–weishaupt–

product

Information on compact burners

Digital oil burners

Weishaupt oil burners WL5 to WL40 (16.5–570 kW)

A burning passion for quality

Ultra-modern research and production methods, rigorous quality control, and a comprehensive service network ensure the quality for which Weishaupt is renowned

Technological progress is our motivation. It has been driving us for more than 65 years to keep setting new standards for the combustion equipment industry.

Our own Research and Development Centre is constantly working both on the development of new products and on the optimisation of existing ones.

We consider it is not only our goal but our responsibility to go above and beyond current legislative requirements to develop combustion systems which emit ever fewer pollutants, save ever more energy, and combine ecology and economy in a practical manner.

Therefore, not only do we invest in research and technology, but we also only ever work with the best materials, using the latest tools, and we carry out meticulous quality control checks.

Millions of times over, Weishaupt burners have proven to heating specialists and end users alike that they are extremely reliable, durable, environmentally friendly, and technologically advanced; a fact also borne out by our numerous prizes for design and innovation.

Burners with outputs ranging from 12.5 to 32 000 kW are manufactured at our ultra-modern facilities in Germany and every single one undergoes a mechanical and electrical function test there. It is this combination of technology and effective quality control that helps to safeguard Weishaupt's renowned reputation for quality.

A new burner is always an investment in the future. Costs always need to be well-balanced against use but, ultimately, long-term overall success depends on quality, technology, and safety. Deciding on a Weishaupt burner is always a safe investment in the future.

Contents

Page

A hallmark of practical combustion technology 5

Trustworthy technology 6

Digital combustion management: reliable and easy to use 8

WL burners with VSD and/or O_2 trim 9

Optional W-FM 25 expansion modules 10

Use, model designation 11

WL5 – Burner selection 13

– Extra equipment 14

– Dimensions 15

WL10–40 – Standard burner selection 17

– Low-NO_x burner selection 18

– Overview 19

WL10 – Extra equipment 20

WL20 – Extra equipment 21

WL30–40 – Extra equipment 22

Dimensions 24

Technical data 26

A hallmark of practical combustion technology

A safe investment in the future
Reliable and economical: The million-fold success of Weishaupt's compact burners is the result of an unrelenting orientation towards quality and customer satisfaction. The equipment has been continually developed and improved over decades.

The latest production methods and very stringent quality checks of all products ensure Weishaupt's reputation for quality. In choosing Weishaupt you are making a safe investment in the future.

Large capacity range
The large capacity range of 16.5 to 570 kW makes the burners suitable for a wide range of heat generators.

Digital combustion management for reliability and ease of use
Weishaupt is a pioneer in this field. Digital combustion management offers greater ease of use, simple servicing, even greater reliability in operation, and, last but not least, an extremely attractive price to capacity ratio. Furthermore, this intelligent technology enables the burner to be integrated with complex building management systems.

Electronic ignition
The ignition unit used on all Weishaupt W-series burners is very energy efficient and extremely reliable.

Flame monitoring
Flame monitoring systems are responsible for the high operational readiness and maximal safety of the burner.

Photo-resistors have been established across the Weishaupt WL burner range for many decades. They are designed for intermittent operation with the W-FM 05 and W-FM 10 combustion managers and respond to the light from the burner's flame. The self-checking W-FM 25 PO combustion manager enables burners to be used for continuous firing.

Burners with oil preheating
H-version oil burners are equipped with oil preheating. This allows optimal flame stability to be achieved, even at low burner ratings.

Weishaupt nozzle shutoff system
All WL5 burners with oil preheating are equipped with Weishaupt's nozzle shutoff system. This shuts off the oil completely whilst the nozzle assembly is brought up to temperature and prevents any drips after the burner has been switched off.

Sound-attenuated air inlet
The burners have a transverse fan with a sound-attenuated air inlet and, as a consequence, are particularly quiet in operation.

Electronically controlled air damper
The electronically controlled air damper fully closes at burner shutdown to hinder the cooling down of the combustion chamber.

Continuous firing, VSD, and O_2 trim
The various options available with the W-FM 25 series of combustion managers used on WL30 and WL40 burners bring the latest technology to the compact burner segment. Innovative technology enables efficiency-optimising measures such as variable speed drive and O_2 trim to be produced more cost effectively.

With these technologies it is possible for investments in burners with staged load control to be quickly amortised. The W-FM 25 PO for continuous firing is well-suited to industrial applications. Its safety features allows burners to fire for more than 24 hours without a shutdown.

Service case
The Weishaupt service case for burner sizes up to WL20 facilitates the sensible storage of spare parts and optimal service readiness. All the parts needed for repairs and service work are clearly arranged in this handy and robust plastic case.

Diagnosis via laptop
A laptop computer can be connected to the combustion manager, offering easy combustion optimisation and fault analysis. A package of interrogation software and connection cables is available for this.

Outstanding service
Weishaupt has an extensive worldwide sales and service network. Customer service is available around the clock. Weishaupt's optimal in-house training ensures service technicians are of the highest calibre.

Trustworthy technology

Compact construction
Remove the burner's cover and you are immediately struck by how clearly its components are arranged, and how the electrical connections are obvious and non-interchangeable. The equipment makes a very good impression, just as Weishaupt always does.

Whichever model, each WL burner's compact construction means it can be easily installed by one person, reducing installation costs to a minimum.

Weishaupt nozzle shutoff system
All Low-NO_x burners are equipped with Weishaupt's nozzle shutoff system. This ensures a tight oil shutoff at the nozzle assembly, preventing any drips after the burner has been switched off.

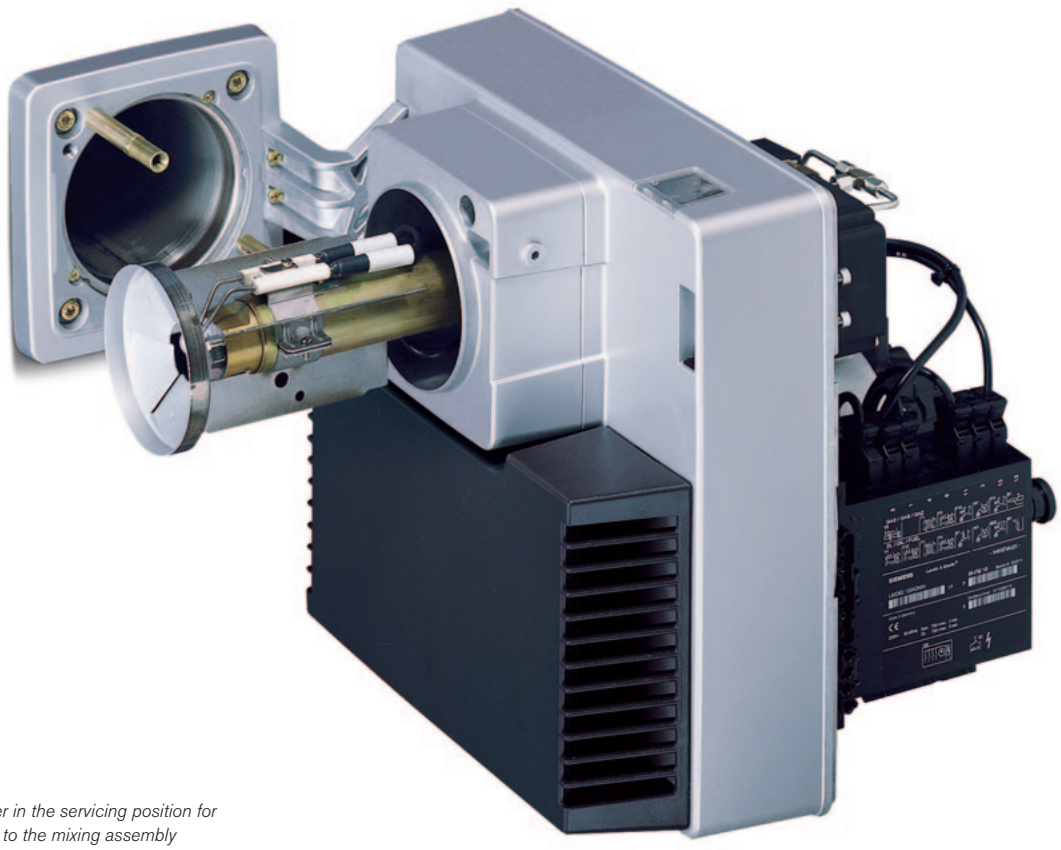
Low-NO_x version
There are Low-NO_x versions available for all WL burner sizes. A specially designed mixing head generates an intensive internal flue gas recirculation that results in exemplary emission levels.

Sound-attenuated air inlet
The burners have a transverse fan with a sound-attenuated air inlet and, as a consequence, are particularly quiet in operation.

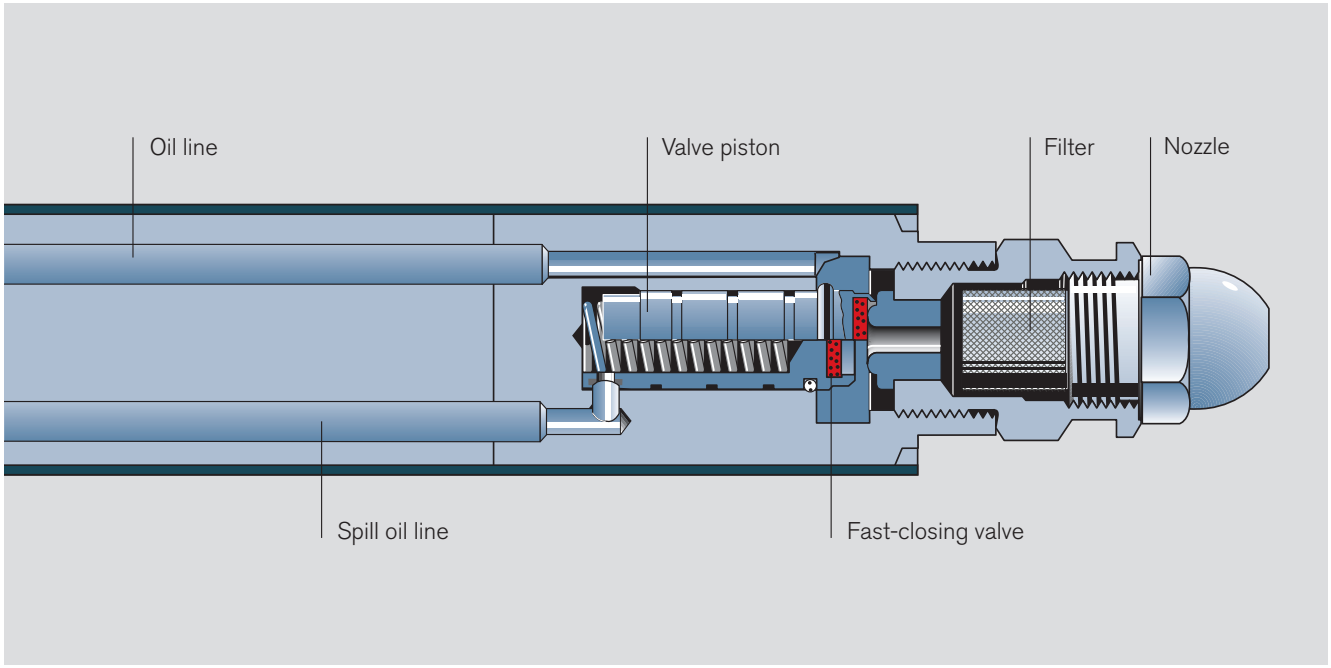
Servicing position
A special bracket allows the burner to be put into a servicing position, providing easy access to the burner and its mixing assembly.

Common platform
The common platform principle used with W-series burners greatly simplifies the provision and storage of spare parts.

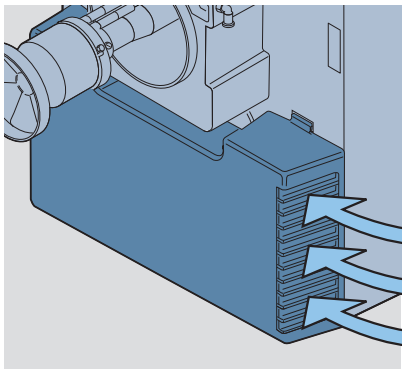
Diagnosis via laptop
A laptop computer can be connected to the combustion manager, offering easy combustion optimisation and fault analysis. A package comprising interrogation software and connection cables is available for this.



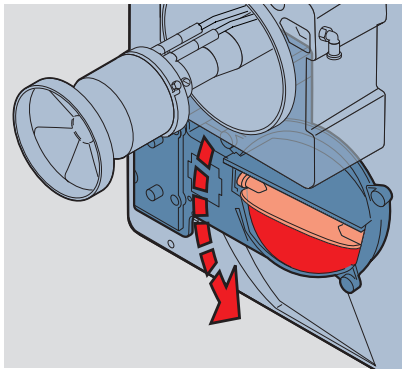
WL20 burner in the servicing position for easy access to the mixing assembly



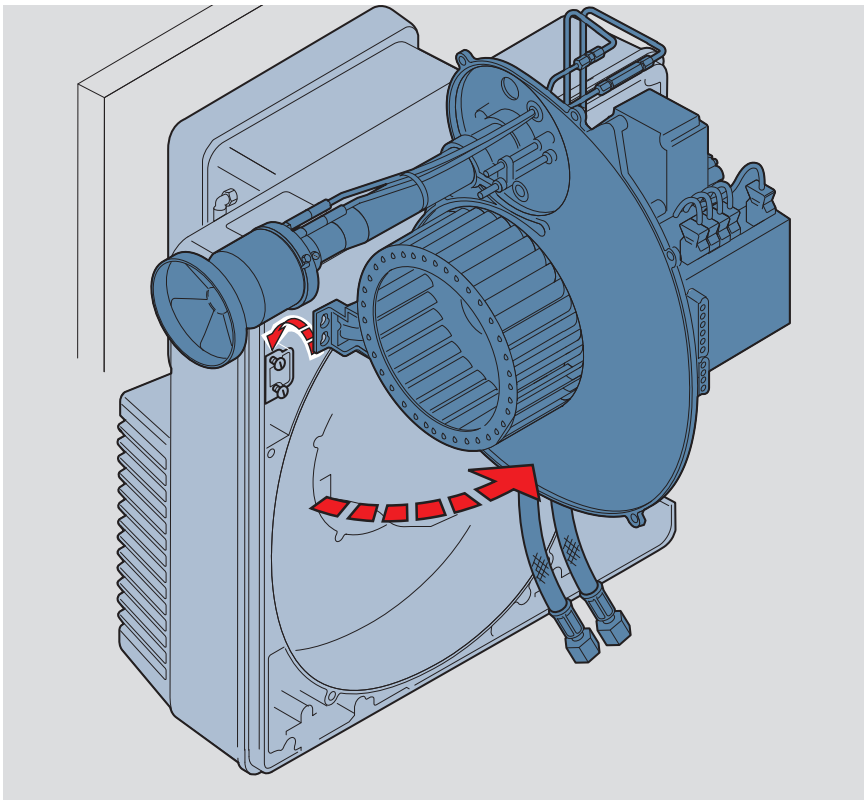
Weishaupt nozzle shutoff system



Sound-absorbing air inlet housing

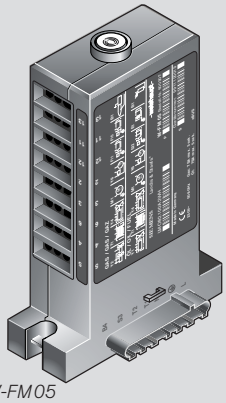


Electronically controlled air damper

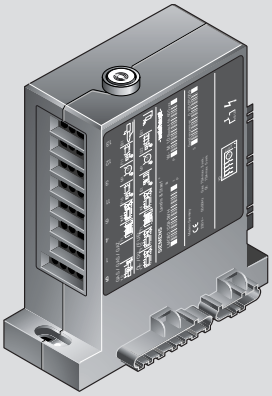


Housing with components in the servicing position: easy access to the fan wheel

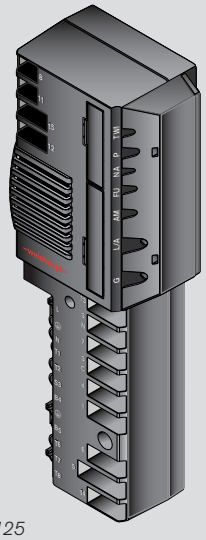
Digital combustion management: reliable and easy to use



W-FM 05



W-FM 10



W-FM 25

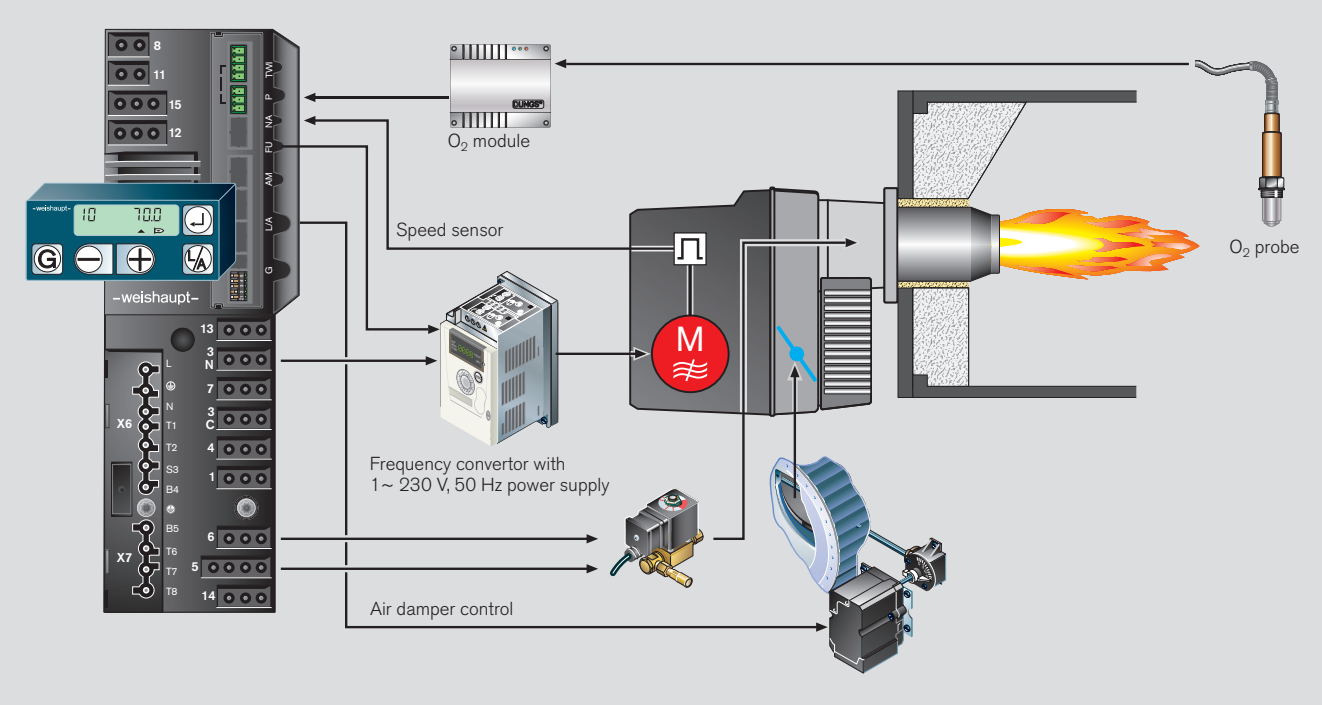
All of Weishaupt's W-series burners are fitted as standard with a digital combustion manager. The unit's microprocessors control and monitor all burner functions. As a result, Weishaupt burners are easy to use, precise, and reliable.

The digital combustion manager also offers the possibility of communicating with other systems via an integrated bus connection. This allows a technician to monitor the operation of the burner and remotely diagnose any errors.

Combustion manager			**W-FM 05**	**W-FM 10**	**W-FM 25**
Fuels					
Gaseous			●	●	●
Liquid (distillate)			●	●	●
Gaseous / liquid (distillate)			–	–	●
Features					
Combustion manager for intermittent firing			●	●	●
Combustion manager for continuous firing > 24 h			–	–	○ [1]
Integrated gas valve proving			–	●	●
Maximum number of actuators			1	1	2
Actuators with stepping motor			–	–	2
Maximum number of compound settings			–	–	2
Flame monitoring			Ion	Ion	Ion
Fuel metering via input pulse			–	–	●
Service software			ACS 401	ACS 401	Vision Box
Efficiency optimisation					
Variable speed drive			–	–	○
O_2 trim			–	–	○ [2]
Control					
Stage switching inputs (thermostat / pressure control)			●	●	●
Three-term switching input			–	–	●
0 / 4–20 mA or 0 / 2–10 V analogue input / output			–	–	○ [2]
Bus systems					
eBus			●	●	–
Modbus-RTU			–	–	○ [3]
Profibus			–	–	○ [3]
Controls positioning					
Burner-mounted combustion manager			●	●	●
Removable control unit			–	–	10 m
Electrical supply					
120 V, 50 Hz / 60 Hz			●	●	●
230 V, 50 Hz / 60 Hz			●	●	●
Approvals					
Europe	CE	(230 V / 50 Hz)	●	●	●
Australia	AGA	(240 V / 50 Hz)	–	–	●
USA / Canada	CSA	(120 V / 60 Hz)	–	–	●

● Standard ○ Optional [1] PO version [2] PO O_2 version
[3] With EM3/3 expansion module [4] With EM3/2 expansion module

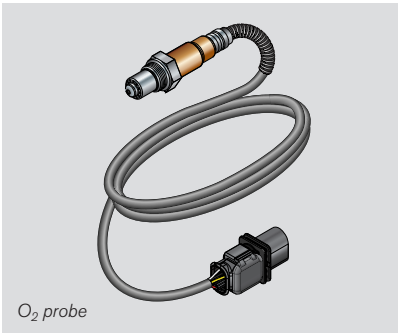
WL30–40 with VSD and/or O_2 trim



Conceptual drawing of WL30/40 with VSD and O_2 trim

The key points:

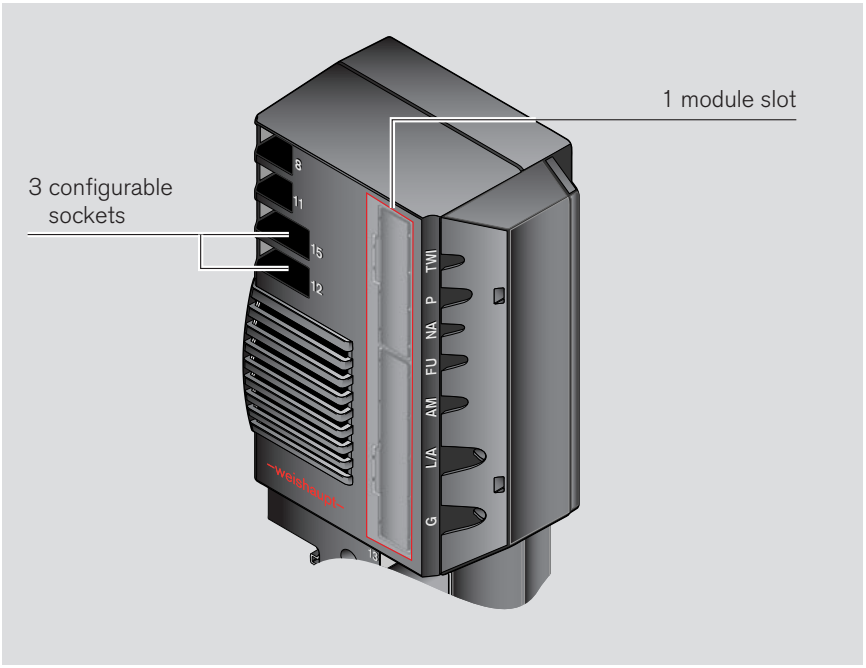
- The utilisation of identical units for gas and oil-fired burners helps simplify commissioning and reduces the number of spares required.
- Non-interchangeable plugs ensure the correct electrical connection of all components
- Electrical remote reset is possible
- Flame monitoring via photoresistor
- Safety is ensured by the reciprocal monitoring of two microprocessors
- Vari-coloured LED lamp to indicate burner operational stage and any fault conditions (WL5–20)
- LCD screen with interrogation, service, and parameterisation functions. The burner can be set directly via the operating keys (WL30–40)
- W-FM 25 for continuous firing, VSD, and O_2 trim
- Air damper and frequency convertor in electronic compound
- Adjustment of the O_2 setpoint curve and the minimum and maximum O_2 monitoring threshold
- Air volume can be adjusted via diffuser position, air damper position, and fan speed
- Separate ignition load setting
- High-precision, digital control
- Optional expansion modules with either a Modbus interface or analogue and digital inputs and outputs
- The separate PC connection offers, through the use of the Vision Box software, additional options such as:
  – Setting of the pre-purge time
  – Display of the operational sequence and the adjustment of functional parameters



O_2 probe

O_2 module

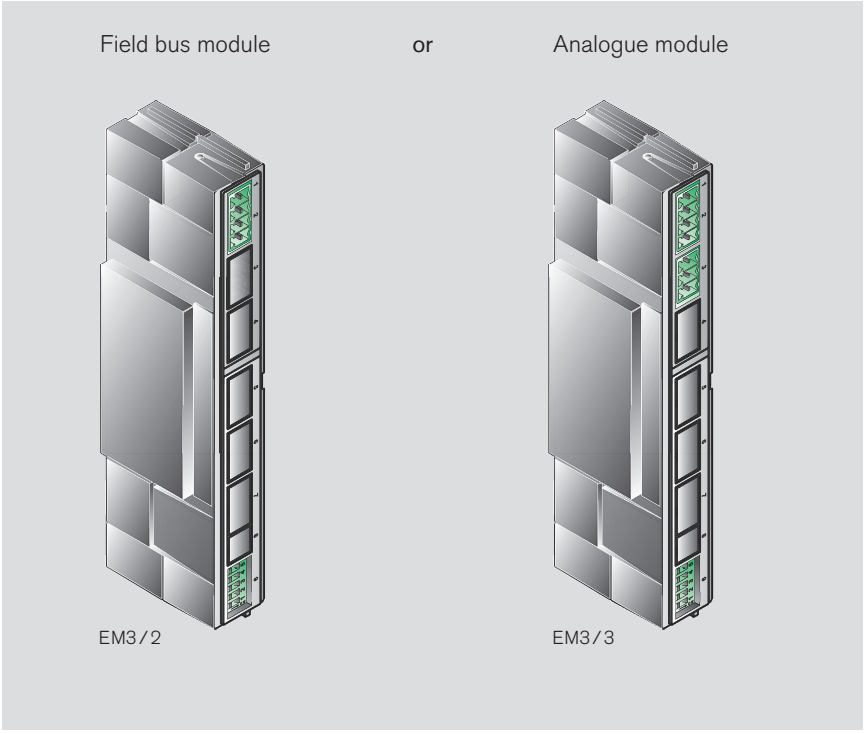
Optional W-FM 25 expansion modules



W-FM 25 combustion manager
- Configurable inputs (summary)
  Socket 12
  – VPS valve proving
  – Proof of valve closure (POC)

  Socket 14
  – Remote reset
  – Start release
  – Contact-dependent post-purge

  Socket 15
  – High gas pressure switch
  – Extraneous air pressure switch



Field bus module – Modbus / Profibus
By way of example, the following data can be read or changed:
- Burner ON / OFF
- Fuel changeover
- Current degree of modulation
- Required degree of modulation
- Heat demand present
- Flame signal
- Hardware inputs and outputs
- Operating phase
- Hours run
- Fan speed with VSD
- Actuator positions
- Fuel throughputs
- Etc.

Analogue module – input / output
Input: Required burner load
0–20 mA / 4–20 mA
0–10 V / 2–10 V

Output: Current burner load
0–20 mA / 4–20 mA
0–10 V / 2–10 V

Use

Fuels
Class D gas oil per BS 2869 / IS 251
Class A2 gas oil per BS 2869 / IS 251
10 % biodiesel blends (B10)

The suitability of fuels of differing quality must be confirmed in advance with Weishaupt.

Applications

W-FM 05 combustion manager for single-stage control
Suitable for intermittent firing on:
- EN 303-compliant heat generators
- LTHW boilers
- Air heaters
- Group II and III steam boilers

W-FM 10 combustion manager for two-stage control
Suitable for intermittent firing on:
- EN 303-compliant heat generators
- LTHW boilers
- Air heaters
- Group II and III steam boilers

W-FM 25 combustion manager for two-stage control
Suitable for intermittent firing on:
- EN 303-compliant heat generators
- LTHW boilers
- Air heaters
- Group II and III steam boilers

W-FM 25 PO combustion manager for two-stage control
Suitable for intermittent firing on:
- EN 303-compliant heat generators
- LTHW boilers
- Air heaters
- HTHW boilers
- Group II, III, and IV steam boilers
- Certain process applications

Protection Class
IP 40

Permissible ambient conditions
- Ambient temperature
  -10 to + 40 °C for gas firing
- Maximum 80 % relative humidity, no condensation
- The combustion air must be free of aggressive substances (halogens, chlorides, fluorides etc.) and impurities (dust, debris, vapours, etc.)
- Adequate ventilation is required for operation in enclosed spaces
- For plant in unheated areas, certain further measures may be required

Use of the burner for other applications or in ambient conditions not detailed above is not permitted without the prior written agreement of Max Weishaupt GmbH. Burner service intervals will be reduced to accord with the more extreme operational conditions.

Capacity graphs per EN 267
The stated ratings are based on an air temperature of 20 °C and an installation altitude of 500 m above sea level.

Stated oil throughputs are for gas oil with a LHV of 11.9 kWh/kg.

Standards compliance
The burners are tested by an independent body and fulfil the applicable requirements of the following European Union directives and applied standards:

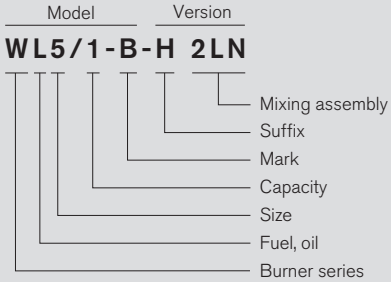
EMC EMC Directive 2014/30/EU
Applied standards
- EN 61000-6-1 : 2007
- EN 61000-6-3 : 2007

LVD Low-Voltage Directive 2014/35/EU
Applied standards
- EN 60335-1 : 2010
- EN 60335-2-102 : 2010

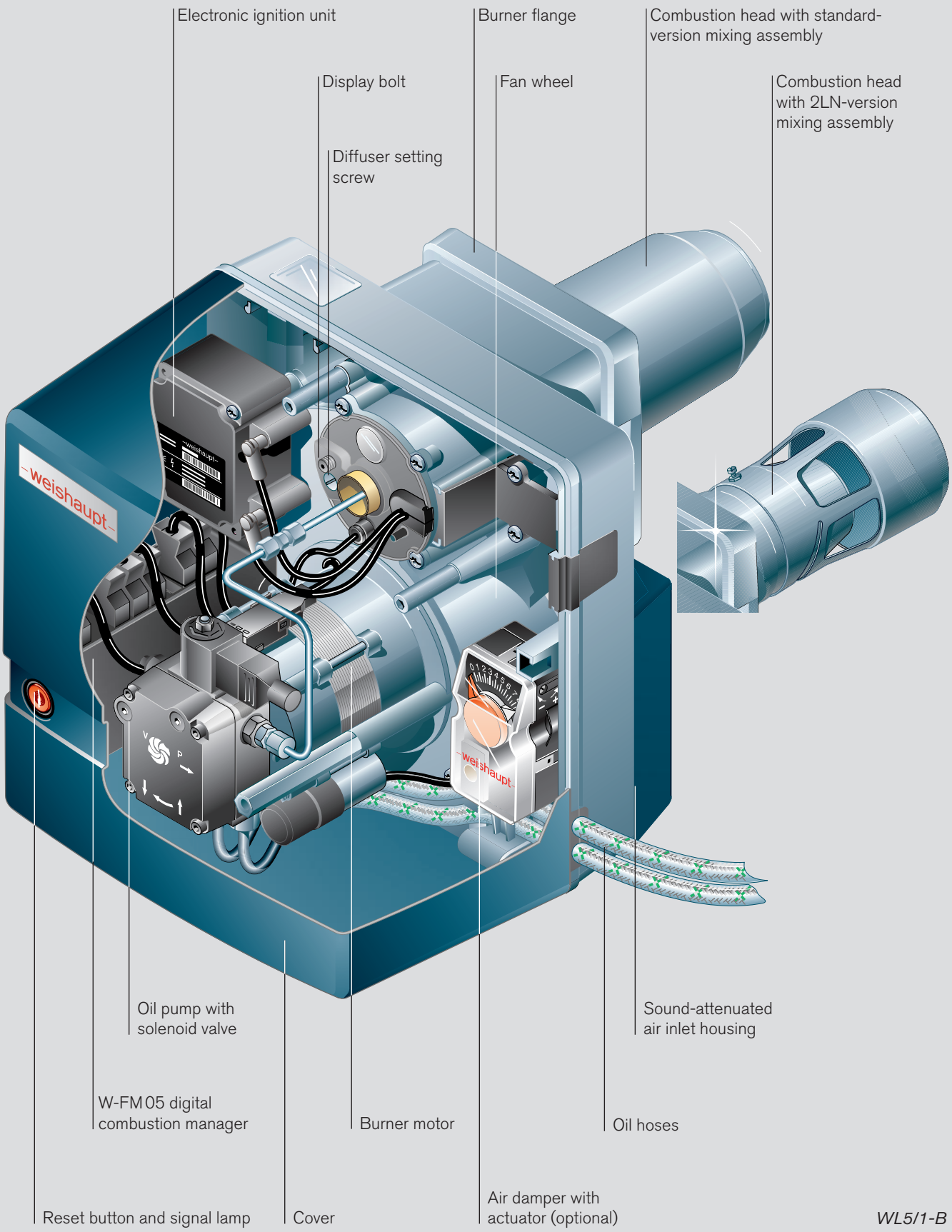
MD Machinery Directive 2006/42/EC
Applied standards
- EN 676 Annex J

The burners are labelled with
- CE Mark
- DIN CERTCO

Model designation

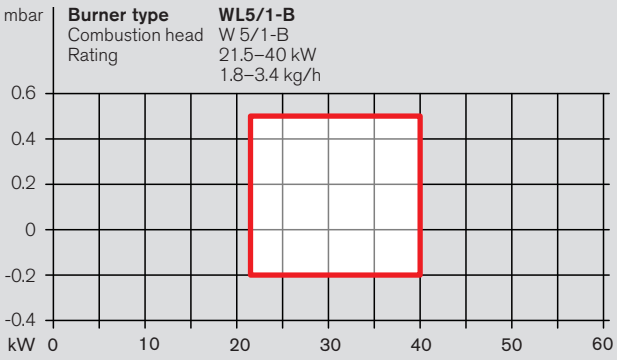


Details	Code	Meaning
Series	W	Compact burner
Fuel	L	Oil
Load control	– Z	Single-stage Two-stage
Mixing assembly	– 2LN	Standard Low-NO_x
Suffix	H	Oil preheating

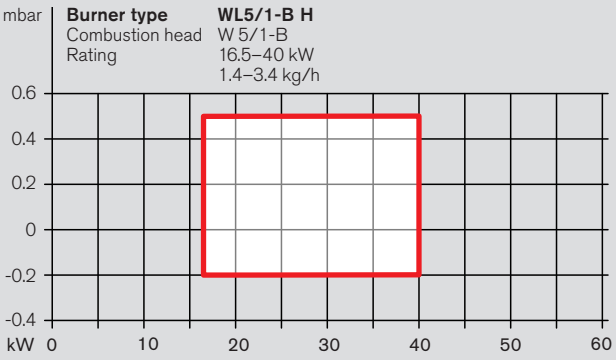

Electronic ignition unit
Display bolt
Diffuser setting screw
Burner flange
Fan wheel
Combustion head with standard-version mixing assembly
Combustion head with 2LN-version mixing assembly
Oil pump with solenoid valve
W-FM 05 digital combustion manager
Reset button and signal lamp
Cover
Burner motor
Air damper with actuator (optional)
Oil hoses
Sound-attenuated air inlet housing
WL5/1-B

Burner selection
WL5

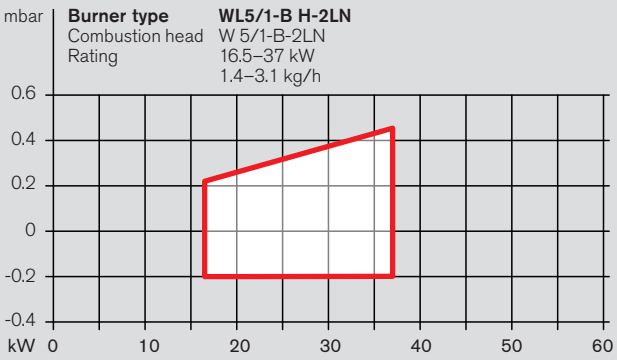
WL5 capacity graph



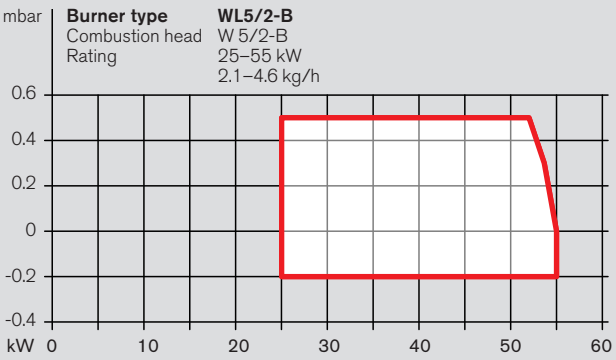
WL5 capacity graph



WL5 capacity graph



WL5 capacity graph

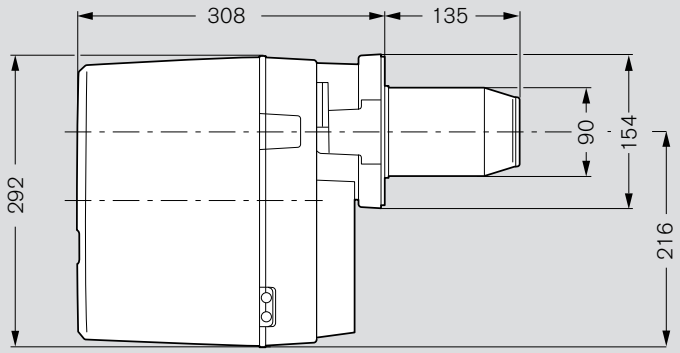


Burner type	Version	Operation	Burner rating	Oil throughput	Power consumption	Order No.
WL5/1-B	Standard	Single-stage	21.5–40 kW	1.8–3.4 kg/h	0.14 kW	241 051 21
WL5/1-B	Standard	Single-stage with actuator	21.5–40 kW	1.8–3.4 kg/h	0.14 kW	241 051 20
WL5/1-B	H	Single-stage with preheating	16.5–40 kW	1.4–3.4 kg/h	0.14 kW	242 051 21
WL5/1-B	H	Single-stage with preheating and actuator	16.5–40 kW	1.4–3.4 kg/h	0.14 kW	242 051 20
WL5/1-B	H-2LN	Single-stage	16.5–37 kW	1.4–3.1 kg/h	0.14 kW	242 051 25
WL5/2-B	Standard	Single-stage with actuator	25.0–55 kW	2.1–4.6 kg/h	0.14 kW	241 051 31
WL5/2-B	Standard	Single-stage with preheating and actuator	25.0–55 kW	2.1–4.6 kg/h	0.14 kW	241 051 30

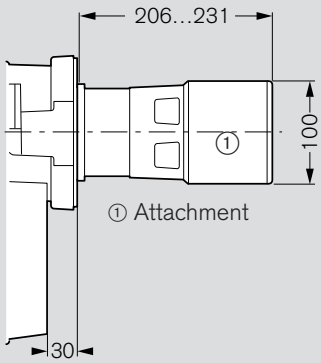
Extra equipment
WL5

Extra equipment	WL5 ...-B	1-B H	1-B H-2LN	Order No.
Integral hours-run counter	●	●	●	240 003 20
Integral oil meter	●	●	●	240 003 45
Solenoid valve and adaptor plug for continuous-run fan or post-purge	●	●	●	240 003 48
Air inlet flange for duct connection, with air pressure switch	●	●	●	240 004 11
Remote reset	●	●	●	240 003 55
Plugged cable for connection of an external solenoid valve	●	●	●	240 003 49
ST18/7 plug connection	●	●	●	240 003 24
30 mm spacer flange	●	●	●	240 003 22
Burner rotated through 180°	●	●	●	240 003 44

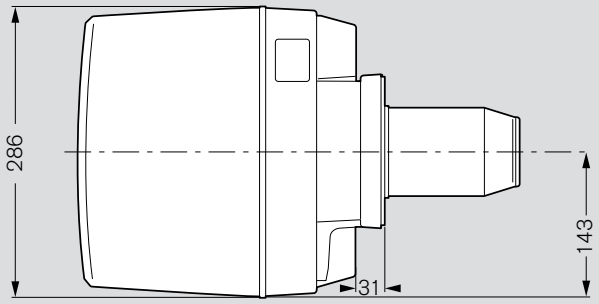
Dimensions

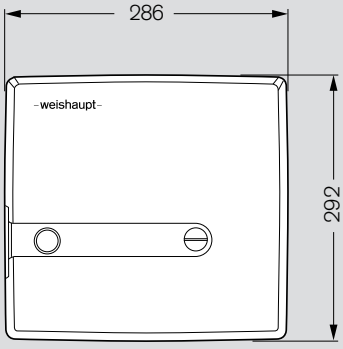


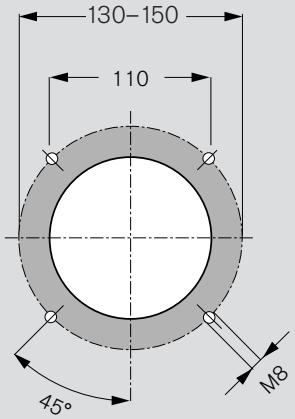
WL5/1-B, WL5/1-B H, WL5/2-B

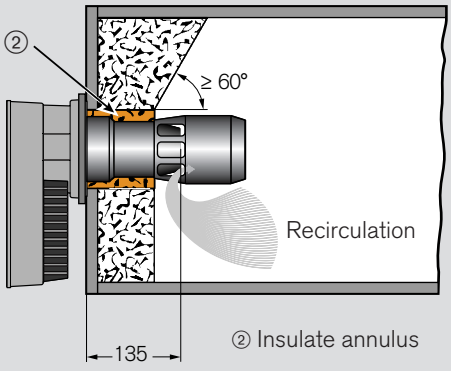


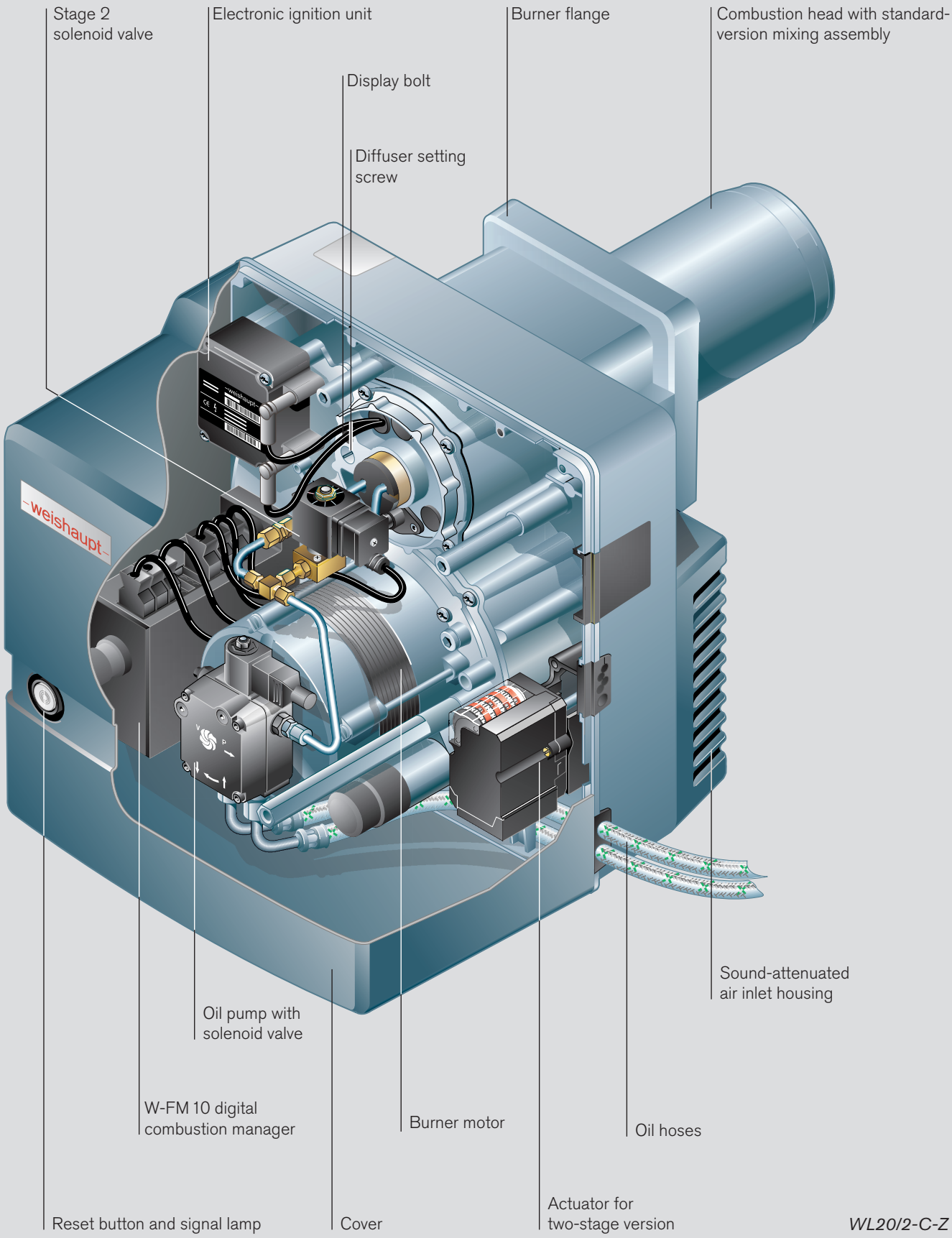
WL5/1-B H-2LN







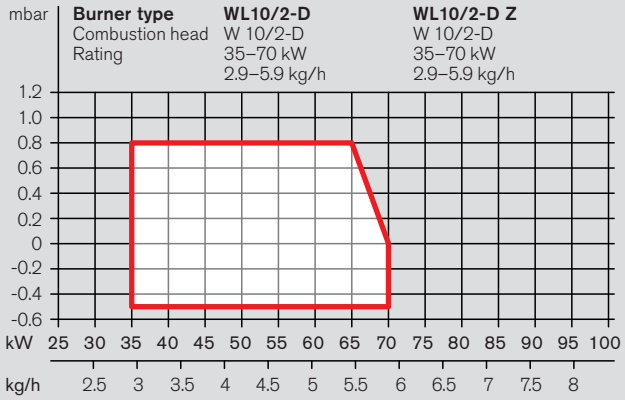



Stage 2
solenoid valve
Electronic ignition unit
Burner flange
Combustion head with standard-
version mixing assembly
Display bolt
Diffuser setting
screw
weishaupt
Sound-attenuated
air inlet housing
Oil pump with
solenoid valve
W-FM 10 digital
combustion manager
Burner motor
Oil hoses
Reset button and signal lamp
Cover
Actuator for
two-stage version

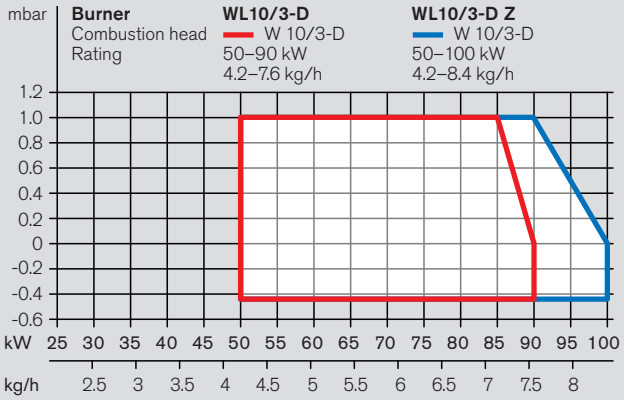
WL20/2-C-Z

Burner selection
WL10 to WL40

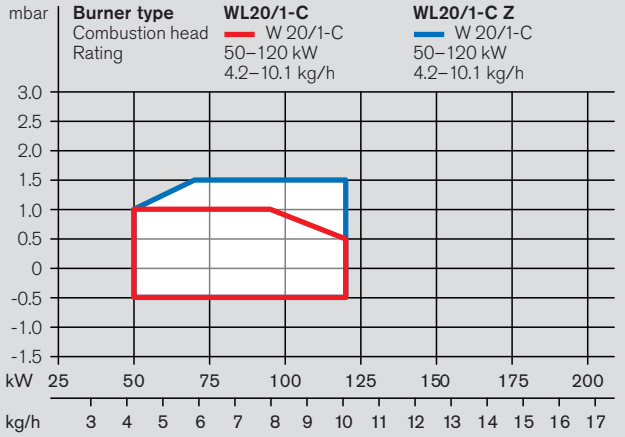
WL10/2 capacity graph



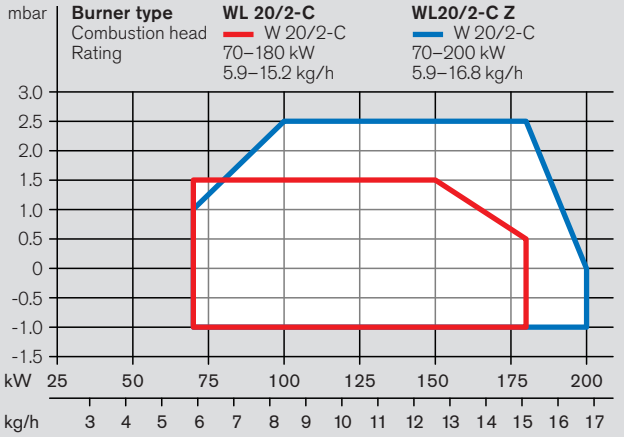
WL10/3 capacity graph



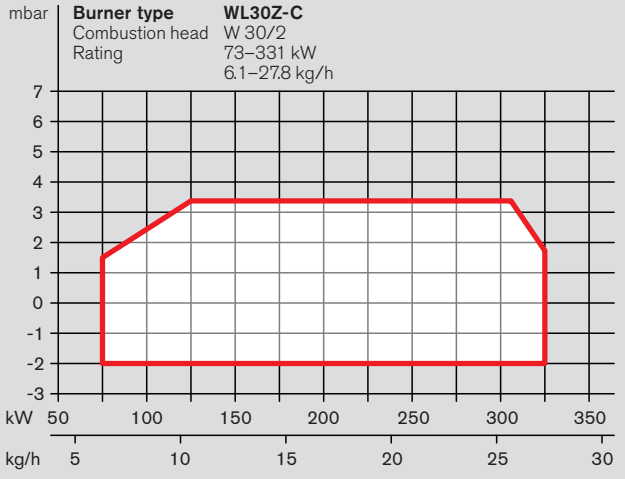
WL20/1 capacity graph



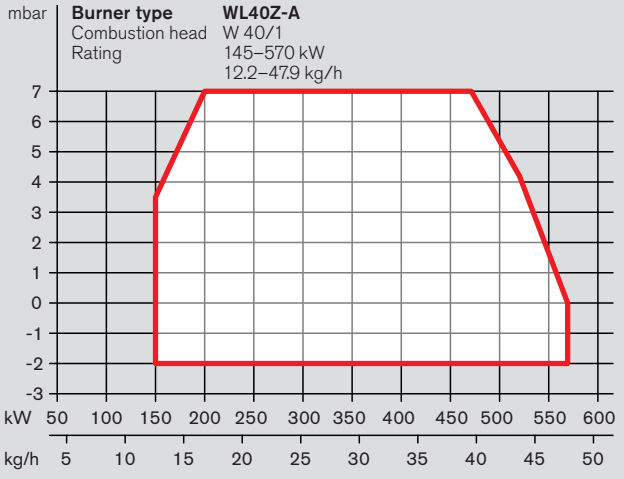
WL20/2 capacity graph



WL30 capacity graph

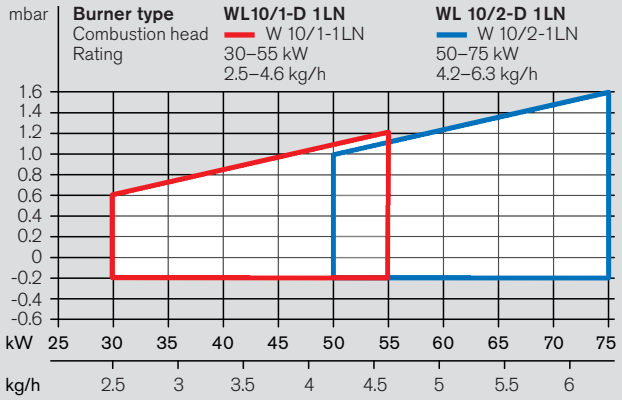


WL40 capacity graph

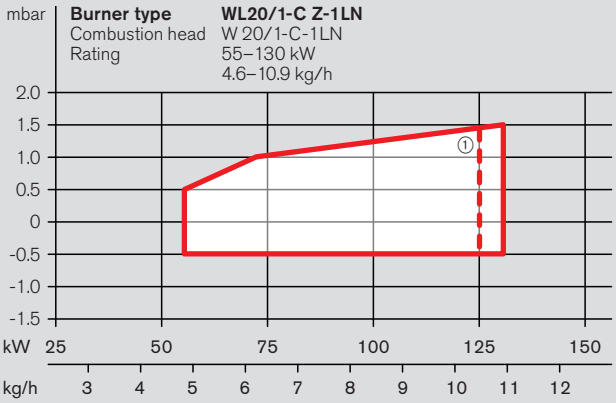


Low-NO_x burner selection WL10 to WL40

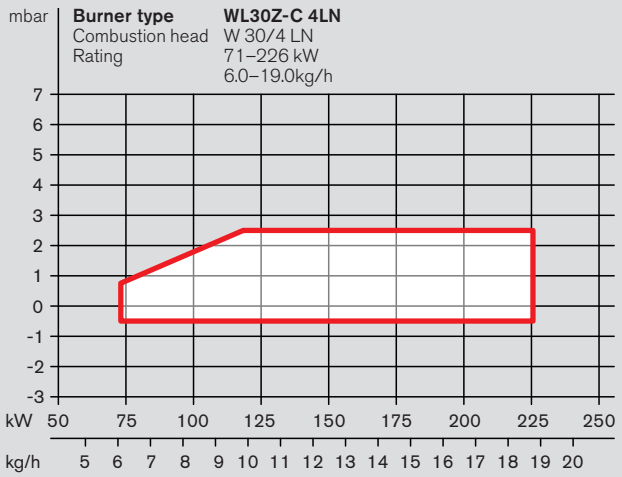
WL10 capacity graph



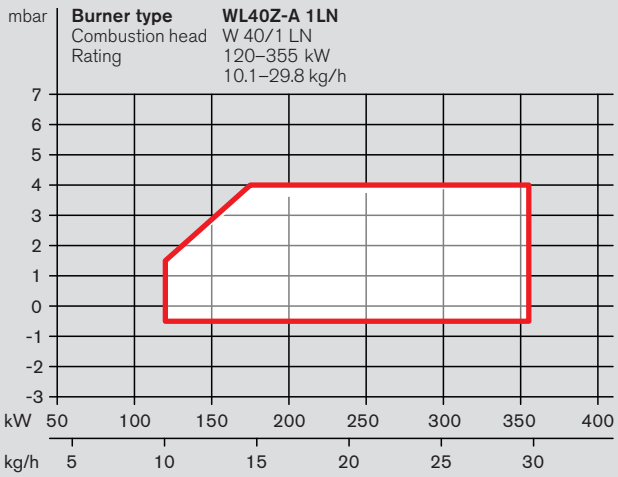
WL20 capacity graph



WL30 capacity graph



WL40 capacity graph



① Limitation for Switzerland:
For use on three-pass heat generators only

Model overview

Burner type	Version	Operation	Burner rating	Oil throughput	Power consumption	Order No.
Standard						
WL10/2-D	Standard	Single-stage	35–70 kW	2.9–5.9 kg/h	0.13 kW	241 111 22
WL10/2-D	Standard	Single-stage with actuator	35–70 kW	2.9–5.9 kg/h	0.13 kW	241 111 20
WL10/2-D	Z	Two-stage with actuator	35–70 kW	2.9–5.9 kg/h	0.13 kW	241 111 23
WL10/3-D	Standard	Single-stage	50–90 kW	4.2–7.6 kg/h	0.13 kW	241 110 31
WL10/3-D	Standard	Single-stage with actuator	50–90 kW	4.2–7.6 kg/h	0.13 kW	241 110 30
WL10/3-D	Z	Two-stage with actuator	50–100 kW	4.2–8.4 kg/h	0.13 kW	241 110 32
WL20/1-C	Standard	Single-stage	50–120 kW	4.2–10.1 kg/h	0.25 kW	241 210 21
WL20/1-C	Standard	Single-stage with actuator	50–120 kW	4.2–10.1 kg/h	0.25 kW	241 210 11
WL20/1-C	Z	Two-stage with actuator	50–120 kW	4.2–10.1 kg/h	0.25 kW	241 213 21
WL20/2-C	Standard	Single-stage	70–180 kW	5.9–15.2 kg/h	0.25 kW	241 210 22
WL20/2-C	Standard	Single-stage with actuator	70–180 kW	5.9–15.2 kg/h	0.25 kW	241 210 12
WL20/2-C	Z	Two-stage with actuator	70–200 kW	5.9–16.8 kg/h	0.25 kW	241 213 22
WL30-C	Z	Two-stage	73–331 kW	6.1–27.8 kg/h	0.42 kW	241 313 21
WL40-A	Z	Two-stage	145–570 kW	12.2–47.9 kg/h	0.62 kW	241 403 21
Low-NO_x						
WL10/1-D	1LN	Single-stage	30–55 kW	2.5–4.6 kg/h	0.13 kW	241 110 15
WL10/2-D	1LN	Single-stage	50–75 kW	4.2–6.3 kg/h	0.13 kW	241 110 25
WL20/1-C	Z-1LN	Two-stage	55–130 kW	4.6–10.9 kg/h	0.25 kW	241 213 25
WL30-Z-C	4LN	Two-stage	71–226 kW	6.0–19.0 kg/h	0.42 kW	241 313 26
WL40-Z-A	1LN	Two-stage	120–355 kW	10.1–29.8 kg/h	0.62 kW	241 403 25

Extra equipment
WL10

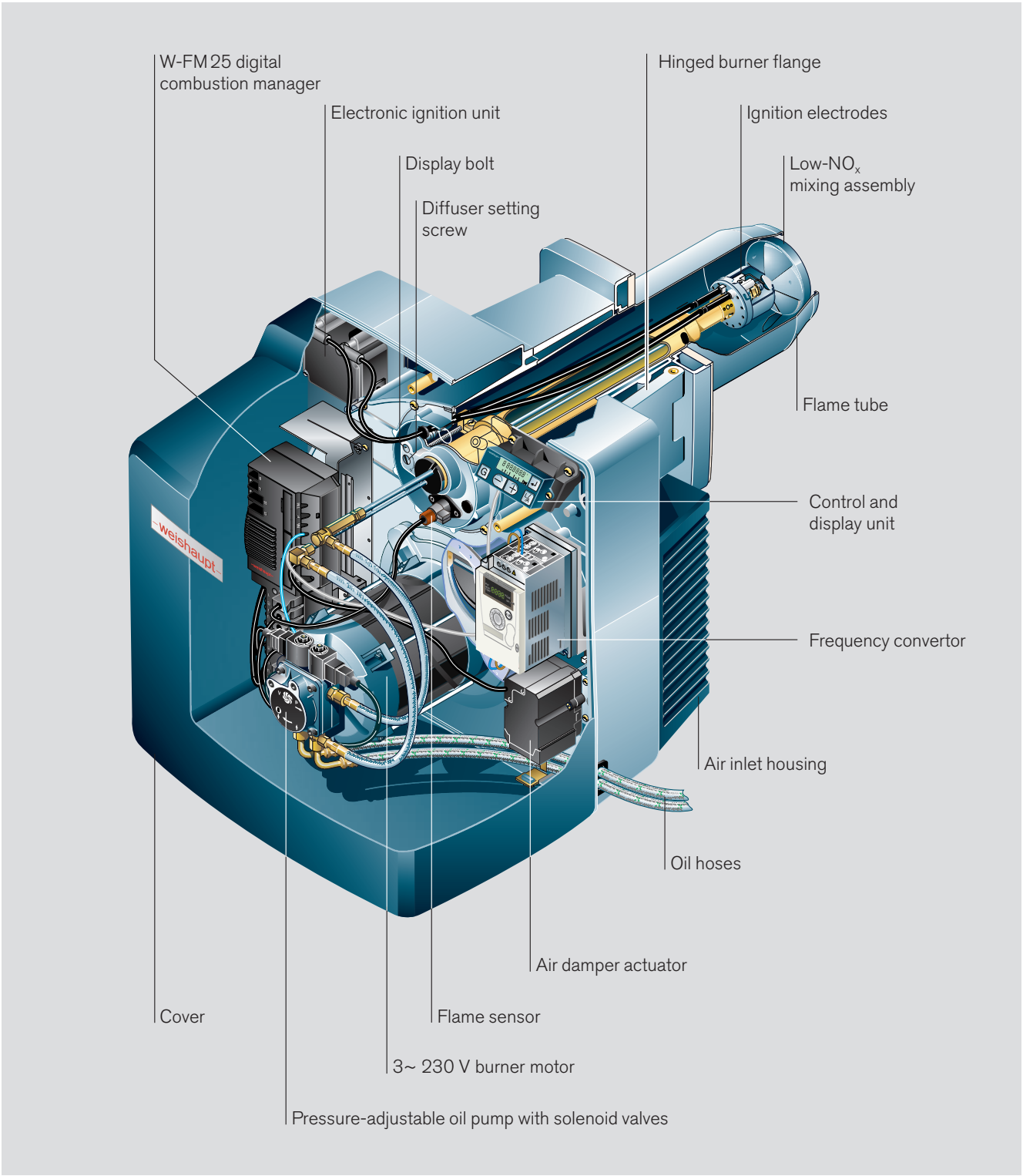
Extra equipment		WL10/2 D	WL10/2 D-Z	WL10/3 D	WL10/3 D-Z	WL10 1-D 1LN	WL10 2-D 1LN	Order No.
Combustion head extension	by 100 mm	●	●	●	●	●	●	240 003 93 240 004 04 240 004 37 240 004 38
	by 200 mm	●	●	●	●			240 003 94 240 004 05
	by 300 mm	●	●	●	●			240 003 95 240 004 06
Integral hours-run counter		●	●	●	●	●	●	240 003 89 240 003 90
Integral oil meter with additional solenoid valve		●	●	●	●	●	●	240 004 18
Solenoid valve and adaptor plug for continuous-run fan or post-purge		●	●	●	●	●	●	240 003 87
Air inlet flange for duct connection, with air pressure switch		●	●	●	●	●	●	240 004 69
Remote reset		●	●	●	●	●	●	240 003 55
Plugged cable for connection of an external solenoid valve		●	●	●	●	●	●	240 003 49
ST18/7 plug connection		●	●	●	●	●	●	240 003 24
30 mm spacer flange		●	●	●	●	●	●	240 003 75
Burner rotated through 180°		●	●	●	●	●	●	240 004 34 240 004 35

Extra equipment WL20

Extra equipment		WL20/1 C	WL20/1 C-Z	WL20/2 C	WL20/2 C-Z	WL20/1 C Z-1LN		Order No.
Combustion head extension	by 100 mm	●	●	●	●	●		240 003 81 240 003 84 240 002 83
	by 200 mm	●	●	●	●			240 003 82 240 003 85
	by 300 mm	●	●	●	●			240 003 83 240 003 86
Integral hours-run counter		●	●	●	●	●		240 003 89 240 003 90
Integral oil meter with additional solenoid valve		●	●	●	●	●		240 003 34
Solenoid valve and adaptor plug for continuous-run fan or post-purge		●	●	●	●	●		240 003 87
Air inlet flange for duct connection, with air pressure switch		●	●	●	●	●		240 004 69
Remote reset		●	●	●	●	●		240 003 55
Plugged cable for connection of an external solenoid valve		●	●	●	●	●		240 003 49
ST18/7 plug connection		●	●	●	●			240 002 15
Slotted 18 mm spacer ring for 150–170 mm PCD (required for boiler ratings < 70 kW)		●	●	●	●	●		240 002 81
30 mm spacer flange		●	●	●	●	●		240 003 75
Burner rotated through 180°		●	●	●	●	●		240 004 08 240 004 09 240 004 10

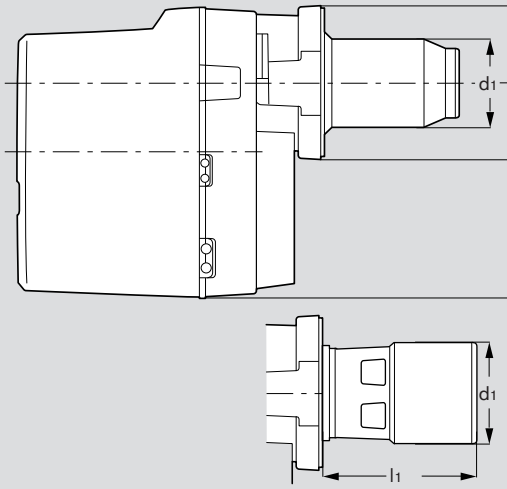
Extra equipment
WL30 and WL40

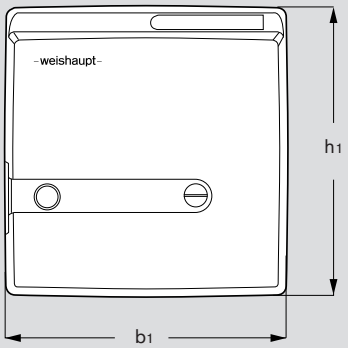
Extra equipment		WL30 Z-C	WL40 Z-A	WL30 Z-C 4LN	WL40 Z-A 1LN	Order No.
Combustion head extension	by 100 mm	●	●	●		240 002 85 240 002 63 240 002 95
	by 200 mm	●				240 003 43
	by 300 mm	●				240 003 73
Note: **Burners with extended combustion heads cannot be hinged open!**						
Integral oil meter		●	●	●	●	240 002 86 240 002 66 240 002 87 240 002 67
Oil hoses, 1500 mm in lieu of 1200 mm		●	●	●	●	240 002 76
Adaptor plug for continuous-run fan or post-purge			●		●	240 002 80
Solenoid valve and adaptor plug for continuous-run fan or post-purge		●		●		240 003 41
Air inlet flange for duct connection, with air pressure switch		●	●	●	●	240 004 99 240 005 00
Remote reset		●	●	●	●	240 005 02
Adaptor for connection of an external solenoid valve		●	●	●	●	240 005 03
LGW air pressure switch and DSF min. oil pressure switch for PED compliance		●	●	●	●	240 003 33
W-FM 25 PO combustion manager for continuous burner firing > 24 h and/or O2 trim		●	●	●	●	240 005 19
EM 3/3 analogue expansion module		●	●	●	●	240 005 07
EM 3/2 field bus expansion module (Profibus/Modbus-RTU)		●	●	●	●	230 011 52
VSD with integral frequency convertor		●	●	●	●	240 005 14 240 005 15
O_2 trim set, comprising O_2 module, O_2 probe, probe flange, and connection cables with plugs		●	●	●	●	230 012 34



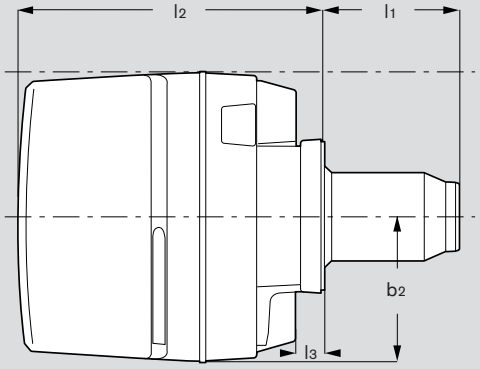
WL30Z-C 4LN with VSD

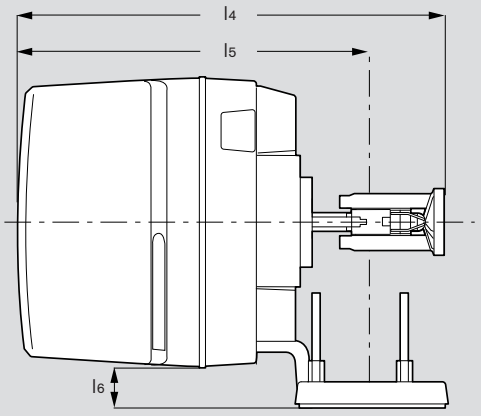
Dimensions

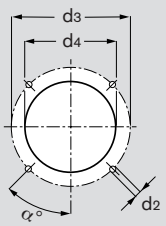


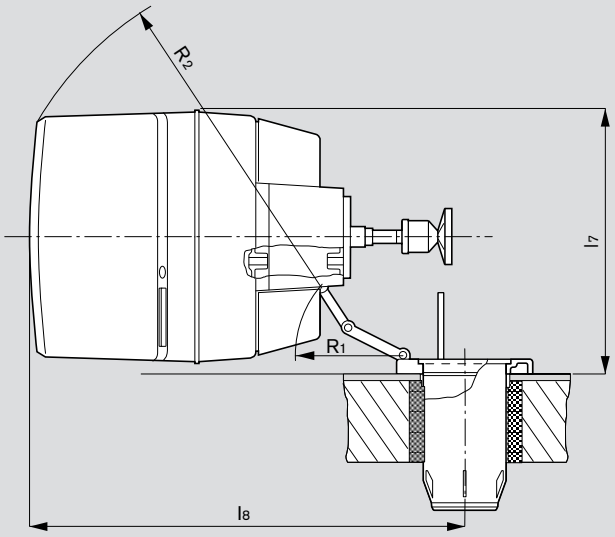


① Attachment, WL10 1LN









Burner type	Dimensions in mm														
	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	b_1	b_2	b_3	h_1	h_2	h_3	h_4
Standard															
WL10/2-D	137	344	32	476	398	51	–	–	330	165	–	353	270	165	–
WL10/3-D	140	344	32	476	398	51	–	–	330	165	–	353	270	165	–
WL20/1-C	140	393	32	525	434	73	–	–	358	179	–	376	285	182	183
WL20/2-C	174	393	32	558	434	73	–	–	358	179	–	376	285	182	183
WL30Z-C	172	480	62	640	600	62	460	600	420	226	100	460	342	–	–
WL40Z-A	242	577	72	801.5	615	72	480	615	450	245	108	480	360	–	–
Low-NO_x															
WL10/1-D 1LN	232–252	344	31.5	476	398	51	–	–	330	165	–	353	270	165	–
WL10/2-D 1LN	232–257	344	31.5	476	398	51	–	–	330	165	–	353	270	165	–
WL20/1-C 1LN	141	393	32	532	434	73	–	–	358	179	–	376	285	182	183
WL30Z-C 4LN	170	480	62	639	600	62	460	600	420	226	100	460	342	–	–
WL40Z-A 1LN	238	577	72	795	615	72	480	615	450	245	108	480	360	–	–

Burner type	Dimensions in mm								
	d_1	d_2	d_3	d_4	d_5	d_6	R_1	R_2	α°
Standard									
WL10/2-D	99	M8	150–170		110	–	–	–	–
WL10/3-D	1108	M8	150–170		110	–	–	–	–
WL20/1-C	108	M8	170		130	123	150	–	–
WL20/2-C	120	M8	170		130	123	150	–	–
WL30Z-C	127	M8	170–186		130	–	–	158	490
WL40Z-A	151	M10	186–200		160	–	–	185	570
Low-NO_x									
WL10/1-D 1LN	100	M8	150–170		110	–	–	–	–
WL10/2-D 1LN	108	M8	150–170		110	–	–	–	–
WL20/1-C 1LN	108	M8	170		130	123	150	–	–
WL30Z-C 4LN	127	M8	170–186		130	–	–	158	490
WL40Z-A 1LN	151	M10	186–200		160	–	–	185	570

Technical data

Burner type	Combust. manager	Motor	Actuator	Frequency convertor	Flame monitoring	Oil pump	Ignition unit	Burner mass ①	Noise emission ②
WL5									
All versions	W-FM05	ECK 02/H-2 230 V, 50 Hz 0.075 kW Cap. 4 µF	None, or optional W-St 02/1	–	Photoresistor QRB4B	ALV 30C 55 l/h at 14 bar	W-ZG01V	11.0 kg	55 dB(A)
WL10									
Vers. 2-D **Vers. 3-D** **Vers. 1-D 1LN** **Vers. 2-D 1LN**	W-FM05	ECK 03/H-2 230 V, 50 Hz 0.13 kW Cap. 3 µF	None, or optional W-St 02/2	–	Photoresistor QRB4B	ALV 30C 55 l/h	W-ZG01V	14.0 kg	62 dB(A)
Vers. 2-D Z **Vers. 3-D Z**	W-FM10		STD 4,5			AT2 V 45C 60 l/h			
WL20									
Vers. 1-C **Vers. 2-C**	W-FM05	ECK 04/A-2 230 V, 50 Hz 0.25 kW Cap. 4 µF	None, or opt. W-St 02/2	–	Photoresistor QRB4A	ALV 30C 55 l/h	W-ZG01V	20.0 kg	68 dB(A)
Vers. 2-C Z	W-FM10		STD 4,5					20.5 kg	
Vers. 1-C Z **Vers. 1-C Z-1LN**					QRB4B	AT2 V 45C 60 l/h			
WL30									
Vers. Z-C	W-FM25	ECK 05/A-2 230 V; 50 Hz 0.38 kW Cap 12 µF	STE 4,5 BO.36/6-01L	–	Photoresistor QRB4A	ALV 65C 75 l/h	W-ZG01V	28.0 kg	72 dB(A)
Vers. Z-C 4LN				–		AT2 V 45C 60 l/h			
With O_2 trim	W-FM25 PO								
With VSD	W-FM25	DK05/A-2 3~ 230 V; 50 Hz 0.42 kW		ATV 12				29.0 kg	
WL40									
Vers. Z-A	W-FM25	ECK 06/A-2 230 V; 50 Hz 0.53 kW Cap. 16 µF	STE 4,5 * BO.36/6-01L	–	Photoresistor QRB4A	ALV 65C 75 l/h	W-ZG01V	37.0 kg	74 dB(A)
Vers. Z-A 1LN				–		AT2 V 55C 75 l/h			
With O_2 trim	W-FM25 PO								
With VSD	W-FM25	DK06/A-2 3~ 230 V; 50 Hz 0.62 kW		ATV 12				38.0 kg	

① All masses are approximate.

② Measured sound pressure level.
Values in the field are subject to variation according to the characteristics of the entire acoustic system.

The Weishaupt Group stands for reliability

Heating system production in Sennwald

Neuberger building automation in Rothenburg o.d.T.

Geothermal drilling with BauGrund Süd

The Weishaupt Group has over 3400 employees and is a market leader for burners, condensing boilers, heat pumps, solar energy, and building automation.

The business, which was founded in 1932, encompasses three companies operating in the fields of energy technology, energy recovery, and energy management.

The core division is Max Weishaupt GmbH, which is located in the south-west German town of Schwendi, and which is where all burners are manufactured. It is also the group's administrative headquarters, and home to the Weishaupt Group's own Research and Development Institute.

Heating systems are manufactured by Weishaupt's sister company, Pyropac, which is located in the Swiss town of Sennwald.

Neuberger building automation, sited in Rothenburg ob der Tauber in Germany, has been a group subsidiary since 1995.

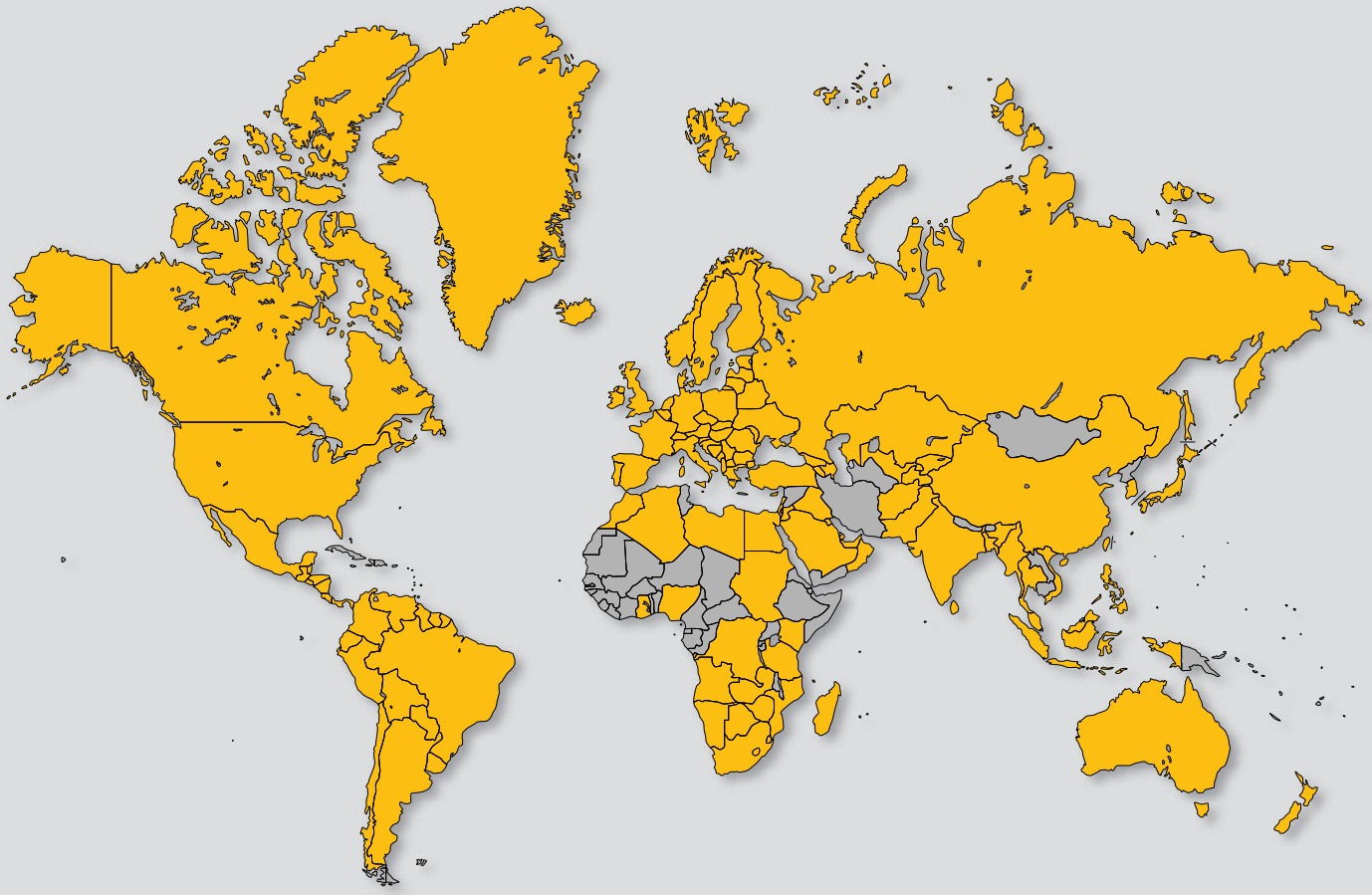
Germany's Bad Wurzach is home to the geothermal engineering company, BauGrund Süd, which has been part of the Weishaupt Group since 2009.

–weishaupt–

Max Weishaupt GmbH
88475 Schwendi
Tel +49 7353 830
Fax +49 7353 83358
www.weishaupt.de

Print No. 83**2190**02, June 2019
Printed in Germany. All rights reserved.

Neachells Lane, Willenhall, WV13 3RG
Tel (01902) 609841



Weishaupt worldwide:

Afghanistan
Algeria
Angola
Argentina
Australia
Austria
Bahrain
Bangladesh
Belarus
Belgium
Belize
Bolivia
Bosnia-Herzegovina
Botswana
Brasil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Croatia
Cyprus
Czechia
Denmark
Ecuador
Egypt
El Salvador
Estonia
Eswatini
Faroe Islands
Finland
France
Germany
Ghana
Greece
Greenland
Guatemala
Guyana
Honduras
Hungary
India
Indonesia
Iraq
Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyzstan
Latvia
Lebanon
Lesotho
Libya
Liechtenstein
Lithuania
Luxembourg
Madagascar
Malaysia
Malta
Mauritius
Mexico
Moldova
Monaco
Montenegro
Morocco
Mozambique
Myanmar
Namibia
Netherlands
New Zealand
Nicaragua
Nigeria
North Macedonia
Norway
Oman
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Rep. of Congo
Romania
Russia
San Marino
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
South Korea
Spain
Sri Lanka
Sudan
Suriname
Sweden
Switzerland
Taiwan
Tajikistan
Tanzania
Thailand
Turkey
UAE
Ukraine
United Kingdom
Uruguay
USA
Uzbekistan
Vatican city
Venezuela
Vietnam
Zambia
Zimbabwe