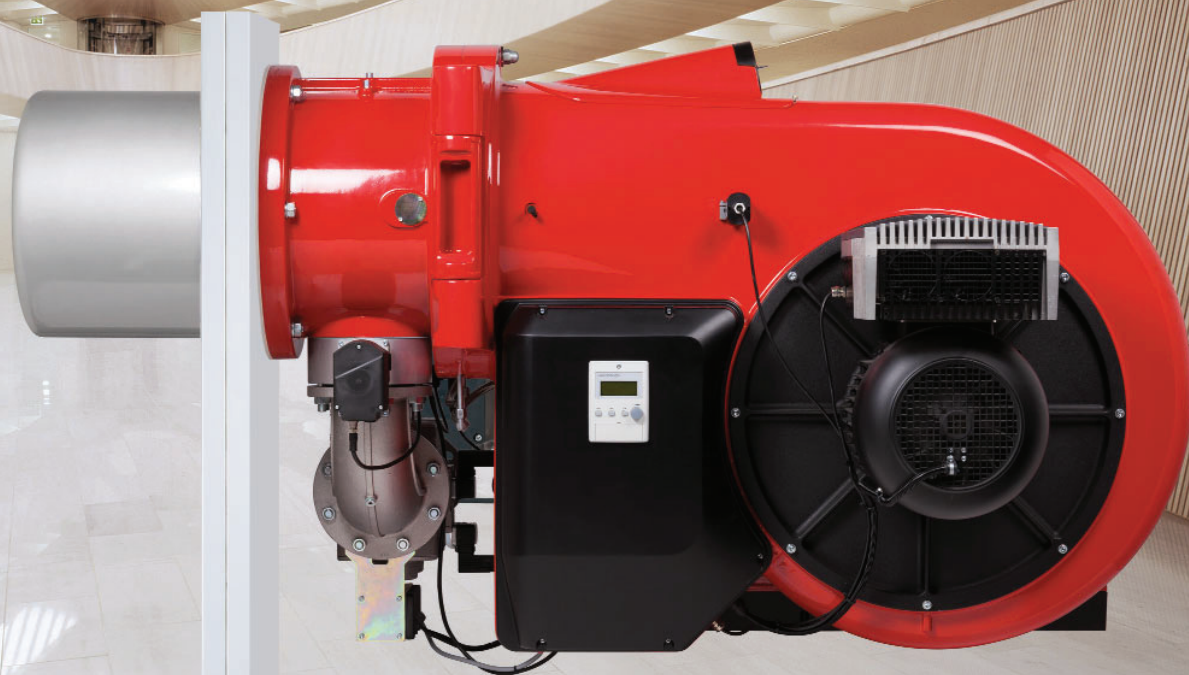
CAZANE, ARZĂTOARE ȘI
PIESE DE SCHIMB

TEL/FAX: 0264-414548; M: 0723-671441

WWW.MONDOCOM.RO

product

Information on gas, oil, and dual-fuel burners



WM 50 for gas, oil, and dual-fuel

WM 50 monarch® burners (800–11 000 kW) • powerful and versatile

Overview of burner regulation

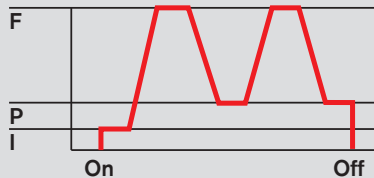
Model designation

Oil-fired operation

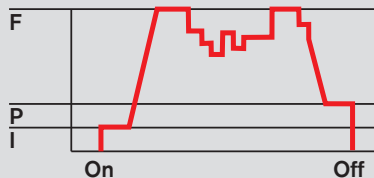
Sliding-two-stage or modulating operation (R)

- On opening the solenoid valves the correct rate of oil for start up is released.
- An actuator sets the oil regulator to full load.
- Load control is achieved through the opening and closing of the oil regulator.
- Modulating operation:
 - W-FM 100 with load controller
 - W-FM 200
- Alternatively, a PID controller can be fitted into the control panel

Sliding-two-stage



Modulating



F = Full load (nominal load)
P = Partial load (minimum load)
I = Ignition load

Gas-fired operation

Sliding-two-stage or modulating operation (ZM)

- Actuators drive the burner to partial load or full load in response to heat demand.
- There is a gradual change between both load points. There are no sudden, large changes in fuel throughput.
- Modulating operation:
 - W-FM 100 with load controller
 - W-FM 200
- Alternatively, a PID controller can be fitted into the control panel

Fuel Version	Oil		Gas	
	sliding-two-stage	modulating	sliding-two-stage	modulating
ZM-NR			●	●
ZM-R-NR	●	●	●	●

Model designation

WM - L 50 / 2 -A R

Version
R = sliding-two-stage / modulating

Mark

Capacity

Size

L = Light oil

Weishaupt monarch® burner series

WM - GL50 / 2 -A ZM - R - NR

NO_x Reduced (gas side)

Version
ZM-R = sliding-two-stage / modulating

Mark

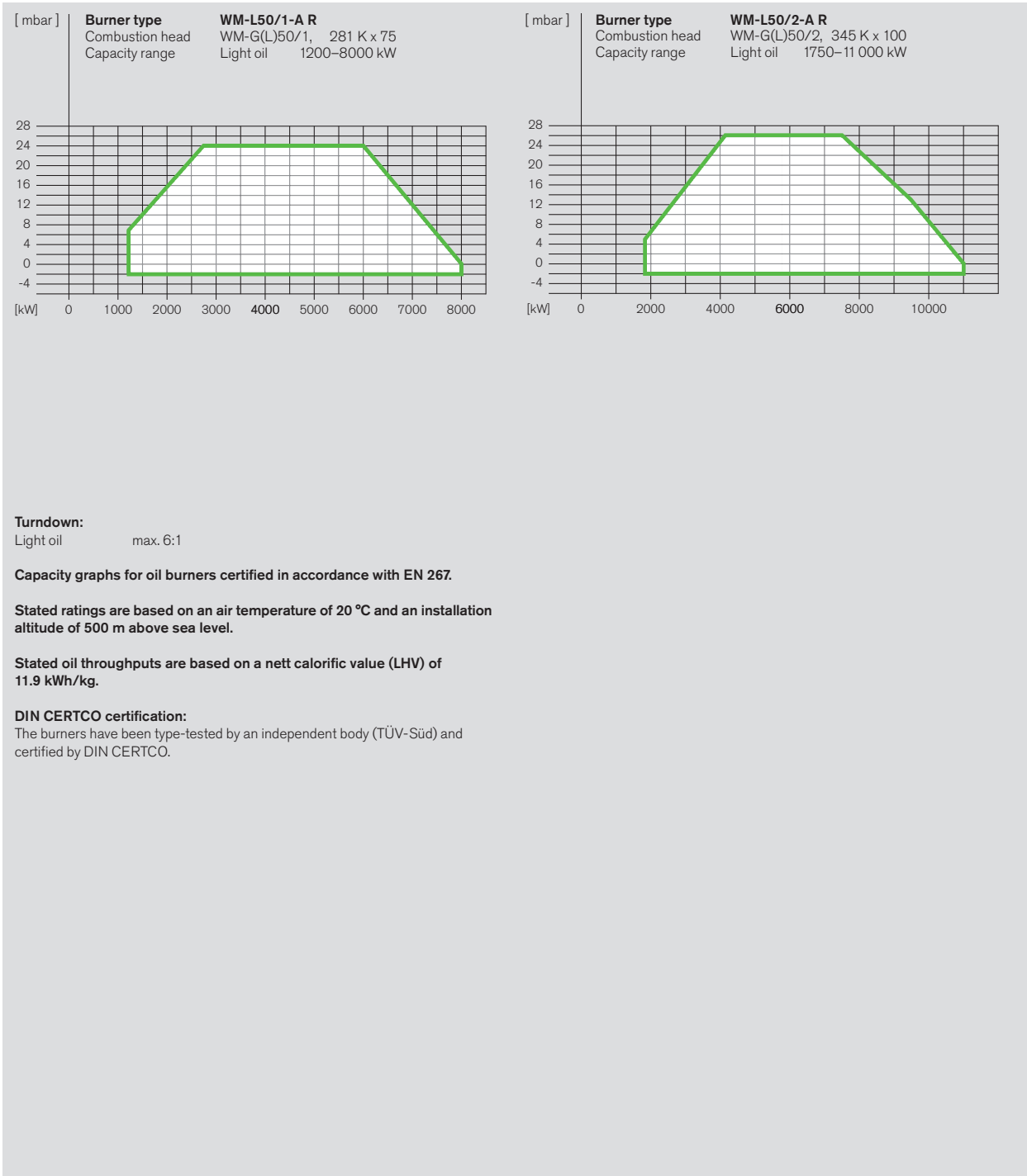
Capacity

Size

G = Gas
L = Light oil

Weishaupt monarch® burner series

Burner selection WM-L50, version R



Technical data

Oil burners

Oil burners		WM-L50/1-A	WM-L50/2-A
Burner motor ¹⁾	Weishaupt type	WM-D160/240-2/16K5	WM-D160/240-2/21K0
Motor power output	kW	16.5	21
Nominal current	A	34	41
Motor protection switch ²⁾ or motor prefusing ²⁾	Type (e.g.) A minimum	PKE65/XTU-65 50 A gG / T (by others)	PKE65/XTU-65 63 A gG / T (by others)
Speed (50 Hz)	rpm	2940	2960
Combustion manager	type	W-FM 100	W-FM 100
Flame monitoring	type	QRB	QRB
Oil actuator	type	SQM45	SQM45
Air damper / mixing assembly actuator	type	SQM48	SQM48
NO _x Class per EN 267		2	2
Mass	kg	455	470
Integral pump	type	T3	T3
Max. flow rate	l/h	2060	2060
Oil hoses	DN / length	25 / 1300	25 / 1300

¹⁾ The electrical motors are premium-efficiency IE3 motors in accordance with Commission Regulation (EC) No. 640/2009

²⁾ The necessary motor protection can be provided either by a motor protection switch (supplied and fitted into a panel by others), or with integral motor overload protection (see special equipment).

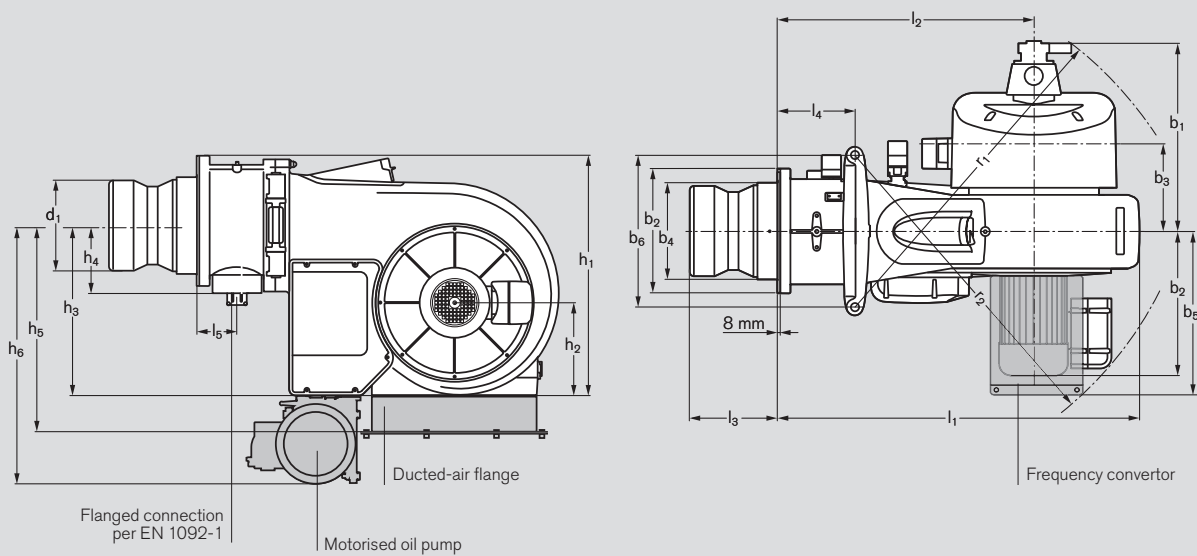
Voltages and frequencies:

The burners are equipped as standard for three-phase alternating current, 400 V, 3 ~, 50 Hz. Other voltages and frequencies are available on application.

Standard burner motor:

Insulation Class F, IP 55 protection.

Dimensions



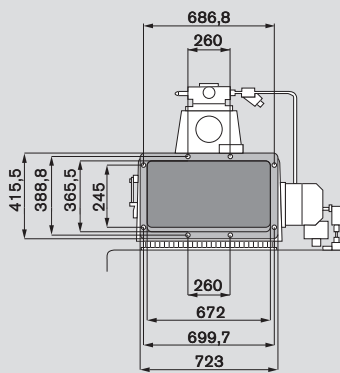
Optional

Burner type	Dimensions in mm												
	l_1	l_2	l_3	l_4	l_5	b_1	b_2	b_3	b_4	b_5	b_6	r_1	r_2^*
WM-L50/1-A R	1616	1146	442	348	—	731	654	403	430	704	680	1467	1450
WM-L50/2-A R	1636	1166	457	368	—	731	654	403	510	704	680	1467	1450
WM-G50/1-A ZM-NR	1616	1146	442	348	178	629	654	403	430	704	680	1467	1450
WM-G50/2-A ZM-NR	1616	1166	457	368	186	629	654	403	510	704	680	1467	1450
WM-GL50/1-A ZM-R-NR	1616	1146	442	348	178	856	654	403	430	704	680	1533	1450
WM-GL50/2-A ZM-R-NR	1636	1166	457	368	186	856	654	403	510	704	680	1533	1450

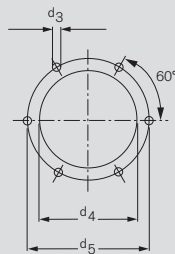
All dimensions are approximate. Weishaupt reserve the right to make changes in light of future developments.

* Without frequency converter

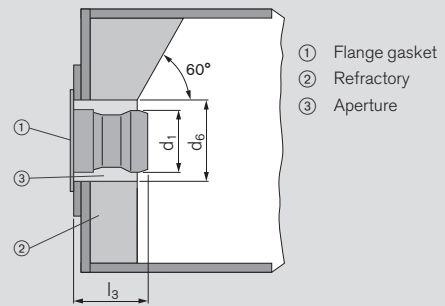
Underside of
ducted-air flange



Mounting-plate drilling
dimensions



Heat generator preparation



The refractory ② must not protrude beyond the front edge of the combustion head. It may, however, be tapered (min. 60°).

Burner type	Dimensions in mm												Nominal diameter of gas butterfly
	h_1	h_2	h_3	h_4	h_5	h_6	d_1	d_2	d_3	d_4	d_5	d_6	
WM-L50/1-A R	1058	414	758	–	854	980	403	520	M16	435	470	440	–
WM-L50/2-A R	1071	414	758	–	854	980	485	630	M16	530	580	530	–
WM-G50/1-A ZM-NR	1058	414	758	302	854	980	403	520	M16	435	470	440	DN100
WM-G50/2-A ZM-NR	1071	414	758	352	854	980	485	630	M16	530	580	530	DN100
WM-GL50/1-A ZM-R-NR	1058	414	758	302	854	980	403	520	M16	435	470	440	DN100
WM-GL50/2-A ZM-R-NR	1071	414	758	352	854	980	485	630	M16	530	580	530	DN100

All dimensions are approximate. Weishaupt reserve the right to make changes in light of future developments.