Burners





nnovation and Quality.

You're in good company with us:











































We're developing **burner solutions** today to meet the needs customers will have tomorrow.

With modern technology, utmost product quality and sustainable solutions, we're the right partner for you when it comes to customized burner solutions. Our innovative ideas and commitment to research and development also guarantee your future competitiveness. As a successful business, we're always setting new standards with our

insistence on top quality, further product development and a high level of added value for our customers. Coupled with our commitment to performance, this approach is surely part of the reason we've led the European market for decades.

Since 1958, we've been setting the standards for burner technology.

As a traditional family-owned company, we've been working on burner technology since 1958. The original cornerstone of our company was the development and production of special burners for cookers, ranges and smokers. Our business is now in its second generation and continues to progress with modern products.

Direct communication with our customers, development of customer-specific solutions and fairness and trustworthiness in our relationships with staff and business partners are important components of our corporate ethos that have shaped our guiding principle: Innovation and Quality. Top quality and complete customer satisfaction are our focus, and we guarantee these values by continuously training our employees and investing in research and development.

We look forward to welcoming you as a customer. Be part of the world of **Herrmann**







Design and Development

Meeting individual **customer needs** is our strength.

With the latest software and hardware, our experienced designers create efficient, economical and future-proof burner solutions for our OEM and wholesale customers.

In this stage, we also advise our customers regarding possible designs for heating chambers and exhaust systems, as well as how equipment can be appropriately combined to achieve the perfect starting behaviour, emissions, flame stability and noise level.

We provide a wide range of modular burners to meet your needs. But we go even further! We aslo create completely new designs for our customers that are suitable for particular boiler situations. Here, our competent and independent engineering company **Supart** stands at the ready.





We meet your specific **burner** needs so your unit is fit for real-world use





In the development phase, our engineers already start making use of our in-house testing lab. This enables them to consider specific results that are relevant to the design at an early stage. As a result, the product can be optimised for maximum efficiency.

Of course, we also provide our customers with a variety of other services:

- · Prototype testing at our certification centre
- · Expert service for long-term on-site contracts
- · Customer-specific installation and operating manuals
- · Development of packaging adapted to the supply chain (single- or multiple-use systems)
- \cdot Tailor-made communications interface for superordinate boiler control
- · Training seminars including relevant documents







Production and Quality

Our **products** are top quality and made in Germany.

At our site in Waiblingen near Stuttgart, we design and produce customized burners and heating systems with maximum precision according to the DIN EN ISO 9001:2015 quality standard.

Our final quality testing is also conducted at the production site. There, each of our finished products undergoes a hot test at one of our test stations.

Functional testing involves inspection of oil-carrying pipes for leaks, observance of flame patterns and examination of electrical parameters. Where issues arise, these are corrected and optimised.

















Research and Innovation

Our **research** ensures your long-term competitiveness

Burners convert the chemical energy locked inside fuel into heat. This is the essence of every fuel-based heating system. To best equip you to meet your future needs, we've been doing research and development in diverse fields over the course of many years. You, too, can use our know-how to your competitive advantage.

Quality and Faultless Operation

We are capable of simulating extreme operating conditions in our laboratory. The knowledge we obtain during this testing process flows directly into our products. As a result, our burners are well-engineered, reliable and durable.

Energy Efficiency

Our modern mixture preparation systems are designed for fuel combustion at low excess air levels. This ensures the heating equipment is highly efficient.

Reducing Emissions

To reduce emissions, we are increasingly integrating blue flame burner mixing equipment into our burners. These systems prevent the formation of soot, vaporising the fuel spray that emanates from the nozzle by mixing in hot flue gases before the flame is reached. Recirculating the flue gases also significantly decreases the formation of NOx gases.

Use of Renewable Energies/Biofuels

Together with our partners, we've been involved in numerous field tests assessing the usability of regenerative biofuels for many years. After evaluating the test results, we've approved numerous regenerative biofuels for our products.

Burner Starting Behaviour

Our burners are equipped with specially-developed blowers featuring extremely high pressure resistance. This makes our burners best suited for fireboxes with high counter pressures.

Mixture Preparation Process for the Smallest Fireboxes

The equipment industry has often built fireboxes smaller than the DIN EN 267 specifications regarding minimum dimensions for heating chambers. This results in an increased thermal load for the mixing equipment and injection system. Unfavourable flow patterns also make it more difficult to stabilise the flame. Consequently, such units require special attention with regard to material selection, the cooling of critical components and the effect of the mixing equipment on the flame's combustion behaviour.

Energy-Saving by EC Motors

To power our combustion air blowers, we use especially energy-efficient EC motors in our two-stage and modular burners. The same applies to the powering of geared pumps in our modulating burners.

We're already working on the sustainable technology of the **future** today.

Modulating Reciprocating Pump

The reciprocating pump's volumetric dosing function enables direct control and detection of the oil mass flow. We've also disconnected the oil circuit ventilation from the dosing function of the pump. For smaller combustion capacities, high volumes of circulating oil are carried through a combination filter/ventilator.

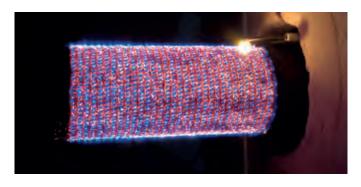
Due to the integrated and generously proportioned gas separator, only 100% gas-free oil reaches the nozzle even when there is massive gas input resulting from leaky supply lines or outgassing oil. This represents a significant advantage compared to the gear pumps currently used.

Burner faults due to gas bubbles in the supply lines — typical of older oil installations — are safely prevented by this new technology. The pump's drive and conveying concept also reduces electric energy consumption.



HLM 35 - Modulating Blue Burner with Reciprocating Pump

- · Modulation range 3:1
- · Volumetric oil dosing
- · Electronic fuel/air mixture
- · Not prone to the formation of air bubbles in the oil supply
- · Intuitive operating and control concept through the display
- · Motor pump unit with integrated drive technology
- · Low electric energy consumption



CATVAP – Catalytic Vaporiser Burner

Together with the Fraunhofer Institute for Solar Energy Systems in Freiburg and another industrial partner, we're developing a premixing line burner for liquid fuels. In a catalytic process arranged before combustion, some of the combustion air is used to trigger a preliminary fuel reaction. The resulting heat inside the catalytic converter completely vaporises the fuel. After the remaining combustion air is mixed in, the whole mixture is combusted using a conventional line burner. As a result, it's possible to employ the equipment platform used for condensing boilers for liquid fuels as well. This is particularly advantageous due to the heating equipment's high modulation range, low emissions, reduced lower performance limit, low noise level and compact construction.

High-Modulating Burners (Oil/Gas) for Compact Fireboxes in Heat Pumps

The massive reduction in CO_2 emissions from buildings is one of the most important goals of climate policy. Our central approach is to significantly reduce specific CO_2 emissions (decarbonisation) from heating technologies. Besides electrically-driven heat pumps, thermally-driven heat pumps are also a sensible alternative, especially for existing buildings.

For large-scale development of the heating market with thermally-driven heat pumps, high feed temperatures (>50°C) are just as important as the quick loading of hot water tanks. According to the present state of development, such heat pumps can achieve coefficients of performance totalling >1.5 in existing buildings.

To achieve this goal, we have been part of a research project together with the Fraunhofer Institute for Solar Energy Systems ISE in Freiburg and other industrial partners. In this field, we are also cooperating directly with heat pump providers.

Product Range

Oil Burners				<u>.</u>			_			
Model	Burner performance	Oil flow	Regulation	Available external air intake adapter	Preheating	High blower pressure	Flame control	Power of motor	Reduced pollutant	Installation horizontal/ vertical
HLM 35 G	8 - 36 kW	0,7 - 3,0 kg/h	modulating	50 mm	yes	torque- controlled	flame detector	90 W	yes	h/v
HL 40 E-S	16 - 35 kW	1,3 - 3,0 kg/h	single-stage	50 / 80 mm	yes	yes	photo-re- sistor	90 W	yes	h/v
HLZ 45 A/BV	10 - 90 kW	0,8 - 7,6 kg/h	two-stage	50 mm	yes	torque- controlled	flame detector	90 W	yes	h/v
HL 60 A/B	16 - 65 kW	1,3 - 5,5 kg/h	single-stage	50 / 80 mm	possible	yes	photo-re- sistor	90 W	no	h/v
HL 60 E/F-S	16 - 65 kW	1,3 - 5,5 kg/h	single-stage	50 / 80 mm	yes	yes	photo-re- sistor	90 W	yes	h/v
HL 60 G/I/K-S	12 - 32 kW	1,0 - 2,7 kg/h	single-stage	50 / 80 mm	yes	yes	flame detector	180 W	yes	h/v
HL 60 N/P-S	31 - 45 kW	2,6 - 3,8 kg/h	single-stage	50 / 80 mm	yes	yes	flame detector	180 W	yes	h/v
HL/Z 120 A-S/B	47 - 140 kW	4,0 - 12,0 kg/h	single / two-stage	none	yes	yes	photo-re- sistor	180 W	no	h/v
HL 120 C/D/E-S	30 - 60 kW	2,5 - 5,1 kg/h	single-stage	none	yes	yes	flame detector	180 W	yes	h/v
HL 85 A/B	16 - 65 kW	1,3 - 5,5 kg/h	single-stage	none	yes	no	photo-re- sistor	180 W	no	h/v

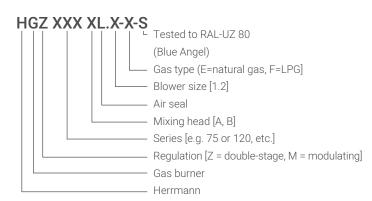
Gas Burner	Burner performance	Gas connection	Regulation	Min. gas flow pressure	Gas type	Power of motor	High blower pressure	Available external air intake adapter
HG/Z 120 A-S	50 - 120 kW	R 3/4	single / two-stage	20 hPa	natural gas	180 W	yes	no
HG 75 A-E/B-E	23 - 90 kW	R 1/2, R 3/4	single-stage	20 hPa	natural gas	180 W	no	no
HG 75 C-F/D-F	23 - 90 kW	R 1/2, R 3/4	single-stage	50 hPa	liquid gas	180 W	no	no
HG 75 C-F/D-F	23 - 90 kW	R 1/2, R 3/4	single-stage	50 hPa	liquid gas	180 W	no	no

Model Code

Oil Burners

HLZ XXX XLV.X-S (Blue Angel) Size of blower [1.2] Oil preheating Air seal Mixing head [A, B, C, D, E, F, G, I, K, N, P] Series [e.g. 40 or 120, etc.] Regulation [Z = double-stage, M = modulating] Light oil burner Herrmann

Gas Burners



HLM 35 GOil Burner



Horizontal installation



- Modulating operating mode
- Blue flame burner
- Low NOx version
- Modulating motor pump unit
- Automated oil-firing with communications interface
- Torque-controllable high-power blower (HRG 134, RG 148)

Vertical installation



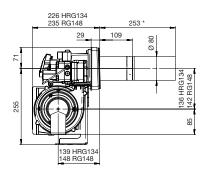
- Flame detector for flame monitoring
- Rated voltage 230V~50Hz

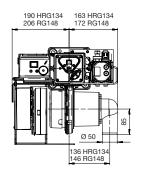
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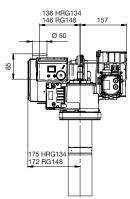


Technical Data

Horizontal installation





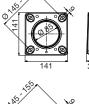


137 HRG134 145 RG148 85	136 HRC 142 RG1	48	127	234
<u>, .</u>	220 HRG134 236 RG148	-	Ø 80,0	255 *

all figures in mm | *other lengths on request

Vertical installation

Model	Oil flow	Burner performance	Regulation
HLM 35 AV 15 G1 G1	0,5 - 1,3 kg/h	6 -15 kW	modulating
HLM 35 AV 16 G1 G1	0,7 - 1,6 kg/h	8 - 19 kW	modulating
HLM 35 AV 17 G1 G1	0,9 - 2,1 kg/h	10 - 25 kW	modulating
HLM 35 AV 19 G1 G1	1,0 - 2,2 kg/h	12 - 27 kW	modulating
HLM 35 AV 22 G1 G1	1,5 - 3,4 kg/h	18 - 40 kW	modulating
HLM 35 AV 24 G2 G1	1,6 - 3,8 kg/h	19 - 45 kW	modulating
HLM 35 AV 24 G2 G1	1,8 - 4,3 kg/h	21 - 51 kW	modulating





HL 40 E-S

Oil Burner









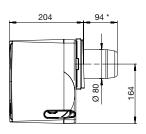


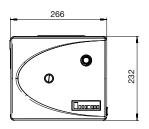


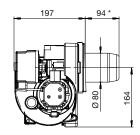
- Low NOx version
- Microcontroller-regulated automatic oil firing
- Automatic air shut-off valve
- High pressure blower
- LE system to reduce start and stop emissions
- Electronic ignition unit

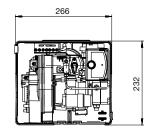
- Photo-resistor for flame monitoring
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 31.5 x 28.5 x 38.0 cm
- Transport weight 10.5 kg

Technical Data

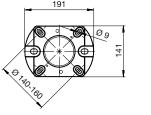








Model	Oil flow	Burner performance	Regulation
HL 40 ELV-S	1,3 - 3,2 kg/h	16 - 38 kW	single-stage



HLZ 45 A/BV

Oil Burner



Horizontal installation





- Two-stage operating mode
- Blue flame burner
- Low NOx version
- Automated oil-firing with communications interface
- Flame detector for flame monitoring
- Torque-controllable high-power blower (HRG 134, RG 148)

Vertical installation



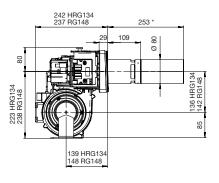


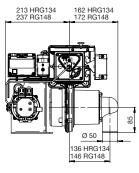
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 44.0 x 37.5 x 49.0 cm (horizontal installation)
- Package dimensions (LxWxH): 40.0 x 40.0 x 46.5 cm (vertical installation)
- Transport weight 13.5 kg (horizontal installation)
- Transport weight 13.0 kg (vertical installation)

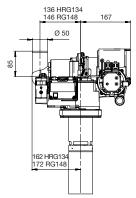
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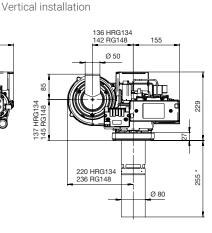
all figures in mm | *other lengths on request

Horizontal installation









Model	Oil flow	Burner performance	Regulation
HLZ 45 AV 17 G1	0,8 - 1,9 kg/h	10 - 22 kW	two-stage
HLZ 45 AV 19 G1	1,2 - 2,5 kg/h	14 - 30 kW	two-stage
HLZ 45 AV 22 G1	1,7 - 3,4 kg/h	20 - 40 kW	two-stage
HLZ 45 AV 24 G1	2,2 - 3,5 kg/h	26 - 42 kW	two-stage
HLZ 45 AV 24 G2	2,3 - 4,7 kg/h	27 - 60 kW	two-stage
HLZ 45 BV 27 G2	4,0 - 6,9 kg/h	35 - 66 kW	two-stage
HLZ 45 BV 31 G2	4,0 - 7,6 kg/h	48 - 90 kW	two-stage





HL 60 A/B

Oil Burner











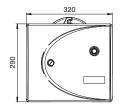


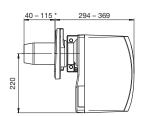
- Automatic air shut-off valve
- Electronic ignition unit
- High pressure blower
- Microcontroller-regulated automatic oil firing
- Photo-resistor for flame monitoring
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 37.0 x 35.0 x 48.5 cm

• Transport weight: 13.5 kg

Technical Data

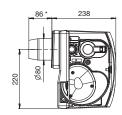
Sliding flange







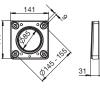
Unit flange



Model	Oil flow	Burner performance	Regulation
HL 60 AL.2	1,3 - 4,5 kg/h	16 - 53 kW	single-stage
HL 60 ALV.2	1,3 - 4,5 kg/h	16 - 53 kW	single-stage
HL 60 BL.2	3,1 - 5,5 kg/h	37 - 65 kW	single-stage
HL 60 BLV.2	3,1 - 5,5 kg/h	37 - 65 kW	single-stage







HL 60 E/F-S

Oil Burner









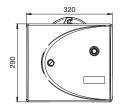


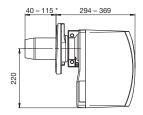


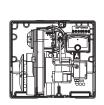
- Microcontroller-regulated automatic oil firing
- Automatic air shut-off valve
- High pressure blower
- Electronic ignition unit
- LE system to reduce start and stop emissions
- Photo-resistor for flame monitoring
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 37.0 x 35.0 x 48.5 cm
- Transport weight: 13.5 kg

Technical Data

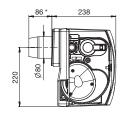
Sliding flange







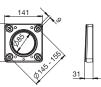
Unit flange



Model	Oil flow	Burner performance	Regulation
HL 60 ELV.2-S	1,3 - 3,5 kg/h	16 - 42 kW	single-stage
HL 60 FLV.2-S	3,0 - 5,5 kg/h	35 - 65 kW	single-stage







HL 60 G/I/K-S

Oil Burner











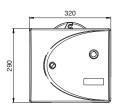


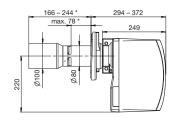
- Blue flame burner
- Low NOx version
- Electronic ignition unit
- High pressure blower
- Flame detector for flame monitoring
- LE system to reduce start and stop emissions
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 37.0 x 35.0 x 48.5 cm
- Transport weight: 14.5 kg

Technical Data

all figures in mm | *other lengths on request

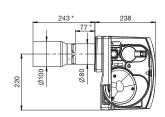
Sliding flange





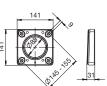


Unit flange



Model	Oil flow	Burner performance	Regulation
HL 60 GLV.2-S	1,0 - 1,9 kg/h	12 - 23 kW	single-stage
HL 60 ILV.2-S	1,7 - 2,5 kg/h	20 - 30 kW	single-stage
HL 60 KLV.2-S	2,2 - 2,7 kg/h	25 - 32 kW	single-stage





HL 60 N/P-S

Oil Burner











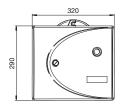


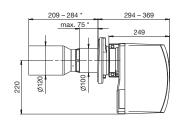
- Blue flame burner
- Low NOx version
- Electronic ignition unit
- High pressure blower
- Flame detector for flame monitoring
- LE system to reduce start and stop emissions
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 37.0 x 35.0 x 48.5 cm
- Transport weight: 14.5 kg

Technical Data

all figures in mm | *other lengths on request

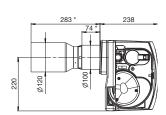
Sliding flange







Unit flange



Model	Oil flow	Burner performance	Regulation
HL 60 NLV.2-S	2,6 - 3,2 kg/h	31 - 38 kW	single-stage
HL 60 PLV.2-S	3,1 - 3,8 kg/h	37 - 45 kW	single-stage





HL/Z 120 A-S/B

Oil Burner









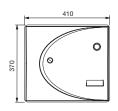


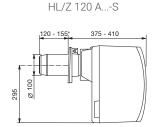


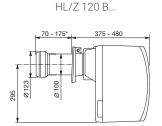
- HL/Z 120 A-S in low NOx version
- HLZ with automatic motor-driven air shut-off valve
- HL with automatic motor-driven air shut-off valve (optional)
- High pressure blower

- Electronic ignition unit
- Photo-resistor for flame monitoring
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 42.5 x 48.5 x 59.5cm
- Transport weight: 21.5 kg (HLZ 120 A-S/B)
- Transport weight: 20.5 kg (HL 120 A-S/B)

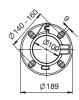
Technical Data







Model	Oil flow	Burner performance	Regulation
HL 120 A-S	4,0 - 10,0 kg/h	47 - 120 kW	single-stage
HL 120 AV-S	4,0 - 10,0 kg/h	47 - 120 kW	single-stage
HL 120 B	6,0 - 12,0 kg/h	71 - 140 kW	single-stage
HL 120 BV	6,0 - 12,0 kg/h	71 - 140 kW	single-stage
HLZ 120 ALV-S	4,0 - 10,0 kg/h	47 - 120 kW	two-stage
HLZ 120 BLV	6,0 - 12,0 kg/h	71 - 140 kW	two-stage





HL 120 C/D/E-S

Oil Burner







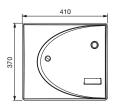


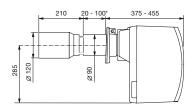


- Blue flame burner
- Low NOx version
- Automatic motor-driven air shut-off valve (optional)
- High pressure blower
- Electronic ignition unit
- Flame detector for flame monitoring

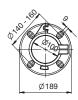
- LE system to reduce start and stop emissions
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 42.5 x 48.5 x 59.5 cm
- Transport weight: 21.0 kg

Technical Data





Model	Oil flow	Burner performance	Regulation
HL 120 CLV-S	2,5 - 3,6 kg/h	30 - 43 kW	single-stage
HL 120 DLV-S	3,3 - 4,5 kg/h	39 - 53 kW	single-stage
HL 120 ELV-S	4,3 - 5,1 kg/h	51 - 60 kW	single-stage



HL 85 A/B Oil Burner



Standard installation

Installation rotated 180°



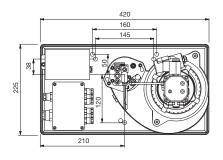


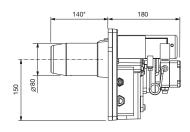


- Special burner for heating of butcher's, cooking and smoker units
- 180°-rotated installation position can be supplied
- Extremely robust construction
- Automatic oil firing for installation into control cabinets is supplied separately
- Photo-resistor for flame monitoring

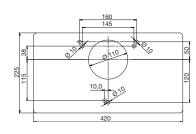
- Rated voltage 230V~50Hz
- Rated voltage 230V~60Hz
- Package dimensions (LxWxH): 29.0 x 36.0 x 46.0 cm
- Transport weight: 13.0 kg

Technical Data





Model	Oil flow	Burner performance	Regulation
HL 85 A	1,3 - 3,6 kg/h	16 - 43 kW	single-stage
HL 85 AV	1,3 - 3,6 kg/h	16 - 43 kW	single-stage
HL 85 B	3,0 - 5,5 kg/h	35 - 65 kW	single-stage
HL 85 BV	3,0 - 5,5 kg/h	35 - 65 kW	single-stage



HG/Z 120 A-S

Gas Burner



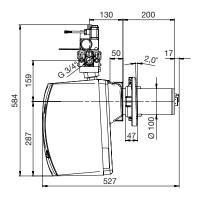


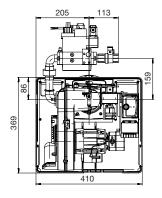




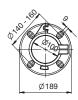
- Burner in single-stage or two-stage version
- Low NOx version
- Gas-air mixture control
- Microcontroller-regulated automatic gas firing
- High pressure blower
- HGZ with automatic motor-driven air shut-off valve
- HL with automatic motor-driven air shut-off valve (optional)
- Ionisation electrode for flame monitoring
- Rated voltage 230V~50Hz
- Package dimensions (LxWxH): 42.5 x 48.5 x 59.5 cm
- Transport weight: 27.5 kg

Technical Data all figures in mm





Model	Gas type	Min. gas flow pressure	Gas connection	Buner performance	Regulation
HG 120 AL-E-S	natural gas	20 hPa	R 3/4	50 - 120 kW	single-stage
HGZ 120 AL-E-S	natural gas	20 hPa	R 3/4	50 - 120 kW	two-stage



HG 75Gas Burner



Standard installation

Installation rotated 180°







- Special burner for heating of butcher's, cooking and smoker units
- 180°-rotated installation position can be supplied
- Extremely robust construction
- Ionisation electrode for flame monitoring
- Automatic gas firing for installation into control cabinets is supplied separately
- Rated voltage 230V~50Hz
- Rated voltage 230V~60Hz
- Package dimensions (LxWxH): 28.0 x 36.0 x 47.0 cm

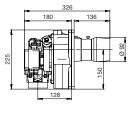
HG75 B/D

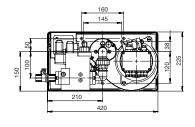
• Transport weight: 15.5 kg

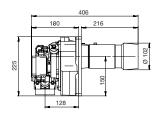
Technical Data all figures in mm

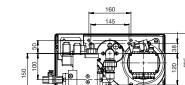
r common Data



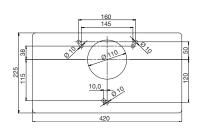








Model	Gas type	Min. gas flow pressure	Gas connection	Buner performance	Regulation
HG 75 A-E	natural gas	20 hPa	R 1/2	23 - 60 kW	single-stage
HG 75 C-F	liquid gas	50 hPa	R 1/2	23 - 60 kW	single-stage
HG 75 B-E	natural gas	20 hPa	R 3/4	60 - 90 kW	single-stage
HG 75 D-F	liquid gas	50 hPa	R 3/4	60 - 90 kW	single-stage

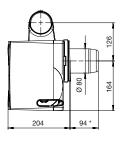


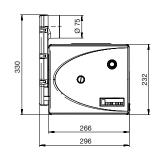
Options / Variants

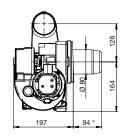


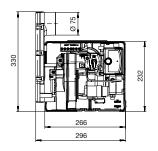
External Air Intake/Noise-Reducing Adapter

Oil Burner HL 40 E-S / 75 mm connector available



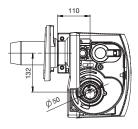




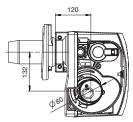


Oil Burner HL 60 / 50 or 80 mm connector available

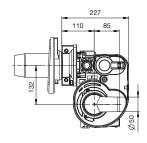
50 mm, straight



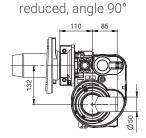
80 mm, straight



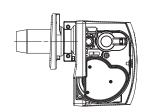
50 mm, angle 90°



50 mm, noise-



Noise-reducing adapter without external air intake



Our technical support team is available to answer any questions you may have.

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