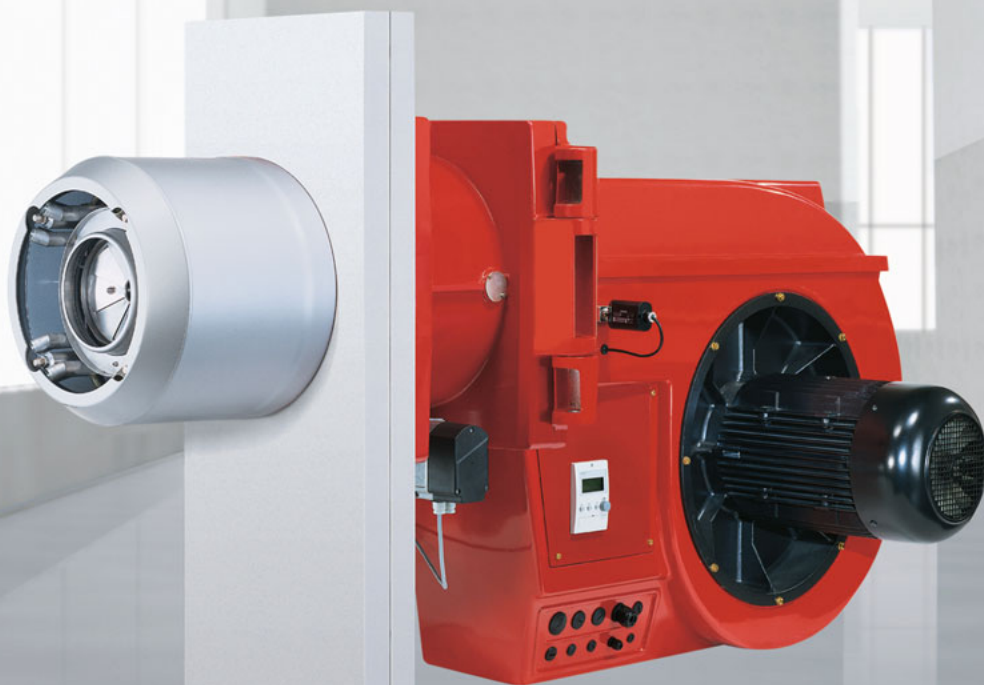


–weishaupt–

product

Information on oil, gas and dual fuel burners



Industrial burners

Industrial burners sizes 30 to 70 • flexible and reliable

Weishaupt Industrial Burners: Flexible and reliable

For more than 50 years, Weishaupt industrial burners have set global standards in terms of reliability, energy efficiency, noise levels and ease of use.

With firing rate between 3,400 and 40,000 MBH, the spectrum of application possibilities covers from heating and steam boilers to air heaters and modern high efficiency boilers.

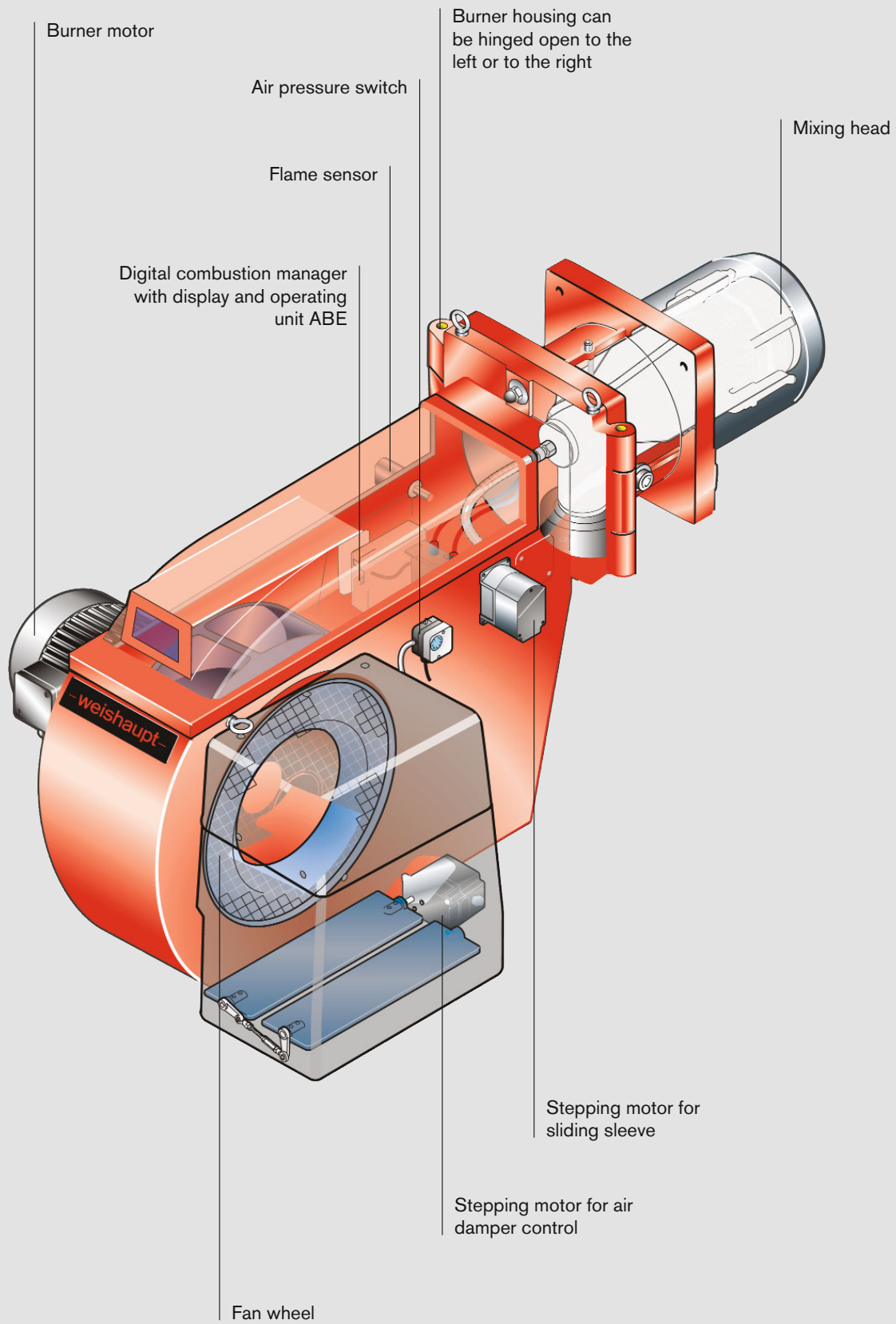
With its wide range of industrial burners, which can be used with almost any gaseous or liquid fuel, Weishaupt has the right burner for virtually any job.

Digital combustion management, included as standard with industrial burners, contributes not only to the economical use of oil and gas, but also simplifies the operation and servicing of the burner. Moreover, the integration into various monitoring and control systems and into complete building management systems is made possible.

The clear layout of the burners with their easily accessible components enables quick and reliable service and therefore also faster commissioning.

Selected materials combined with experience gained over decades in a modern research and development centre and an extensive service network guarantee Weishaupt proverbial reliability.





Index of contents

Oil burners version Standard		multiflam® oil burners version 3LN	50
Burner selection	10	Burner selection	51
Scope of delivery / Accessories	14	Scope of delivery / Accessories /	
Technical data	15	Technical data	52
Gas burners NR		multiflam® gas burners version 3LN	
Burner selection	20	Burner selection	53
Scope of delivery / Accessories	22	Scope of delivery / Accessories	55
Technical data	23	Technical data	56
Gas burners 1LN		multiflam® dual fuel burners version 3LN	
Burner selection	24	Burner selection	57
Scope of delivery / Accessories/		Scope of delivery / Accessories	60
Technical data	25	Technical data	61
Gas burners LN		Dimensions	63
Burner selection	26	Fuel systems	69
Scope of delivery / Accessories	28		
Technical data	29	Pump and preheater station	71
Dual fuel burners NR			
Burner selection	32		
Scope of delivery / Accessories	37		
Technical data	39		
Dual fuel burners 1LN			
Burner selection	44		
Scope of delivery / Accessories	46		
Technical data	47		

Weishaupt industrial burners sizes 30 to 70

High capacity and flexible application range

Weishaupt industrial burners have been especially designed for industrial applications. The monobloc burners are noteworthy for their large capacity and operational ranges and numerous technical details:

Flexible application range

The burners can be used on heat exchangers such as hot water boilers, steam boilers, air heaters and for certain process applications. As the burners are capable of overcoming high combustion chamber resistances, they are primarily used on high efficiency boilers.

Digital combustion management

Digital combustion management ensures simple and safe operation of combustion application. All important functions, such as fuel and air supply or flame monitoring are controlled with digital precision. Operational functions are optimized, economy is maximized and emissions are minimized. The integral ModBus interface allows communication with building automation/ management system.

Energy saving with speed control and O₂ trim

Electrical consumption is definitely a cost factor for large combustion application.

Speed control uses frequency drive to match fan speed to the actual air requirement, allowing for significant savings of electricity, particularly at low fire. With O₂ trim the flue gases are continuously monitored and controlled to ensure the best possible degree of combustion efficiency and thus lower fuel consumption and increased reliability.

Applicable fuels

- Light oil #2
viscosity up to 6 cSt (6 mm²/s) at 68F (20 °C) to ASTM D396
- Medium #4 to heavy fuel #6 oil
viscosity up to 50 cSt (50 mm²/s at 212F (100 °C) to ASTM D396
- Natural Gas
- Propane

Permissible ambient conditions:

- Ambient temperature
-10 to +40 °C (14 to 104F)
-15 to +40 °C (5 to 104F)
- Air humidity: max. 80% relative humidity, no condensation
- Suitable only for indoor operation
- For installation in unheated rooms under some circumstances special solutions are required (contact Weishaupt)

Any discrepancy from the above described applications requires written confirmation from Weishaupt Corporation. The maintenance interval could be shortened according to conditions where the burners are installed.

Approvals

The burners are in compliance with most North American and European applicable standards.

Outstanding service

Weishaupt maintains an extensive global sales and service network. Customer service is available every day around the clock. In-house training by Weishaupt ensures the high standard of their service engineers.

The most important advantages:

- Large capacity and application range
- Stable fan characteristics
- Good combustion behaviour
- Burner housing can be hinged open
- Easy installation, commissioning and service
- Increased safety provided by nozzle head shut off device with dedicated nozzle shut off solenoid
- Nozzle circulation and precise oil temperature regulation on heavy fuel oil burners
- Compliance with current emission standards worldwide
- High turndown ratio (RL, RGL)

Characteristics of the different variations

Version Standard

Oil, gas and dual fuel burners for installations without specific NO_x requirements. Suitable for Natural Gas, Propane, #2 - #6 oil, as well as special gases and special oils on request.

Version NR

Gas and dual fuel burners with advanced, standard mixing head for applications where there is NO_x requirements on gas side. NR means: lower NO_x emission on gas side compared to the standard version. Oil side as standard version. Suitable for Natural Gas, Propane, #2 - #6 oil.

Version 1LN

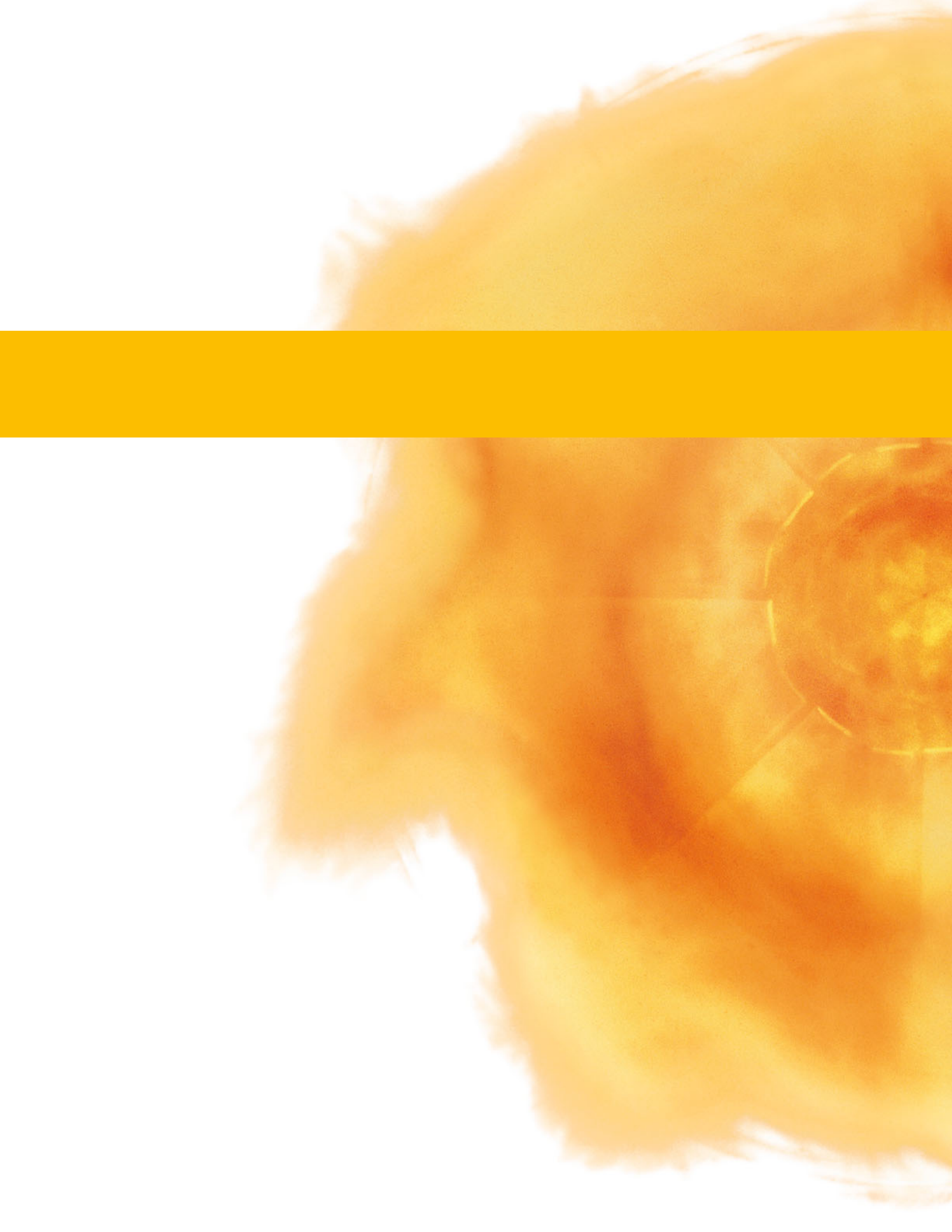
LowNO_x gas and dual fuel burners with special mixing head for applications, where there are requirements for lower NO_x emission on gas and oil side. 1LN means: lower NO_x values compared to version NR. Suitable for Natural Gas, Propane, #2 oil.

Version LN

LowNO_x gas burners with special mixing head for installations where there is requirement for lower NO_x emission on gas operation. Lower NO_x value compared to vers. 1LN. Suitable for Natural Gas and Propane.

Version 3LN

LowNO_x gas and dual fuel burners with patented multiflam mixing head for installations with more stringent low NO_x requirements. Low NO_x values are achieved by fuel distribution method. Suitable for Natural Gas, Propane and #2 oil.



–weishaupt–

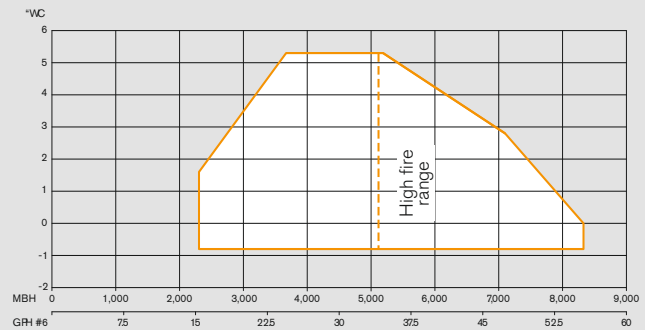
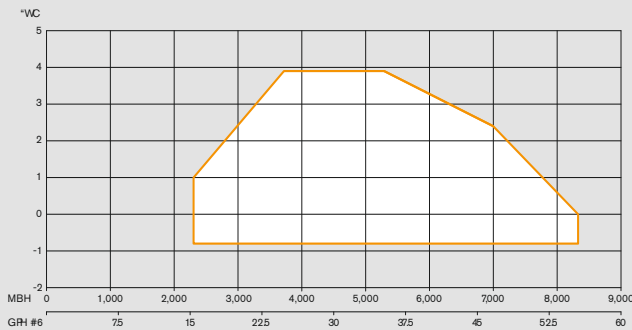
Oil burners

Burner selection

Oil burners size 30, version Standard

Burner model MS30Z/2-A
 Combustion head M30/2 - 190k x 65
 Capacity in MBH 2,300 – 8,330
 Capacity in GPH#6 15 – 54.5

Burner model RMS30/2-A
 Combustion head M30/2 - 190k x 65
 Capacity in MBH 2,300 – 8,330
 Capacity in GPH#6 15 – 54.5



Fuels
 #6 oil



Burner model	vers.	Order No.
MS30Z/2-A	-	212 303 02
RMS30/2-A	ZM	212 305 02

The stated oil throughputs in GPH refer to #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude of 1,640 ft (500 m) above sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

Insulation class F, protection IP 55.

Burner selection

Oil burners size 40, version Standard

Burner model	MS40Z/1-B	MS40Z/1-B	Burner model	RMS40/1-B
Combustion head	M30/2 - 200x50	M30/2 - 175x50	Combustion head	M30/2 - 190k x 65
Capacity in MBH	3,445 – 8,740	3,445 – 10,170	Capacity in MBH	2,680 – 9,965
Capacity in GPH#6	22.5 – 57	22.5 – 66	Capacity in GPH#6	17.5 – 65

Burner model	RMS40/2-A
Combustion head	M40/2 - 217k x 75
Capacity in MBH	3,445 – 12,590
Capacity in GPH#6	22.5 – 82.3

Burner model	Vers.	Order No.
MS40Z/1-B	–	212 402 00
RMS40/1-B	ZM	212 404 00
RMS40/2-A	ZM	212 405 02

The stated oil throughputs in GPH refer to #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude of 1,640 ft (500 m) above sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Fuels
#6 oil

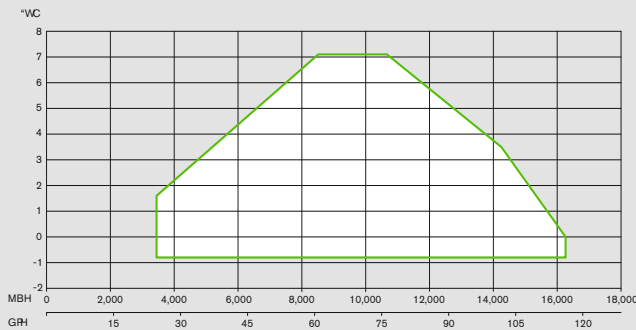
Voltagess and frequencies:
The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

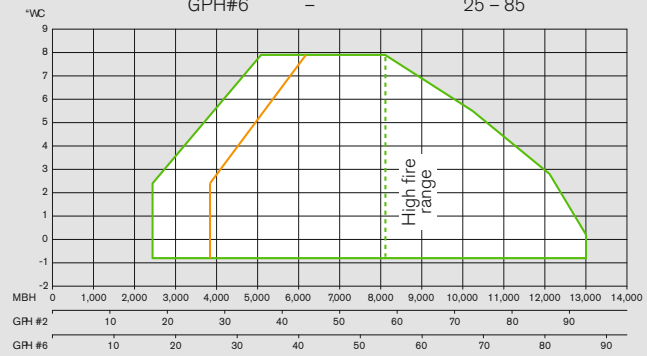
Burner selection

Oil burners size 50, version Standard

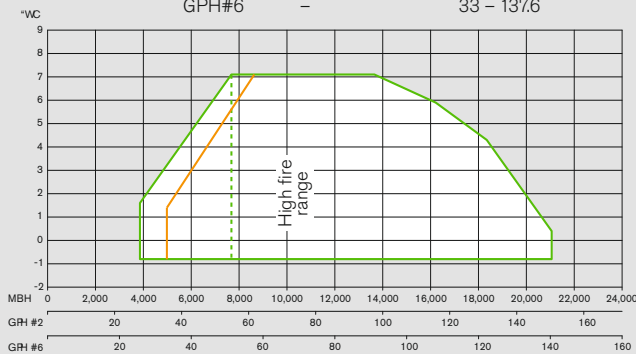
Burner model L50T/2-A
 Combustion head M50/1 - 185x50
 Capacity in MBH 3,445 – 16,260
 Capacity in GPH#2 25 – 116



Burner model RL50/1-B RMS50/1-B
 Combustion head M40/2 - 217x75 M40/2 - 217x75
 Capacity in MBH 2,440 – 13,000 3,840 – 13,000
 Capacity in GPH#2 17 – 93 –
 GPH#6 – 25 – 85



Burner model RL50/2-A RMS50/2-A
 Combustion head M50/2 - 290x185 M50/2 - 290x185
 Capacity in MBH 3,860 – 21,060 4,980 – 21,060
 Capacity in GPH#2 27 – 150 –
 GPH#6 – 33 – 137.6



Fuel oils
 #2 oil —
 #6 oil —

Burner model	Vers.	Order No.
L50T/2-A	-	211 509 02
RL50/1-B	ZM	211 504 00
RMS50/1-B	ZM	212 504 00
RL50/2-A	ZM	211 505 02
RMS50/2-A	ZM	212 505 02

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude of 1,640 ft (500 m) above sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
 Insulation class F, protection IP 55.

Burner selection

Oil burners size 60 and 70, version Standard

<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Burner model</td> <td style="width: 33%;">RL60/2-A</td> <td style="width: 33%;">RMS60/2-A</td> </tr> <tr> <td>Combustion head</td> <td>M60/2-345-230</td> <td>M60/2-345-230</td> </tr> <tr> <td>Capacity in MBH</td> <td>4,470 – 24,795</td> <td>6,140 – 24,795</td> </tr> <tr> <td>Capacity in GPH#2</td> <td>32 – 176</td> <td>–</td> </tr> <tr> <td>Capacity in GPH#6</td> <td>–</td> <td>40 – 162</td> </tr> </table>	Burner model	RL60/2-A	RMS60/2-A	Combustion head	M60/2-345-230	M60/2-345-230	Capacity in MBH	4,470 – 24,795	6,140 – 24,795	Capacity in GPH#2	32 – 176	–	Capacity in GPH#6	–	40 – 162	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Burner model</td> <td style="width: 33%;">RL70/1-A</td> <td style="width: 33%;">RMS70/1-A</td> </tr> <tr> <td>Combustion head</td> <td>M70/1a-425-290</td> <td>M70/1a-425-290</td> </tr> <tr> <td>Capacity in MBH</td> <td>6,500 – 29,860</td> <td>6,910 – 29,860</td> </tr> <tr> <td>Capacity in GPH#2</td> <td>46 – 213</td> <td>–</td> </tr> <tr> <td>Capacity in GPH#6</td> <td>–</td> <td>45 – 195</td> </tr> </table>	Burner model	RL70/1-A	RMS70/1-A	Combustion head	M70/1a-425-290	M70/1a-425-290	Capacity in MBH	6,500 – 29,860	6,910 – 29,860	Capacity in GPH#2	46 – 213	–	Capacity in GPH#6	–	45 – 195						
Burner model	RL60/2-A	RMS60/2-A																																			
Combustion head	M60/2-345-230	M60/2-345-230																																			
Capacity in MBH	4,470 – 24,795	6,140 – 24,795																																			
Capacity in GPH#2	32 – 176	–																																			
Capacity in GPH#6	–	40 – 162																																			
Burner model	RL70/1-A	RMS70/1-A																																			
Combustion head	M70/1a-425-290	M70/1a-425-290																																			
Capacity in MBH	6,500 – 29,860	6,910 – 29,860																																			
Capacity in GPH#2	46 – 213	–																																			
Capacity in GPH#6	–	45 – 195																																			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Burner model</td> <td style="width: 33%;">RL70/2-A</td> <td style="width: 33%;">RMS70/2-A</td> </tr> <tr> <td>Combustion head</td> <td>M70/1a-425-290</td> <td>M70/1a-425-290</td> </tr> <tr> <td>Capacity in MBH</td> <td>6,500 – 37,200</td> <td>6,910 – 37,200</td> </tr> <tr> <td>Capacity in GPH#2</td> <td>46 – 265</td> <td>–</td> </tr> <tr> <td>Capacity in GPH#6</td> <td>–</td> <td>45 – 243</td> </tr> </table>	Burner model	RL70/2-A	RMS70/2-A	Combustion head	M70/1a-425-290	M70/1a-425-290	Capacity in MBH	6,500 – 37,200	6,910 – 37,200	Capacity in GPH#2	46 – 265	–	Capacity in GPH#6	–	45 – 243	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Burner model</th> <th>Vers.</th> <th>Order No.</th> </tr> </thead> <tbody> <tr> <td>RL60/2-A</td> <td>ZM</td> <td>211 605 02</td> </tr> <tr> <td>RMS60/2-A</td> <td>ZM</td> <td>212 605 02</td> </tr> <tr> <td>RL70/1-A</td> <td>ZM</td> <td>211 704 02</td> </tr> <tr> <td>RMS70/1-A</td> <td>ZM</td> <td>212 704 02</td> </tr> <tr> <td>RL70/2-A</td> <td>ZM</td> <td>211 705 02</td> </tr> <tr> <td>RMS70/2-A</td> <td>ZM</td> <td>212 705 02</td> </tr> </tbody> </table> <p style="margin-top: 10px;">The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.</p> <p style="margin-top: 10px;">The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude of 1,640 ft (500 m) above sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.</p> <p style="margin-top: 10px;">Voltages and frequencies: The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.</p> <p style="margin-top: 10px;">Standard burner motor: Insulation class F, protection IP 55.</p>	Burner model	Vers.	Order No.	RL60/2-A	ZM	211 605 02	RMS60/2-A	ZM	212 605 02	RL70/1-A	ZM	211 704 02	RMS70/1-A	ZM	212 704 02	RL70/2-A	ZM	211 705 02	RMS70/2-A	ZM	212 705 02
Burner model	RL70/2-A	RMS70/2-A																																			
Combustion head	M70/1a-425-290	M70/1a-425-290																																			
Capacity in MBH	6,500 – 37,200	6,910 – 37,200																																			
Capacity in GPH#2	46 – 265	–																																			
Capacity in GPH#6	–	45 – 243																																			
Burner model	Vers.	Order No.																																			
RL60/2-A	ZM	211 605 02																																			
RMS60/2-A	ZM	212 605 02																																			
RL70/1-A	ZM	211 704 02																																			
RMS70/1-A	ZM	212 704 02																																			
RL70/2-A	ZM	211 705 02																																			
RMS70/2-A	ZM	212 705 02																																			

Scope of delivery/Accessories

Oil burners size 30 to 70, version Standard

Scope of delivery	MS30	MS40	RMS30	RMS40	RMS50	RMS60	RMS70	L50	RL50	RL60	RL70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air intake housing fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes nozzle assembly with oil nozzle/s, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●	●	●	●	●	●	●	●	●
Combustion manager W-FM100	-	-	●	●	●	●	●	●	●	●	●
Air pressure switch	-	-	-	-	-	●	●	-	-	-	-
Oil pressure switch in return	●	●	●	●	●	●	●	●	●	●	●
Oil pressure switch in supply	-	-	-	-	-	●	●	-	-	-	-
Adjustable regulating sleeve in mixing head	●	-	-	-	-	-	-	-	-	-	-
Sliding sleeve in mixing head	-	-	●	●	●	●	●	-	●	●	●
Oil pump, fitted	●	●	●	●	●	-	-	●	●	●	●
Oil preheater, fitted	●	●	●	●	●	-	-	-	-	-	-
Oil hoses	●	●	●	●	●	●	●	●	●	●	●
3 oil solenoid valves, 1 safety shut off valve, three stage nozzle head without shut off device	-	-	-	-	-	-	-	●	-	-	-
1 normally closed solenoid valve in supply and return, nozzle head with shut off device (nozzle solenoid on RL and RMS, hydraulically controlled ball valve on MS)	●	●	●	●	●	-	-	-	●	●	●
1 normally closed solenoid valve in supply and return, bypass solenoid valve, nozzle head with shut off device (nozzle solenoid)	-	-	-	-	-	●	●	-	-	-	-
Downward firing version	●	●	●	●	●	●	●	●	●	●	●
Heating cartridges	●	●	●	●	●	●	●	-	-	-	-
Accessories											
Intake flange for connection of air duct	○	○	○	○	○	○	○	○	○	○	○
Stainless steel oil hoses, heated	○	○	○	○	○	○	○	-	-	-	-
Magnetic coupling	-	-	○	○	○	-	-	○	○	○	○
Combustion head extension	○	○	○	○	○	○	○	○	○	○	○
Media preheater with fittings	○	○	○	○	○	○	○	-	-	-	-
Speed control	-	-	○	○	○	○	○	○	○	○	○
O ₂ trim	-	-	○	○	○	○	○	○	○	○	○
W-FM loosed for installation in remote panel	-	-	○	○	○	○	○	○	○	○	○
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories on request.</p>											

Technical data

Oil burners size 30 and 40, version Standard

Technical data				MS30Z/2-A	RMS30/2-A
Burner motor 3~208 - 600V		Model	W-D 112/140-2/4K5	W-D 112/140-2/4K5	
Motor rating		HP (kW)	6.6 (4.5)	6.6 (4.5)	
FLA at 460V		A	8.6	8.6	
Speed (60 Hz)		rpm	3,510	3,510	
Fan wheel		Color / ø	red / 248 x 104	red / 248 x 104	
Combustion manager		Model	LAL2.25	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	1055/80	SQM45	
	Fuel	Model	–	SQM45	
	Mixing head	Model	–	SQM45	
Pump fitted		Model	E7	TA3	
Oil preheater		Model	EV2D	EV2D	
	Oil throughput GPH and (kg/h)		72 (270)	72 (270)	
	Heat rating kW		13.2	13.2	
Oil solenoid valves	110V 1/8"	19 W	Model 121 K 2423	–	
	110V 1/8"	19 W	Model 122 K 9321	–	
	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322	
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320	
Oil pressure switches	1 – 10 bar	(return fuel oil EL - 5 bar)	Model –	–	
	1 – 10 bar	(return fuel oil S - 7 bar)	Model DSA 46 F001	DSA 46 F001	
Oil hoses (on MS, RMS and RGMS, high pressure metal hoses)		DN, length in inch and (mm)	20/40" (1000)	20/40" (1000)	
			20/51" (1300)	20/51" (1300)	
Burner weight		approx. lbs (kg)	297 (135)	309 (140)	

Technical data				MS40Z/1-B	RMS40/1-B	RMS40/2-A
Burner motor 3~208 - 600V		Model	W-D 112/170-2/5K5	W-D 112/170-2/5K5	W-D 112/170-2/7K0	
Motor rating		HP (kW)	8.6 (6.5)	8.6 (6.5)	10.4 (7.8)	
FLA at 460V		A	12	12	14	
Speed (60 Hz)		rpm	3,530	3,530	3,500	
Fan wheel		Color / ø	red / 275 x 104	red / 275 x 104	red / 275 x 104	
Combustion manager		Model	LAL2.25	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM10	SQM45	SQM45	
	Fuel	Model	–	SQM45	SQM45	
	Mixing head	Model	–	SQM45	SQM45	
Pump fitted		Model	E7	TA3	TA3	
Oil preheater		Model	EV2D	EV2D	EV2D ²⁾	
	Oil throughput in GPH and (kg/h)		75 (270)	75 (270)	75 (270)	
	Heat rating kW		13.2	13.2	13.2	
Oil solenoid valves	110V 1/8"	19 W	Model 121 K 2423	–	–	
	110V 1/4" (safety v.)	20 W	Model –	–	–	
	110V 1/8"	19 W	Model 122 K 9321	–	–	
	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322	321 H 2322	
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320	121 G 2320	
Oil pressure switches	1 – 10 bar	(return #2 oil - 5 bar)	Model –	–	–	
	1 – 10 bar	(return #6 oil - 7 bar)	Model DSA 46 F001	DSA 46 F001	DSA 46 F001	
Oil hoses (on MS, RMS and RGMS, high pressure metal hoses)		DN, length in inch and (mm)	20/40" (1000)	20/40" (1000)	20/40" (1000)	
			20/51" (1300)	20/51" (1300)	20/51" (1300)	
Burner weight		approx. lbs (kg)	350 (159)	366 (166)	380 (172)	

¹⁾ Burners above 75 GPH (270 kg/h): Oil preheater WEV2.2 in lieu of EV2D, Refer to 'Accessories'

²⁾ Burners above 82.5 GPH (300 kg/h): Oil preheater WEV3 in lieu of WEV2.2, Refer to 'Accessories'

Technical data

Oil burners size 50, version Standard

Technical data				L50T/2-A	RL50/1-B	RL50/2-A
Burner motor 3~208 V - 600V		Model	W-D132/210-2/14K0	W-D132/170-2/9K0	W-D132/210-2/14K0	
Motor rating		HP (kW)	20 (15)	14.6 (11)	20 (15)	
FLA at 460V		A	25	19	25	
Speed (60 Hz)		rpm	3,520	3,500	3,520	
Fan wheel		Colour / ø	red / 330 x 104.5	red / 330 x 104.5	red / 330 x 104.5	
Combustion manager		Model	W-FM100	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM45	SQM45	SQM45	
	Fuel	Model	–	SQM45	SQM45	
	Mixing head	Model	–	SQM45	SQM45	
Pump, fitted		Model	TA2C	TA4C	T2C	
Oil preheater		Model	–	–	–	
	Oil throughput in GPH and (kg/h)		–	–	–	
	Heat rating kW		–	–	–	
Oil solenoid valve	110V 1/8"	19 W	Model 121 K 2423 (3 off)	–	–	
	110V 1/4" (safety v.)	20 W	Model 121 K 6220	–	–	
	55V 3/8" (supply)	20 W	Model –	321 H 2322	321 H 2322	
	55V 3/8" (return)	20 W	Model –	121 G 2320	121 G 2320	
Oil pressure switches	1 – 10 bar	(return #2 oil - 5 bar)	Model –	DSA 46 F001	DSA 46 F001	
	1 – 10 bar	(return #6 oil - 7 bar)	Model –	–	–	
Oil hoses		DN, length in inch and (mm)	20/51" (1300)	25/51" (1300)	25/51" (1300)	
Burner weight		approx. lbs (kg)	440 (200)	458 (208)	463 (210)	

Technical data				RMS50/1-B	RMS50/2-A
Burner motor 3~208 - 600V		Model	W-D132/170-2/9K0	W-D132/210-2/14K0	
Motor rating		HP (kW)	14.6 (11)	20 (15)	
FLA at 460V		A	19	25	
Speed (60 Hz)		rpm	3,500	3,520	
Fan wheel		Colour / ø	red / 330 x 104.5	red / 330 x 104.5	
Combustion manager		Model	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM45	SQM45	
	Fuel	Model	SQM45	SQM45	
	Mixing head	Model	SQM45	SQM45	
Pump, fitted		Model	TA4C	T2C	
Oil preheater		Model	WEV2,2/01 ¹⁾	WEV3/01	
	Oil throughput in GPH and (kg/h)		82.5 (300)	137.5 (500)	
	Heat rating kW		13.8	22.4	
Oil solenoid valve	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322	
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320	
Oil pressure switches	1 – 10 bar	(return #2 oil - 5 bar)	Model –	–	
	1 – 10 bar	(return #6 oil - 7 bar)	Model DSA 46 F001	DSA 46 F001	
Oil hoses		DN, length in inch and (mm)	25/45" (1150)	25/45" (1150)	
(on MS, RMS and RGMS, high pressure metal hoses)			25/59" (1500)	25/59" (1500)	
Burner weight		approx. lbs (kg)	546 (248)	552 (250)	

¹⁾ Burners above 82.5 GPH (300 kg/h): Oil preheater WEV3 in lieu of WEV2,2. Refer to 'Accessories'

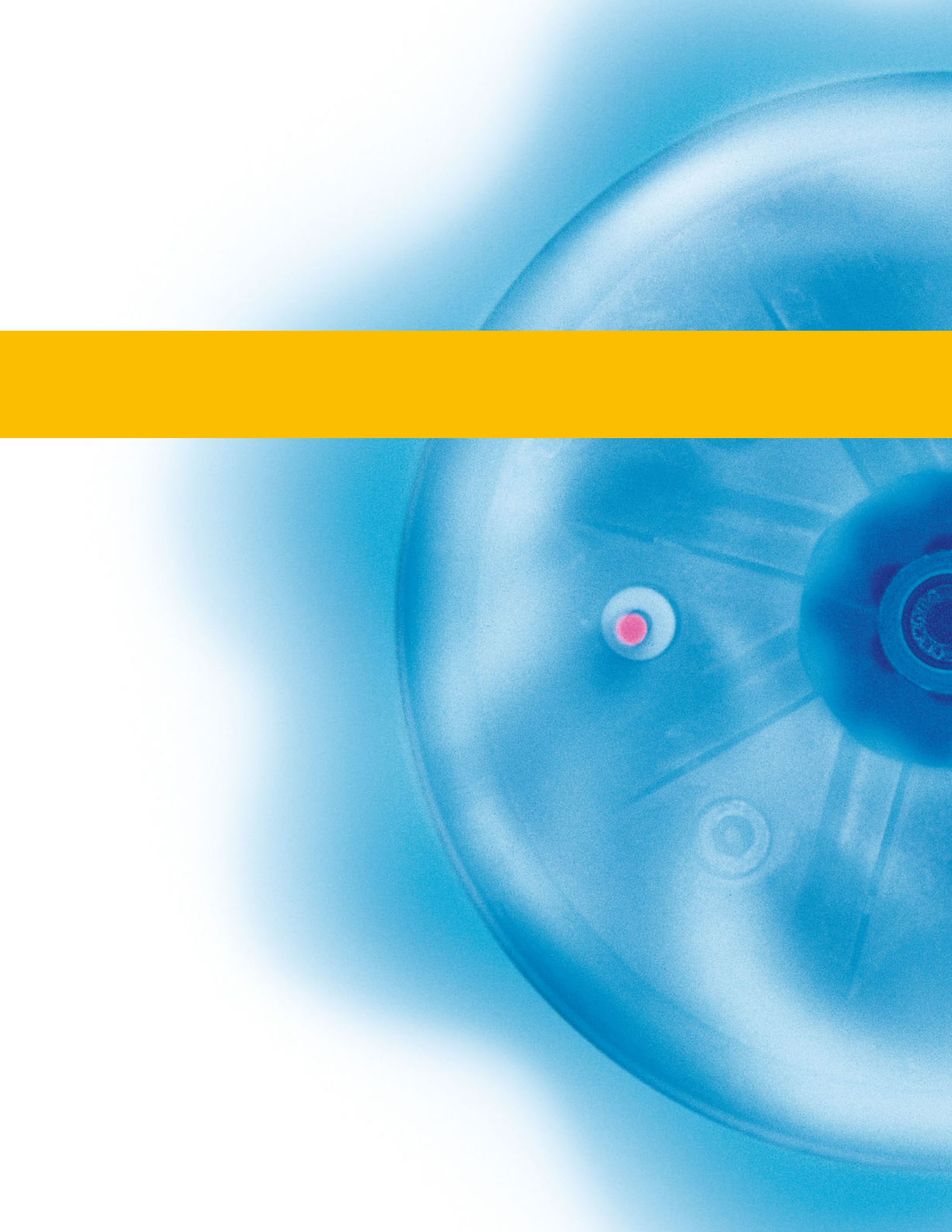
Technical data

Oil burners size 60 and 70, version Standard

Technical data			RL60/2-A	RMS60/2-A
Burner motor 3~208 - 600V		Model	W-D132/210-2/14K0	W-D132/210-2/14K0
Motor rating		HP (kW)	20 (15)	20 (15)
FLA at 460V		A	25	25
Speed (60 Hz)		rpm	3,520	3,520
Fan wheel		Colour / ø	red / 465 x 103	red / 465 x 103
Combustion manager		Model	W-FM100	W-FM100
Ignition unit		Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
	Mixing head	Model	SQM45	SQM45
Pump fitted		Model	T2C	–
Oil solenoid valves	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320
	110V 3/8" (bypass)	19 W	Model –	322 H 7306
Oil pressure switches	3 – 25 bar (supply-18 bar)	Model	–	DSA 58 F 001
	1 – 10 bar (return #2 oil-5 bar)	Model	DSA 46 F 001	–
	1 – 10 bar (return #6 oil-7 bar)	Model	–	DSA 46 F 001
Oil hoses (on RMS and RGMS, high pressure metal hoses)	DN, length in inch and (mm)		25/51" (1300)	16/45" (1150)
			–	16/59" (1500)
Burner weight		approx. lbs (kg)	552 (250)	463 (210) ²⁾

Technical data			RL70/1-A	RL70/2-A	RMS70/1-A	RMS70/2-A
Burner motor 3~208 - 600V		Model	W-D160/215-2/14K0	W-D160/240-2/22K0	W-D160/215-2/14K0	W-D160/240-2/22K0
Motor rating		HP (kW)	21,3 (16)	26,6 (20)	21,3 (16)	26,6 (20)
FLA at 460V		A	28	33	28	33
Speed (60 Hz)		rpm	3,540	3,550	3,540	3,550
Fan wheel		Colour / ø	yellow / 475 x 128	green / 530 x 120	yellow / 475 x 128	green / 530 x 120
Combustion manager		model	W-FM100	W-FM100	W-FM100	W-FM100
Ignition unit		model	W-ZG02	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	model	SQM45	SQM45	SQM45	SQM45
	Fuel	model	SQM45	SQM45	SQM45	SQM45
	Mixing head	model	SQM45	SQM45	SQM45	SQM45
Pump fitted		model	T2C (up to 173 GPH/ 600 kg/h)	–	–	–
		model	T3C (from 173 GPH/ 600 kg/h)	–	–	–
Oil solenoid valves	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322	321 H 2322	321 H 2322
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320	121 G 2320	121 G 2320
	110V 3/8" (bypass)	19 W	Model –	–	322 H 7306	322 H 7306
Oil pressure switch	3 – 25 bar (supply-18 bar)	Model	–	–	DSA 58 F 001	DSA 58 F 001
	1 – 10 bar (return #2 oil-5 bar)	Model	DSA 46 F 001	DSA 46 F 001	–	–
	1 – 10 bar (return #6 oil-7 bar)	Model	–	–	DSA 46 F 001	DSA 46 F 001
Oil hoses (on RMS and RGMS, high pressure metal hoses)	DN, length in inch and (mm)		25/51" (1300)	25/51" (1300)	20/45" (1150)	20/45" (1150)
			–	–	20/59" (1500)	20/59" (1500)
Burner weight		approx. lbs (kg)	772 (350)	772 (350)	684 (310) ²⁾	684 (310) ²⁾

²⁾ Weight without pump and preheater station



–weishaupt–

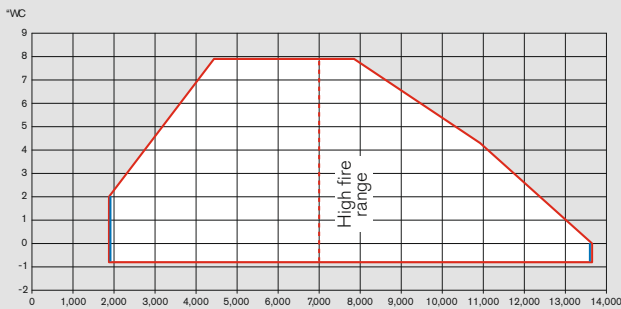
Gas burners



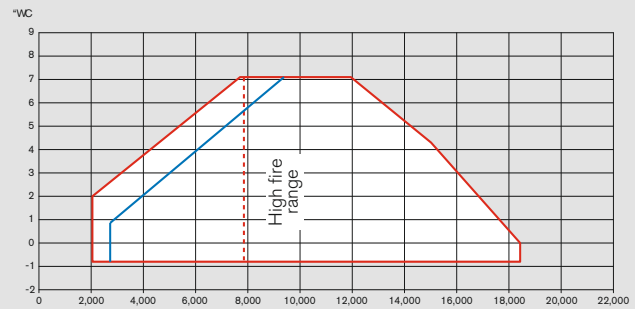
Burner selection

Gas burners size 50 to 70, version NR

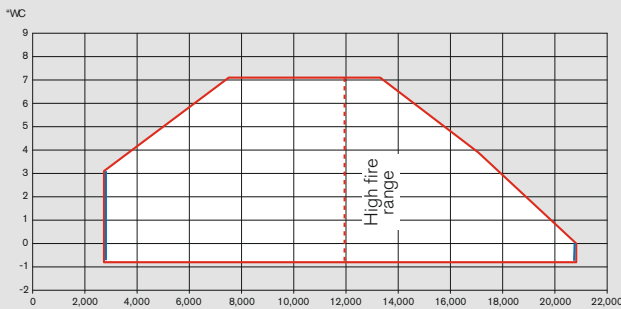
Burner model G50/1-B, vers. ZM-NR
 Combustion head G40/2-NR 217x75
 Capacity in MBH Nat Gas 1,875 – 13,650
 Propane 1,875 – 13,650



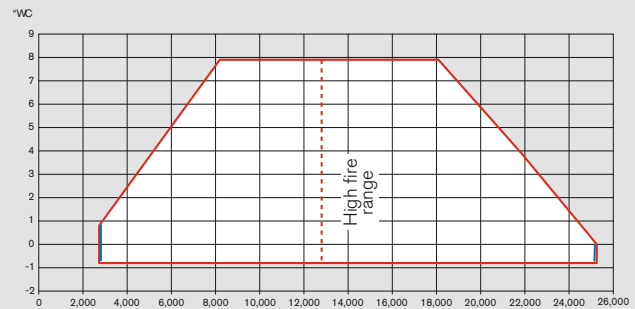
Burner model G50/2-A, vers. ZM-NR
 Combustion head G50/2-NR 290x85
 Capacity in MBH Nat Gas 2,050 – 18,430
 Propane 2,050 – 18,430



Burner model G60/2-A, vers. ZM-NR
 Combustion head G60/2-NR 345x230
 Capacity in MBH Nat Gas 2,730 – 20,800
 Propane 2,730 – 20,800



Burner model G70/1-B, vers. ZM-NR
 Combustion head G60/2-NR 345x230
 Capacity in MBH Nat Gas 2,730 – 25,250
 Propane 2,730 – 25,250



Fuels
 Nat gas —
 Propane —

Burner model	Vers.	Order No.
G50/1-B	ZM-NR	217 504 15
G50/2-A	ZM-NR	217 505 13
G60/2-A	ZM-NR	217 605 12
G70/1-B	ZM-NR	217 704 42

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

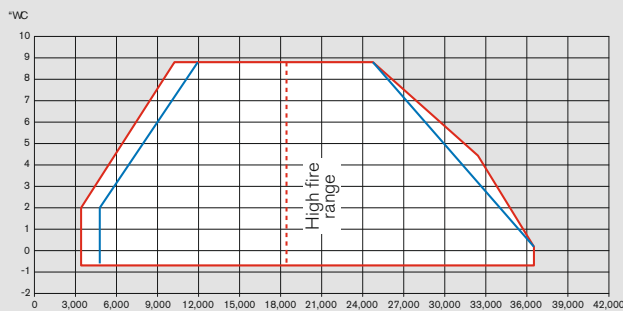
Voltagess and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
 Insulation class F, protection IP 55.

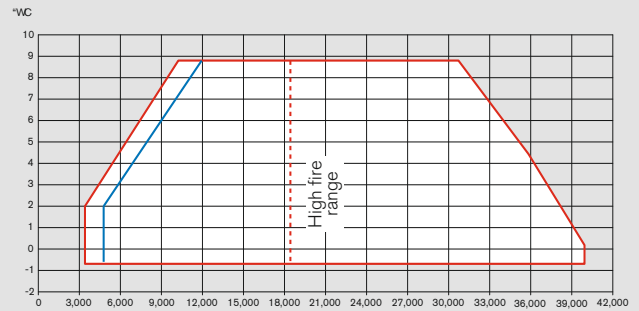
Burner selection

Gas burners size 70, version NR

Burner model G70/3-A, vers. ZM-NR
Combustion head G70/3-NR 425x290
Capacity in MBH Nat Gas 3,400 – 36,500
Propane 4,780 – 36,500



Burner model G70/4-A, vers. ZM-NR
Combustion head G70/3-NR 425x290
Capacity in MBH Nat Gas 3,400 – 39,930
Propane 4,780 – 39,930



Fuels
 Nat gas ————
 Propane ————

Burner model	Vers.	Order No.
G70/3-A	ZM-NR	217 714 14
G70/4-A	ZM-NR	217 734 14

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
 Insulation class F, protection IP 55.

Scope of delivery/Accessories

Gas burners size 50 to 70, version NR

Scope of delivery	G50	G60	G70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrode, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●
Combustion manager W-FM100	●	●	●
Two gas safety shut off valves	●	●	●
Gas butterfly valve	●	●	●
Ignition pilot	●	●	●
Air pressure switch	●	●	●
Gas pressure switches	●	●	●
Servomotor driven sliding sleeve in mixing head	●	●	●
Stepping motor for Gas /Air ratio control with W-FM100	●	●	●
Stepping motor for air damper	●	●	●
Stepping motor for gas butterfly valve	●	●	●
Stepping motor for sliding sleeve	●	●	●
Accessories			
Downward firing burner	○	○	○
Intake flange for the connection of an air duct	○	○	○
Solenoid valve for air pressure switch test for cont. run fan or post-purge	○	○	○
Combustion head extension	○	○	○
Speed control	○	○	○
O ₂ trim	○	○	○
W-FM loosed for installation in remote control panel	○	○	○

- Scope of delivery
- Accessories

Additional accessories on request.

Technical data

Gas burners size 50 to 70, version NR

Technical data			G50/1-B	G50/2-A	G60/2-A
Burner motor 3~208 - 600V	Model		W-D132/170-2/9K0	W-D132/210-2/14K0	W-D132/210-2/14K0
Motor rating	HP (kW)		14.6 (11)	20 (15)	20 (15)
FLA at 460V	A		19	25	25
Speed (60 Hz)	rpm		3,500	3,520	3,520
Fan wheel	Colour		red	red	red
	ø		330 x 104,5	330 x 104,5	465 x 103
Combustion manager	Model		W-FM100	W-FM100	W-FM100
Ignition unit	Model		W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45	SQM48
	Mixing head	Model	SQM45	SQM45	SQM45
	Fuel	Model	SQM45	SQM45	SQM45
Burner weight	approx. lbs (kg)		408 (185)	408 (185)	606 (275)

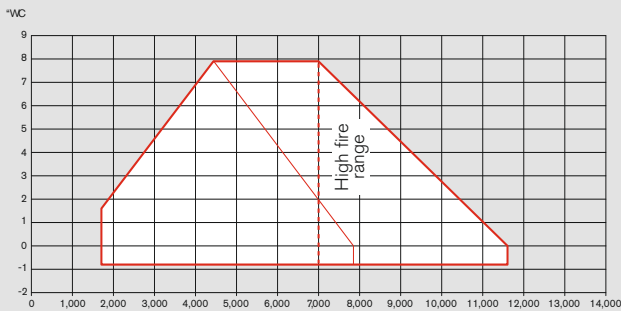
Technical data			G70/1-B	G70/3-A	G70/4-A
Burner motor 3~208 - 600V	Model		W-D160/240-2/18K0	W-D160/240-2/22K0	W-D160/240-2/28K0
Motor rating	HP (kW)		22 (16.5)	26.6 (20)	37.3 (28)
FLA at 460 V	A		30.5	33	53 (at 400V)
Speed (60/55 Hz)	rpm		3,560	3,550	3220 (55 Hz)
Fan wheel	Colour		green	green	blue
	ø		530 x 120	530 x 120	590 x 160
Combustion manager	Model		W-FM100	W-FM100	W-FM200
Ignition unit	Model		W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM48	SQM48	SQM48
	Mixing head	Model	SQM45	SQM48	SQM48
	Fuel	Model	SQM45	SQM45	SQM45
Burner weight	approx. lbs (kg)		860 (390)	860 (390)	860 (390)

* Operation at 55 Hz only in conjunction with frequency drive.

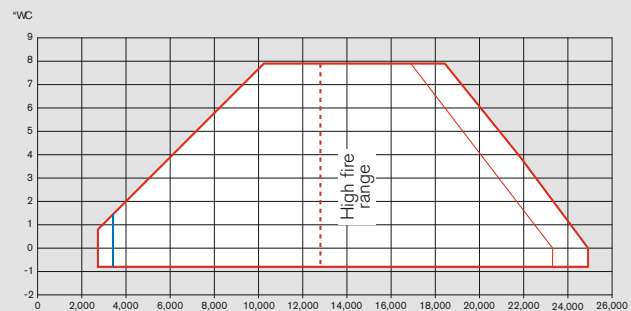
Burner selection

Gas burners size 50 to 70, version 1LN

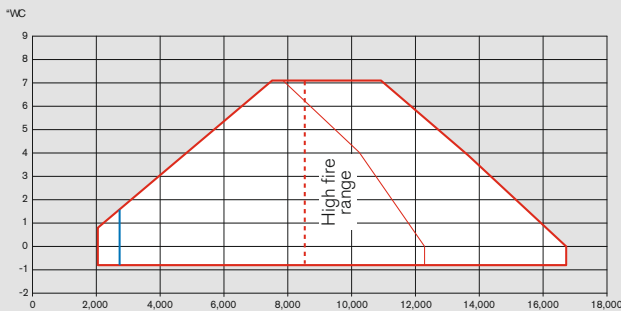
Burner model G50/1-B, vers. ZM-1LN
Combustion head G40/2-LN 217x35
Capacity in MBH Nat Gas 1,700 – 11,600
Propane 1,700 – 11,600



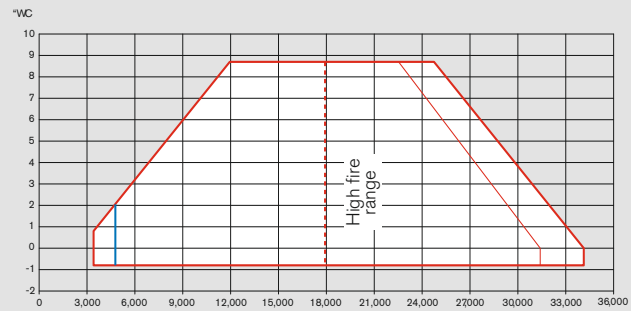
Burner model G70/1-B, vers. ZM-1LN
Combustion head G60/2-1LN 300x75
Capacity in MBH Nat Gas 2,730 – 24,900
Propane 3,400 – 24,900



Burner model G50/2-A, vers. ZM-1LN
Combustion head G50/2-LN 260x40
Capacity in MBH Nat Gas 2,050 – 16,720
Propane 2,730 – 16,720



Burner model G70/2-A, vers. ZM-1LN
Combustion head G70/2-1LN 365x85
Capacity in MBH Nat Gas 3,400 – 34,100
Propane 4,440 – 34,100



Fuels
 Nat gas —
 Propane —

Burner model	Vers.	Order No.
G50/1-B	ZM-1LN	217 504 17
G50/2-A	ZM-1LN	217 505 16
G70/1-B	ZM-1LN	217 704 45
G70/2-A	ZM-1LN	217 705 45

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Voltagess and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
 Insulation class F, protection IP 55.

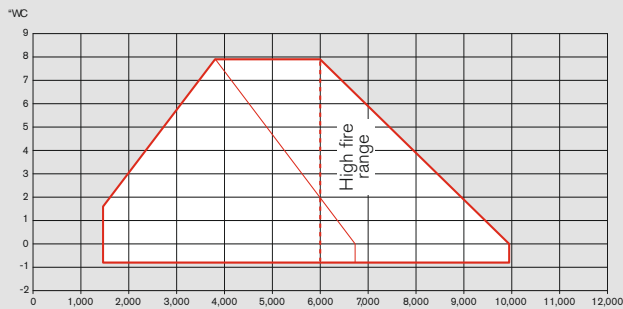
Scope of delivery/Accessories/ Technical data Gas burners size 50 and 70, version 1LN

Scope of delivery		G50	G70		
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrode, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws		●	●		
Combustion manager W-FM100		●	●		
Two gas safety shut off valves		●	●		
Gas butterfly valve		●	●		
Ignition pilot		●	●		
Air pressure switch		●	●		
Gas pressure switches		●	●		
Adjustable flame tube in mixing head		●	●		
Stepping motor for Gas/Air ratio control with W-FM100		●	●		
Stepping motor for air damper		●	●		
Stepping motor for gas butterfly valve		●	●		
Accessories					
Downward firing burner		○	○		
Intake flange for the connection of an air duct		○	○		
Solenoid valve for air pressure switch test for cont. run fan or post-purge		○	○		
Combustion head extension		○	○		
Speed control		○	○		
O ₂ trim		○	○		
W-FM loosed for installation in remote control panel		○	○		
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories on request.</p>					
Technical data		G50/1-B	G50/2-A	G70/1-B	G70/2-A
Burner motor 3~208 - 600V		Model W-D132/170-2/9K0	W-D132/210-2/14K0	W-D160/240-2/18K0	W-D160/240-2/22K0
Motor rating		HP (kW) 14.6 (11)	20 (15)	22 (16.5)	26.6 (20)
FLA at 460V		A 19	25	30.5	33
Speed (60 Hz)		rpm 3,500	3,520	3,560	3,550
Fan wheel		Colour red ø 330 x 104.5	red 330 x 104.5	green 530 x 120	green 530 x 120
Combustion manager		Model W-FM100	W-FM100	W-FM100	W-FM100
Ignition unit		Model W-ZG02	W-ZG02	W-ZG02	W-ZG02
Stepping motor		Model SQM45	SQM45	SQM48	SQM48
Air		Model SQM45	SQM45	SQM45	SQM45
Fuel					
Burner weight		approx. lbs (kg) 408 (185)	408 (185)	860 (390)	860 (390)

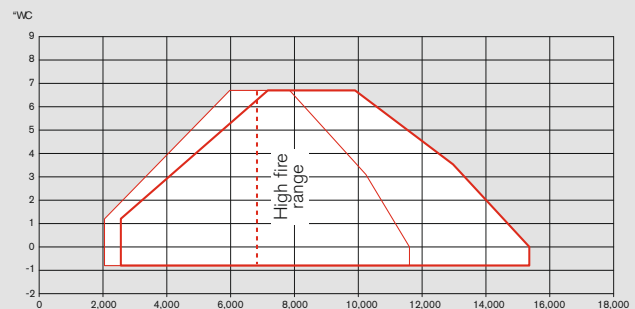
Burner selection

Gas burners size 50, version LN

Burner model G50/1-B, vers. ZM-LN
Combustion head G40/2-3a 210x60
Capacity in MBH Nat Gas 1,700 – 10,230



Burner model G50/2-A, vers. ZM-LN
Combustion head G50/2-3a 250x90
Capacity in MBH Nat Gas 2,050 – 15,350



Fuels – capacity with
 combustion head open close
 Nat gas — —

Burner model	Vers.	Order No.
G50/1-B	ZM-LN	217 504 19
G50/2-A	ZM-LN	217 505 18

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

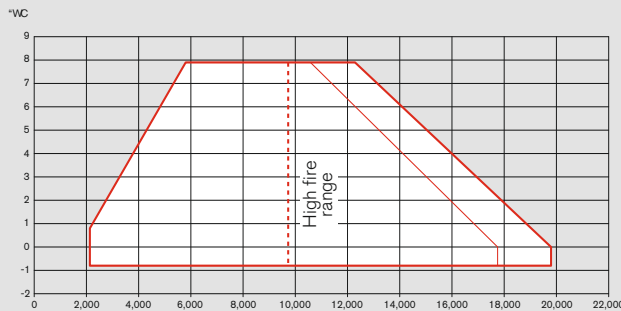
Standard burner motor:

Insulation class F, protection IP 55.

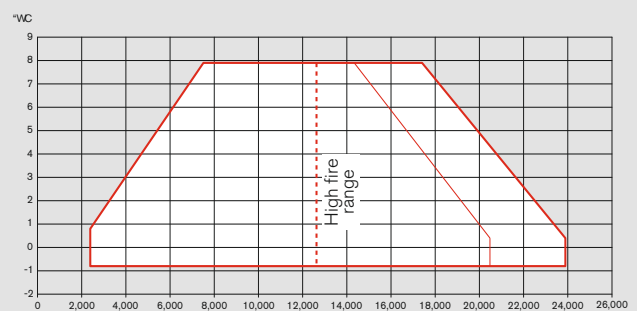
Burner selection

Gas burners size 60 and 70, version LN

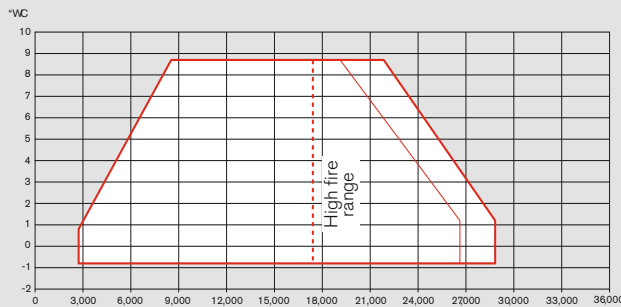
Burner model G60/2-A, vers. ZM-LN
Combustion head G60/2-3a 300x100
Capacity in MBH Nat Gas 2,135 – 19,795



Burner model G70/1-B, vers. ZM-LN
Combustion head G60/2-3a 300x100
Capacity in MBH Nat Gas 2,390 – 23,890



Burner model G70/2-A, vers. ZM-LN
Combustion head G70/2-3a 355x120
Capacity in MBH Nat Gas 2,730 – 29,000



Fuels – capacity with

combustion head **open** **close**
 Nat gas — —

Burner model	Vers.	Order No.
G60/2-A	ZM-LN	217 605 13
G70/1-B	ZM-LN	217 704 43
G70/2-A	ZM-LN	217 705 43

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude at sea level. A reduction of burner capacity of 1% for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

Insulation class F, protection IP 55.

Scope of delivery/Accessories

Gas burners size 50 to 70, version LN

Scope of delivery	G50	G60	G70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●
Combustion manager W-FM100	●	●	●
Two safety gas shut off valves	●	●	●
Gas butterfly valve	●	●	●
Air pressure switch	●	●	●
Gas pressure switches	●	●	●
Adjustable flame tube in mixing head	●	●	●
Stepping motor for Gas /Air ratio control with W-FM100	●	●	●
Stepping motor for air damper	●	●	●
Stepping motor for gas butterfly valve	●	●	●
Accessories			
Downward firing burner	○	○	○
Intake flange for the connection of an air duct	○	○	○
Combustion head extension	○	○	○
Speed control	○	○	○
O ₂ trim	○	○	○
W-FM loosed for installation in remote panel	○	○	○

- Scope of delivery
- Accessories

Additional accessories on request.

Technical data

Gas burners size 50 to 70, version LN

Technical data			G50/1-B	G50/2-A
Burner motor 3~208 - 600V		Model	W-D132/170-2/9K0	W-D132/210-2/14K0
Motor rating		HP (kW)	14.6 (11)	20 (15)
FLA at 460 V		A	19	25
Speed (60 Hz)		rpm	3,500	3,520
Fan wheel		Colour	red	red
		ø	330 x 104.5	330 x 104.5
Combustion manager		Model	W-FM100	W-FM100
Ignition unit		Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
Burner weight		approx. lbs (kg)	408 (185)	408 (185)

Technical data			G60/2-A	G70/1-B	G70/2-A
Burner motor 3~208 - 600V		Model	W-D132/210-2/14K0	W-D160/215-2/14K0	W-D160/240-2/22K0
Motor rating		HP (kW)	20 (15)	21.3 (16.0)	26.6 (20)
FLA at 460 V		A	25	28	33
Speed (60 Hz)		rpm	3,520	3,540	3,550
Fan wheel		Colour	red	green	green
		ø	465 x 103	530 x 120	530 x 120
Combustion manager		Model	W-FM100	W-FM100	W-FM100
Ignition unit		Model	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM48	SQM48	SQM48
	Fuel	Model	SQM45	SQM45	SQM45
Burner weight		approx. lbs (kg)	606 (275)	860 (390)	860 (390)



–weishaupt–

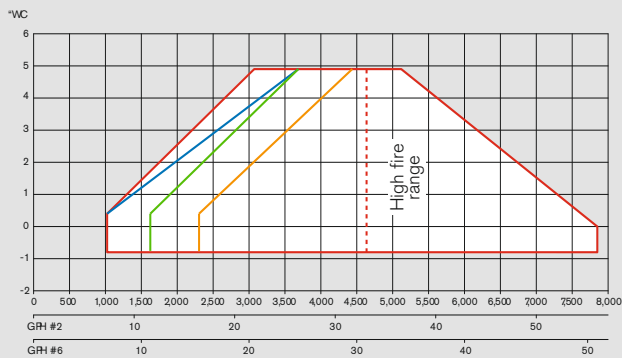
Dual fuel burners

Burner selection

Dual fuel burners size 30, version NR

Burner model	RGL30/2-A, vers. ZM-NR	RGMS30/2-A, vers. ZM-NR
Combustion head	G30/2-NR 190x65	G30/2-NR 190x65
Capacity in MBH Gas	1,025 – 7,850	1,025 – 7,850
GPH #2 oil	11.6 – 56	–
GPH #6 oil	–	15 – 51

Fuels	
#2 oil	—
#6 oil	—
Nat gas	—
Propane	—



The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

Insulation class F, protection IP 55.

Burner model	Vers.	Order No.
RGL30/2-A	ZM-NR	218 305 13
RGMS30/2-A	ZM-NR	219 305 13

Burner selection

Dual fuel burners size 40, version NR

Burner model	RGL40/1-B, vers. ZM-NR	RGMS40/1-B, vers. ZM-NR	Burner model	RGL40/2-A, vers. ZM-NR	RGMS40/2-A, vers. ZM-NR
Combustion head	G30/2-NR 190x58	G30/2-NR 190x58	Combustion head	G40/2-NR 217x75	G40/2-NR 217x75
Capacity in MBH Gas	1,540 – 9,215	1,540 – 9,215	Capacity in MBH Gas	1,710 – 11,775	1,710 – 11,775
GPH #2 oil	13 – 65.8	–	GPH #2 oil	15.8 – 84	–
GPH #6 oil	–	17.6 – 60	GPH #6 oil	–	22.3 – 76.9

Fuels

- #2 oil —
- #6 oil —
- Nat gas —
- Propane —

Burner model	Vers.	Order No.
RGL40/1-B	ZM-NR	218 404 13
RGMS40/1-B	ZM-NR	219 404 13
RGL40/2-A	ZM-NR	218 405 15
RGMS40/2-A	ZM-NR	219 405 15

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

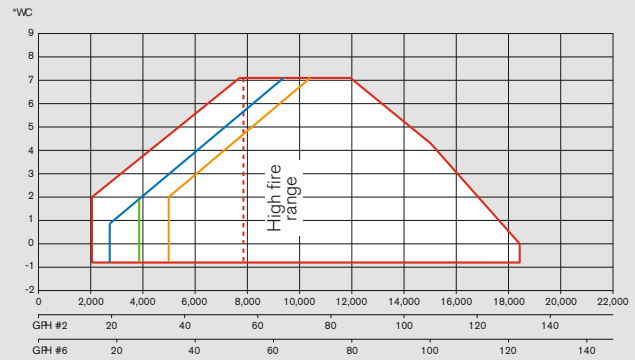
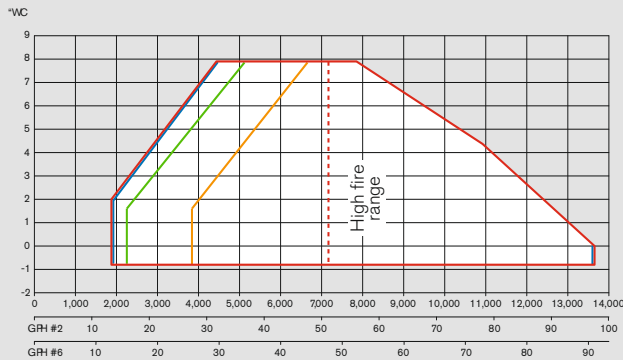
Standard burner motor:
 Insulation class F, protection IP 55.

Burner selection

Dual fuel burners size 50, version NR

Burner model	RGL50/1-B, vers. ZM-NR	RGMS50/1-B, vers. ZM-NR
Combustion head	G40/2-NR 217x75	G40/2-NR 217x75
Capacity in MBH Gas	1,880 – 13,650	1,880 – 13,650
GPH #2 oil	16 – 97.5	–
GPH #6 oil	–	25 – 89

Burner model	RGL50/2-A, vers. ZM-NR	RGMS50/2-A, vers. ZM-NR
Combustion head	G50/2-NR 290x185	G50/2-NR 290x185
Capacity in MBH NG	2,050 – 18,430	2,050 – 18,430
MBH Propane	2,730 – 18,430	2,730 – 18,430
GPH #2 oil	27.5 – 131.6	–
GPH #6 oil	–	32.6 – 120.4



Fuels

- #2 oil —
- #6 oil —
- Nat gas —
- Propane —

Burner model	Vers.	Order No.
RGL50/1-B	ZM-NR	218 504 42
RGMS50/1-B	ZM-NR	219 504 42
RGL50/2-A	ZM-NR	218 505 42
RGMS50/2-A	ZM-NR	219 505 42

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

Burner selection

Dual fuel burners size 60 and 70, version NR

Burner model	RGL60/2-A, vers. ZM-NR	RGMS60/2-A, vers. ZM-NR	Burner model	RGL70/1-B, vers. ZM-NR	RGMS70/1-B, vers. ZM-NR
Combustion head	G60/2-NR 345x230	G60/2-NR 345x230	Combustion head	G60/2-NR 345x230	G60/2-NR 345x230
Capacity in MBH Gas	2,730 – 20,815	2,730 – 20,815	Capacity in MBH Gas	2,730 – 25,250	2,730 – 25,250
GPH #2 oil	32 – 148.7	–	GPH #2 oil	29 – 180	–
GPH #6 oil	–	40.1 – 136	GPH #6 oil	–	43.9 – 180

Fuels

- #2 oil —
- #6 oil —
- Nat gas —
- Propane —

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

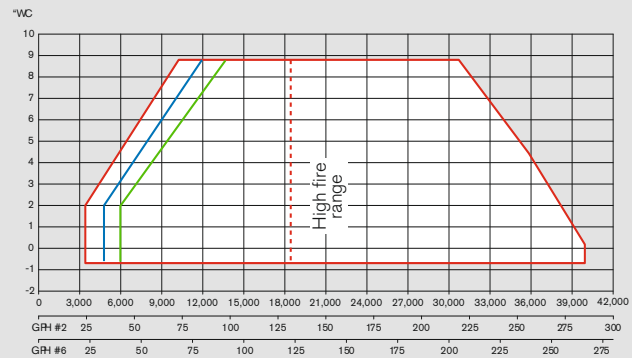
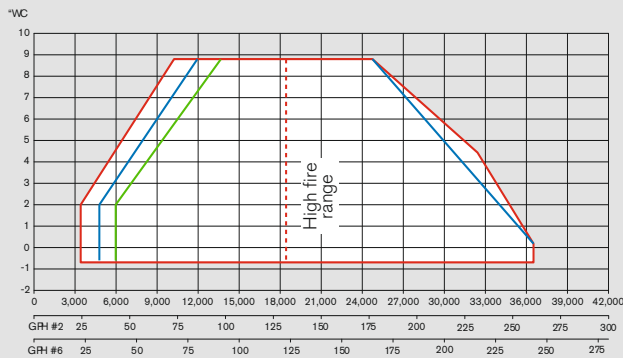
Burner model	Vers.	Order No.
RGL60/2-A	ZM-NR	218 605 42
RGMS60/2-A	ZM-NR	219 605 42
RGL70/1-B	ZM-NR	218 704 42
RGMS70/1-B	ZM-NR	219 704 42

Burner selection

Dual fuel burners size 70, version NR

Burner model	RGL70/3-A, vers. ZM-NR	RGMS70/3-A, vers. ZM-NR
Combustion head	G70/3-NR 425x290	G70/3-NR 425x290
Capacity in MBH Gas	3,400 – 36,500	3,400 – 36,515
MBH Propane	4,780 – 36,500	4,780 – 36,515
GPH #2 oil	42.5 – 259.8	–
GPH #6 oil	–	39 – 238.7

Burner model	RGL70/4-A, vers. ZM-NR	RGMS70/4-A, vers. ZM-NR
Combustion head	G70/3-NR 425x290	G70/3-NR 425x290
Capacity in MBH NG	3,400 – 39,930	3,400 – 39,930
MBH Propane	4,780 – 39,930	4,780 – 39,930
GPH #2 oil	42.5 – 285.2	–
GPH #6 oil	–	39 – 261



Fuels

- #2 oil —
- #6 oil —
- Nat gas —
- Propane —

Burner model	Vers.	Order No.
RGL70/3-A	ZM-NR	218 714 14
RGMS70/3-A	ZM-NR	219 714 14
RGL70/4-A	ZM-NR	218 734 14
RGMS70/4-A	ZM-NR	219 734 14

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal and #6 oil with a calorific value of 153,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation altitude of 1,640 ft (500 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:
The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

Scope of delivery/Accessories

Dual fuel burners size 30 to 50, version NR

Scope of delivery	RGMS30	RGMS40	RGMS50	RGL30	RGL40	RGL50
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, nozzle assembly with oil nozzle/s, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●	●	●	●
Combustion manager W-FM100	●	●	●	●	●	●
Two safety gas shut off valves	●	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●	●
Ignition pilot	●	●	●	●	●	●
Air pressure switch	●	●	●	●	●	●
Oil pressure switch in return	●	●	●	●	●	●
Gas pressure switches	●	●	●	●	●	●
Servomotor driven sliding sleeve in mixing head	●	●	●	●	●	●
Stepping motor for Gas /Air ratio control with W-FM100	●	●	●	●	●	●
Stepping motor for air damper	●	●	●	●	●	●
Stepping motor for gas butterfly valve	●	●	●	●	●	●
Stepping motor for regulating/sliding sleeve	●	●	●	●	●	●
Oil pump, fitted	●	●	●	●	●	●
Oil preheater, fitted	●	●	●	-	-	-
Oil hoses	●	●	●	●	●	●
Two oil solenoid valves in supply and return	-	-	-	●	-	-
1 solenoid valve in supply and in return, nozzle head with shut off device (nozzle solenoid)	●	●	●	-	●	●
Magnetic coupling	●	●	●	●	●	●
Accessories						
Downward firing burner	-	-	○	○	○	○
Intake flange for the connection of an air duct	-	-	○	○	○	○
Solenoid valve for air pressure switch test for cont. run fan or post-purge	-	-	○	○	○	○
Combustion head extension	-	-	○	○	○	○
Speed control	-	-	○	○	○	○
O ₂ trim	-	-	○	○	○	○
W-FM loose to fit into control panel	-	-	○	○	○	○
Separate pump station	○	○	○	○	○	○
Separate preheater station (electric or media)	○	○	○	-	-	-
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories on request.</p>						

Scope of delivery/Accessories

Dual fuel burners size 60 and 70, version NR

Scope of delivery	RGMS60	RGMS70	RGL60	RGL70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, nozzle assembly with oil nozzle/s, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●	●
Combustion manager W-FM100	●	●	●	●
Two safety gas shut off valves	●	●	●	●
Gas butterfly valve	●	●	●	●
Ignition pilot	●	●	●	●
Air pressure switch	●	●	●	●
Oil pressure switch in return	●	●	●	●
Gas pressure switches	●	●	●	●
Servomotor driven sliding sleeve in mixing head	●	●	●	●
Stepping motor for Gas /Air ratio control with W-FM100	●	●	●	●
Stepping motor for air damper	●	●	●	●
Stepping motor for gas butterfly valve	●	●	●	●
Stepping motor for regulating/sliding sleeve	●	●	●	●
Oil pump, fitted	-	-	●	●
Oil hoses	●	●	●	●
1 solenoid valve in supply and in return, nozzle head with shut off device (nozzle solenoid)	●	●	●	●
Magnetic coupling	●	●	●	●
Accessories				
Downward firing burner	○	○	○	○
Intake flange for the connection of an air duct	○	○	○	○
Solenoid valve for air pressure switch test for cont. run fan or post-purge	○	○	○	○
Combustion head extension	○	○	○	○
Speed control	○	○	○	○
O ₂ trim	○	○	○	○
W-FM loose to fit into control panel	○	○	○	○
Separate pump station	○	○	○	○
Separate preheater station (electric or media)	○	○	-	-
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories on request.</p>				

Technical data

Dual fuel burners size 30 and 40, version NR

Technical data			RGL30/2-A	RGMS30/2-A
Burner motor 3~208 - 600V		Model	W-D112/140-2/4K5	W-D112/140-2/4K5
Motor rating		HP (kW)	6.6 (5.0)	6.6 (5.0)
FLA at 460V		A	8.6	8.6
Speed (60 Hz)		rpm	3,510	3,510
Fan wheel		Colour / ø	red / 248 x 104	red / 248 x 104
Combustion manager		Model	W-FM100	W-FM100
Ignition unit		Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Mixing head	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
Pump, fitted		Model	TA3	TA3
Oil preheater		Model	–	EV2D
	Oil throughput	GPH (kg/h)	–	72 (270)
	Heat rating	kW	–	13.2
Oil solenoid valves	55V 1/4" (supply)	20 W	Model 121 K 6220	–
	55V 1/8" (return)	20 W	Model 121 K 2423	–
	55V 3/8" (supply)	20 W	Model –	321 H 2322
	55V 3/8" (supply)	20 W	Model –	121 G 2320
Oil pressure switches	1 – 10 bar (return #2 oil - 5 bar)		Model DSA 46 F001	–
	1 – 10 bar (return #6 oil - 7 bar)		Model –	DSA 46 F001
Oil hoses (on RGMS, high pressure metal hoses)		DN, length in inch (mm)	20/40" (1000)	–
		DN, length in inch (mm)	–	20/51" (1300)
Burner weight		approx. lbs (kg)	320 (145)	386 (175)

Technical data			RGL40/1-B	RGMS40/1-B
Burner motor 3~208 - 600V		Model	W-D112/170-2/5K5	W-D112/170-2/5K5
Motor rating		HP (kW)	8.6 (6.5)	8.6 (6.5)
FLA at 460V		A	12	12
Speed (60 Hz)		rpm	3,530	3,530
Fan wheel		Colour / ø	red / 275 x 104	red / 275 x 104
Combustion manager		Model	W-FM100	W-FM100
Ignition unit		Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Mixing head	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
Pump, fitted		Model	TA3	TA3
Oil preheater		Model	–	EV2D
	Oil throughput	GPH (kg/h)	–	75 (270)
	Heat rating	kW	–	13.2
Oil solenoid valves	55V 3/8" (supply)	20 W	Model 321 H 2322	321 H 2322
	55V 3/8" (return)	20 W	Model 121 G 2320	121 G 2320
Oil pressure switches	1 – 10 bar (return fuel oil EL - 5 bar)		Model DSA 46 F001	–
	1 – 10 bar (return fuel oil S - 7 bar)		Model –	DSA 46 F001
Oil hoses (on RGMS, high pressure metal hoses)		DN, length in inch (mm)	20/40" (1000)	–
		DN, length in inch (mm)	–	20/51" (1300)
Burner weight		approx. lbs (kg)	419 (190)	419 (190)

Technical data

Dual fuel burners size 40 and 50, version NR

Technical data				RGL40/2-A	RGMS40/2-A
Burner motor 3~208 - 600V	(40/2)	Model	W-D112/170-2/7K0	W-D112/170-2/7K0	
Motor rating		HP (kW)	10.4 (7.8)	10.4 (7.8)	
FLA at 460V		A	14	14	
Speed (60 Hz)		rpm	3,500	3,500	
Fan wheel		Colour / ø	red / 275 x 104	red / 275 x 104	
Combustion manager		Model	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM45	SQM45	
	Mixing head	Model	SQM45	SQM45	
	Fuel	Model	SQM45	SQM45	
Pump, fitted		Model	TA3	TA3	
Oil preheater		Model	–	EV2D	
	Oil throughput	GPH (kg/h)	–	75 (270)	
	Heat rating	kW	–	13.2	
Oil solenoid valves	55V 3/8" (supply) 20 W	Model	321 H 2322	321 H 2322	
	55V 3/8" (return) 20 W	Model	121 G 2320	121 G 2320	
Oil pressure switches	1 – 10 bar (return fuel oil EL - 5 bar)	Model	DSA 46 F001	–	
	1 – 10 bar (return fuel oil S - 7 bar)	Model	–	DSA 46 F001	
Oil hoses		DN, length in inch (mm)	20/40" (1000)	–	
(on RGMS, high pressure metal hoses)		DN, length in inch (mm)	–	20/51" (1300)	
Burner weight		approx. lbs (kg)	419 (190)	419 (190)	

Technical data				RGL50/1-B	RGL50/2-A
Burner motor 3~208 - 600V		Model	W-D132/170-2/9K0	W-D132/210-2/14K0	
Motor rating		HP (kW)	14.6 (11)	20 (15)	
FLA at 460V		A	19	25	
Speed (60 Hz)		rpm	3,500	3,520	
Fan wheel		Colour	red	red	
		ø	330 x 104.5	330 x 104.5	
Combustion manager		Model	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM45	SQM45	
	Mixing head	Model	SQM45	SQM45	
	Fuel	Model	SQM45	SQM45	
Pump, fitted		Model	TA4C	T2C	
Oil solenoid valves	55V 3/8" (supply) 20W	Model	321 H 2322	321 H 2322	
	55V 3/8" (return) 20W	Model	121 G 2320	121 G 2320	
Oil pressure switch	1 – 10 bar (return #2 oil - 5 bar)	Model	DSA 46 F001	DSA 46 F001	
Oil hoses		DN, length in inch and (mm)	25/51" (1300)	25/51" (1300)	
Burner weight		approx. lbs (kg)	508 (230)	508 (230)	

Technical data

Dual fuel burners size 50 and 60, version NR

Technical data				RGMS50/1-B	RGMS50/2-A
Burner motor 3~208 - 600V		Model		W-D132/170-2/9K0	W-D132/210-2/14K0
Motor rating		HP (kW)		14.6 (11)	20 (15)
FLA at 460V		A		19	25
Speed (60 Hz)		rpm		3,500	3,520
Fan wheel		Colour		red	red
		ø		330 x 104.5	330 x 104.5
Combustion manager		Model		W-FM100	W-FM100
Ignition unit		Model		W-ZG02	W-ZG02
Stepping motor	Air	Model		SQM45	SQM45
	Mixing head	Model		SQM45	SQM45
	Fuel	Model		SQM45	SQM45
Oil preheater		Model		WEV2.2/01 ²⁾	WEV3/01
	Oil throughput	GPH (kg/h)		82.5 (300)	137.5 (500)
	Heat rating	kW		13.8	22.4
Pump, fitted		Model		TA4C	T2C
Oil solenoid valves	55V 3/8" (supply)	20W	Model	321 H 2322	321 H 2322
	55V 3/8" (return)	20W	Model	121 G 2320	121 G 2320
Oil pressure switch	1 – 10 bar (return #6 oil)		Model	DSA 46 F001	DSA 46 F001
Oil hoses			DN/length	25/59" (1500)	25/59" (1500)
Burner weight			approx. lbs (kg)	672 (305)	672 (305)

²⁾ Burners above 82.5 GPH (300 kg/h): Oil preheater WEV3 in lieu of WEV2.2 (refer to Accessories)

Technical data				RGL60/2-A	RGMS60/2-A
Burner motor 3~208 - 600V		Model		W-D132/210-2/14K0	W-D132/210-2/14K0
Motor rating		HP (kW)		20 (15)	20 (15)
FLA at 460V		A		28	28
Speed (60 Hz)		rpm		3,520	3,520
Fan wheel		Colour		red	red
		ø		465 x 103	465 x 103
Combustion manager		Model		W-FM100	W-FM100
Ignition unit		Model		W-ZG02	W-ZG02
Stepping motor	Air	Model		SQM48	SQM48
	Mixing head	Model		SQM45	SQM45
	Fuel	Model		SQM45	SQM45
Pump, fitted		Model		T2C	–
Oil solenoid valves	55V 3/8" (supply)	20W	Model	321 H 2322	321 H 2322
	55V 3/8" (return)	20W	Model	121 G 2320	121 G 2320
	110V 3/8" (bypass)	19W	Model	–	322 H 7306
Oil pressure switches	3 – 25 bar (supply - 18 bar)		Model	–	DSA 58 F001
	1 – 10 bar (return #2 oil - 5 bar)		Model	DSA 46 F001	–
	1 – 10 bar (return #6 oil - 7 bar)		Model	–	DSA 46 F001
Oil hoses			DN, length in inch and (mm)	25/51" (1300)	–
(on RGMS, high pressure metal hoses)			DN, length in inch and (mm)	–	16/59" (1500)
Burner weight			approx. lbs (kg)	684 (310)	640 (290) ²⁾

²⁾ Weight without pump and preheater stations

Technical data

Dual fuel burners size 70, version NR

Technical data				RGL70/1-B	RGL70/3-A
Burner motor 3~208 - 600V		Model	W-D160/240-2/18K0	W-D160/240-2/22K0	
Motor rating		HP (kW)	22 (16.5)	26.6 (20)	
FLA at 460V		A	30.5	33	
Speed (60 Hz)		rpm	3,560	3,550	
Fan wheel		Colour	green	green	
		ø	530 x 120	530 x 120	
Combustion manager		Model	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM48	SQM48	
	Mixing head	Model	SQM45	SQM45	
	Fuel	Model	SQM45	SQM45	
Pump, fitted		Model	T2C (up to 173 GPH/ 600 kg/h)		
		Model	T3C (from 173 GPH/ 600 kg/h)		
Oil solenoid valves	55V 1/2" (supply)	20W	Model 321 H 2522	321 H 2522	
	55V 1/2" (return)	20W	Model 121 G 2520	121 G 2520	
	110V 3/8" (bypass)	19W	Model -	-	
Oil pressure switch	3 - 25 bar (supply - 18 bar)	Model	-	-	
	1 - 10 bar (return #2 oil - 5 bar)	Model	DSA 46 F001	DSA 46 F001	
	1 - 10 bar (return #6 oil - 7 bar)	Model	-	-	
Oil hoses (on RGMS, high pressure metal hoses)	DN, length in inch and (mm)		25/1300	25/1300	
	DN, length in inch and (mm)		-	-	
	DN, length in inch and (mm)		-	-	
Burner weight		approx. lbs (kg)	948 (430)	948 (430)	

Technical data				RGMS70/1-B	RGMS70/3-A
Burner motor 3~208 - 600V		Model	W-D160/240-2/18K0	W-D160/240-2/22K0	
Motor rating		HP (kW)	22 (16.5)	26.6 (20)	
FLA at 460V		A	30.5	33	
Speed (60 Hz)		rpm	3,560	3,550	
Fan wheel		Colour	green	green	
		ø	530 x 120	530 x 120	
Combustion manager		Model	W-FM100	W-FM100	
Ignition unit		Model	W-ZG02	W-ZG02	
Stepping motor	Air	Model	SQM48	SQM48	
	Mixing head	Model	SQM48	SQM48	
	Fuel	Model	SQM45	SQM45	
Pump, fitted		Model	-	-	
		Model	-	-	
Oil solenoid valves	55V 1/2" (supply)	20W	Model 321 H 2522	321 H 2522	
	55V 1/2" (return)	20W	Model 121 G 2520	121 G 2520	
	110V 3/8" (bypass)	19W	Model 322 H 7306	322 H 7306	
Oil pressure switch	3 - 25 bar (supply - 18 bar)	Model	DSA 58 F001	DSA 58 F001	
	1 - 10 bar (return #2 oil - 5 bar)	Model	-	-	
	1 - 10 bar (return #6 oil - 7 bar)	Model	DSA 46 F001	DSA 46 F001	
Oil hoses (on RGMS, high pressure metal hoses)	DN, length in inch and (mm)		-	-	
	DN, length in inch and (mm)		20/1150	20/1150	
	DN, length in inch and (mm)		20/1500	20/1500	
Burner weight		approx. lbs (kg)	848 (385) ²⁾	848 (385) ²⁾	

Technical data

Dual fuel burners size 70, version NR

Technical data			RGL70/4-A	RGMS70/4-A
Burner motor 3~208 - 600V		Model	W-D160/240-2/28K0	W-D160/240-2/28K0
Motor rating		HP (kW)	37.3 (28)	37.3 (28)
FLA at 400V		A	53	53
Speed (55 Hz)		rpm	3,220	3,220
Fan wheel		Colour	blue	blue
		ø	590 x 160	590 x 160
Combustion manager		Model	W-FM200	W-FM200
Ignition unit		Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM48	SQM48
	Mixing head	Model	SQM48	SQM48
	Fuel	Model	SQM45	SQM45
Pump, fitted		Model	T4C	–
Oil solenoid valves	55V 1/2" (supply)	20W	Model 321 H 2522	321 H 2522
	55V 1/2" (return)	20W	Model 121 G 2520	121 G 2520
	110V 3/8" (bypass)	19W	Model –	322 H 7306
Oil pressure switches	3 – 25 bar (supply - 18 bar)	Model	–	DSA 58 F001
	1 – 10 bar (return fuel oil EL - 5 bar)	Model	DSA 46 F001	–
	1 – 10 bar (return fuel oil S - 7 bar)	Model	–	DSA 46 F001
Oil hoses		DN, length in inch and (mm)	25/51" (1300)	–
(on RGMS, high pressure metal hoses)		DN, length in inch and (mm)	–	20/45" (1150)
		DN, length in inch and (mm)	–	20/59" (1500)
Burner weight		approx. kg	948 (430)	848 (385) ²⁾

²⁾ Weight without pump and preheater stations

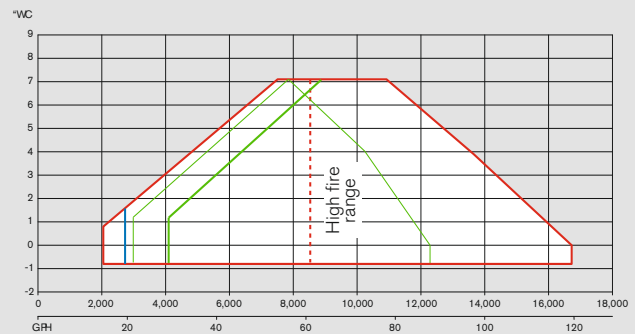
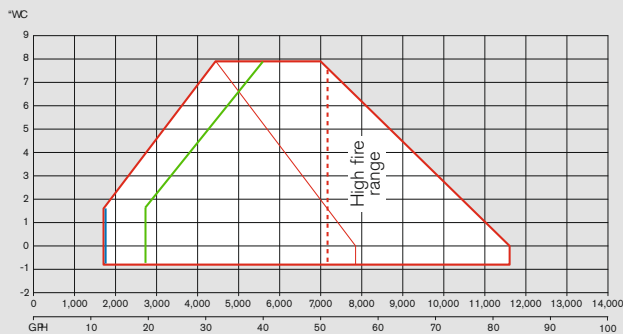
* Operation with 55 Hz frequency converter only.

Burner selection

Dual fuel burners size 50, version 1LN

Burner model RGL50/1-B, vers. ZM-1LN
 Combustion head G40/2-LN 217x35K
 Capacity in MBH NG 1,710 – 11,600
 MBH Propane 1,710 – 11,600
 GPH #2 oil 19.5 – 82.8

Burner model RGL50/2-A, vers. ZM-1LN
 Combustion head G50/2-LN 260x40
 Capacity in MBH NG 2,050 – 16,725
 MBH Propane 2,730 – 16,725
 GPH #2 oil 21.3 – 119.4



Fuels
 #2 oil —
 Nat gas —
 Propane —

Burner model	Vers.	Order No.
RGL50/1-B	ZM-1LN	218 504 16
RGL50/2-A	ZM-1LN	218 505 17

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

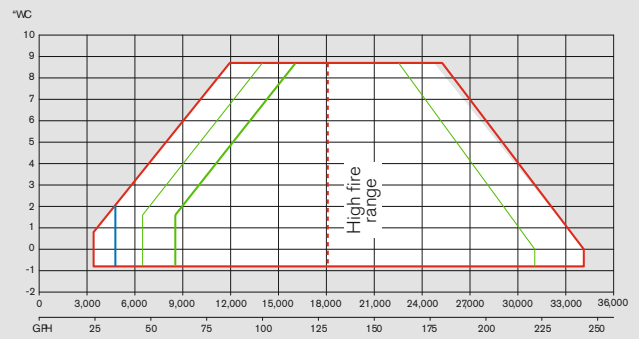
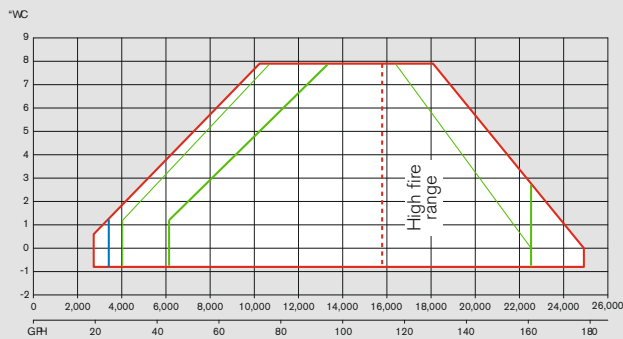
Insulation class F, protection IP 55.

Burner selection

Dual fuel burners size 70, version 1LN

Burner model RGL70/1-B, vers. ZM-1LN
 Combustion head G60/2-1LN 300x75
 Capacity in MBH NG 2,730 – 24,915
 MBH Propane 3,415 – 24,915
 GPH #2 oil 28.8 – 178

Burner model RGL70/2-A, vers. ZM-1LN
 Combustion head G70/2-1LN 365x85
 Capacity in MBH NG 3,415 – 34,130
 MBH Propane 4,780 – 34,130
 GPH #2 oil 46.3 – 243.8



Fuels
 #2 oil —
 Nat gas —
 Propane —

Burner model	Vers.	Order No.
RGL70/1-B	ZM-1LN	218 704 43
RGL70/2-A	ZM-1LN	218 705 43

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

Insulation class F, protection IP 55.

Scope of delivery/Accessories

Dual fuel burners size 50 and 70, version 1LN

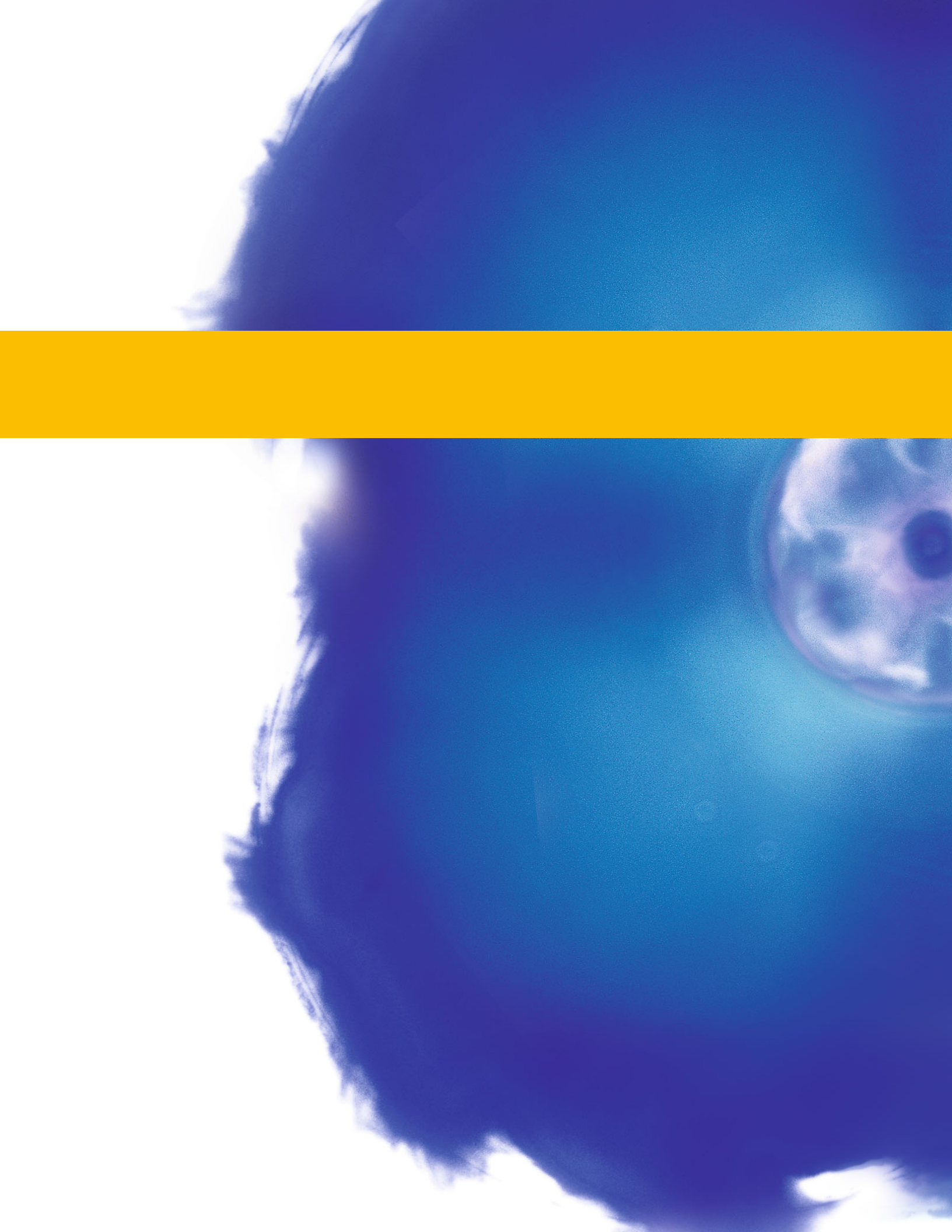
Scope of delivery	RGL50	RGL70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrode, nozzle assembly with oil nozzle/s, combustion manager with operating unit, flame sensor stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●
Combustion manager W-FM100	●	●
Two safety gas valves	●	●
Gas butterfly valve	●	●
Ignition pilot	●	●
Air pressure switch	●	●
Oil pressure switch in return	●	●
Gas pressure switches	●	●
Adjustable regulating sleeve in mixing head	●	-
Adjustable flame tube in mixing head	-	●
Stepping motor for Gas/Air ratio control with W-FM100		
Stepping motor for air regulator	●	●
Stepping motor for gas butterfly valve	●	●
Stepping motor for oil regulator	●	●
Oil pump, fitted	●	●
Oil hoses	●	●
2 oil solenoid valves, 1 safety valve, two stage nozzle head with shut off device (nozzle solenoid)	●	●
Magnetic coupling	●	●
Accessories		
Downward firing burner	○	○
Intake flange for the connection of an air duct	○	○
Solenoid valve for air pressure switch test for cont. run fan or post-purge	○	○
Combustion head extension	○	○
Speed control	○	○
O ₂ trim	○	○
W-FM loose to fit into control panel	○	○
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories on request.</p>		

Technical data

Dual fuel burners size 50 and 70, version 1LN

Technical data				RGL50/1-B	RGL50/2-A
Burner motor 3~208 - 600V		Model		W-D132/170-2/9K0	W-D132/210-2/14K0
Motor rating		HP (kW)		14.6 (11)	20 (15)
FLA at 460V		A		19	25
Speed (60 Hz)		rpm		3,500	3,520
Fan wheel		Colour		red	red
		ø		330 x 104,5	330 x 104,5
Combustion manager		Model		W-FM100	W-FM100
Ignition unit		Model		W-ZG02	W-ZG02
Stepping motor	Air	Model		SQM45	SQM45
	Fuel	Model		SQM45	SQM45
Pump, fitted		Model		TA4C	T2C
Oil solenoid valves	55V 3/8" (supply)	20 W	Model	321 H 2322	321 H 2322
	55V 3/8" (return)	20 W	Model	121 G 2320	121 G 2320
Oil pressure switch	1 – 10 bar (return - 5 bar)		Model	DSA 46 F001	DSA 46 F001
Oil hoses		DN, length in inch and (mm)		25/51" (1300)	25/51" (1300)
Burner weight		approx. lbs (kg)		508 (230)	508 (230)

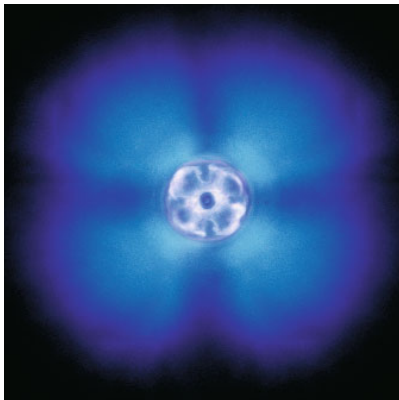
Technical data				RGL70/1-B	RGL70/2-A
Burner motor 3~400V ¹⁾		Model		W-D160/240-2/18K0	W-D160/240-2/22K0
Motor rating		HP (kW)		22 (16.5)	26.6 (20)
FLA at 460V		A		30.5	33
Speed (60 Hz)		rpm		3,560	3,550
Fan wheel		Colour		green	green
		ø		530 x 120	530 x 120
Combustion manager		Model		W-FM100	W-FM 100
Ignition unit		Model		W-ZG02	W-ZG02
Stepping motor	Air	Model		SQM48	SQM48
	Fuel	Model		SQM45	SQM45
Pump, fitted		Model		T2C (up to 173 GPH/ 600 kg/h)	T3C (from 173 GPH/ 600 kg/h)
Oil solenoid valves	55V 1/2" (supply)	20 W	Model	321 H 2522	321 H 2522
	55V 1/2" (return)	20 W	Model	121 G 2520	121 G 2520
Oil pressure switch	2 – 40 bar (supply - 18 bar)		Model	–	–
	1 – 10 bar (return - 5 bar)		Model	DSA 46 F 001	DSA 46 F 001
Oil hoses		DN, length in inch and (mm)		25/1300	25/1300
Burner weight		approx. lbs (kg)		948 (430)	948 (430)



–weishaupt–

multiflam[®] Burners

multiflam[®] principle: emission reduction as standard

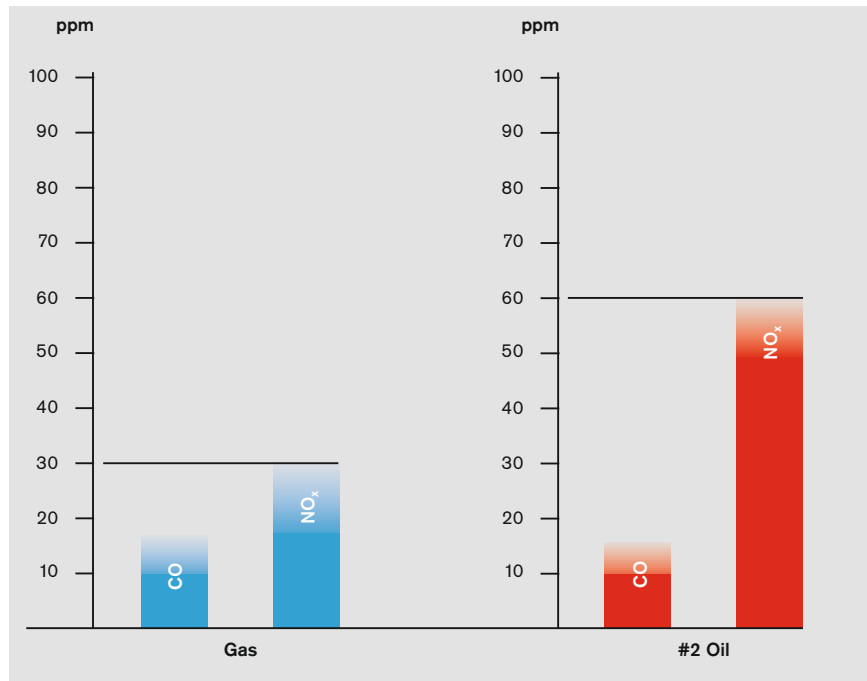


The multiflam[®] flame shows efficient combustion

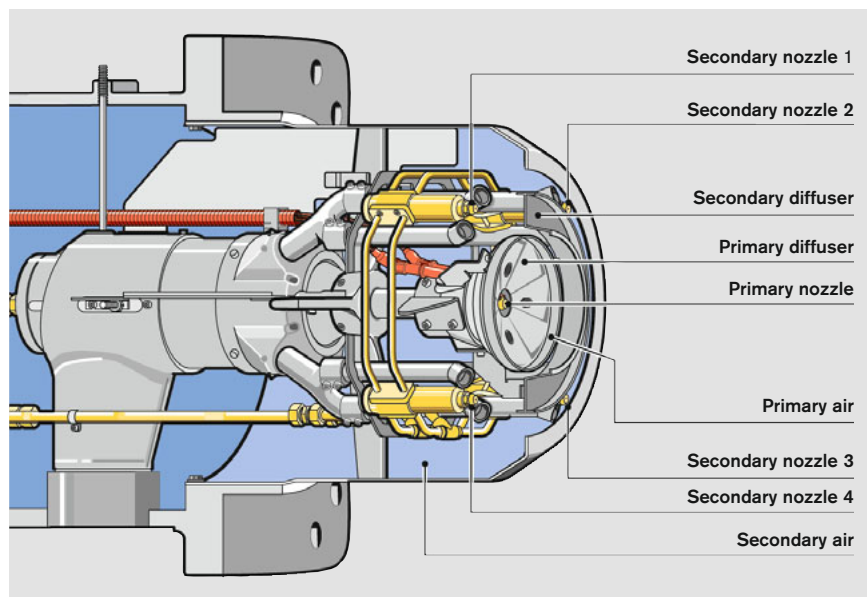
In 1998, Weishaupt made history with the introduction of multiflam technology into the market. Unprecedented low emission values stunned the industry. With the patented mixing head, Weishaupt was able to reduce the Nitrous Oxide emissions (NO_x) for medium and large burners to values normally only seen with compact burners. Weishaupt has set the standards with values below 60 ppm for #2 oil and 30 ppm for natural gas, depending on the relevant combustion chamber geometry.

The multiflam[®] burners therefore comply with the most stringent regulations worldwide and are leaders among industrial burners particularly in countries with strict environmental regulations.

The core of multiflam technology is the specially designed mixing head, in which the fuel is distributed in multiple points and energy released to secondary and primary flames, making combustion more efficient than ever before. This is achieved by the recirculation of flue gases directly in the mixing head.



Example values for hot water plant depend on the combustion chamber



Schematic of the mixing head

Burner selection

Oil burners size 30 to 50, vers. 3LN – multiflam[®]

<p>Burner model RL30/2-A, version 3LN Combustion head M30/2-4a Capacity in MBH 1,025 – 7,320 Capacity in GPH#2 7.3 – 52.3</p>	<p>Burner model RL40/2-A, version 3LN Combustion head M40/2-4A Capacity in MBH 1,620 – 10,170 Capacity in GPH#2 11.6 – 72.6</p>												
<p>Burner model RL50/1-B, version 3LN Combustion head M50/1-4a Capacity in MBH 1,825 – 12,800 Capacity in GPH#2 13 – 91.4</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Burner model</th> <th style="text-align: left;">Vers.</th> <th style="text-align: left;">Order No.</th> </tr> </thead> <tbody> <tr> <td>RL30/2-A</td> <td>3LN</td> <td>211 305 24</td> </tr> <tr> <td>RL40/2-A</td> <td>3LN</td> <td>211 405 24</td> </tr> <tr> <td>RL50/1-B</td> <td>3LN</td> <td>211 504 24</td> </tr> </tbody> </table> <p>The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.</p> <p>The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude of 1,640 ft (500 m) above sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.</p> <p>Voltagues and frequencies: The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.</p> <p>Standard burner motor: Insulation class F, protection IP 55.</p>	Burner model	Vers.	Order No.	RL30/2-A	3LN	211 305 24	RL40/2-A	3LN	211 405 24	RL50/1-B	3LN	211 504 24
Burner model	Vers.	Order No.											
RL30/2-A	3LN	211 305 24											
RL40/2-A	3LN	211 405 24											
RL50/1-B	3LN	211 504 24											

Fuels

#2 oil —

Scope of delivery / Accessories / Technical data

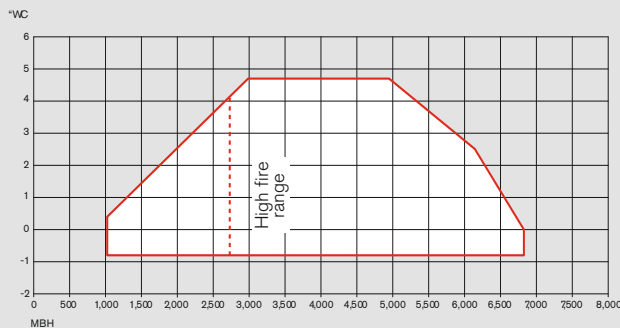
Oil burners size 30 to 50, version 3LN

Scope of delivery		RL30	RL40	RL50
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, combustion manager with operating unit, UV flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws		●	●	●
Combustion manager W-FM100		●	●	●
Oil pressure switch in return		●	●	●
Oil pump, fitted		●	●	●
Oil hoses		●	●	●
Accessories				
Intake flange for the connection of an air duct		○	○	○
Combustion head extension		○	○	○
Speed control		○	○	○
O ₂ trim		○	○	○
W-FM loose to fit into control panel		○	○	○
<p>● Scope of delivery ○ Accessories</p> <p>Additional accessories available on request.</p>				
Technical data		RL30/2-A 3LN	RL40/2-A 3LN	RL50/1-B 3LN
Burner motor 3~208 - 600V	Model	W-D112/140-2/4K5	W-D112/170-2/7K0	W-D132/170-2/9K0
Motor rating	HP (kW)	6.6 (4.5)	10.4 (7.8)	14.6 (11)
FLA at 460 V	A	8.6	14	19
Speed (60 Hz)	rpm	3,510	3,500	3,500
Fan wheel	Colour	red	red	red
	ø	248 x 104	275 x 104	330 x 104.5
Combustion manager	Model	W-FM100 / W-FM200	W-FM100 / W-FM200	W-FM100 / W-FM200
Ignition unit	Model	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
	Mixing head	Model	SQM48	SQM48
Pump, fitted	Model	TA2C	TA3C	TA4C
Oil solenoid valves	55V 1/4" (supply)	20 W Model	121 K 6220	–
	55V 1/4" (return)	20 W Model	121 K 6220	–
	55V 3/8" (supply)	20 W Model	–	321 H 2322
	55V 3/8" (return)	20 W Model	–	121 G 2320
Oil pressure switch	1 – 10 bar (return fuel #2 oil - 5 bar)	Model	DSA 46 F001	DSA 46 F001
Oil hoses	DN, length in inch and (mm)	20/39" (1000)	20/39" (1000)	25/51" (1300)
Burner weight	approx. lbs (kg)	220 (100)	313 (142)	458 (208)

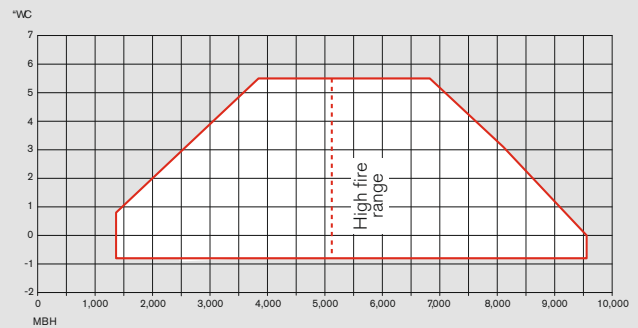
Burner selection

Gas burners size 30 and 50, version 3LN

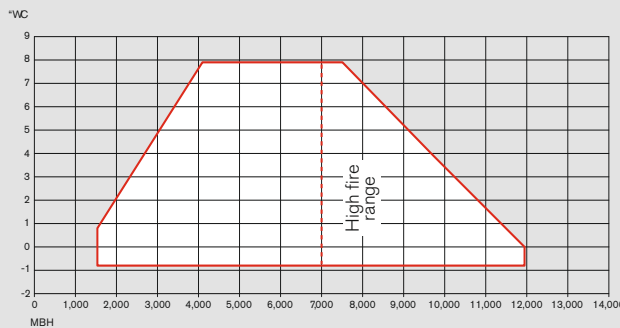
Burner model G30/2-A, version 3LN
Combustion head G30/2-3LN
Capacity in MBH Nat Gas 1,025 – 6,825



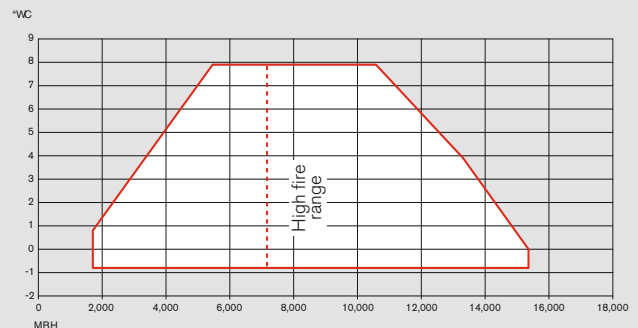
Burner model G40/2-A, version 3LN
Combustion head G40/2-3LN
Capacity in MBH Nat Gas 1,365 – 9,555



Burner model G50/1-B, version 3LN
Combustion head G50/1-3LN
Capacity in MBH Nat Gas 1,535 – 11,945



Burner model G50/2-A, version 3LN
Combustion head G50/2-3LN
Capacity in MBH Nat Gas 1,710 – 15,360



Fuels – capacity with

combustion head open close
 Nat gas — —

Burner model	Vers.	Order No.
G30/2-A	3LN	217 305 08
G40/2-A	3LN	217 405 10
G50/1-B	3LN	217 504 10
G50/2-A	3LN	217 505 44

The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

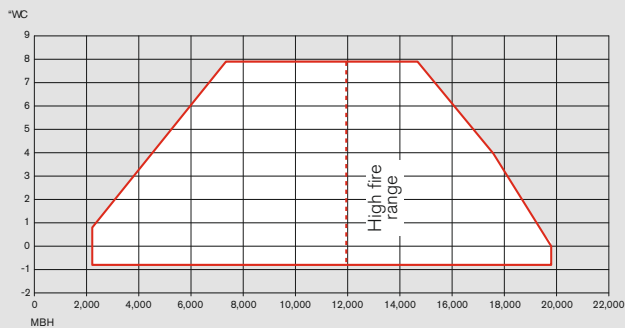
Standard burner motor:

Insulation class F, protection IP 55.

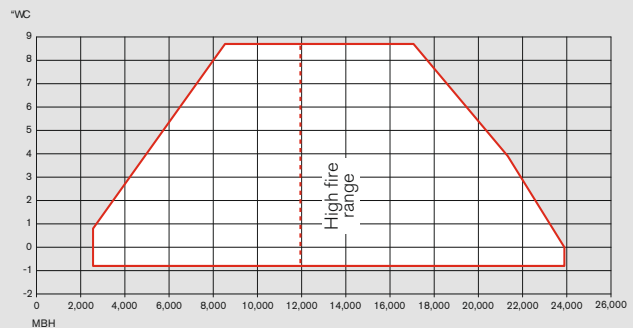
Burner selection

Gas burners size 60 and 70, version 3LN

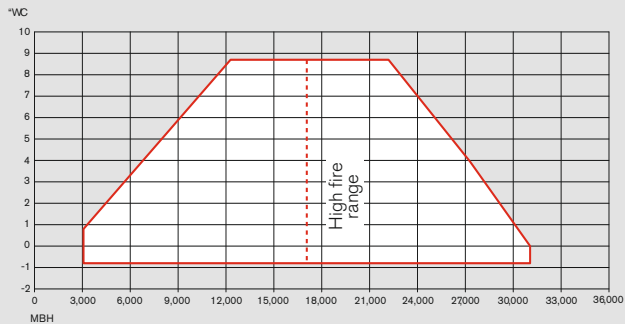
Burner model G60/2-A, version 3LN
Combustion head G60/2-3LN
Capacity in MBH Nat Gas 2,220 – 19,795



Burner model G70/1-B, version 3LN
Combustion head G70/1-3LN
Capacity in MBH Nat Gas 2,560 – 23,890



Burner model G70/2-A, version 3LN
Combustion head G70/2-3LN
Capacity in MBH Nat Gas 3,075 – 31,055



The capacity graphs are based on air temperature of 68F (20 °C) an installation altitude at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Voltagés and frequencies:
 The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:
 Insulation class F, protection IP 55.

Fuels – capacity with
 combustion head open close
 Nat gas

Burner model	Vers.	Order No.
G60/2-A	3LN	217 605 44
G70/1-B	3LN	217 704 44
G70/2-A	3LN	217 705 54

Scope of delivery/Accessories

Gas burners size 30 to 70, version 3LN

Scope of delivery	G30	G40	G50	G60	G70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, combustion manager with operating unit, UV flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●	●	●
Combustion manager W-FM100	●	●	●	●	●
Two safety gas shut off valves	●	●	●	●	●
Ignition pilot	●	●	●	●	●
Air pressure switch	●	●	●	●	●
Gas pressure switch	●	●	●	●	●
Ratio controlled sliding sleeve in mixing head	●	●	●	●	●
Stepping motor for Air regulator	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●
Mixing head	●	●	●	●	●
Accessories					
Intake flange for the connection of an air duct	○	○	○	○	○
Combustion head extension	○	○	○	○	○
Speed control	○	○	○	○	○
O ₂ trim	○	○	○	○	○
W-FM loose to fit into control panel	○	○	○	○	○

- Scope of delivery
- Accessories

Additional accessories available on request.

Technical data

Gas burners size 30 to 70, version 3LN

Technical data			G30/2-A 3LN	G40/2-A 3LN	G50/1-B 3LN	G50/2-A 3LN
Burner motor 3~208 - 600V		Model	W-D112/140-2/4K5	W-D112/170-2/7K0	W-D132/170-2/9K0	W-D132/210-2/14K0
Motor rating		HP (kW)	6.6 (5.0)	10.4 (7.8)	14.6 (11)	20 (15)
FLA at 460V		A	8.6	14	19	25
Speed (60 Hz)		rpm	3,510	3,500	3,500	3,520
Fan wheel		Colour	red	red	red	red
		ø	248 x 104	275 x 104	330 x 104.5	330 x 104.5
Combustion manager		Model	W-FM100	W-FM100	W-FM100	W-FM100
		Model	W-FM200	W-FM200	W-FM200	W-FM200
Ignition unit		Model	W-ZG02	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45	SQM45	SQM45
	Fuel	Model	SQM45	SQM45	SQM45	SQM45
	Mixing head	Model	SQM48	SQM48	SQM48	SQM48
Burner weight		approx. lbs (kg)	320 (145)	353 (160)	518 (235)	530 (240)

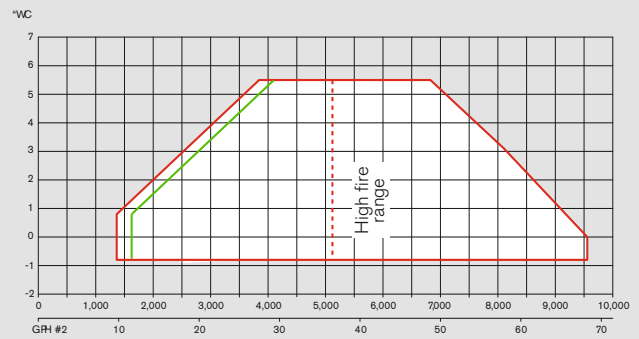
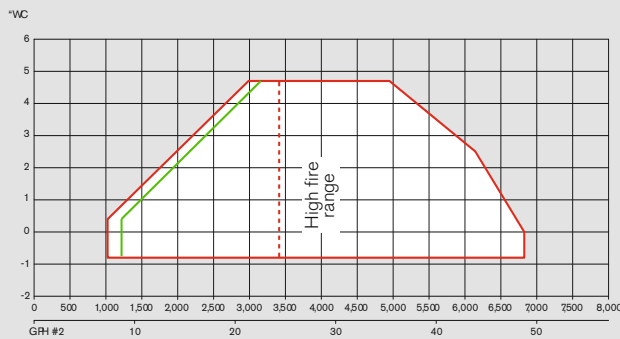
Technical data			G60/2-A 3LN	G70/1-B 3LN	G70/2-A 3LN
Burner motor 3~208 - 600V		Model	W-D132/210-2/14K0	W-D160/240-2/18K0	W-D160/240-2/22K0
Motor rating		HP (kW)	20 (15)	22 (16.5)	26.6 (20)
FLA at 460V		A	28	30.5	33
Speed (60 Hz)		rpm	3,520	3,560	3,550
Fan wheel		Colour	no color code	green	green
		ø	450 x 127.5-R	530 x 120	530 x 120
Combustion manager		Model	W-FM100	W-FM100	W-FM100
		Model	W-FM200	W-FM200	W-FM200
Ignition unit		Model	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45	SQM45
	Fuel	Model	SQM45	SQM45	SQM45
	Mixing head	Model	SQM48	SQM48	SQM48
Burner weight		approx. lbs (kg)	728 (330)	960 (435)	960 (435)

Burner selection

Dual fuel burners size 30 and 40, version 3LN

Burner model RGL30/2-A, version 3LN
Combustion head G30/2-3LN
Capacity in MBH NG 1,025 – 6,825
MBH #2 1,220 – 6,825
GPH #2 oil 8.7 – 49

Burner model RGL40/2-A, version 3LN
Combustion head G40/2-3LN
Capacity in MBH NG 1,365 – 9,555
MBH #2 1,625 – 9,555
GPH #2 oil 11.6 – 68.2



Fuels
 #2 oil —
 Nat gas —

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Burner model	Vers.	Order No.
RGL30/2-A	3LN	218 305 18
RGL40/2-A	3LN	218 405 18

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

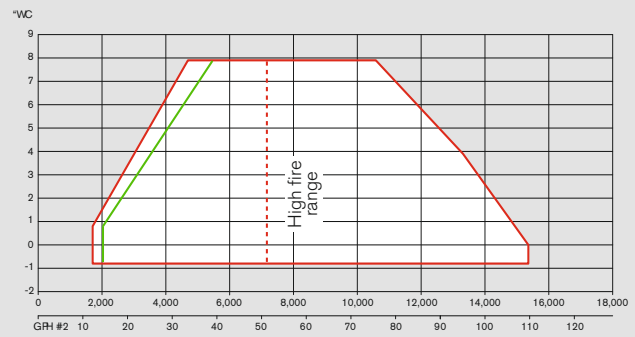
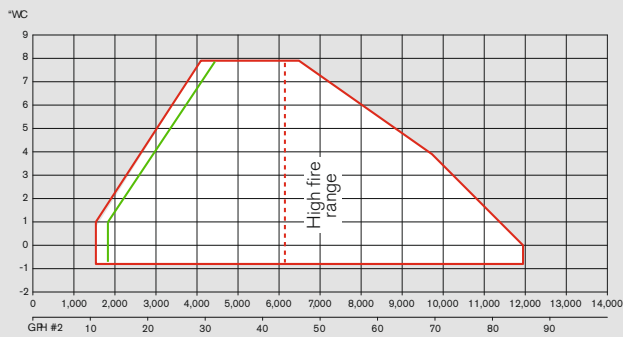
Insulation class F, protection IP 55.

Burner selection

Dual fuel burners size 50, version 3LN

Burner model RGL50/1-B, version 3LN
 Combustion head G50/1-3LN
 Capacity in MBH NG 1,540 – 11,945
 MBH #2 1,830 – 11,945
 GPH #2 oil 13 – 85

Burner model RGL50/2-A, version 3LN
 Combustion head G50/2-3LN
 Capacity in MBH NG 1,710 – 15,360
 MBH #2 2,030 – 15,360
 GPH #2 oil 14.5 – 109.7



Fuels
 #2 oil —
 Nat gas —

Burner model	Vers.	Order No.
RGL50/1-B	3LN	218 504 44
RGL50/2-A	3LN	218 505 44

The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.

The capacity graphs are based on air temperature of 68F (20 °C) and installation at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.

Voltages and frequencies:

The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.

Standard burner motor:

Insulation class F, protection IP 55.

Burner selection

Dual fuel burners size 60 and 70, version 3LN

<p>Burner model RGL60/2-A, version 3LN Combustion head G60/2-3LN Capacity in MBH NG 2,220 – 18,770 MBH #2 3,655 – 18,770 GPH #2 oil 26 – 134</p>	<p>Burner model RGL70/1-B, version 3LN Combustion head G70/1-3LN Capacity in MBH NG 2,560 – 23,890 MBH #2 4,065 – 23,890 GPH #2 oil 29 – 170</p>												
<p>Burner model RGL70/2-A, version 3LN Combustion head G70/2-3LN Capacity in MBH NG 3,075 – 31,055 MBH #2 5,285 – 31,055 GPH #2 oil 37.7 – 221.8</p>	<p>The stated oil throughputs in GPH refer to #2 oil with a calorific value of 140,000 BTU/Gal.</p> <p>The capacity graphs are based on air temperature of 68F (20 °C) and installation at sea level. A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration depending on installation altitude.</p> <p>Voltages and frequencies: The burners are equipped with three phase motor in 208 - 600 V, 60 Hz as standard. Different voltage and frequency are available upon request.</p> <p>Standard burner motor: Insulation class F, protection IP 55.</p>												
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Burner model</th> <th>Vers.</th> <th>Order No.</th> </tr> </thead> <tbody> <tr> <td>RGL60/2-A</td> <td>3LN</td> <td>218 605 44</td> </tr> <tr> <td>RGL70/1-B</td> <td>3LN</td> <td>218 704 44</td> </tr> <tr> <td>RGL70/2-A</td> <td>3LN</td> <td>218 705 44</td> </tr> </tbody> </table>	Burner model	Vers.	Order No.	RGL60/2-A	3LN	218 605 44	RGL70/1-B	3LN	218 704 44	RGL70/2-A	3LN	218 705 44
Burner model	Vers.	Order No.											
RGL60/2-A	3LN	218 605 44											
RGL70/1-B	3LN	218 704 44											
RGL70/2-A	3LN	218 705 44											
<p>Fuels</p> <p>#2 oil —</p> <p>Nat gas —</p>													

Scope of delivery/Accessories

Dual fuel burners size 30 and 70, version 3LN

Scope of delivery	RGL30	RGL40	RGL50	RGL60	RGL70
Burner housing, hinge flange, housing cover, Weishaupt burner motor, air regulator housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, atomising system with oil nozzle/s, combustion manager with operating unit, flame sensor, stepping motors, flange gasket, limit switch on hinge flange, fixing screws	●	●	●	●	●
Combustion manager W-FM100	●	●	●	●	●
Two gas shut off valves	●	●	●	●	●
Ignition pilot	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●
Air pressure switch	●	●	●	●	●
Gas pressure switches	●	●	●	●	●
Ratio control sliding sleeve in mixing head	●	●	●	●	●
Stepping motor for					
Air regulator	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●
Mixing head	●	●	●	●	●
Accessories					
Intake flange for the connection of an air duct	○	○	○	○	○
Solenoid valve for air pressure switch test for cont. run fan or post-purge	○	○	○	○	○
Combustion head extension	○	○	○	○	○
Speed control	○	○	○	○	○
O ₂ trim	○	○	○	○	○
W-FM loose for installation in a remote control panel	○	○	○	○	○

- Scope of delivery
- Accessories

Additional accessories available on request.

Technical data

Dual fuel burners size 30 to 50, version 3LN

Technical data		RGL30/2-A 3LN	RGL40/2-A 3LN
Burner motor 3~208 - 600V	Model	W-D112/140-2/4K5	W-D112/170-2/7K0
Motor rating	HP (kW)	6.6 (5.0)	10.4 (7.8)
FLA at 460V	A	8.6	14
Speed (60 Hz)	rpm	3,510	3,500
Fan wheel	Colour	red	red
	ø	248 x 104	275 x 104
Combustion manager	Model	W-FM100 / W-FM200	W-FM100 / W-FM200
Ignition unit	Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45
	Fuel	Model	SQM45
	Mixing head	Model	SQM48
Pump, fitted	Model	TA3C	TA3C
Oil solenoid valves	55V (supply)	Model	121 K 6220
	55V (return)	Model	121 K 6220
Oil pressure switch (return #2 oil - 5 bar)	1 – 10 bar	Model	DSA 46 F001
Oil hoses	DN, length in inch (mm)	20/40" (1000)	20/40" (1000)
Burner weight	approx. lbs (kg)	320 (145)	353 (160)

Technical data		RGL50/1-B 3LN	RGL50/2-A 3LN
Burner motor 3~208 - 600V	Model	W-D132/170-2/9K0	W-D132/210-2/14K0
Motor rating	HP (kW)	14.6 (11)	20 (15)
FLA at 460V	A	19	25
Speed (60 Hz)	rpm	3,500	3,520
Fan wheel	Colour	red	red
	ø	330 x 104.5	330 x 104.5
Combustion manager	Model	W-FM100 / W-FM200	W-FM100 / W-FM200
Ignition unit	Model	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45
	Fuel	Model	SQM45
	Mixing head	Model	SQM48
Pump, fitted	Model	TA4C	T2C
Oil solenoid valves	55V (supply)	Model	321 H 2322
	55V (return)	Model	121 G 2320
Oil pressure switch (return #2 oil - 5 bar)	1 – 10 bar	Model	DSA 46 F001
Oil hoses	DN, length in inch and (mm)	25/51" (1300)	25/51" (1300)
Burner weight	approx. lbs (kg)	518 (235)	530 (240)

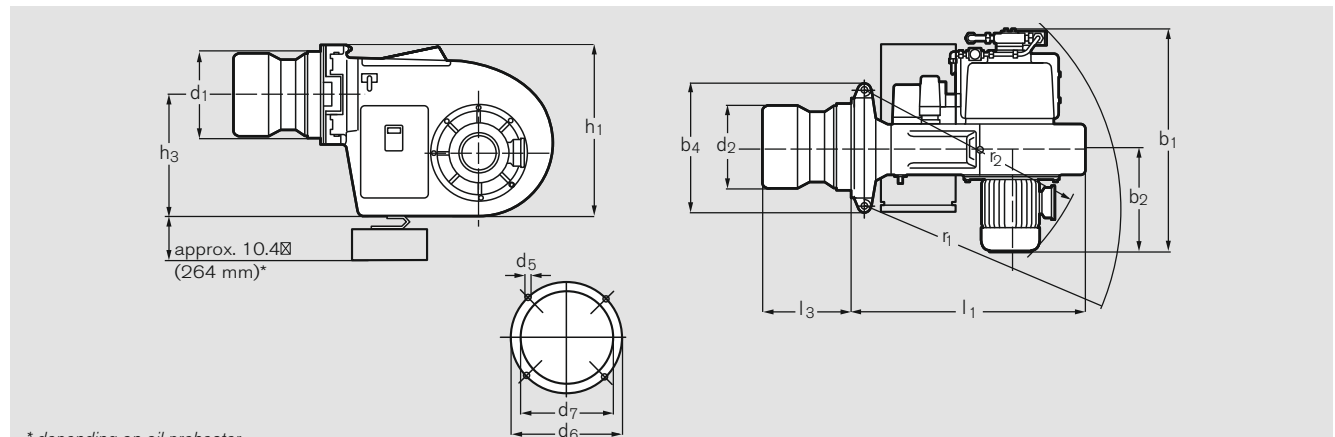
Technical data

Dual fuel burners size 60 and 70, version 3LN

Technical data		RGL60/2-A 3LN	RGL70/1-B 3LN	RGL70/2-A 3LN
Burner motor 3~208 - 600V	Model	W-D132/210-2/14K0	W-D160/240-2/18K0	W-D160/240-2/22K0
Motor rating	HP (kW)	20 (15)	22 (16.5)	26.6 (20)
FLA at 460V	A	28	30.5	33
Speed (60 Hz)	rpm	3,520	3,560	3,550
Fan wheel	Colour / ø	no color / 450 x 127.5-R	green / 530 x 120	green / 530 x 120
Combustion manager	Model	W-FM100 / W-FM200	W-FM100 / W-FM200	W-FM100 / W-FM200
Ignition unit	Model	W-ZG02	W-ZG02	W-ZG02
Stepping motor	Air	Model	SQM45	SQM45
	Fuel	Model	SQM45	SQM45
	Mixing head	Model	SQM48	SQM48
Pump, fitted	Model	T2C	T2C (up to 130 GPH / 450 kg/h) T3C (from 130 GPH / 450 kg/h)	T3C
Oil solenoid valves	55V (supply)	Model	321 H 2322	321 H 2522
	55V (return)	Model	121 G 2320	121 G 2520
Oil pressure switch (return #2 oil - 5 bar)	1 – 10 bar	Model	DSA 46 F001	DSA 46 F001
Oil hoses	DN, length in inch and (mm)	25/51" (1300)	25/51" (1300)	25/51" (1300)
Burner weight	approx. lbs (kg)	728 (330)	960 (435)	960 (435)

Oil burner dimensions

Size 30 to 70



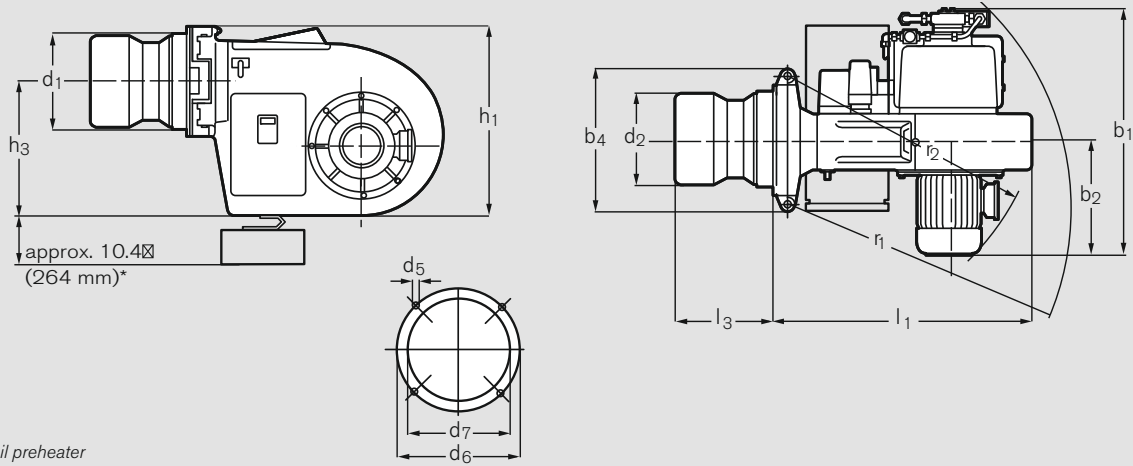
* depending on oil preheater

Burner model	Dimensions in inches and (mm)															
	b1	b2	b4	d1	d2	d5	d6	d7	h1	h3	l1	l3	r1	r2		
MS30Z/2-A	32.0 (813)	15.7 (399)	16.5 (418)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	35.1 (892)	11.9 (303)	37.4 (950)	35.0 (890)		
RMS30/2-A	32.1 (815)	15.7 (399)	16.5 (418)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	35.1 (892)	11.9 (303)	37.4 (950)	35.0 (890)		
MS40Z/1-B	34.9 (887)	17.4 (441)	18.2 (462)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	23.9 (607)	16.6 (422)	36.9 (937)	11.9 (303)	43.3 (1100)	38.2 (970)		
RMS40/1-B	35.0 (889)	17.4 (441)	18.2 (462)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	23.9 (607)	16.6 (422)	36.9 (937)	11.9 (303)	43.3 (1100)	38.2 (970)		
RMS40/2-A	35.0 (889)	17.4 (441)	18.2 (462)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	23.9 (607)	16.6 (422)	36.9 (937)	14.2 (361)	43.3 (1100)	38.2 (970)		
L50T/2-A	39.1 (992)	19.4 (493)	21.7 (550)	15.0 (380)	11.0 (280)	M16	18.9 (480)	15.4 (390)	28.7 (728)	20.2 (513)	39.0 (990)	14.1 (357)	43.3 (1100)	40.4 (1025)		
RL50/1-B	38.2 (970)	18.2 (463)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	13.0 (330)	28.7 (728)	20.2 (513)	38.8 (985)	14.2 (361)	43.3 (1100)	39.4 (1000)		
RMS50/1-B	38.2 (970)	18.2 (463)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	13.0 (330)	28.7 (728)	20.2 (513)	38.8 (985)	14.2 (361)	43.3 (1100)	39.4 (1000)		
RL50/2-A	39.1 (993)	19.4 (493)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (728)	20.2 (513)	39.0 (990)	15.2 (386)	43.3 (1100)	40.4 (1025)		
RMS50/2-A	39.1 (993)	19.4 (493)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (728)	20.2 (513)	39.0 (990)	15.2 (386)	43.3 (1100)	40.4 (1025)		
RL60/2-A	43.3 (1100)	20.4 (517)	26.4 (670)	16.9 (429)	15.7 (400)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	46.8 (1189)	16.0 (407)	49.6 (1260)	44.9 (1140)		
RMS60/2-A	44.6 (1132)	20.4 (517)	26.4 (670)	16.9 (429)	15.7 (400)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	46.8 (1189)	16.0 (407)	49.6 (1260)	44.9 (1140)		
RL70/1-A	50.3 (1277)	23.7 (603)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	53.9 (1368)	16.4 (417)	59.1 (1500)	51.6 (1310)		
RMS70/1-A	50.8 (1290)	23.7 (603)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	53.9 (1368)	16.4 (417)	59.1 (1500)	51.6 (1310)		
RL70/2-A	51.1 (1297)	24.5 (623)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	53.9 (1368)	16.4 (417)	59.1 (1500)	51.6 (1310)		
RMS70/2-A	51.6 (1310)	24.5 (623)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	53.9 (1368)	16.4 (417)	59.1 (1500)	51.6 (1310)		

Refer to burner manual for additional dimensions

Oil burner dimensions

Size 30 to 70



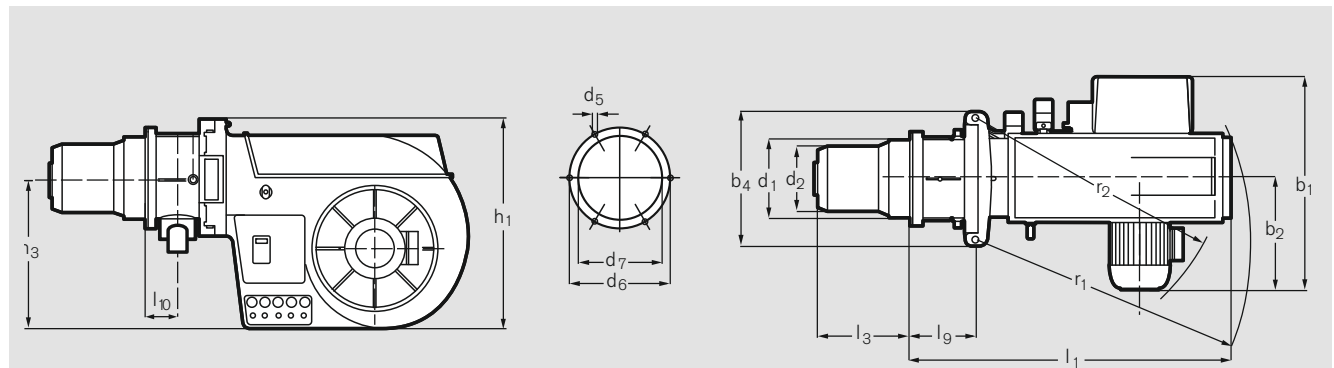
* depending on oil preheater

Burner model	Dimensions in inches and (mm)														
	b ₁	b ₂	b ₄	d ₁	d ₂	d ₅	d ₆	d ₇	h ₁	h ₃	l ₁	l ₃	r ₁	r ₂	
RL30/2-A 3LN	31.9 (811)	15.7 (399)	16.5 (418)	11.0 (280)	10.1 (256)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	35.1 (892)	14.1 (359)	37.4 (950)	35.0 (890)	
RL40/2-A 3LN	35.0 (889)	17.4 (441)	18.2 (462)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	23.9 (607)	16.6 (422)	36.9 (937)	14.8 (376)	43.3 (1100)	38.2 (970)	
RL50/1-B 3LN	38.2 (970)	18.2 (463)	21.7 (550)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	28.7 (728)	20.2 (513)	39.0 (990)	14.8 (376)	43.3 (1100)	39.4 (1000)	

Refer to burner manual for additional dimensions

Gas burner dimensions

Size 30 to 70



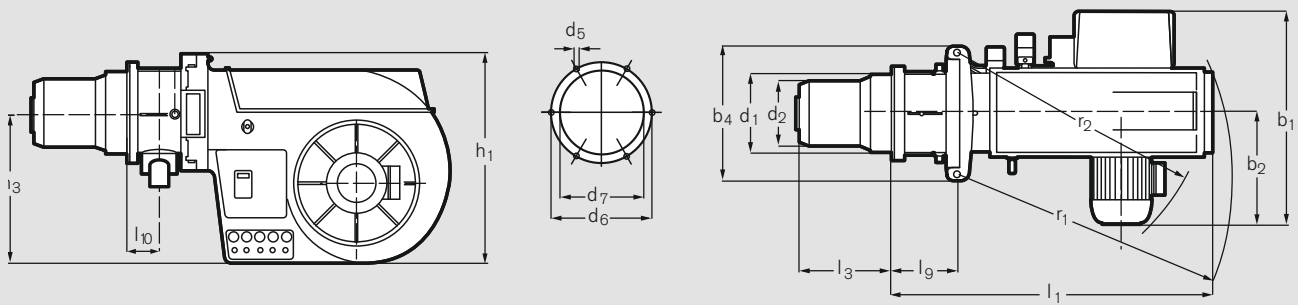
(Shown version 3LN)

Burner model	Dimensions in inches and (mm)																
	b_1	b_2	b_4	d_1	d_2	d_5	d_6	d_7	h_1	h_3	l_1	l_3	l_9	l_{10}	r_1	r_2	
G50/1-B ZM-NR	33.8 (858)	18.8 (478)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	13.1 (332)	10.2 (258)	5.2 (133)	41.7 (1060)	39.4 (1000)	
G50/2-A ZM-NR	35.0 (890)	19.5 (495)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	13.1 (332)	12.1 (308)	6.2 (158)	41.7 (1060)	40.4 (1025)	
G60/2-A ZM-NR	39.8 (1010)	20.4 (517)	26.4 (670)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	14.1 (357)	13.7 (348)	7.0 (178)	49.2 (1250)	44.9 (1140)	
G70/1-B ZM-NR	46.0 (1169)	25.4 (646)	29.9 (760)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	14.1 (357)	13.7 (348)	7.0 (178)	56.7 (1440)	51.6 (1310)	
G70/3-A ZM-NR	45.1 (1145)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	56.7 (1440)	51.6 (1310)	
G70/4-A ZM-NR	45.1 (1145)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	56.7 (1440)	51.6 (1310)	
G50/1-B ZM-1LN	33.8 (858)	18.8 (478)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	13.1 (332)	10.2 (258)	5.2 (133)	41.7 (1060)	39.4 (1000)	
G70/1-B ZM-1LN	46.0 (1169)	25.4 (646)	29.9 (760)	17.0 (432)	16.0 (406)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	16.5 (419)	13.7 (348)	7.0 (178)	56.7 (1440)	51.6 (1310)	
G50/2-A ZM-1LN	35.0 (890)	19.5 (495)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	17.6 (447)	12.1 (308)	6.2 (158)	41.7 (1060)	40.4 (1025)	
G70/2-A ZM-1LN	46.9 (1190)	24.5 (622)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.7 (1668)	17.6 (447)	14.5 (368)	7.4 (188)	56.7 (1440)	51.6 (1310)	
G50/1-B ZM-LN	33.8 (858)	18.8 (478)	21.7 (550)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	14.4 (367)	10.2 (258)	5.2 (133)	41.7 (1060)	39.4 (1000)	
G50/2-A ZM-LN	35.0 (890)	19.5 (495)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	15.2 (387)	12.1 (308)	6.2 (158)	41.7 (1060)	40.4 (1025)	
G60/2-A ZM-LN	39.8 (1010)	20.4 (517)	26.4 (670)	17.0 (432)	16.0 (406)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	17.0 (432)	13.7 (348)	7.0 (178)	49.2 (1250)	44.9 (1140)	
G70/1-B ZM-LN	46.0 (1169)	23.7 (601)	29.9 (760)	17.0 (432)	16.0 (406)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	17.0 (432)	13.7 (348)	7.0 (178)	56.7 (1440)	51.6 (1310)	
G70/2-A ZM-LN	46.9 (1190)	24.5 (622)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.7 (1668)	17.2 (437)	14.5 (368)	7.4 (188)	56.7 (1440)	51.6 (1310)	

Refer to burner manual for additional dimension

Gas burner dimensions

Size 30 to 70



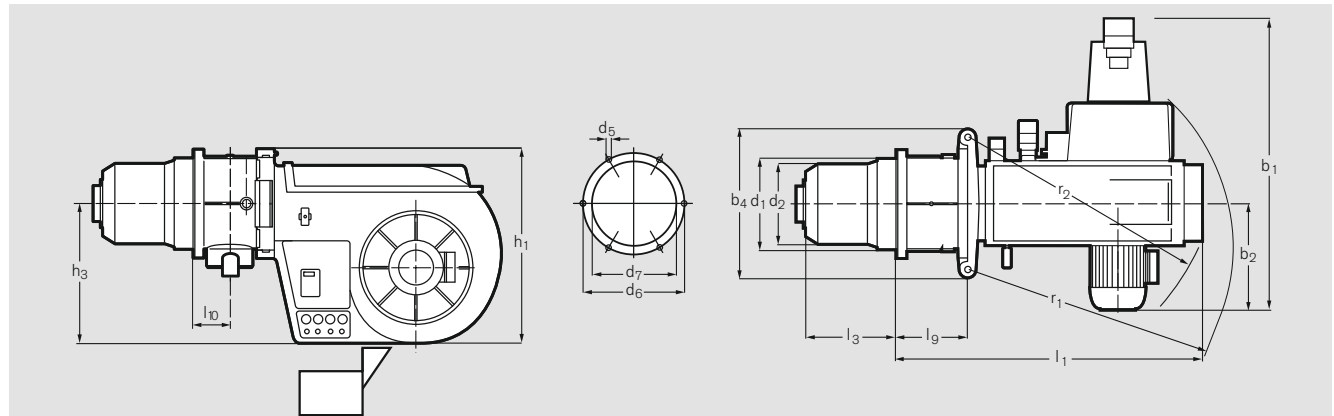
(Shown version 3LN)

Burner model	Dimensions in inches and (mm)																
	b_1	b_2	b_4	d_1	d_2	d_5	d_6	d_7	h_1	h_3	l_1	l_3	l_9	l_{10}	r_1	r_2	
G30/2-A 3LN	28.7 (729)	15.7 (400)	16.5 (418)	11.0 (280)	10.1 (256)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	42.6 (1083)	14.4 (366)	9.4 (238)	4.8 (123)	33.1 (840)	35.0 (890)	
G40/2-A 3LN	31.3 (795)	17.4 (441)	18.2 (462)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	23.9 (607)	16.6 (422)	45.2 (1148)	15.0 (380)	10.2 (258)	5.2 (133)	35.2 (895)	38.2 (970)	
G50/1-B 3LN	33.8 (858)	18.8 (478)	21.7 (550)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	15.0 (380)	10.2 (258)	5.2 (133)	41.7 (1060)	39.4 (1000)	
G50/2-A 3LN	44.1 (1119)	20.7 (525)	21.7 (550)	15.0 (380)	13.2 (335)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	17.7 (450)	12.1 (308)	6.2 (158)	41.7 (1060)	40.4 (1025)	
G60/2-A 3LN	39.8 (1010)	20.4 (517)	26.4 (670)	17.0 (432)	14.8 (376)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	18.9 (480)	13.7 (348)	7.0 (178)	53.1 (1350)	44.9 (1140)	
G70/1-B 3LN	47.8 (1214)	25.4 (646)	29.9 (760)	17.0 (432)	14.8 (376)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	18.9 (480)	13.7 (348)	7.0 (178)	59.1 (1500)	51.6 (1310)	
G70/2-A 3LN	46.9 (1190)	24.5 (622)	29.9 (760)	18.5 (470)	17.5 (444)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.7 (1668)	18.7 (475)	14.5 (368)	7.4 (188)	59.1 (1500)	51.6 (1310)	

Refer to burner manual for additional dimension

Dual fuel burner dimensions

Size 30 to 70



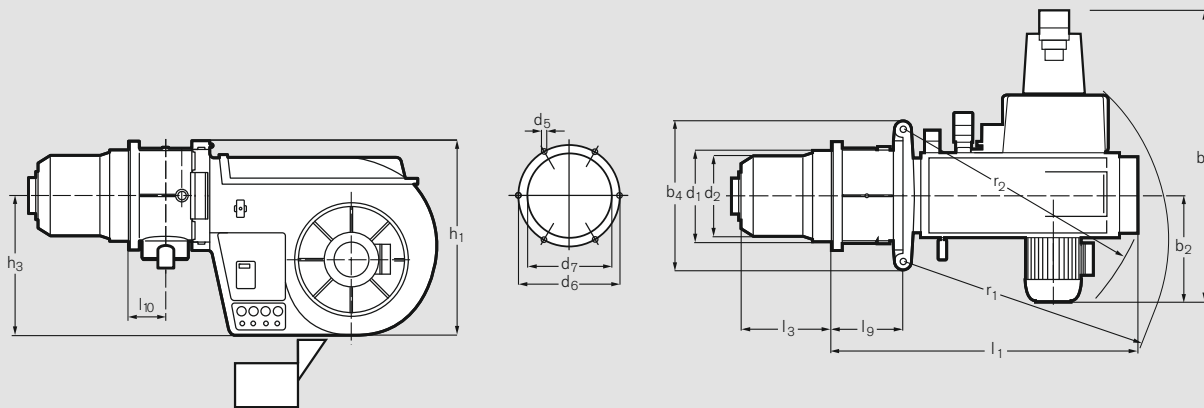
(Shown version 3LN)

Burner model	Dimensions in inches and (mm)																
	b ₁	b ₂	b ₄	d ₁	d ₂	d ₅	d ₆	d ₇	h ₁	h ₃	l ₁	l ₃	l ₉	l ₁₀	r ₁	r ₂	
RGMS30/2-A NR	42.6 (1083)	14.6 (371)	13.0 (330)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	42.6 (1083)	10.7 (272)	13.3 (338)	4.8 (123)	38.2 (970)	38.6 (980)	
RGMS40/1-B NR	38.1 (967)	15.9 (403)	13.0 (330)	11.0 (280)	9.8 (250)	M12	14.2 (360)	11.2 (285)	23.9 (608)	16.6 (422)	44.4 (1129)	10.7 (272)	13.3 (338)	4.8 (123)	41.3 (1050)	38.2 (970)	
RGMS40/2-A NR	38.1 (967)	15.9 (403)	14.6 (370)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	23.9 (608)	16.6 (422)	45.2 (1148)	13.0 (330)	14.1 (358)	5.2 (133)	41.3 (1050)	38.2 (970)	
RGL50/1-B ZM-NR	43.2 (1098)	18.8 (478)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	13.1 (332)	10.2 (258)	5.2 (133)	46.5 (1180)	39.4 (1000)	
RGMS50/1-B ZM-NR	43.2 (1098)	18.8 (478)	21.7 (550)	12.6 (320)	11.4 (290)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	13.1 (332)	10.2 (258)	5.2 (133)	46.5 (1180)	39.4 (1000)	
RGL50/2-A ZM-NR	44.5 (1130)	19.5 (495)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	13.1 (332)	12.1 (308)	6.2 (158)	46.5 (1180)	40.4 (1025)	
RGMS50/2-A ZM-NR	44.5 (1130)	19.5 (495)	21.7 (550)	15.0 (380)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	13.1 (332)	12.1 (308)	6.2 (158)	46.5 (1180)	40.4 (1025)	
RGL60/2-A ZM-NR	49.0 (1245)	20.4 (517)	26.4 (670)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	14.1 (357)	13.7 (348)	7.0 (178)	53.1 (1350)	44.9 (1140)	
RGMS60/2-A ZM-NR	44.6 (1132)	20.4 (517)	26.4 (670)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	14.1 (357)	13.7 (348)	7.0 (178)	53.1 (1350)	44.9 (1140)	
RGL70/1-B ZM-NR	57.2 (1454)	25.4 (646)	29.9 (760)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.8 (1646)	14.1 (357)	13.7 (348)	7.0 (178)	59.1 (1500)	51.6 (1310)	
RGMS70/1-B ZM-NR	50.8 (1290)	25.4 (646)	29.9 (760)	17.0 (432)	15.7 (400)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.8 (1646)	14.1 (357)	13.7 (348)	7.0 (178)	59.1 (1500)	51.6 (1310)	
RGL70/2-A ZM-NR	56.3 (1430)	24.5 (622)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.6 (1666)	14.3 (362)	14.5 (368)	7.4 (188)	59.1 (1500)	51.6 (1310)	
RGMS70/2-A ZM-NR	51.6 (1310)	24.5 (622)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.6 (1666)	14.3 (362)	14.5 (368)	7.4 (188)	59.1 (1500)	51.6 (1310)	
RGL70/3-A ZM-NR	56.3 (1430)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	59.1 (1500)	51.6 (1310)	
RGMS70/3-A ZM-NR	51.6 (1310)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	59.1 (1500)	51.6 (1310)	

Refer to burner manual for additional dimension

Dual fuel burner dimensions

Size 30 to 70

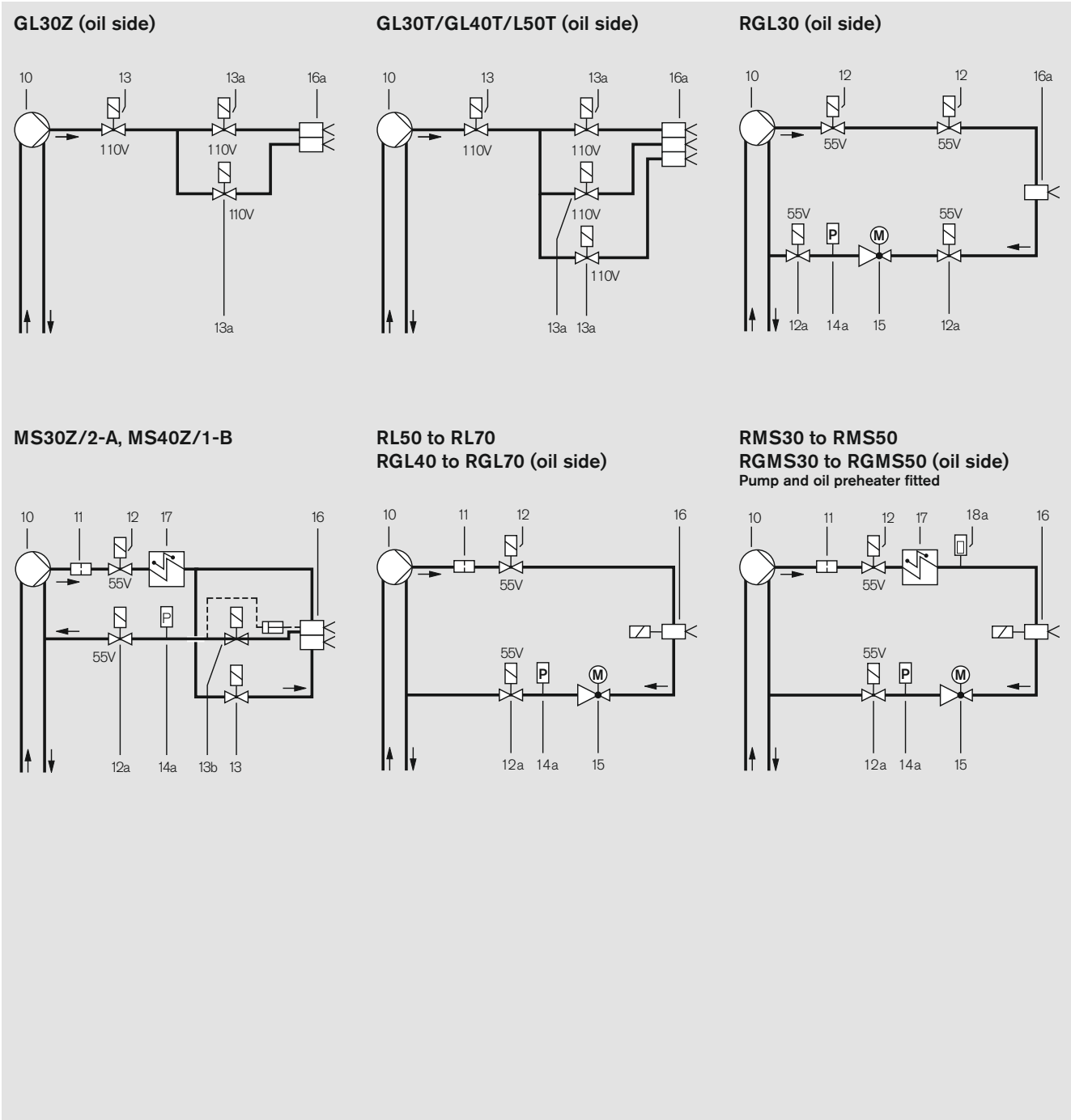


(Shown version 3LN)

Burner model	Dimensions in inches and (mm)															
	b ₁	b ₂	b ₄	d ₁	d ₂	d ₅	d ₆	d ₇	h ₁	h ₃	l ₁	l ₃	l ₉	l ₁₀	r ₁	r ₂
RGL70/4-A ZM-NR	56.3 (1430)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	59.1 (1500)	51.6 (1310)
RGMS70/4-A ZM-NR	51.6 (1310)	24.5 (622)	29.9 (760)	20.1 (510)	18.9 (480)	M16	22.8 (580)	20.9 (530)	42.3 (1075)	30.5 (775)	65.4 (1660)	18.4 (467)	14.5 (368)	7.3 (186)	59.1 (1500)	51.6 (1310)
RGL50/2-A ZM-1LN	44.5 (1130)	19.5 (495)	21.7 (550)	15.0 (382)	13.8 (350)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	17.6 (447)	12.1 (308)	6.2 (158)	46.5 (1180)	40.4 (1025)
RGL70/1-B ZM-1LN	57.2 (1454)	25.4 (646)	29.9 (760)	17.0 (432)	16.0 (406)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	16.5 (419)	13.7 (348)	7.0 (178)	59.1 (1500)	51.6 (1310)
RGL70/2-A ZM-1LN	56.3 (1430)	24.5 (622)	29.9 (760)	18.5 (470)	18.9 (480)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.7 (1668)	17.6 (447)	14.5 (368)	7.4 (188)	59.1 (1500)	51.6 (1310)
RGL30/2-A 3LN	36.4 (924)	15.7 (400)	16.5 (418)	11.0 (280)	10.1 (256)	M12	14.2 (360)	11.2 (285)	22.5 (572)	16.0 (407)	42.6 (1083)	14.4 (366)	9.4 (238)	4.8 (123)	38.2 (970)	35.0 (890)
RGL40/2-A 3LN	39.0 (990)	17.4 (441)	18.2 (462)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	23.9 (607)	16.6 (422)	45.2 (1148)	15.0 (380)	10.2 (258)	5.2 (133)	41.3 (1050)	38.2 (970)
RGL50/1-B 3LN	43.2 (1098)	18.8 (478)	21.7 (550)	12.6 (320)	11.7 (296)	M12	15.7 (400)	12.8 (325)	28.7 (730)	20.2 (513)	47.0 (1195)	15.0 (380)	10.2 (258)	5.2 (133)	46.5 (1180)	39.4 (1000)
RGL50/2-A 3LN	44.5 (1130)	19.5 (495)	21.7 (550)	15.0 (380)	13.2 (335)	M16	18.9 (480)	15.4 (390)	28.7 (730)	20.2 (513)	49.0 (1245)	17.7 (450)	12.1 (308)	6.2 (158)	46.5 (1180)	40.4 (1025)
RGL60/2-A 3LN	49.0 (1245)	20.4 (517)	26.4 (670)	17.0 (432)	14.8 (376)	M16	18.5 (470)	17.1 (435)	36.6 (930)	26.4 (670)	58.2 (1478)	18.9 (480)	13.7 (348)	7.0 (178)	53.1 (1350)	44.9 (1140)
RGL70/1-B 3LN	57.2 (1454)	25.4 (646)	29.9 (760)	17.0 (432)	14.8 (376)	M16	18.5 (470)	17.1 (435)	42.3 (1075)	30.5 (775)	64.9 (1648)	18.9 (480)	13.7 (348)	7.0 (178)	59.1 (1500)	51.6 (1310)
RGL70/2-A 3LN	56.3 (1430)	24.5 (622)	29.9 (760)	18.5 (470)	17.5 (444)	M16	21.7 (550)	19.7 (500)	42.3 (1075)	30.5 (775)	65.7 (1668)	18.7 (475)	14.5 (368)	7.4 (188)	59.1 (1500)	51.6 (1310)

Refer to burner manual for additional dimension

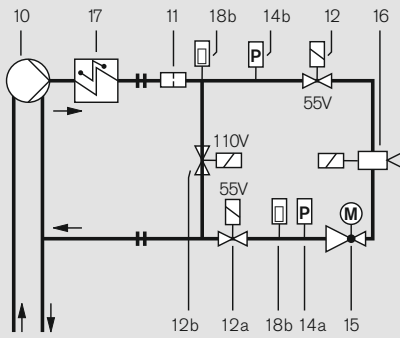
Fuel systems



Fuel systems

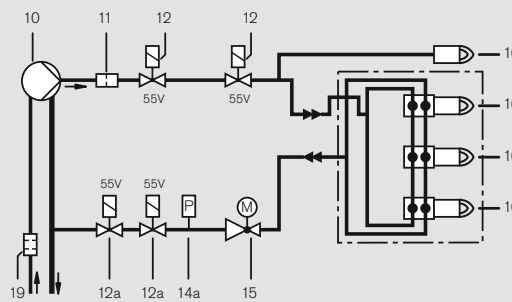
RGMS60/70 (oil side)

With separate pump and preheater stations



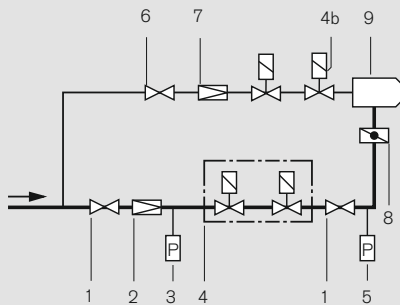
RL30 to RL50 vers. 3LN

RGL30 to RGL70 vers. 3LN (oil side)

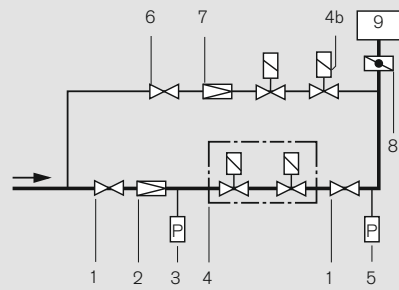


G30 to G70 (gas side vers. NR)

RGL30 to RGL70 vers. 3LN (gas side)



G30 to G70 vers. LN



The gas train schematics show typical configuration for UL gas train. The actual gas train shipped with burner might have different configuration depending on applicable code and regulation.

Legend

- | | | |
|--------------------------------|---|--|
| 1 Ball valve | 11 Strainer | 14a Oil pressure switch in return |
| 2 Gas pressure regulator | 12 Oil solenoid valve, normally closed (55V connected in series with 12a) | 14b Oil pressure switch in supply (optional, not shown) |
| 3 Low gas pressure switch | 12a Oil solenoid valve, normally closed (55V connected in series with 12, installed against the flow direction) | 15 Oil regulator |
| 4 Double main SSOV | 12b Bypass solenoid valve, normally open | 16 Nozzle head with shut off device |
| 4b Pilot gas valves | 13 Oil solenoid valve, normally closed | 16a Nozzle head without shut off device |
| 5 High gas pressure switch | 13a Oil solenoid valve, normally closed for stage 1, 2 and 3 | 17 Oil preheater |
| 6 Pilot train ball valve | 13b Oil solenoid valve, normally open | 18a Temperature switch |
| 7 Pilot gas pressure regulator | | 18b Temperature sensor Pt 100 (to monitor minimum oil temperature) |
| 8 Gas butterfly valve | | 19 External oil filter [Ⓞ] |
| 9 Burner | | |
| 10 Oil pump | | |

Pump and preheater stations

Scope of delivery – pump station

Pump unit (screw spindle pump with motor), pressure gauge, vacuum gauge, pressure regulating valve, ball valves, suction flange, pressure flange including counter flanges, screws and washers, suction side filter. All parts are fully assembled on an oil drip tray.

The pump station is built as one of two different versions - either as a single station unit with one pump, or as a twin station unit with two pumps with one pump serves as a backup unit. Should one pump fail, it is possible to quickly switch over to the other.

Only tried and tested makes of pump are used. The pumps are carefully matched to the capacity of the burner.

Scope of delivery - preheater stations

Preheater stations are supplied fully assembled on an oil drip tray. The preheater ensures constant regulation of the oil temperature and thus the viscosity of the fuel oil.

There are two basic versions of the preheater station available:

1. Electric preheater
2. Medium preheater

WEV.. and MV.. type preheaters are used.

MV medium oil preheater

Medium preheaters are high capacity, forced circulation heat exchangers. High capacity is achieved with a compact, space saving construction. Hot water, steam or thermal fluid can be used as heating media. The oil preheaters guarantee largely stable oil temperatures and thus good combustion figures. The oil temperature achieved depends on the heating

medium used.

When selecting and sizing, please refer to the oil temperature diagrams in chapter 5.3 of the technical brochure "Weishaupt electric and medium oil preheaters", print No. 18. Weishaupt medium oil preheaters can be used universally. It is possible to change the medium at any time. The preheaters are used either alone or in conjunction with an electric oil preheater.

If operating steam at more than 110 PSI or hot water between 360 F (180 °C) and 390 F (200 °C) is continuously available, then an electric preheater is not required. This is also possible if installation with the above minimum pressures or temperatures can be operated with #2 oil or gas.

If the medium temperature is not sufficient to adequately preheat the fuel oil, then the electric oil preheater provides the additional heat required. The electric oil preheater heats the oil for the start up of the installation. If the required medium temperature is available then the station switches over to the medium oil preheater thus saving on expensive electrical energy.

Suitable connection for medium oil preheaters can be selected, depending on the medium. If medium oil preheaters are provided without electric oil preheaters, a temperature controller must be used with the medium connection fittings. Medium connection fittings are available as an option.

General instructions

When starting a boiler from a cold condition with heavy oil, an electric oil preheater capacity must be provided for at least 30 % of the boiler rating.

Planning and installation instructions

Oil filter, air/gas separator, circulation tank, pump station and oil preheater station must be installed as close as possible to the burner.

On burners with separate oil preheater the time required for oil circulation during start up depends on the length of the pipework between the burner and the air/gas separator or circulation tank.

The shorter the pipeline, the shorter the period between heat being called for and oil release and burner start after a controlled shutdown.

Pump and preheater stations

Specification

Burner Rating GPH	Technical data - Pump			Version with 1 pump Pump model	Version with 2 pumps Pump model
	Flow rate in GPH (l/h) (based on 150cSt)	Speed rpm	Motor rating HP (kW)		
Pump stations - frequency 60 Hz					
74 – 114	265 (1,020)	3,400	2.9 (2.2)	SPF 10-38	SPZ 10-38
114 – 214	532 (2,050)	3,400	3.4 (2.6)	SPF 20-38	SPZ 20-38
214 – 265	705 (2,720)	3,400	5.3 (4.0)	SPF 20-46	SPZ 20-46

Model	Quantity	Medium preheater oil flow in GPH (kg/h)	Electric preheater (EV) Oil flow in GPH (kg/h) at $\Delta T = 135F (75^{\circ}C)$
Preheater stations			
WEV3.1/01	1	–	103 (375)
WEV3.1/01	2	–	205 (750)
WEV3/01	1	–	137.5 (500)
WEV3/01	2	–	275 (1000)
MV9C with temperature regulator	1	137.5 (500)	–
MV9C without temperature regulator	1	137.5 (500)	–
MV10A with temperature regulator	1	275 (1000)	–
MV10A without temperature regulator	1	275 (1000)	–

That is not a Facade. Weishaupt has been one of the leading company in heating and combustion industry since years with headquarter in Schwendi and branches all over the world. That is Reliability.



Weishaupt is Reliability. The family business in Schwendi was established by Max Weishaupt in 1932. Represented in 55 countries by branch offices and subsidiaries Weishaupt is international leader in the areas of combustion technology and heating applications.

Trustworthy, quality, good customer service, innovation and experience are values on which the Pioneer Max Weishaupt established his company. All this combined in a word is reliability.

Therefore stands Weishaupt today.



That is not an Imagination. Continuous research and development at Weishaupt ensure environmental friendly and efficient burners. That is Reliability.



Test facility at Weishaupt R&D centre



Developing improvement.

Weishaupt recognizes the signs of time and researches perpetually to get more efficient and environmental friendly burner systems.

This way not only Weishaupt prevents largely unnecessary energy cost but also actively contributes in conserving the environment.

– weishaupt –

Weishaupt Corporation
6280 Danville Road
Mississauga, ON L5T 2H7, Canada
Ph: (905) 564 0946
Fax: (905) 564 0949
www.weishaupt-corp.com

Weishaupt America Inc.
2587 Millenium Drive, Unit A
Elgin, IL 60124, USA
Ph: (847) 531 5800
Fax: (847) 531 5855
www.weishaupt-america.com

Print No. 832111 16, June 2012
Printed in Germany. All rights reserved.



Regular maintenance reduces heating costs and environmental pollution. Only a properly adjusted burner can save energy and be environmentally friendly. Behind each Weishaupt burner stands the whole Weishaupt customer service organization. The outstanding efforts made in maintenance and service justify the enormous trust placed in Weishaupt's burners, for at Weishaupt product and customer service belong together.

Weishaupt customer service is there for you all year round. Whenever you need help, be it the supply of spare parts, technical advice or a site visit. We are there when you need us.