CATALOGUE 2012

LIGHT OIL BURNERS

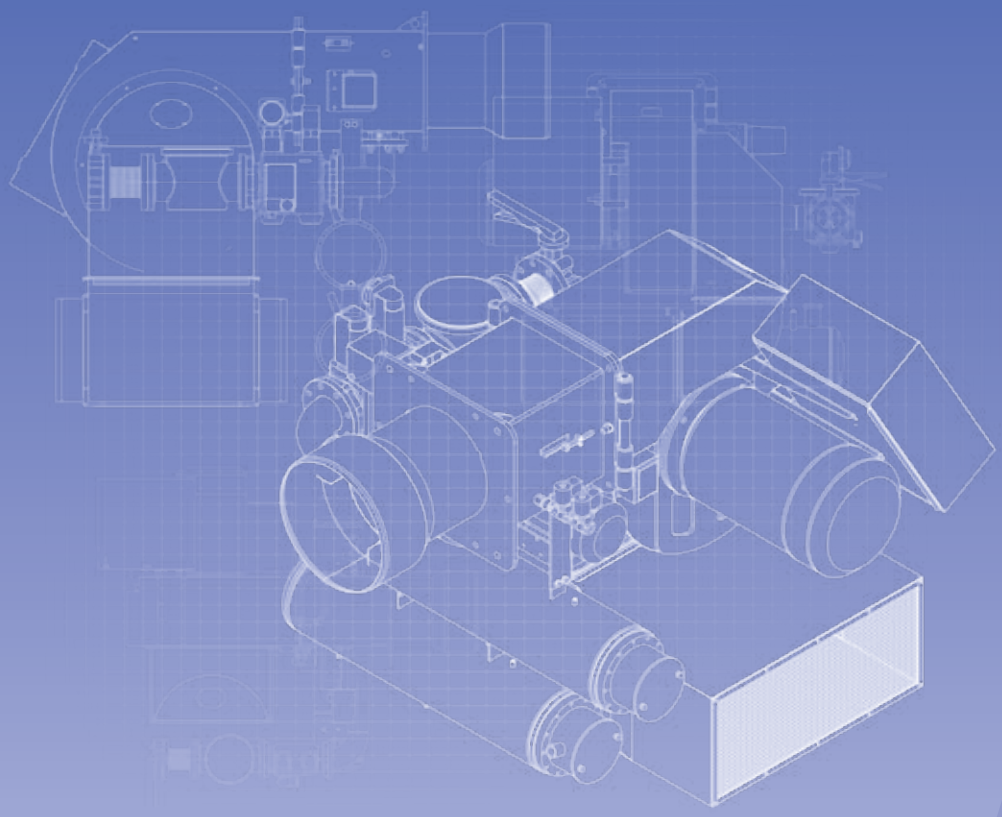
GAS/LIGHT OIL BURNERS

HEAVY OIL BURNERS

GAS/HEAVY OIL BURNERS

GAS BURNERS

DUOBLOCK BURNERS



A complete range of burners for all fuels

MONOBLOCK 20 - 17000 kW

DUOBLOCK 350 - 25000 kW

Customised solutions for all types of application

Ecoflam

www.ecoflam-burners.com

COMPANY PROFILE

Ecoflam Bruciatori S.p.A. is a specialist in combustion technologies and a worldwide brand recognised for the reliability of its burners, the competence of its technical team and the wide offer of customised solutions for heating and industry applications.

Ecoflam was established in 1973 in Castelfranco Veneto, near Venice in the North East of Italy.
Throughout the time Ecoflam has continued to develop products with constant devotion and determination addressing: Technological Research, Ecology, Energy Saving and Safety.

Ecoflam Bruciatori S.p.A. since 2005 has been incorporated into the Burners Division of Ariston Thermo Group and today takes advantage of the group synergies and offers a full range of blown air pressure jet burners for all fuels in monoblock and duoblock version up to 25 MW.

Ecoflam burners guarantee high efficiency and reliable operation combined with functional features that reduce installation time and maintenance. Manufacturing is carried out in the factory of Resana (Treviso - Italy) in accordance with ISO 9001:2008 and products are distributed worldwide thanks to its network of partners.

BURNER APPLICATIONS

- Heating applications
- Agriculture applications
- Metal industry applications
- Food industry applications
- Asphalt plants and building industry applications
- Textile, glass and ceramic industry applications
- Incinerators applications and waste industry
- Chemical and petrolchemical industry applications
- Modernisation of plants and other applications
- Wood and solid fuel applications

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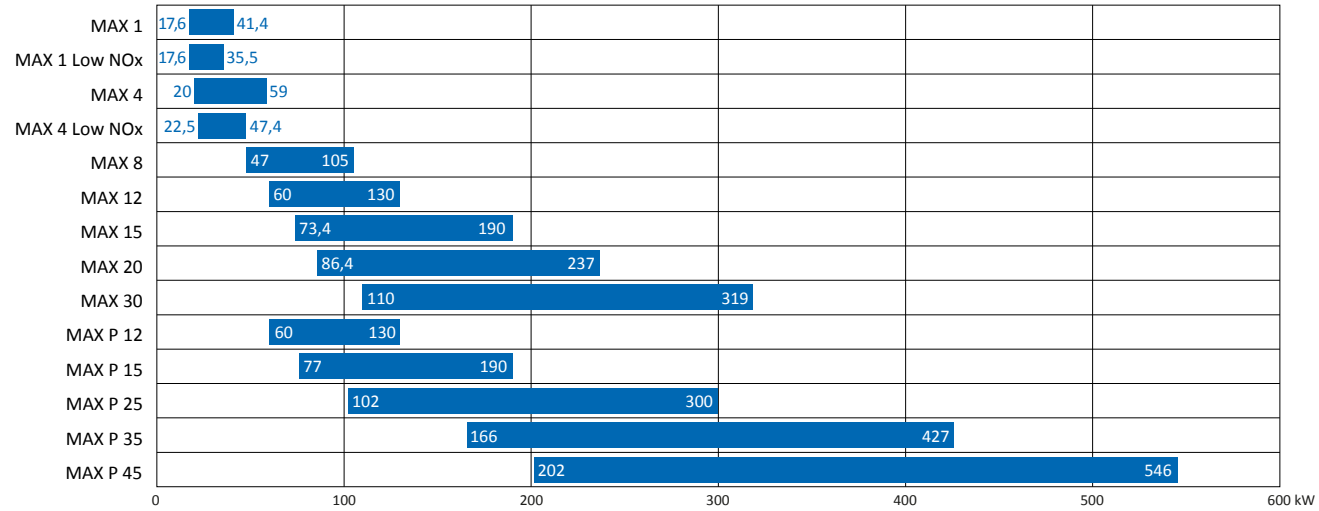
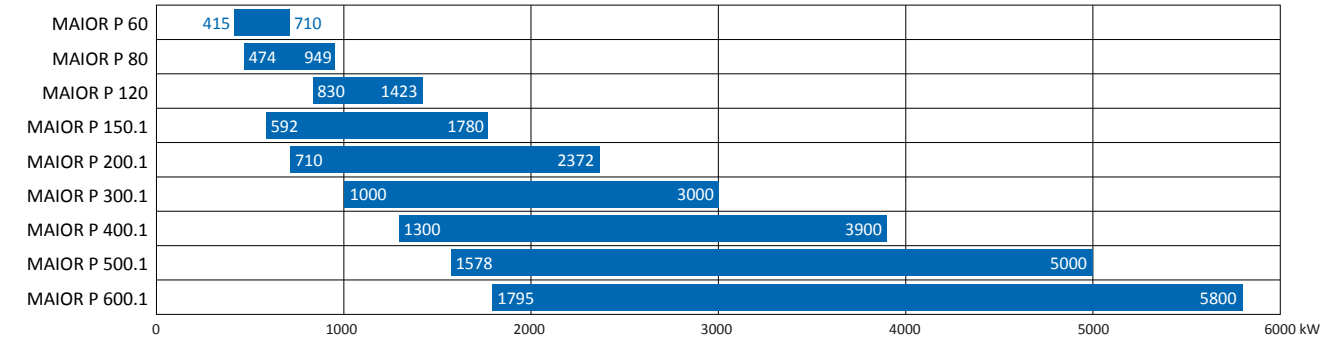
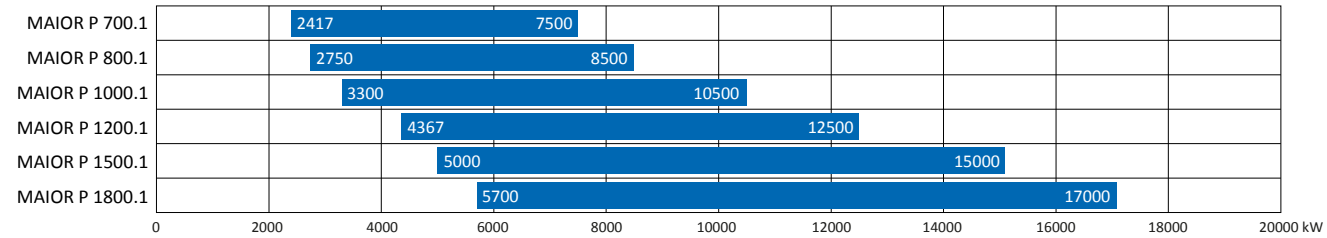
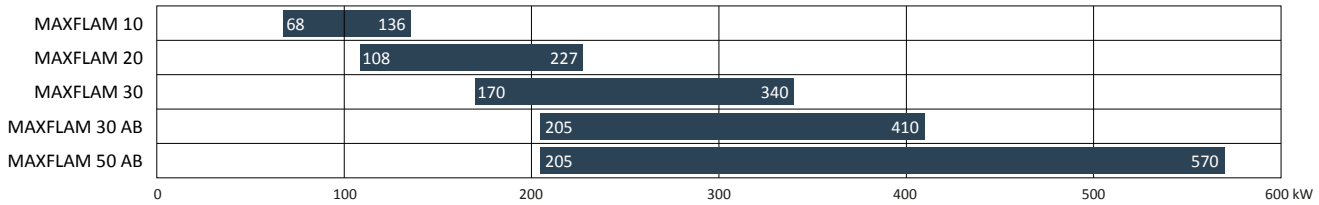
LIGHT OIL RANGE

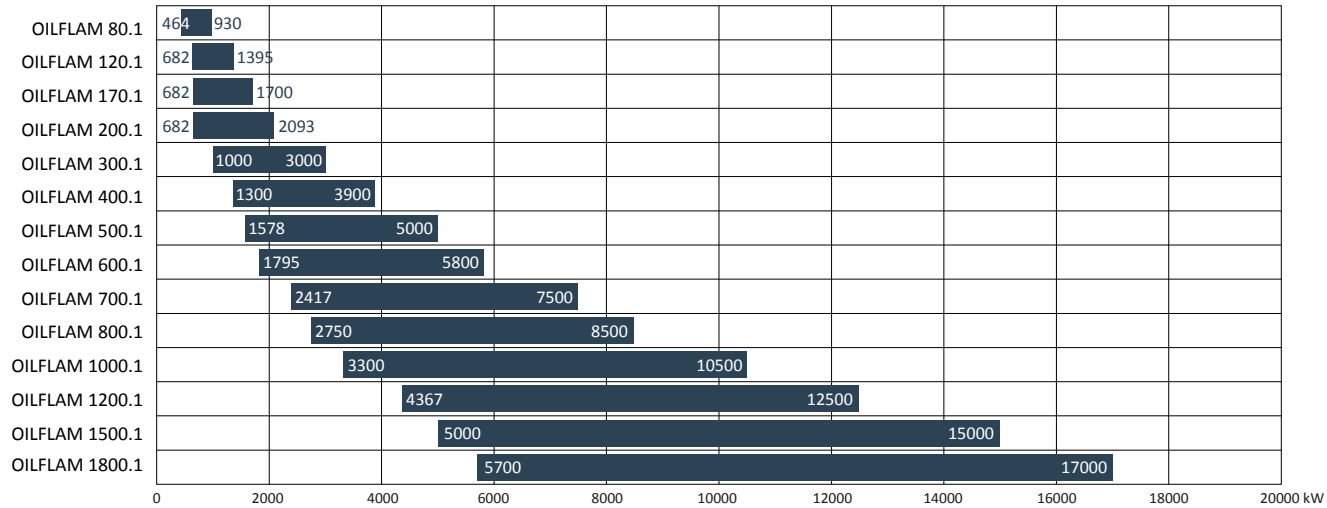




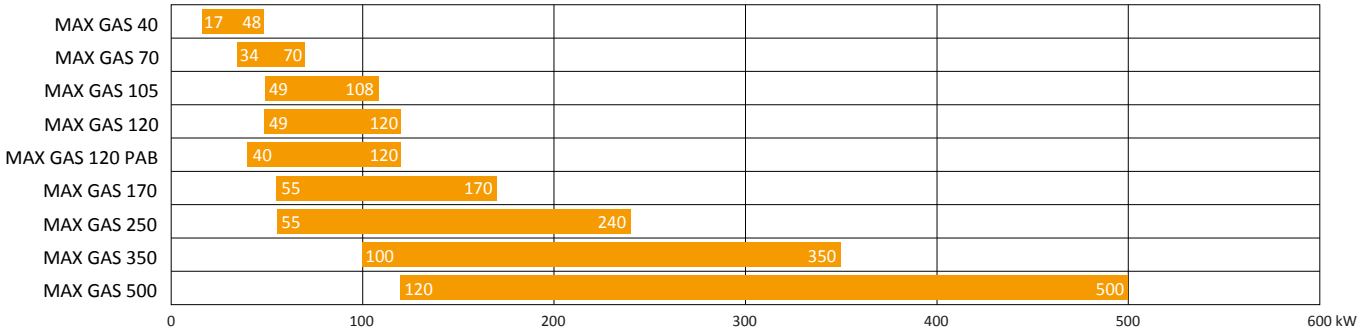


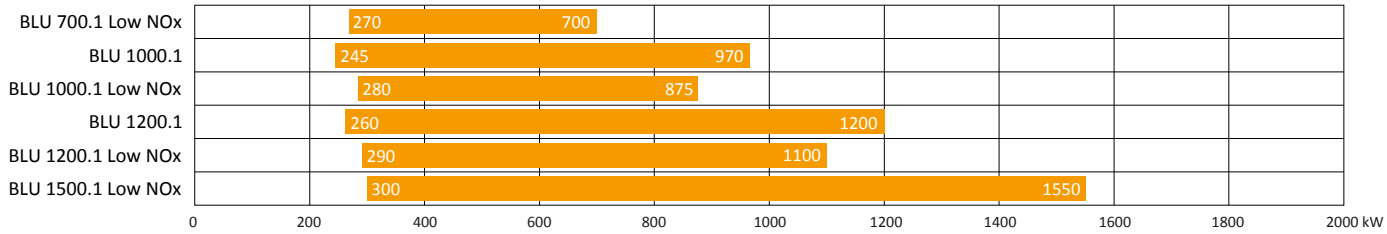
HEAVY OIL RANGE

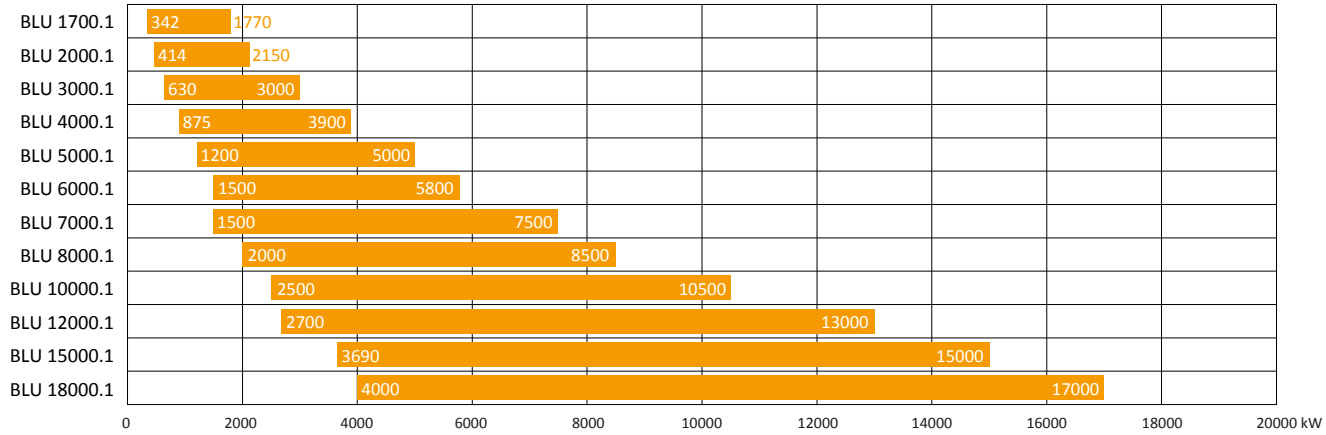




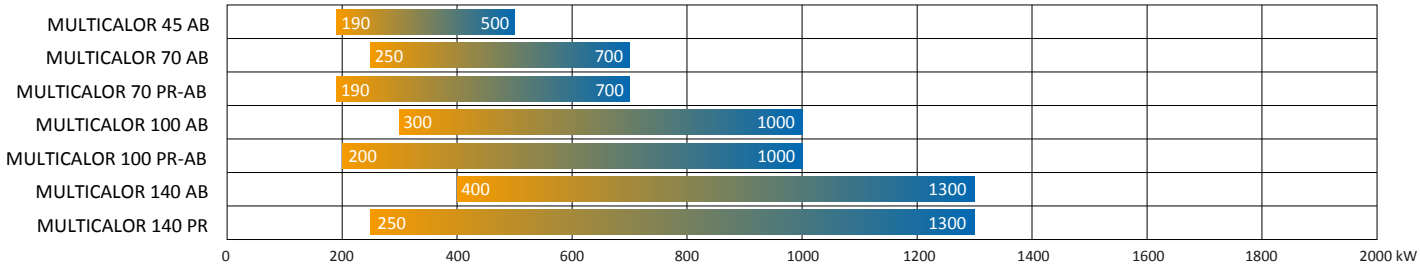
GAS RANGE

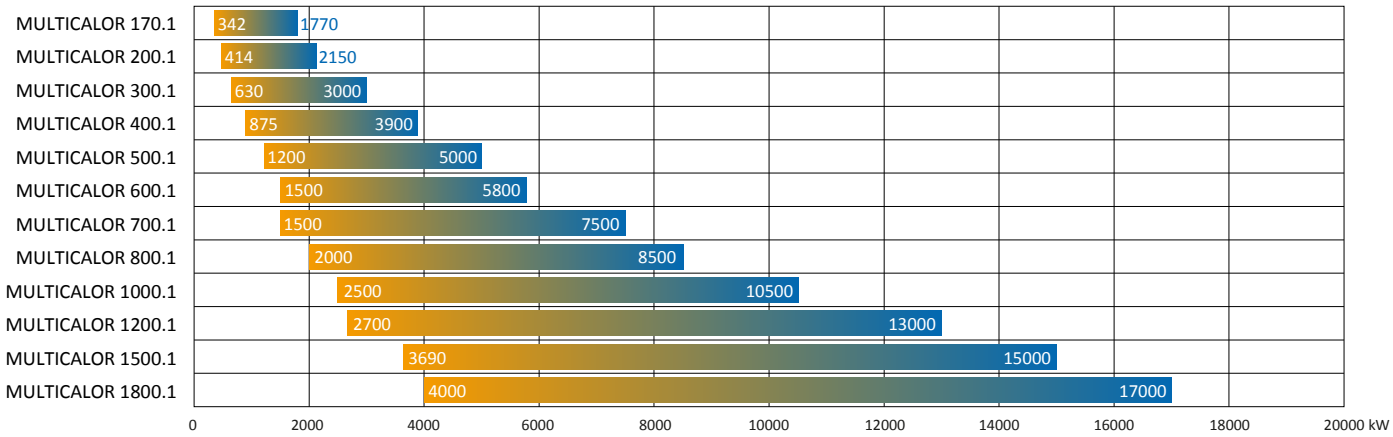




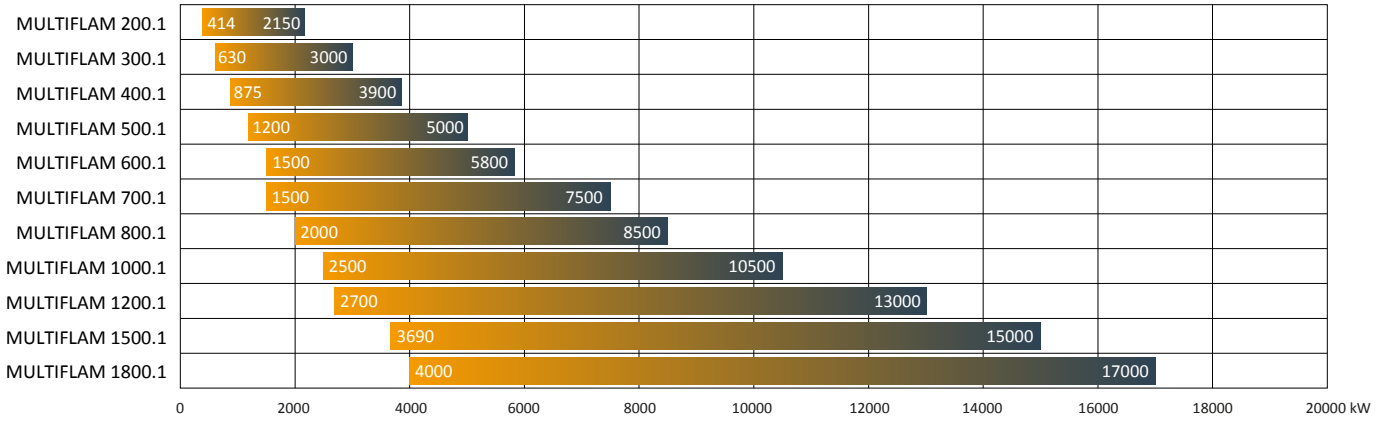


DUAL FUEL (GAS/LIGHT OIL) RANGE





DUAL FUEL (GAS/HEAVY OIL) RANGE

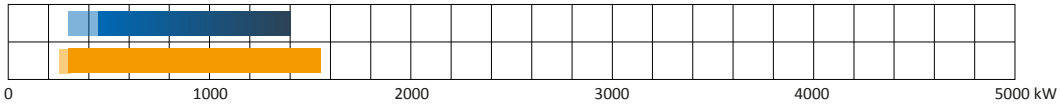


DUOBLOCK RANGE

Note: Oil/Gas indicates the output range for light oil, heavy oil, gas and dual fuel burners.

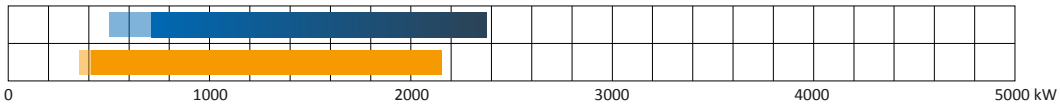
PLATFORM 260

	Min VSD	Min kW	Max kW
Oil 120	300	450	1400
Gas 1500.1	250	300	1550



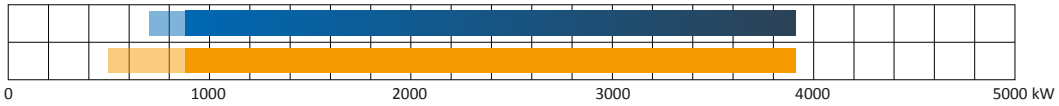
PLATFORM 280

	Min VSD	Min kW	Max kW
Oil 200.1	500	710	2372
Gas 2000.1	350	414	2150



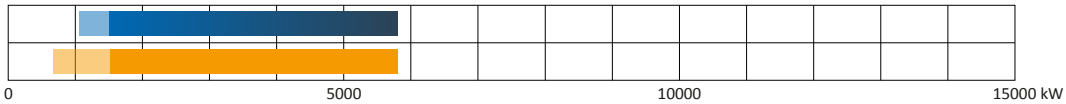
PLATFORM 320

	Min VSD	Min kW	Max kW
Oil 400.1	700	875	3900
Gas 4000.1	500	875	3900



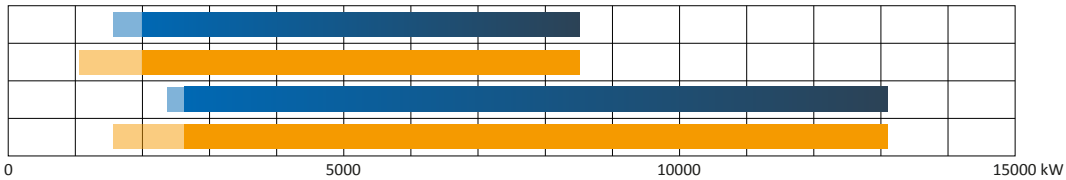
PLATFORM 380

	Min VSD	Min kW	Max kW
Oil 600.1	1050	1500	5800
Gas 6000.1	725	1500	5800



PLATFORM 630

	Min VSD	Min kW	Max kW
Oil 800.1	1600	2000	8500
Gas 8000.1	1050	2000	8500
Oil 1200.1	2400	2700	13100
Gas 1200.1	1600	2700	13100



PLATFORM 710

	Min VSD	Min kW	Max kW
Oil 1800.1	3200	5700	17000
Gas 18000.1	2100	4000	17000

PLATFORM 800

	Min VSD	Min kW	Max kW
Oil 2500.1	5000	7000	25000
Gas 25000.1	3200	6000	25000

BURNER DESIGNATION

BLU 1200.1 LN PAB TL SGT 230-50 TW

RANGE NAME BY FUEL TYPE	
MAX GAS	Gas natural - LPG
BLU	Gas natural - LPG
MAX	Light oil
MAIOR	Light oil
MAXFLAM	Heavy oil (max visc. 50°E at 50°C)
OILFLAM	Heavy oil (max visc. 50°E at 50°C)
MULTICALOR	Dual fuel: gas/light oil
MULTIFLAM	Dual fuel: gas/heavy oil (max visc. 50°E at 50°C)
RANGE NAME **+ TS**	Duoblock burner

MODEL SIZE (gas: kW; oil: kg/h)	
MAX 4	4 kg/h
MAIOR 120	120 kg/h
MAX GAS 40	40 kW
BLU 1200.1	1200 kW
MULTICALOR 300.1	300 kg/h - 3000 kW

EMISSIONS	
LN - Low NOx	Low NOx Class 3 - GAS EN676 (<80 mg/kWh)
-	Standard Class 2 - GAS EN676 (<120 mg/kWh)
MAX Low NOx	Low NOx Class 3 yellow flame (<120 mg/kWh)
MAX	Standard Class 2 - OIL EN267 (<185 mg/kWh)
MAIOR	Standard Class 1 - OIL EN267 (<250 mg/kWh)

OPERATION TYPE	
-	1 stage
R	1 stage with pre-heater
P	1 stage - soft start
PAB	2 stages gas - soft start
P 120 AB	2 stages light/heavy oil 120 kg/h - soft start
P 120 AB HS	2 stages oil hydraulic system 120 kg/h - soft start
Z3 / S3	2 stages with 3 nozzles / 3 stages with 3 nozzles
PR	2 stages progressive mechanical
PR-PAB	2 stages progressive mechanical gas / 2 stages oil
MD	2 stages modulating mechanical with PID
E	2 stages modulating electronic

HEAD TYPE	
TC	Short head
TL	Long head

FUEL	
-	Gas / Light oil / Heavy oil
LPG	Liquid gas
BIOGAS	Biogas
KER	Kerosene
B10	Biodiesel

ELECTRICAL POWER SUPPLY	
230-50	230 V, 50 Hz
230-50-60	230 V, 50-60 Hz
230-400-50	230/400 V, 50 Hz
110-50-60	110 V, 50-60 Hz

ELECTRICAL EQUIPMENT (CONTROL BOX)	
TW	Thermowatt
LFL.../LAL.../LGK...	Siemens
LMV...	Siemens electronic
ETO	Lamtec Etamatic OEM
BT3	Lamtec BT300

CONFIGURATION / ADDITIONAL INFO	
HT	High temperature
D	D pump version for light oil (max visc. 5°E at 20°C)
SGT	Separate gas train
NS	Without silencer

GAS TRAIN DESIGNATION

GT - S2 - VGD40 - DN80 - BLU/MULTI

GAS TRAIN VALVE MANUFACTURER	
D	Dungs
K	Kromschröder
S	Siemens - Landis
H	Honeywell
B	Brahma

OPERATION TYPE	
1	1 stage or 2 stages with butterfly valve
2	2 stages solenoid valve
3	2 stages pneumatic
4	2 stages electronic
5	2 stages mechanical

MODEL TYPE	
MBC120	MultiBloc model MBC120
MBDLE403	MultiBloc model MBDLE403
MBZRDLE410	MultiBloc 2 stages valve model MBZRDLE410
VGD20503	Siemens Landis model VGD20503
VCS240	Kromschröder model VCS240
EG12L	Brahma model EG12L

VALVE NOMINAL DIAMETER	
RP15	Rp. 1/2" Threaded connection
RP20	Rp. 3/4" Threaded connection
RP25	Rp. 1" Threaded connection
RP32	Rp. 1"1/4 Threaded connection
RP40	Rp. 1"1/2 Threaded connection
RP50	Rp. 2" Threaded connection
DN40	DN40 Flanged connection
DN50	DN50 Flanged connection
DN60	DN60 Flanged connection
DN80	DN80 Flanged connection
DN100	DN100 Flanged connection
DN125	DN125 Flanged connection

GAS TRAIN MATCHING BURNER	
MAXGAS40-120	Model matching MAX GAS 40-120
BLU/MULTI	Model matching BLU-MULTICALOR-MULTIFLAM range
MAXGAS40-120SX	Left side connection for MAX GAS 40-120

KIT - ACS DESIGNATION

KITTC-VPS504VCS	Kit tightness control VPS504 for VCS gas valve
PROBE-WATER130C	Water probe up to 0÷130° C
GTCP-DN80-260/280/320	Connection pipe for gas train DN80 platform 260/280/320
OPT / STD / ACS	Optional / Standard / Accessory

ECOFLAM RANGE

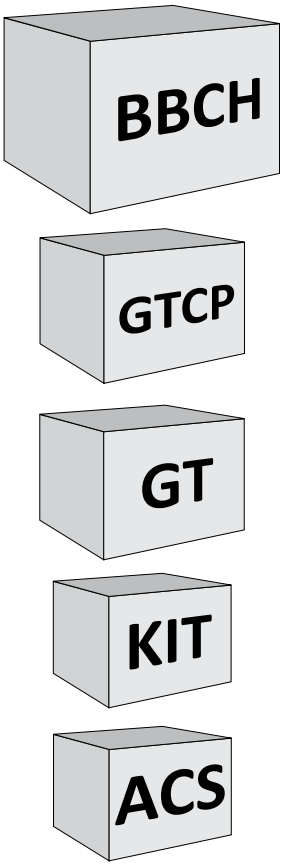
Ecoflam burners have been designed and built in compliance with all current regulations and directives.
All burners comply to the safety and energy saving operation regulations within the standard of their respective performance range. The quality is guaranteed by a quality and management system certified in accordance with ISO 9001:2008.

COMPONENT TYPE

CB	**C**omplete **B**urner (for light oil / heavy oil)
BBCH	**B**urner **B**ody with **C**ombustion **H**ead (without gas train)
BB	**B**urner **B**ody
CH	**C**ombustion **H**ead
GTCP	**G**as **T**rain **C**onnection **P**ipe
GT	**G**as **T**rain (delivered separately)
SV	**S**eparate **V**entilator for duoblock burner

GAS BURNERS AND DUAL FUEL BURNERS

Ecoflam gas and dual fuel burners are delivered in compliance to the applicable standards.
All burners from 3 MW are supply by default with silencer.
Gas train is delivered separately with different configurations.
Kits and accessories shall be included in the gas train and in the burner as described in the Catalogue Structure (scope of supply) in accordance to the instruction and local safety regulations and codes of practise.



All **gas burners** are delivered in separate set/box, i.e. burner body including combustion head and separate gas train with separate additional kit and accessories that shall complete the gas train or the burner according to the applicable standard.
Kit and accessories are delivered separately.

All **dual fuel burners** are delivered in separate set/box, i.e. burner body including combustion head and separate gas train with separate additional kit and accessories that shall complete the gas train or the burner according to the applicable standard.
Kit and accessories are delivered separately.

Configurated and special version on request with burner selection form.

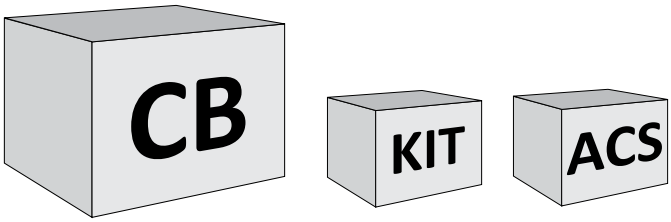
GAS TRAIN - GTCP - KITS - ACCESSORIES

All gas and dual fuel burners gas trains are delivered separately in different models and configuration.
Export configuration gas train completion are available but it is mandatory for the local installer in this case to comply to the local safety regulations.
For burners over 1700 kW gas train connection pipe must be ordered.
Kits and accessories are managed and delivered separately.

ECOFLAM RANGE

LIGHT OIL AND HEAVY OIL BURNERS

Ecoflam oil burners are delivered in compliance to the applicable standards. All burners from 3 MW are supplied by default with silencer.
Additional accessories and options shall be installed by the installer in accordance to the instruction and local safety regulations and codes of practise.



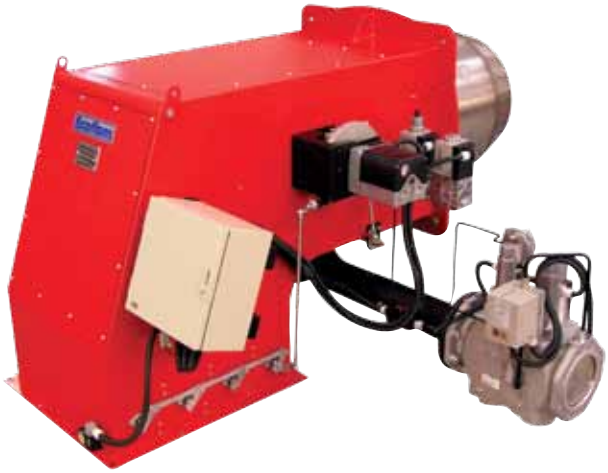
All **light oil burners** are delivered complete in one single packaging including filter and flexible hoses up to 6 MW.

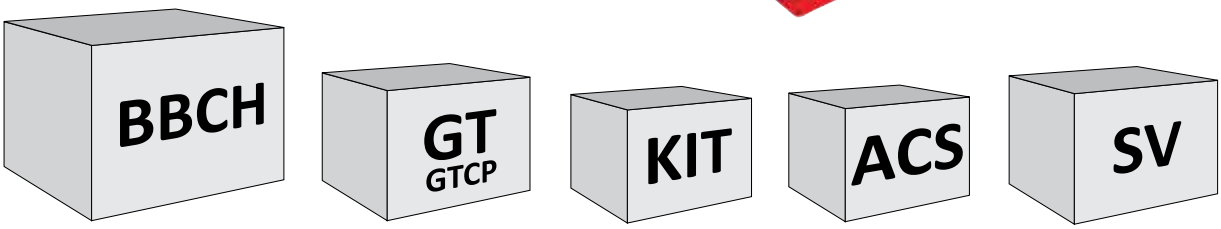
All **heavy oil burners** are delivered with electrical pre-heater preassembled into the burner body, including filter and flexible hoses up to 6 MW.

Configurated and special version on request with burner selection form.

DUOBLOCK BURNERS

Ecoflam offers selected models/outputs in **duoblock** version for all the fuels that can be delivered based on the configuration requested (mechanical or electronic) from the client in order to better fit into the application and provide a customised and more cost effective solution.

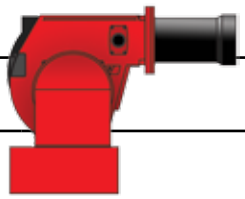




! **BURNER SELECTION:** Type of operation and configuration must be done by professional personnel in order to grant correct working of the burner. Installation, start-up and maintenance must be carried out by authorised specialists and all applicable guidelines and regulations (including local safety regulations and codes of practise) must be observed.

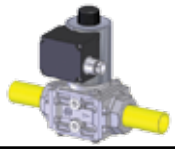
CATALOGUE STRUCTURE

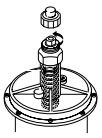
BURNER COMPOSITION - Scope of supply for all burners include the following parts:

BBCH BURNER BODY with COMBUSTION HEAD	Light oil Heavy oil		BBCH is delivered in one single box Additional KIT-ACS to be ordered and delivered separately
	Gas Dual fuel		BBCH - GT - ACS are delivered in separate boxes Additional KIT-ACS to be ordered and delivered separately
	Duoblock		BBCH - GT - ACS are delivered in separate boxes SV and additional KIT-ACS to be ordered and delivered separately
	Electronic version with BMS		BBCH - GT - ACS are delivered in separate boxes Available from 2 MW with loosen electrical panel or separate electrical or switch cabinet

SILENCER	Up till 2 MW platform 280		Silencer is complementary and can be ordered as a separate KITSIL-...
	From 3 MW platform 320		Silencer is included by default for Monoblock burners

GTCP GAS TRAIN CONNECTION PIPE	Size Gas train vs Diameter Connection		To be included from the platform 280 (≈1700 kW) **WARNING**: its size and fitting depends on the burner and the gas train selected

GT GAS TRAIN SEPARATE * Export configuration EN676 completion * Min working pressure = Pressure drop inlcudes "COMBUSTION HEAD + GAS TRAIN + GAS GOVERNOR & FILTER" as per EN676	MultiBloc MB		Gas MultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch
	Siemens VGD		Double gas valves with actuators and regulator VGD Siemens and min pressure switch + ACS gas filter Default blank spring: head pressure 0...22 mbar **WARNING**: from BLU 3000.1 - MULTICALOR 300.1 - MULTIFLAM 300.1 change spring and damping
	Kromschröder VCS		Double solenoid valves VCS Kromschröder and min pressure switch + ACS gas governor & filter
	Export configuration		Export completion gas train depending on the models shall be completed in compliance with local safety regulations.

GAS GOVERNOR & FILTER GAS FILTER	FGDR / FS1B		Gas pressure governor and filter model FGDR, operating pressure range up to 500 mbar. FS1B up to 1 bar.
	SPRING FGDR		FGDR: default spring is neutral for outlet pressure range 10-30 mbar For different outlet setting range please change the spring according to our technical documentation
	FILTER		Gas filter to complete VGD gas trains, operating pressure up to 1 bar. (Suggested as additional for all installations)

CATALOGUE STRUCTURE

KIT - ACCESSORIES - CONFIGURATIONS

DIAGNOSTIC TOOL	KITDT-TW	Diagnostic tool for Thermowatt control box
TIGHTNESS CONTROL	KITTC-...	Gas leakage control device for gas trains Different models depending on the type of gas train Compulsory for EN676 over 1200 kW – 1032000 kcal/h
MAXIMUM GAS PRESSURE SWITCH	KITPRES...	Maximum gas pressure switch - kit To be installed in order to comply local safety regulations
ADDITIONAL KITS ACCESSORIES	KIT - ACS	Additional kits and accessories To be installed in order to comply local safety regulations

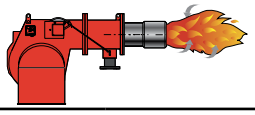
For full modulating version: BURNER BODY PR + PID REGULATOR & PROBE

PID CONTROLLER	KITMD-...	KITMD-RWF40 Modulation of burner can be done also from the PID of the boiler panel
MATCHING PROBE	PROBE-...	Matching probe for hot water - air - steam

Additional Kits & Accessories

KITS	KITLPG-...	LPG transformation kit for gas burner See related models and technical documentation for operating gas pressure
	KITADAPT-...	Adaptor for gas train connection MAX GAS range for LPG
	KITPOT-...	Kit Potentiometer
	KITxx-...	Other KITs: see related pages
ACCESSORIES	ACS	Antivibration coupling
	ACS	Ball valve
	ACS	Manometer + Push button
	ACS	Magnetic + Selfcleaning oil filter
	ACS	Other ACS: see related pages

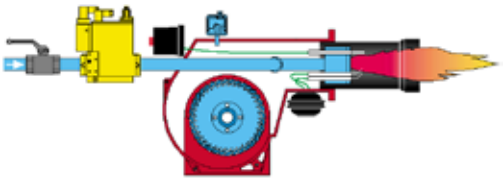
FLEXSHOP Configurations - Service

Configurations can be implemented in the factory from our internal FLEXSHOP	Swirl system 	Available for different fuel burner head Swirls for blast tube that can reduce flame lenght up to 10-50% depending on fuel, backpressure and shape of combustion chamber
	KITCV Continuous Ventilation	Available for different burner Kit for burner with Thermowatt control box
	Other	Special configurations will be evaluated on request
AFTER SALE SERVICE CONTRACTS		Ecoflam Service Department can offer start up service contracts
SPARE PARTS		Ecoflam original spare parts

GAS TRAIN COMPOSITION - EN676 CONFIGURATIONS AND EXPORT

Ecoflam gas trains are delivered separately for all gas and dual fuel burners and are available in different configuration and models:

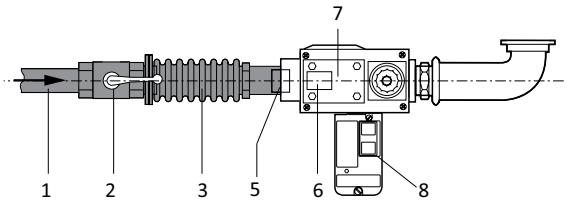
- EN676 standard gas train + kit/accessories in compliance with EN676;
- Export configuration + others additional options to be added by installer in compliance with local safety regulations and codes of practise;
- KIT and accessories: shall be fitted by the installer in accordance to the instruction and local safety regulations and codes of practise.



! PRESSURE DROP includes: "COMBUSTION HEAD + GAS TRAIN + GAS GOVERNOR & FILTER" as per EN676. Back pressure of boiler/application must be added/included in order to have the total min pressure drop.

MultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch

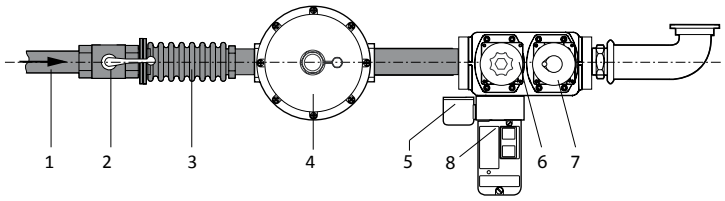
MB-DLE 407 - MB-DLE 410 - MB-DLE 412 - MB-DLE 415 - MB-DLE 420



1. Main gas pipe			
2. Ball valve		ACS	
3. Antivibrating coupling		ACS	
5. Min. gas pressure switch	EN676	GAS TRAIN	EN676
6. Safety + Working gas valve			
7. Gas governor and filter included			
8. Gas leakage control		KITTC *	
KIT - Max. gas pressure switch		KITPRES	
ACS - Gas train connection pipe		GTCP **	

Double solenoid valves VCS Kromschröder and min pressure switch + ACS gas governor & filter

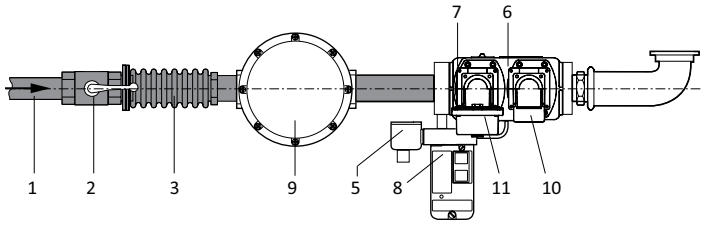
VCS 125 R/LW Rp 1" - VCS 240 R/LW Rp 1"1/2 - VCS 350 R/LW Rp 2"



1. Main gas pipe			
2. Ball valve		ACS	
3. Antivibrating coupling		ACS	
4. Gas governor & filter		ACS	EN676
5. Min. gas pressure switch	Export	GAS TRAIN	
6. Safety gas valve			
7. Working gas valve			
8. Gas leakage control		KITTC *	
KIT - Max. gas pressure switch		KITPRES	
ACS - Gas train connection pipe		GTCP **	

Double gas valves with actuators and regulator VGD Siemens and min pressure switch + ACS gas filter

VGD 20.503 Rp 2" / VGD 40.065 - 40.080 - 40.100 - 40.125



Default blank spring: head pressure 0...22 mbar.
Yellow spring: head pressure 15...120 mbar
From BLU 3000.1 - MULTICALOR 300.1 - MULTIFLAM 300.1 change spring and damping

1. Main gas pipe			
2. Ball valve		ACS	
3. Antivibrating coupling		ACS	
5. Min. gas pressure switch	Export	GAS TRAIN	EN676
6. Safety gas valve + 10. Actuator			
7. Working gas valve + 11. Actuator			
8. Gas leakage control		KITTC *	
9. Gas filter		ACS	
KIT - Max. gas pressure switch		KITPRES	
ACS - Gas train connection pipe		GTCP **	

! * EN676 CONFIGURATION: for gas train VCS include gas governor and filter and for VGD include filter. KITTC-... Tightness control device (VPS - VDK - LDU) must be included over 1200 kW according to EN676.

! ** WARNING: From BLU 1700.1 - MULTICALOR 170.1 - MULTIFLAM 300.1, in order to fit the gas train, the corresponding connection pipe must be ordered (GTCP size and fitting depend on the burner and the gas train selected).

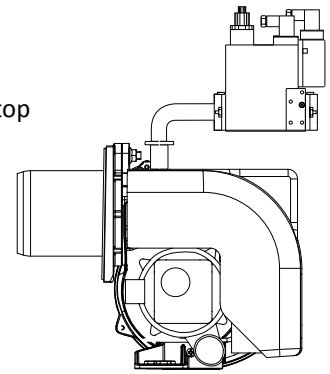
GAS TRAIN - KIT - ACCESSORIES ASSEMBLY TO THE BURNER

HOW TO INSTALL THE GAS TRAIN INTO THE BURNER AND CALCULATE THE OVERALL DIMENSIONS

! *** WARNING:** From **BLU 1700.1 - MULTICALOR 170.1 - MULTIFLAM 300.1:**
in order to fit the gas train the corresponding connection pipe must be ordered.

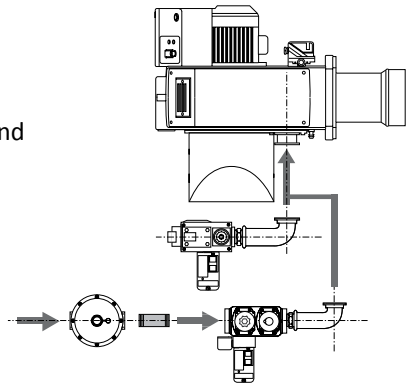
MAX GAS 40 ÷ 250

Gas train with
connection on the top



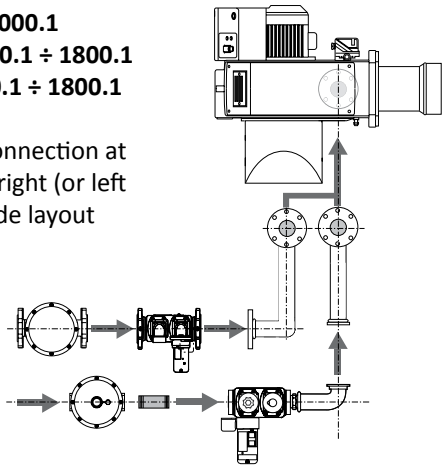
MAX GAS 350 ÷ 500
BLU 700.1 ÷ 1500.1
MULTICALOR 45 ÷ 140

Gas train with right hand
side connection



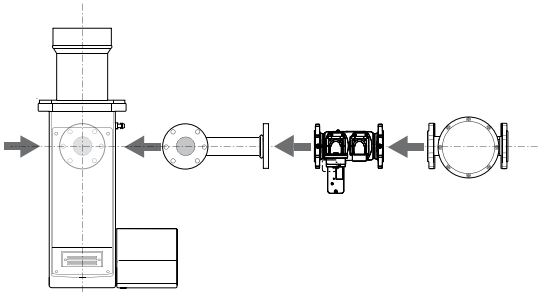
BLU 1700.1 ÷ 18000.1
MULTICALOR 170.1 ÷ 1800.1
MULTIFLAM 300.1 ÷ 1800.1

Gas train with connection at
the bottom and right (or left
with kit) hand side layout



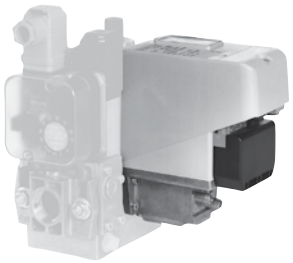
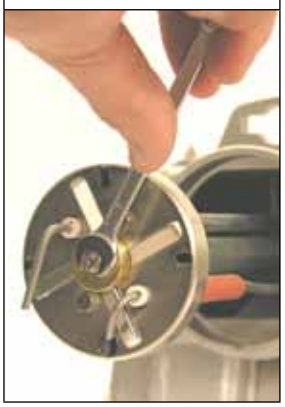
DUOBLOCK

Gas train with connection at the bottom and
right or left hand side layout



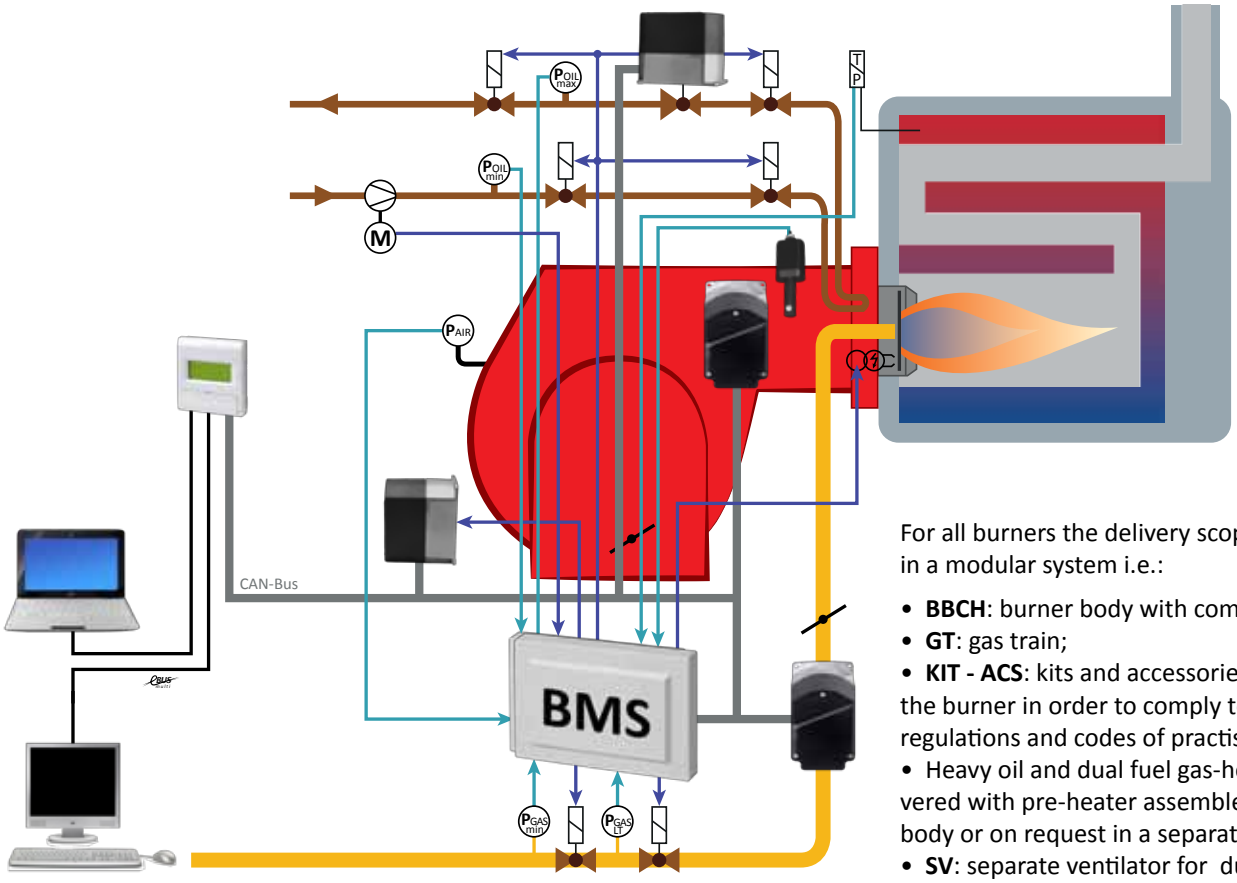
KIT AND ACCESSORIES

! **WARNING:** EN676 compulsory kit and accessories in order to comply to the safety regulations. Additional accessories and kits shall be installed by the installer in accordance to the local safety regulations and codes of practise.

Gas governor / Filter	Tightness control	Modulation Kit	Max Pressure switch	LPG Transformation
FGDR - FILTER	KITTC- Model	KITMD-RWF40	KITPRES50	KITLPG-MAXGAS...
Compulsory EN676	Compulsory over 1200 kW	PROBE-...	KITPRES150	KITLPG-BLU...
				

ELECTRONIC VERSION WITH BURNER MANAGEMENT SYSTEM

Ecoflam offers the electronic range with BMS from 2 MW up to 17 MW in monoblock and up to 25 MW in duoblock configuration with electrical panel assembled into the burner or on request with separate switch cabinet.

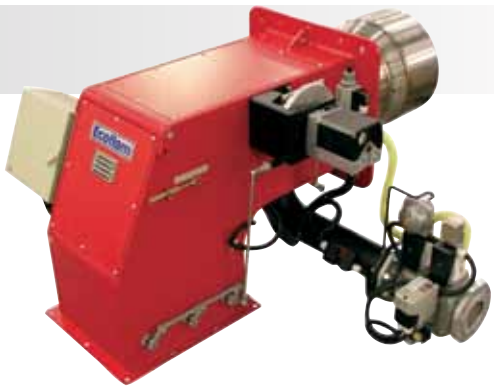


For all burners the delivery scope is in a modular system i.e.:

- **BBCH**: burner body with combustion head;
- **GT**: gas train;
- **KIT - ACS**: kits and accessories can complete the burner in order to comply to the local safety regulations and codes of practise;
- Heavy oil and dual fuel gas-heavy oil are delivered with pre-heater assembled into the burner body or on request in a separate frame/skid;
- **SV**: separate ventilator for duoblock version.

TS RANGE - DUOBLOCK BURNERS

SELECTED OUTPUT TO MATCH MAIN BOILERS AND INDUSTRIAL APPLICATION



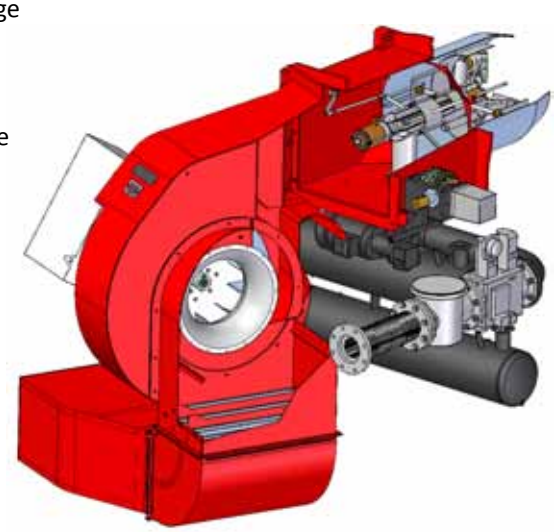
Available models for different fuels in standard progressive mechanical configuration with derivative electrical panel.

Electronic version with Burner Management System with separate switch cabinet on request.

Platform	Max output range	Light oil	Heavy oil	Gas	Gas - Light oil	Gas - Heavy oil
260	0,8 ÷ 1,5 MW	Maior 120	Oilflam 120.1	Blu 1500.1	Multicalor 140	Multiflam 120
280	1,5 ÷ 2 MW	Maior 200.1	Oilflam 200.1	Blu 2000.1	Multicalor 200.1	Multiflam 200.1
320	3 ÷ 4 MW	Maior 400.1	Oilflam 400.1	Blu 4000.1	Multicalor 400.1	Multiflam 400.1
380	5 ÷ 6 MW	Maior 600.1	Oilflam 600.1	Blu 6000.1	Multicalor 600.1	Multiflam 600.1
630	7 ÷ 9 MW	Maior 800.1	Oilflam 800.1	Blu 8000.1	Multicalor 800.1	Multiflam 800.1
630	10 ÷ 13 MW	Maior 1200.1	Oilflam 1200.1	Blu 12000.1	Multicalor 1200.1	Multiflam 1200.1
710	15 ÷ 18 MW	Maior 1800.1	Oilflam 1800.1	Blu 18000.1	Multicalor 1800.1	Multiflam 1800.1
800	22 ÷ 25 MW	Feasibility only on request				

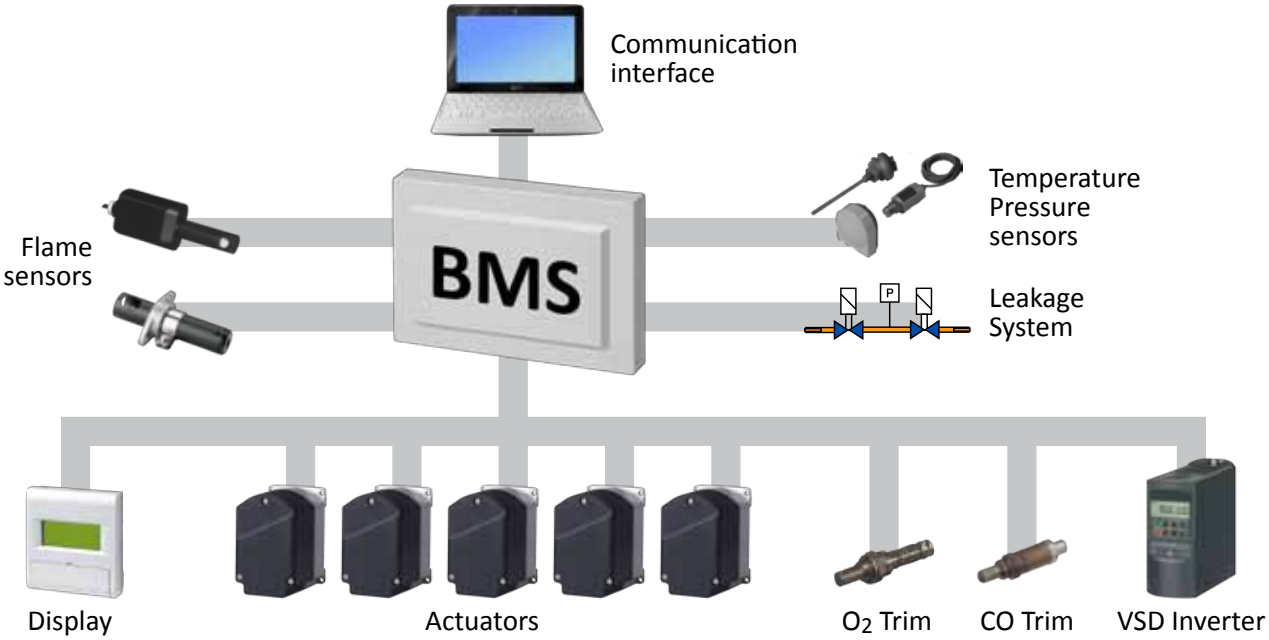
MONOBLOCK - DUOBLOCK RANGE WITH BMS

Electronic compound manager for burner has been introduced into Ecoflam range in order to improve performance and efficiency of modern firing installation. BMS is a compact powerful solution suitable for the control and supervision of single or dual fuel forced draft burners. This system is designed to be matched with an extensive range of components such as flame, temperature and pressure sensors, gas valves, variable speed fan motors and oxygen control that can be managed from different bus interfaces.



BMS solutions are meant to bring the main following benefits:

- significant energy saving in both fuel and electricity;
- optimal process performance and minimise costs;
- simple commissioning and operating in total safety;
- integrated solution with a wide range of communications interfaces;
- combustion optimisation with O_2/CO control;
- effective diagnostic and real time status information;
- user interface easy to use and program.



INVERTER SYSTEM

VSD module is an extension to the BMS and is used for the control of a variable speed drive, that allows electrical comsumption saving, lower noise emission, gradual fan starting and reduction of mechanical stress.

O_2-CO TRIM CONTROL

O_2-CO allows the control of the residual oxygen content in order to increase the boiler efficiency.

MONITORING APPLICATION

Reliable and safe flame detection system for single and multiple burner furnaces.

RANGE OF OUTPUT WITH BURNER MANAGEMENT SYSTEM

Model	Turndown ratio			Kit	Kit	Additional functions
	standard	with inverter	oil side	VSD - inverter	O_2-CO trim	
MAIOR 200.1-1800.1	1÷5	1÷5	1÷5	Kit	Kit	Flame monitoring sensors Communication interfaces Display interface
OILFLAM 200.1-1800.1	1÷5	1÷5	1÷5	Kit	Kit	
BLU 2000.1-18000.1	1÷6	1÷8	-	Kit	Kit	
MULTICALOR 200.1-1800.1	1÷6	1÷8	1÷5	Kit	Kit	
MULTIFLAM 200.1-1800.1	1÷6	1÷8	1÷5	Kit	Kit	
DUOBLOCK	1÷6	1÷8	1÷5	Kit	Kit	

LIGHT OIL BURNERS

MAX - MAIOR - Max visc. 1,5° E at 20° C

MAX range for light oil combines a high efficiency fan ventilation system (HPV) with features ranging from easy matching on boilers up to easy maintenance and set up.
The range is available in standard class 2 and Low NOx emission class 3 yellow flame according to EN267.
The range fits standard heating and light industry applications.

All light oil burners are delivered complete in one single packaging including filter and flexible hoses up to 6 MW.

MAIOR range for light oil are available in two stages with hydraulic system or servomotor up to 350 kg/h and from the model MAIOR 45 in progressive operation that can be turned in modulating with a PID regulator.

MAIOR models over 7 MW are offered on request based on the configuration requested (mechanical or electronic) in order to better fit into the application and provide a customised and more cost effective solution.

DUOBLOCK and **ELECTRONIC** versions are available on request for selected output to match main boilers and industry application.

KIT - ACS (see dedicated pages)

- KIT Biodiesel
- KIT Wieland plugs
- Light oil pump unit on request
- PID modulating KIT and probe
- Diagnostic tool for TW control box

Available configurations on request

- CV: Continuous ventilation version
- HT: High temperature version
- D pump: light oil with max viscosity 5°E at 20°C
- OEM and special application version only on request

LIGHT OIL BURNERS

MAX

One stage Low NOx class 3 (NOx < 120 mg/kWh) - TW - B10

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX 1 R Low NOx	17,6	35,5	1,5	3	TC	3142713
MAX 4 R Low NOx	22,5	47,4	1,9	4	TC	3142722

One stage class 2 (NOx < 185 mg/kWh) - TW - B10

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX 1	17,6	41,4	1,5	3,5	TC	3142709
					TL	3142710
MAX 4	20	59	1,7	5	TC	3142714
					TL	3142715
MAX 8	47	105	4	8,9	TC	3142716
					TL	3142717
MAX 12	60	130	5,1	11	TC	3142718
					TL	3142719
MAX 15	73,4	190	6,2	16	TC	3142729
					TL	3142730
MAX 20	86,4	237	7,3	20	TC	3142731
					TL	3142732
MAX 30	110	319	9,3	27	TC	3142733
					TL	3142734

One stage with pre-heater versions (NOx < 185 mg/kWh) - TW - B10

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX 1 R	20	39	1,5	3,5	TC	3142711
					TL	3142712
MAX 4 R	20	59	1,7	5	TC	3142720
					TL	3142721

KIT - ACCESSORIES

description	
Diagnostic tool for TW control box	see accessories page

LIGHT OIL BURNERS

MAX

Two stages hydraulic system class 2 (NOx < 185 mg/kWh) - TW - B10

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX P 12 AB HS	60	130	5,1	11	TC	3124094
					TL	3124095
MAX P 15 AB HS	77	190	6,5	16	TC	3122708
					TL	3122709
MAX P 25 AB HS	102	300	8,6	25,4	TC	3122710
					TL	3122274
MAX P 35 AB HS	166	427	14	36	TC	3142301
					TL	3142302
MAX P 45 AB HS	202	546	17	46	TC	3142305
					TL	3142306

Two stages class 2 (NOx < 185 mg/kWh)

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX P 35 AB	166	427	14	36	TC	3142299
					TL	3142300
MAX P 45 AB	202	546	17	46	TC	3142303
					TL	3142304

One stage class 2 (NOx < 185 mg/kWh) - TW - B10

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAX 4 HT	20	59	1,7	5	TC	3142724
					TL	3142723
MAX 8 HT	47	105	4	8,9	TC	3142726
					TL	3142725
MAX 12 HT	60	130	5,1	11	TC	3142728
					TL	3142727
MAX 15 HT	73,4	190	6,2	16	TC	3142735
					TL	3142736
MAX 20 D HT	86,4	237	7,3	20	TC	3142737
					TL	3142738
MAX 30 D HT	110	319	9,3	27	TC	3142739
					TL	3142740
MAX P 35 AB HS D HT	166	427	14	36	TC	3143101
					TL	3143102
MAX P 45 AB HS D HT	202	546	17	46	TC	3143103
					TL	3143104

D pump: max viscosity 5°E at 20°C; **HT**: high temperature; **TW**: Thermowatt control box; **B10**: oil pump with vitton seals for biodiesel

LIGHT OIL BURNERS

MAIOR

Two stages hydraulic system

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
MAIOR P 60 AB HS	415	710	35	60	OPT	TC	3140151
						TL	3140152
MAIOR P 60 AB HS D	415	710	35	60	OPT	TC	3141572
						TL	3141571
MAIOR P 80 AB HS	474	949	40	80	OPT	TC	3121063
						TL	3121064
MAIOR P 120 AB HS	830	1423	70	120	OPT	TC	3121065
						TL	3121066
MAIOR P 150.1 AB HS	592	1780	50	150	OPT	TC	3121067
						TL	3121068
MAIOR P 200.1 AB HS	710	2372	60	200	OPT	TC	3121069
						TL	3121070
MAIOR P 300.1 AB HS	1000	3000	85	250	STD	TC	3140153
						TL	3140154
MAIOR P 400.1 AB HS Z3	1300	3900	110	350	STD	TC	3140155
						TL	3140156

Two stages

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
MAIOR P 60 AB	415	710	35	60	OPT	TC	3121016
						TL	3122265
MAIOR P 80 AB	474	949	40	80	OPT	TC	3121018
						TL	3122266
MAIOR P 120 AB	830	1423	70	120	OPT	TC	3121020
						TL	3122269
MAIOR P 150.1 AB	592	1780	50	150	OPT	TC	3121022
						TL	3121021
MAIOR P 200.1 AB	710	2372	60	200	OPT	TC	3121024
						TL	3121023
MAIOR P 300.1 AB	1000	3000	85	250	STD	TC	3121026
						TL	3122272
MAIOR P 400.1 AB Z3	1300	3900	110	350	STD	TC	3121028
						TL	3121027

LIGHT OIL BURNERS

MAIOR

Two stages progressive mechanical

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
MAIOR P 45 PR	296	532	25	45	OPT	TL	on request
MAIOR P 60 PR	415	710	35	60	OPT	TL	on request
MAIOR P 80 PR	474	949	40	80	OPT	TL	on request
MAIOR P 120 PR	830	1423	70	120	OPT	TL	on request
MAIOR P 150.1 PR	592	1780	50	150	OPT	TL	on request
MAIOR P 200.1 PR	710	2372	60	200	OPT	TL	on request
MAIOR P 300.1 PR	1000	3000	85	250	STD	TC	3121045
						TL	3121046
MAIOR P 400.1 PR	1300	3900	110	350	STD	TC	3121047
						TL	3121048
MAIOR P 500.1 PR	1578	5000	134	422	STD	TC	3121049
						TL	3121050
MAIOR P 600.1 PR	1795	5800	153	490	STD	TC	3121051
						TL	3121052

Two stages progressive mechanical

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
MAIOR P 700.1 PR	2417	7500	205	634	STD	TC	-
MAIOR P 800.1 PR	2750	8500	234	718	STD	TC	-
MAIOR P 1000.1 PR	3300	10500	281	887	STD	TC	-
MAIOR P 1200.1 PR	4367	12500	371	1053	STD	TC	-
MAIOR P 1500.1 PR	5000	15000	422	1265	STD	TC	-
MAIOR P 1800.1 PR	5700	17000	481	1433	STD	TC	-

KIT - ACCESSORIES

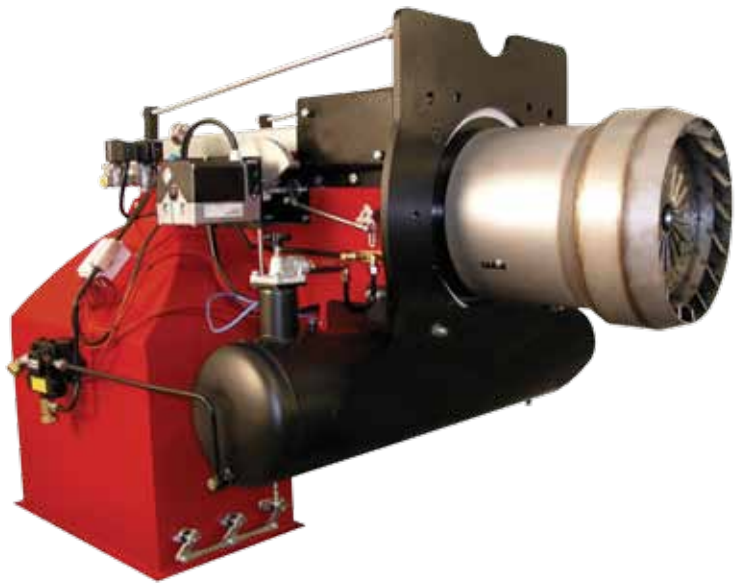
description	
Silencer	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
Pumping unit	see accessories page
Kit Wieland plugs	see accessories page

MAIOR - DUOBLOCK AND ELECTRONIC BURNERS

Versions from 2 to 25 MW are available on request for selected output to match main boilers and industry application.

HEAVY OIL BURNERS

MAXFLAM - OILFLAM - Max visc. 50° - 100°E at 50°C



MAXFLAM and **OILFLAM** range work with heavy oil up to 50°E at 50°C with On/Off switch to exclude the circuit heaters in order to operate also with low viscosity heavy oil.

M100 configuration for heavy oil up to 100°E at 50°C is available on request.

OILFLAM models from 300.1 are supplied with "GEFRAN" digital thermo regulator integrated on the front panel for granting temperature stability of fuel.
Available version includes double stage up to 350 kg/h and from the model OILFLAM 300.1 in progressive operation that can be turned in modulating with a PID regulator.

Easy maintenance system is integrated into the burner:

- HINGE FLANGE SYSTEM for OILFLAM 80.1 to 200.1 and 1500.1 to 1800.1
- SLIDING BAR SYSTEM for MAXFLAM 10 to 50 and OILFLAM 300.1 to 1200.1

OILFLAM models over 7 MW are offered on request based on the configuration requested (mechanical or electronic) in order to better fit into the application and provide a customised and more cost effective solution.

DUOBLOCK and **ELECTRONIC** versions are available on request for selected output to match main boilers and industry application

All heavy oil burners are delivered with electrical pre-heater preassembled into the burner body, including filter and flexible hoses up to 6 MW.

KIT - ACS (see dedicated pages)

- KIT Wieland plugs
- KIT magnetic + selfcleaning filter
- PID modulating KIT and probe

Available configurations on request

- M100 version for heavy oil up to 100°E at 50°C
- From OILFLAM 300.1 pre-heater can be supplied separately with extra cost
- Forced oil preparation ring system on request

HEAVY OIL BURNERS

MAXFLAM

One stage - 50°E fuel viscosity at 50°C

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAXFLAM 10	68	136	6	12	TC	3142594
					TL	3142595
MAXFLAM 20	108	227	9,5	20	TC	3142596
					TL	3142597
MAXFLAM 30	170	340	15	30	TC	3142598
					TL	3142599

Two stages - 50°E fuel viscosity at 50°C

model	output [kW]		flow rate [kg/h]		blast tube	code
	min	max	min	max		
MAXFLAM 30 AB	205	410	18	36	TC	3142600
					TL	3142601
MAXFLAM 50 AB	205	570	18	50	TC	3142602
					TL	3142603

OILFLAM

Two stages - 50°E fuel viscosity at 50°C

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
OILFLAM 80.1 AB	464	930	41	82	OPT	TC	3142604
						TL	3142605
OILFLAM 120.1 AB	682	1395	60	122	OPT	TC	3142606
						TL	3142607
OILFLAM 170.1 AB	682	1700	60	148	OPT	TC	3142608
						TL	3142609
OILFLAM 200.1 AB	682	2093	60	184	OPT	TC	3142610
						TL	3142611
OILFLAM 300.1 AB	1000	3000	88,5	264	STD	TC	3142612
						TL	3142613
OILFLAM 400.1 AB Z3	1300	3900	115	343	STD	TC	3142614
						TL	3142615

OILFLAM

Two stages progressive mechanical - 50°E fuel viscosity at 50°C

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
OILFLAM 80.1 PR	464	930	41	82	OPT	TL	on request
OILFLAM 120.1 PR	682	1395	60	122	OPT	TL	on request
OILFLAM 170.1 PR	682	1700	60	148	OPT	TL	on request
OILFLAM 200.1 PR	682	2093	60	184	OPT	TL	on request
OILFLAM 300.1 PR	1000	3000	88,5	264	STD	TC	3142616
						TL	3142617
OILFLAM 400.1 PR	1300	3900	115	343	STD	TC	3142618
						TL	3142619
OILFLAM 500.1 PR	1578	5000	140	440	STD	TC	3142620
						TL	3142621
OILFLAM 600.1 PR	1795	5800	159	510	STD	TC	3142622
						TL	3142623

Two stages progressive mechanical - 50°E fuel viscosity at 50°C

model	output [kW]		flow rate [kg/h]		silencer	blast tube	code
	min	max	min	max			
OILFLAM 700.1 PR	2417	7500	214	660	STD	TC	-
OILFLAM 800.1 PR	2750	8500	243	748	STD	TC	-
OILFLAM 1000.1 PR	3300	10500	292	924	STD	TC	-
OILFLAM 1200.1 PR	4367	12500	386	1097	STD	TC	-
OILFLAM 1500.1 PR	5000	15000	440	1319	STD	TC	-
OILFLAM 1800.1 PR	5700	17000	501	1495	STD	TC	-

KIT - ACCESSORIES

description	
Silencer	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
Heating and pumping unit	see accessories page
Magnetic + self cleaning filter	see accessories page

OILFLAM - DUOBLOCK AND ELECTRONIC BURNERS

Versions from 2 to 25 MW are available on request for selected output to match main boilers and industry application.

FORCED OIL PREPARATION RING

STANDARD SYSTEM COMPOSITION FOR LIGHT OIL AND HEAVY OIL HEATING AND PUMPING UNIT

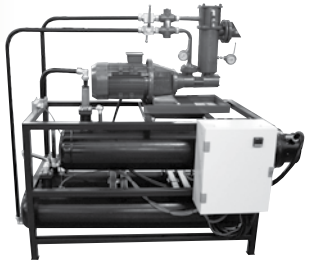
I. Feeding and filtering system

II. Fuel heating system for reducing oil viscosity plus service tank

III. Forced oil supply system "RING"

PRE-HEATER UNIT

Ecoflam heavy oil burners are delivered with electrical pre-heater assembled into the burner body or in a separate skid. Additional Forced system "**OIL RING**" can be design and delivered assembled on skid/frame or offered as single component.



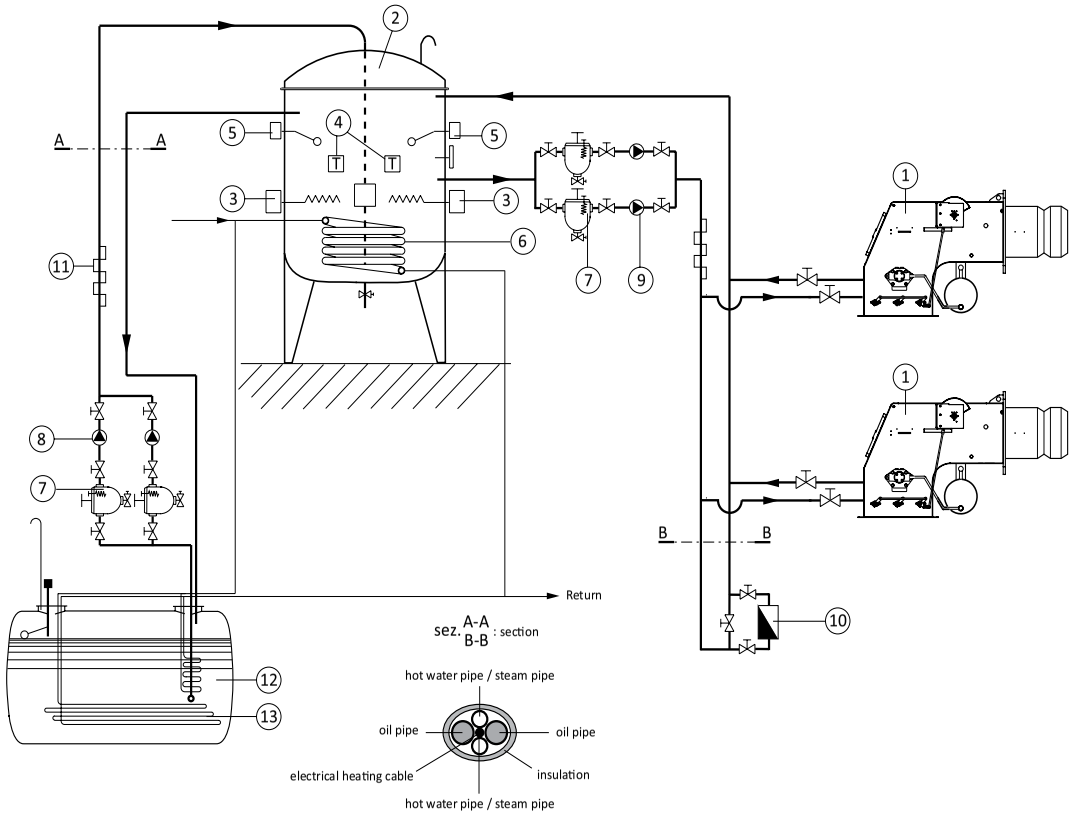
ACCESSORIES

Service tanks + Pumps units.
Quotation on request depending on output and configuration.

MAGNETIC + SELF CLEANING FILTER

The filtering system operation: the first magnetic filter allows to separate all ferrous impurities contained in the oil and the second lamellar filter allows the final filtration of all impurities.

HEAVY OIL PREPARATION RING - SUGGESTED SCHEME



LEGENDA

1. Burners
2. Service tank
3. Electric heaters
4. Safety and operation thermostat
5. Level switch (working + safety)
6. Heating coil
7. Self cleaning oil filter
8. Load pumps
9. Ring pumps
10. Oil ring control pressure device
11. Heating cable
12. Main heavy oil storage tank
13. Heating coil

! HEAVY OIL WARNINGS

All installations using heavy oil burners have to be completed with a **FORCED OIL PREPARATION RING** in order to guarantee oil supply to the burner at suitable temperature and pressure (temperature +/- 80° C, pressure 3 bar).

For heavy oil with more than 50°E at 50°C Ecoflam recommends to decrease the maximum output of 10-20% and work in eccess of air in order to grant better operation and reduce maintenance.

MAX GAS - Low NOx class 3 (< 80 mg/kWh)

MAX GAS range is available in the following versions and is delivered in a modular system of boxes:

- **P**: 1 stage soft start
- **PAB**: 2 stages
- **PR**: 2 stages progressive mechanical

BBCH: Burner Body with Combustion Head → TC short head and TL long head
GT: Gas train separate → EN676 or Export configuration
KIT & ACS: Kits and accessories according to local rules installation

All MAX GAS are delivered for natural gas and can operate with LPG by changing the nozzle with a kit.
MAX GAS two stages are complete with two stages MultiBloc valves MBZRDLE for the models 120-250 where models 350-500 operate in two stage with butterfly valve.
Progressive version are availble for models MAX GAS 350-500 and can be transformed into modulating with the PID KITMD-RWF40.

EN676 configuration:

- GasMultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch
- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch + separate gas governor and filter FGDR

EXPORT configuration (other additional options to be added by installer in compliance with local safety regulations):

- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch
- GasMultiBloc Dungs GB-LE 055 Class B: compact double solenoid valve with integrated filter, regulator and min pressure switch available for MAX GAS 40-120
- Single solenoid valve Brahma E6G*SR P and EG12*L for MAX GAS 40-120 complete with min gas pressure switch
- Single solenoid valve Kromschröder VAS125 and VAS240 for MAX GAS 170-250 complete with min gas pressure switch

Gas train matching table and pressure drop diagrams for natural gas/LPG are available in the gas train technical documentation.

KIT - ACS (see dedicated pages)

- LPG KIT
- KIT Wieland plugs
- PID modulating KIT and probe
- Antivibration coupling and ball valve

Available configurations on request

- CV: Continuous ventilation version
- HT: High Temperature version
- OEM and special application version only on request

GAS BURNERS

MAX GAS

One stage Low NOx class 3 (NOx < 80 mg/kWh) - TW

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code	min	max	code	type	Ø	
MAX GAS 40 P	17	48	TC	3142741	9	65	3141885	MBC 65 DLE	1/2"	included
					9	200	3123944	MB-DLE 403		
			TL	3142742	9	65	3141885	MBC 65 DLE	1/2"	included
					9	200	3123944	MB-DLE 403		
MAX GAS 70 P	34	70	TC	3142743	10	360	3123560	MB-DLE 405	3/4"	included
					11		3141886	MBC 120 DLE		
					16	65	3141885	MBC 65 DLE	1/2"	
					18	200	3123944	MB-DLE 403		
			TL	3142744	10	360	3123560	MB-DLE 405	3/4"	included
					11		3141886	MBC 120 DLE		
					16	65	3141885	MBC 65 DLE	1/2"	
					18	200	3123944	MB-DLE 403		
MAX GAS 105 P	49	108	TC	3142745	16	360	3123560	MB-DLE 405	3/4"	included
					18		3141886	MBC 120 DLE		
					34	65	3141885	MBC 65 DLE	1/2"	
					36	200	3123944	MB-DLE 403		
			TL	3142746	16	360	3123560	MB-DLE 405	3/4"	included
					18		3141886	MBC 120 DLE		
					34	65	3141885	MBC 65 DLE	1/2"	
					36	200	3123944	MB-DLE 403		
MAX GAS 120 P	49	120	TC	3142747	16	360	3123560	MB-DLE 405	3/4"	included
					18		3141886	MBC 120 DLE		
					34	65	3141885	MBC 65 DLE	1/2"	
					36	200	3123944	MB-DLE 403		
			TL	3142748	16	360	3123560	MB-DLE 405	3/4"	included
					18		3141886	MBC 120 DLE		
					34	65	3141885	MBC 65 DLE	1/2"	
					36	200	3123944	MB-DLE 403		

GAS TRAIN - Export configuration

designation	description	type of burner	Ø	code
GT-D1-GBLE055-RP15-MAXGAS40-120	MultiBloc class B - EN676 up to 70 kW	40-120	1/2"	3142027
GT-H1-E6GSRP-RP15-MAXGAS40-120	single solenoid valve with min gas pressure switch	40-120	1/2"	3141888
GT-H1-EG12L-RP15-MAXGAS40-120	single solenoid valve with min gas pressure switch	40-120	1/2"	3141887
GT-K1-VAS125-RP25-MAXGAS170-250	single solenoid valve with min gas pressure switch	170-250	1"	3142815
GT-K1-VAS240-RP40-MAXGAS170-250	single solenoid valve with min gas pressure switch	170-250	1"1/2	3142816

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code	min	max	code	type	Ø	kit adaptor
MAX GAS 170 P	55	175	TC	3142749	13	360	3123947	MB-DLE 410	1"	included
					17		3123525	MB-DLE 407	3/4"	
					26		3123560	MB-DLE 405	3/4"	3122300
			TL	3142750	13	360	3123947	MB-DLE 410	1"	included
					17		3123525	MB-DLE 407	3/4"	
					26		3123560	MB-DLE 405	3/4"	3122300
MAX GAS 250 P	55	240	TC	3142751	15	360	3141899	MB-DLE 412	1"1/4	included
					17		3123947	MB-DLE 410	1"	
					26		3123525	MB-DLE 407	3/4"	
					40		3123560	MB-DLE 405	3/4"	3122300
			TL	3142752	15	360	3141899	MB-DLE 412	1"1/4	included
					17		3123947	MB-DLE 410	1"	
					26		3123525	MB-DLE 407	3/4"	
					40		3123560	MB-DLE 405	3/4"	3122300
MAX GAS 350 P	100	350	TC	3142283	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142284	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
MAX GAS 500 P	120	500	TC	3142289	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142290	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	

One stage Low NOx class 3 (NOx < 80 mg/kWh) - VCS gas train versions - TW

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code	min	max	code	type	Ø	code	type
MAX GAS 170 P	55	175	TC	3142749	20	500	3141906	VCS-125	1"	3142521	FGDR 1"
			TL	3142750	20	500	3141906	VCS-125	1"	3142521	FGDR 1"
MAX GAS 250 P	55	240	TC	3142751	15	500	3142251	VCS-240	1"1/2	3142523	FGDR 1"1/2
					34		3141906	VCS-125	1"	3142521	FGDR 1"
			TL	3142752	15	500	3142251	VCS-240	1"1/2	3142523	FGDR 1"1/2
					34		3141906	VCS-125	1"	3142521	FGDR 1"
MAX GAS 350 P	100	350	TC	3142283	18	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
			TL	3142284	18	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
MAX GAS 500 P	120	500	TC	3142289	24	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					98		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
			TL	3142290	24	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					98		3142374	VCS-125 350/500	1"	3142521	FGDR 1"

Two stages Low NOx class 3 (NOx < 80 mg/kWh)

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code	min	max	code	type	Ø	kit adaptor
MAX GAS 120 PAB	40	120	TC	3123954	16	360	3123960	MB-ZRDLE 405	3/4"	included
			TL	3123955	16	360	3123960	MB-ZRDLE 405	3/4"	included
MAX GAS 170 PAB	55	175	TC	3123956	13	360	3123962	MB-ZRDLE 410	1"	included
					17		3123961	MB-ZRDLE 407	3/4"	
					26		3123960	MB-ZRDLE 405	3/4"	3122300
			TL	3123957	13	360	3123962	MB-ZRDLE 410	1"	included
					17		3123961	MB-ZRDLE 407	3/4"	
					26		3123960	MB-ZRDLE 405	3/4"	3122300
MAX GAS 250 PAB	55	240	TC	3123958	15	360	3141901	MB-ZRDLE 412	1"1/4	included
					17		3123962	MB-ZRDLE 410	1"	
					26		3123961	MB-ZRDLE 407	3/4"	
					40		3123960	MB-ZRDLE 405	3/4"	3122300
			TL	3123959	15	360	3141901	MB-ZRDLE 412	1"1/4	included
					17		3123962	MB-ZRDLE 410	1"	
					26		3123961	MB-ZRDLE 407	3/4"	
					40		3123960	MB-ZRDLE 405	3/4"	3122300
MAX GAS 350 PAB	100	350	TC	3142285	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142286	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
MAX GAS 500 PAB	120	500	TC	3142291	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142292	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	

Two stages Low NOx class 3 (NOx < 80 mg/kWh) - VCS gas train versions

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code	min	max	code	type	Ø	code	type
MAX GAS 350 PAB	100	350	TC	3142285	18	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
			TL	3142286	18	500	3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
MAX GAS 500 PAB	120	500	TC	3142291	14	500	3142376	VCS-350 350/500	2"	3142524	FGDR 2"
					18		3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"
			TL	3142292	14	500	3142376	VCS-350 350/500	2"	3142524	FGDR 2"
					18		3142375	VCS-240 350/500	1"1/2	3142523	FGDR 1"1/2
					54		3142374	VCS-125 350/500	1"	3142521	FGDR 1"

Two stages progressive mechanical Low NOx class 3 (NOx < 80 mg/kWh)

model	output [kW]		burner body		pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code	min	max	code	type	Ø	
MAX GAS 350 PR	100	350	TC	3142287	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142288	17	360	3142296	MB-DLE 415 350/500	1"1/2	included
					20		3142295	MB-DLE 412 350/500	1"1/4	
					37		3142665	MB-DLE 410 350/500	1"	
					60		3142392	MB-DLE 407 350/500	3/4"	
MAX GAS 500 PR	120	500	TC	3142293	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	
			TL	3142294	20	360	3142296	MB-DLE 415 350/500	1"1/2	included
					35		3142295	MB-DLE 412 350/500	1"1/4	
					55		3142665	MB-DLE 410 350/500	1"	
					90		3142392	MB-DLE 407 350/500	3/4"	

KIT - ACCESSORIES

description	
Tightness control	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
LPG kit	see accessories page
Adaptor kit for gas train	see accessories page
Additional gas accessories	see accessories page

One stage Low NOx class 3 (NOx < 80 mg/kWh) - LPG versions - TW

model	output [kW]		burner body		pressure [mbar]		gas train			LPG kit	adapt. kit
	min	max	blast tube	code	min	max	code	type	Ø	code	code
MAX GAS 40 P	17	48	TC	3142741	7	65	3141885	MBC 65 DLE	1/2"	3122301	-
			TL	3142742							
MAX GAS 70 P	34	70	TC	3142743	15	65	3141885	MBC 65 DLE	1/2"	3122301	-
			TL	3142744							
MAX GAS 105 P	49	108	TC	3142745	24	65	3141885	MBC 65 DLE	1/2"	3122301	-
			TL	3142746							
MAX GAS 120 P	49	120	TC	3142747	24	65	3141885	MBC 65 DLE	1/2"	3122301	-
			TL	3142748							
MAX GAS 170 P	55	175	TC	3142749	23	360	3123560	MB-DLE 405	3/4"	3122302	3122300
			TL	3142750							
MAX GAS 250 P	55	240	TC	3142751	34	360	3123560	MB-DLE 405	3/4"	3122302	3122300
			TL	3142752							
MAX GAS 350 P	100	350	TC	3142283	33	360	3122392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142284							
MAX GAS 500 P	120	500	TC	3142289	52	360	3122392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142290							

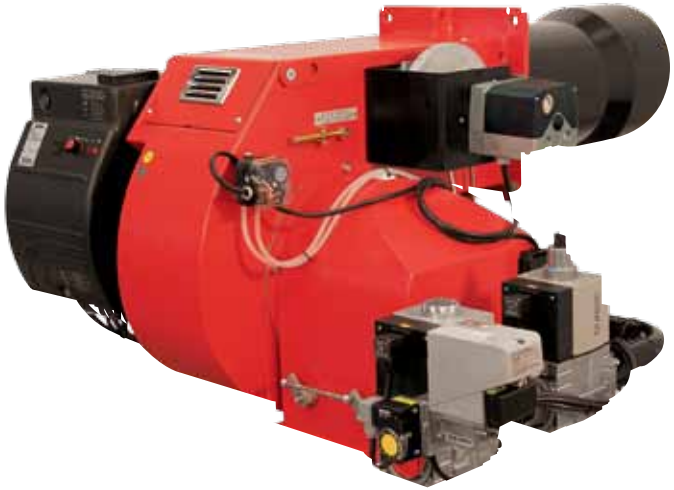
Two stages Low NOx class 3 (NOx < 80 mg/kWh) - LPG versions

model	output [kW]		burner body		pressure [mbar]		gas train			LPG kit	adapt. kit
	min	max	blast tube	code	min	max	code	type	Ø	code	code
MAX GAS 120 PAB	40	120	TC	3123954	15	360	3123960	MB-ZRDLE 405	3/4"	3122301	-
			TL	3123955							
MAX GAS 170 PAB	55	175	TC	3123956	23	360	3123960	MB-ZRDLE 405	3/4"	3122302	3122300
			TL	3123957							
MAX GAS 250 PAB	55	240	TC	3123958	34	360	3123960	MB-ZRDLE 405	3/4"	3122302	3122300
			TL	3123959							
MAX GAS 350 PAB	100	350	TC	3142285	33	360	3142392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142286							
MAX GAS 500 PAB	120	500	TC	3142291	52	360	3142392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142292							

Two stages progressive mechanical Low NOx class 3 (NOx < 80 mg/kWh) - LPG versions

model	output [kW]		burner body		pressure [mbar]		gas train			LPG kit	adapt. kit
	min	max	blast tube	code	min	max	code	type	Ø	code	code
MAX GAS 350 PR	100	350	TC	3142287	33	360	3142392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142288							
MAX GAS 500 PR	120	500	TC	3142293	52	360	3142392	MB-DLE 407 350/500	3/4"	3142431	-
			TL	3142294							

BLU - Low NOx class 3 (< 80 mg/kWh) and class 2 (< 120 mg/kWh)



BLU range is available in the following versions and is delivered in a modular system of boxes:

- **PAB**: 2 stages
- **PR**: 2 stages progressive mechanical

BBCH: Burner body with combustion head → TC short head and TL long head
SILENCER: included by default from BLU 3000.1 and optional on smaller output KITSIL-...
GT: Gas train separate → EN676 or Export configuration
GTCP: Connection pipe between burner and gas train starting from model 1700.1
FGDR: Gas governor and filter for double solenoid valves VCS Kromschröder
FILTER: for double gas valves VGD Siemens
KITTC-...: Tightness control kit to be included over 1200 kW according to EN676
KITPRES-...: Maximum pressure switch
KIT & ACS can be added according to local rules installations (ball valve, antivibration coupling...)

EN676 configuration:

- GasMultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch up to model BLU 2000.1
- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch + separate gas governor and filter FGDR
- Double gas valves with actuators and regulator VGD Siemens§ + gas filter
- KITTC-... Tightness control device must be included over 1200 kW according to EN676
- KITPRES... Maximum pressure switch as option or in compliance with local safety regulations

EXPORT configuration (others additional options to be added by installer in compliance with local safety regulations):

- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch
- Double gas valves with actuators and regulator VGD Siemens§

§ VGD Siemens: default blank spring, head pressure 0...22 mbar; from BLU 300.1 change spring and damping (see pag. 53).

Gas train matching table and pressure drop diagrams for natural gas/LPG are available in the gas train technical documentation.

KIT - ACS (see dedicated pages)

- LPG KIT up to Blu 2000.1
- KIT Wieland plugs
- PID modulating KIT and probe
- Antivibration coupling and ball valve

Available configurations on request

- CV: Continuous ventilation version
- OEM and special application version only on request
- KITSWIRL: Swirl system for flame customized in our FLEXSHOP

GAS BURNERS

BLU

Two stages Low NOx (NOx < 80 mg/kWh)

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 700.1 PAB Low NOx	270	700	TC	3124012	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							175		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3124013	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							175		3142024	VCS 125	1"	3142521	FGDR 1"
BLU 1000.1 PAB Low NOx	280	875	TC	3140303	OPT	-	30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							60		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3140304	OPT	-	30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							60		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
BLU 1200.1 PAB Low NOx	290	1100	TC	3140309	OPT	-	20	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							65		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140310	OPT	-	20	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							65		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
BLU 1500.1 PAB Low NOx	300	1550	TC	3140312	OPT	3141842	30	700	3124110	VGD 40.065	2"1/2	3124111	Filter 2"1/2
						3142076	40	600	3123860	VGD 20.503	2"	3121384	Filter 2"
						-	60	500	3141862	VCS 350	2"	3142524	FGDR 2"
							130		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140313	OPT	3141842	30	700	3124110	VGD 40.065	2"1/2	3124111	Filter 2"1/2
						3142076	40	600	3123860	VGD 20.503	2"	3121384	Filter 2"
						-	60	500	3141862	VCS 350	2"	3142524	FGDR 2"
							130		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 1000.1 PAB	245	970	TC	3124014	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							55		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
			TL	3124015	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							55		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 1200.1 PAB	260	1200	TC	3124016	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3124017	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
BLU 1700.1 PAB	342	1770	TC	3140326	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142074	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140327	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142074	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
BLU 2000.1 PAB	414	2150	TC	3140330	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142074	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140331	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142074	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages progressive mechanical Low NOx class 3 (NOx < 80 mg/kWh)

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 700.1 PR Low NOx	270	700	TC	3124030	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							175		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3123886	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							175		3142024	VCS 125	1"	3142521	FGDR 1"
BLU 1000.1 PR Low NOx	280	875	TC	3142587	OPT	-	30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							60		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"1/2
			TL	3140391	OPT	-	30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							60		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"1/2
BLU 1200.1 PR Low NOx	290	1100	TC	3140396	OPT	-	20	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							65		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140397	OPT	-	20	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							30	500	3141862	VCS 350	2"	3142524	FGDR 2"
							65		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 1500.1 PR Low NOx	300	1550	TC	3124109	OPT	3141842	30	700	3124110	VGD 40.065	2"1/2	3124111	Filter 2"1/2
						3142076	40	600	3123860	VGD 20.503	2"	3121384	Filter 2"
						-	60	500	3141862	VCS 350	2"	3142524	FGDR 2"
							130		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140400	OPT	3141842	30	700	3124110	VGD 40.065	2"1/2	3124111	Filter 2"1/2
						3142076	40	600	3123860	VGD 20.503	2"	3121384	Filter 2"
						-	60	500	3141862	VCS 350	2"	3142524	FGDR 2"
							130		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages progressive mechanical

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 1000.1 PR	245	970	TC	3124031	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							55		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
			TL	3124032	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							55		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
BLU 1200.1 PR	260	1200	TC	3124033	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3124034	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
BLU 1700.1 PR	342	1770	TC	3140401	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142074	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140402	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142074	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
BLU 2000.1 PR	414	2150	TC	3140403	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142074	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140404	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142074	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages - MultiBloc gas train

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
BLU 700.1 PAB Low NOx	270	700	TC	3124012	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
			TL	3124013	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
BLU 1000.1 PAB Low NOx	280	875	TC	3140303	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							40		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3140304	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							40		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
BLU 1200.1 PAB Low NOx	290	1100	TC	3140309	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							45		3141846	MB-DLE 415	1"1/2	
							85		3141845	MB-DLE 412	1"1/4	
			TL	3140310	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							45		3141846	MB-DLE 415	1"1/2	
							85		3141845	MB-DLE 412	1"1/4	
BLU 1500.1 PAB Low NOx	300	1550	TC	3140312	OPT	3142076	60	360	3141847	MB-DLE 420	2"	included
							70		3141846	MB-DLE 415	1"1/2	
			TL	3140313	OPT	3142076	60	360	3141847	MB-DLE 420	2"	included
							70		3141846	MB-DLE 415	1"1/2	

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
BLU 1000.1 PAB	245	970	TC	3124014	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3124015	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
BLU 1200.1 PAB	260	1200	TC	3124016	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
			TL	3124017	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
BLU 1700.1 PAB	342	1770	TC	3140326	OPT	3142074	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
			TL	3140327	OPT	3142074	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
BLU 2000.1 PAB	414	2150	TC	3140330	OPT	3142074	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	
			TL	3140331	OPT	3142074	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	

Two stages progressive mechanical

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
BLU 700.1 PR Low NOx	270	700	TC	3124030	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
			TL	3123886	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
BLU 1000.1 PR Low NOx	280	875	TC	3142587	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							40		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3140391	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							40		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB -DLE 412	1"1/4	
BLU 1200.1 PR Low NOx	290	1100	TC	3140396	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							45		3141846	MB-DLE 415	1"1/2	
							85		3141845	MB -DLE 412	1"1/4	
			TL	3140397	OPT	-	35	360	3141847	MB-DLE 420	2"	included
							45		3141846	MB-DLE 415	1"1/2	
							85		3141845	MB-DLE 412	1"1/4	
BLU 1500.1 PR Low NOx	300	1550	TC	3124109	OPT	3142076	60	360	3141847	MB-DLE 420	2"	included
							70		3141846	MB-DLE 415	1"1/2	
			TL	3140400	OPT	3142076	60	360	3141847	MB-DLE 420	2"	included
							70		3141846	MB-DLE 415	1"1/2	

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
BLU 1000.1 PR	245	970	TC	3124031	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3124032	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
BLU 1200.1 PR	260	1200	TC	3124033	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
			TL	3124034	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
BLU 1700.1 PR	342	1770	TC	3140401	OPT	3142074	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
			TL	3140402	OPT	3142074	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
BLU 2000.1 PR	414	2150	TC	3140403	OPT	3142074	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	
			TL	3140404	OPT	3142074	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	

Two stages progressive mechanical

model	output [kW]		burner body		silencer	connection	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code		pipe code	min	max	code	type	Ø	code	type
BLU 3000.1 PR	630	3000	TC	3140405	STD	3142069+ 3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3140406	STD	3142069+ 3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
BLU 4000.1 PR	875	3900	TC	3140407	STD	3142069+ 3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3140408	STD	3142069+ 3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"
BLU 5000.1 PR	1200	5000	TC	3140410	STD	3142198	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3140411	STD	3142198	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
BLU 6000.1 PR	1500	5800	TC	3140413	STD	3142198	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3140414	STD	3142198	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from BLU 3000.1 change spring and damping (see pag. 53)

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
BLU 7000.1 PR	1500	7500	TC	3142588	STD	3142422+ 3142425	60	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	75		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	140		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	280		3124110	VGD 40.065	DN65	3124111	Filter DN65
BLU 8000.1 PR	2000	8500	TC	3142589	STD	3142422+ 3142425	85	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	110		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	210		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	410		3124110	VGD 40.065	DN65	3124111	Filter DN65
BLU 10000.1 PR	2500	10500	TC	3142590	STD	3142422+ 3142425	115	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	165		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	290		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	550		3124110	VGD 40.065	DN65	3124111	Filter DN65
BLU 12000.1 PR	2700	13000	TC	3142591	STD	3142422+ 3142425	175	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	230		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	420		3142026	VGD 40.080	DN80	3142088	Filter DN80
BLU 15000.1 PR	3690	15000	TC	3142592	STD	3142422+ 3142425	150	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	230		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	450		3142026	VGD 40.080	DN80	3142088	Filter DN80
BLU 18000.1 PR	4000	17000	TC	3142593	STD	3142422+ 3142425	210	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	330		3141869	VGD 40.100	DN100	3142205	Filter DN100

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from BLU 3000.1 change spring and damping (see pag. 53)

Two stages progressive mechanical - No silencer

model	output [kW]		burner body		NO silencer
	min	max	blast tube	code	
BLU 3000.1 PR	630	3000	TC	3141753	NS
			TL	3141754	
BLU 4000.1 PR	875	3900	TC	3141756	NS
			TL	3141757	
BLU 5000.1 PR	1200	5000	TC	3141758	NS
			TL	3141759	
BLU 6000.1 PR	1500	5800	TC	3141761	NS
			TL	3141762	

KIT - ACCESSORIES

description	
Tightness control	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
LPG kit	see accessories page
Adaptor kit for gas train	see accessories page
Additional gas accessories	see accessories page

BLU - DUOBLOCK AND ELECTRONIC BURNERS

Versions from 2 to 25 MW are available on request for selected output to match main boilers and industry application.

MULTICALOR

MULTICALOR is available in the following versions and is delivered in a modular system of boxes:

- **AB**: 2 stages gas and light oil / soft start light oil
- **PR-AB**: 2 stages progressive mechanical gas / 2 stages light oil - soft start light oil
- **PR**: 2 stages progressive mechanical gas - oil

BBCH: Burner body with combustion head → TC short head and TL long head.
Easy maintenance system with hinge flange for models 1500.1 - 1800.1.
SILENCER: included by default from model 300.1 and optional on smaller output KITSIL-...
GT: Gas train separate → EN676 or Export configuration
GTCP: Connection pipe between burner and gas train starting from model 170.1
FGDR: Gas governor and filter for double solenoid valves VCS Kromschröder
FILTER for double gas valves VGD Siemens
KITTC-...: Tightness control kit to be included over 1200 kW according to EN676
KITPRES...: Maximum pressure switch
KIT & ACS can be added according to local rules installations (ball valve, antivibration coupling...)

Standard version running on manual fuel selection mode and on request kit for automatic fuel changeover.
The automatic changeover system can be triggered by a gas pressure switch or by a timer.

EN676 configuration:

- GasMultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch up to model MULTICALOR 200.1
- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch + separate gas governor and filter FGDR
- Double gas valves with actuators and regulator VGD Siemens§ + gas filter
- KITTC-... Tightness control device must be included over 1200 kW according to EN676
- KITPRES... Maximum pressure switch as option or in compliance with local safety regulations

EXPORT configuration (others additional options to be added by installer in compliance with local safety regulations):

- Double solenoid valves VCS Kromschröder: double solenoid valves including min gas pressure switch
- Double gas valves with actuators and regulator VGD Siemens§

§ VGD Siemens: default blank spring, head pressure 0...22 mbar. From MULTICALOR 300.1 change spring and damping (see pag. 53).

Gas train matching table and pressure drop diagrams for natural gas/LPG are available in the gas train technical documentation.

KIT - ACS (see dedicated pages)

- LPG KIT up to MULTICALOR 200.1
- KIT automatic fuel changeover
- PID modulating KIT and probe
- KIT Wieland plugs
- Antivibration coupling and ball valve

Available configurations on request

- CV: Continuous ventilation version
- OEM and special application version only on request
- KITSWIRL: Swirl system for flame customized in our FLEXSHOP

DUAL FUEL BURNERS (GAS/LIGHT OIL)

MULTICALOR

Two stages gas / Two stages light oil

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTICALOR 45	190	500	TC	3140429	-	-	17	500	3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							90		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3140428	-	-	17	500	3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							90		3142024	VCS 125	1"	3142521	FGDR 1"
MULTICALOR 70	250	700	TC	3140431	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3140430	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
MULTICALOR 100	300	1000	TC	3140433	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							40		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
			TL	3140432	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							40		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
MULTICALOR 140	400	1300	TC	3140439	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3140438	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
MULTICALOR 170.1	342	1770	TC	3142628	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142075	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3142629	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142075	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
MULTICALOR 200.1	414	2150	TC	3142630	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142075	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3142631	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142075	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages progressive mechanical gas / Two stages light oil

model	output [kW]		burner body		silencer	connection pipe	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code		code	min	max	code	type	Ø	code	type
MULTICALOR 70 PR-AB	190	700	TC	3142632	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
			TL	3142633	OPT	-	15	500	3141862	VCS 350	2"	3142524	FGDR 2"
							30		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							170		3142024	VCS 125	1"	3142521	FGDR 1"
MULTICALOR 100 PR-AB	200	1000	TC	3142634	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							40		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
			TL	3142635	OPT	-	25	500	3141862	VCS 350	2"	3142524	FGDR 2"
							40		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
							165		3142024	VCS 125	1"	3142523	FGDR 1"1/2
MULTICALOR 140 PR-AB	250	1300	TC	3142636	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3142637	OPT	-	25	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							35	500	3141862	VCS 350	2"	3142524	FGDR 2"
							80		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
MULTICALOR 170.1 PR-AB	342	1770	TC	3142638	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142075	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3142639	OPT	3142069	20	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142075	45	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							65	500	3141862	VCS 350	2"	3142524	FGDR 2"
							150		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
MULTICALOR 200.1 PR-AB	414	2150	TC	3142640	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142075	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2
			TL	3142641	OPT	3142069	23	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	35		3124110	VGD 40.065	2"1/2	3124111	Filter DN65
						3142075	60	600	3123860	VGD 20.503	2"	3121384	Filter 2"
							90	500	3141862	VCS 350	2"	3142524	FGDR 2"
							220		3142025	VCS 240	1"1/2	3142523	FGDR 1"1/2

Two stages gas / Two stages light oil - MultiBloc gas train

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
MULTICALOR 45	190	500	TC	3140429	OPT	-	15	360	3141846	MB-DLE 415	1"1/2	included
							30		3141845	MB-DLE 412	1"1/4	
							50		3142022	MB-DLE 410	1"	
							85		3123525	MB-DLE 407	3/4"	
			TL	3140428	OPT	-	15	360	3141846	MB-DLE 415	1"1/2	included
							30		3141845	MB-DLE 412	1"1/4	
							50		3142022	MB-DLE 410	1"	
							85		3123525	MB-DLE 407	3/4"	
MULTICALOR 70	250	700	TC	3140431	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
			TL	3140430	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
MULTICALOR 100	300	1000	TC	3140433	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3140432	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
MULTICALOR 140	400	1300	TC	3140439	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
			TL	3140438	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
MULTICALOR 170.1	342	1770	TC	3142628	OPT	3142075	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
			TL	3142629	OPT	3142075	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
MULTICALOR 200.1	414	2150	TC	3142630	OPT	3142075	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	
			TL	3142631	OPT	3142075	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	

Two stages progressive mechanical gas / Two stages light oil - MultiBloc gas train

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter
	min	max	blast tube	code			min	max	code	type	Ø	
MULTICALOR 70 PR-AB	190	700	TC	3142632	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
			TL	3142633	OPT	-	17	360	3141847	MB-DLE 420	2"	included
							25		3141846	MB-DLE 415	1"1/2	
							75		3142022	MB-DLE 410	1"	
MULTICALOR 100 PR-AB	200	1000	TC	3142634	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
			TL	3142635	OPT	-	27	360	3141847	MB-DLE 420	2"	included
							35		3141846	MB-DLE 415	1"1/2	
							75		3141845	MB-DLE 412	1"1/4	
MULTICALOR 140 PR-AB	250	1300	TC	3142636	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
			TL	3142637	OPT	-	40	360	3141847	MB-DLE 420	2"	included
							50		3141846	MB-DLE 415	1"1/2	
							100		3141845	MB-DLE 412	1"1/4	
MULTICALOR 170.1 PR-AB	342	1770	TC	3142638	OPT	3142075	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
			TL	3142639	OPT	3142075	60	360	3141847	MB-DLE 420	2"	included
							85		3141846	MB-DLE 415	1"1/2	
MULTICALOR 200.1 PR-AB	414	2150	TC	3142640	OPT	3142075	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	
			TL	3142641	OPT	3142075	75	360	3141847	MB-DLE 420	2"	included
							100		3141846	MB-DLE 415	1"1/2	

Two stages progressive mechanical gas / Two stages progressive mechanical light oil - Only body

model	output [kW]		burner body		silencer
	min	max	blast tube	code	
MULTICALOR 70 PR	250	700	TL	on request	OPT
MULTICALOR 100 PR	300	1000	TL	on request	OPT
MULTICALOR 140 PR	400	1300	TL	on request	OPT
MULTICALOR 170.1 PR	342	1770	TL	on request	OPT
MULTICALOR 200.1 PR	414	2150	TL	on request	OPT

Two stages progressive mechanical gas / Two stages progressive mechanical light oil

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTICALOR 300.1 PR	630	3000	TC	3142642	STD	3142069+ 3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142643	STD	3142069+ 3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
MULTICALOR 400.1 PR	875	3900	TC	3142644	STD	3142069+ 3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142645	STD	3142069+ 3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142069	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142197	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"
MULTICALOR 500.1 PR	1200	5000	TC	3142646	STD	3142198	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142070	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142647	STD	3142198	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
MULTICALOR 600.1 PR	1500	5800	TC	3142648	STD	3142198	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142649	STD	3142198	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142070+ 3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142070	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142071	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3142075	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTICALOR 300.1 change spring and damping (see pag. 53)

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTICALOR 700.1 PR	1500	7500	TC	3142650	STD	3142422+ 3142425	60	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	75		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	140		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	280		3124110	VGD 40.065	DN65	3124111	Filter DN65
MULTICALOR 800.1 PR	2000	8500	TC	3142651	STD	3142422+ 3142425	85	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	110		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	210		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	410		3124110	VGD 40.065	DN65	3124111	Filter DN65
MULTICALOR 1000.1 PR	2500	10500	TC	3142652	STD	3142422+ 3142425	115	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	165		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	290		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142423	550		3124110	VGD 40.065	DN65	3124111	Filter DN65
MULTICALOR 1200.1 PR	2700	13000	TC	3142653	STD	3142422+ 3142425	175	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	230		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	420		3142026	VGD 40.080	DN80	3142088	Filter DN80
MULTICALOR 1500.1 PR	3690	15000	TC	3142654	STD	3142422+ 3142425	150	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	230		3141869	VGD 40.100	DN100	3142205	Filter DN100
						3142424	450		3142026	VGD 40.080	DN80	3142088	Filter DN80
MULTICALOR 1800.1 PR	4000	17000	TC	3142655	STD	3142422+ 3142425	210	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142422	330		3141869	VGD 40.100	DN100	3142205	Filter DN100

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTICALOR 300.1 change spring and damping (see pag. 53)

KIT - ACCESSORIES

description	
Silencer	see accessories page
Tightness control	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
LPG kit	see accessories page
Additional gas accessories	see accessories page
Automatic fuel changeover kit	see accessories page
Oil pumping unit	see accessories page

MULTICALOR - DUOBLOCK AND ELECTRONIC BURNERS

Versions from 2 to 25 MW are available on request for selected output to match main boilers and industry application.

DUAL FUEL BURNERS (GAS/HEAVY OIL)

MULTIFLAM - Max visc. 50° - 100°E at 50°C

MULTIFLAM range is available in the following versions and is delivered in a modular system of boxes:

- **PAB**: 2 stages gas and heavy oil / soft start heavy oil
- **PR**: 2 stages progressive mechanical gas - heavy oil

BBCH: Burner body with combustion head → TC short head and TL long head in D version for heavy oil with max visc 50°E at 50°C. Electrical pre-heater preassembled into the burner body.
All burners body include silencer and are delivered with sliding bar system up to model 1200.1 and with hinge flange for models 200.1 and 1500.1 - 1800.1.
SILENCER: included by default from model 300.1 and optional on smaller output KITSIL-...
GT: Gas train separate → EN676 or Export configuration
GTCP: Connection pipe between burner and gas train starting from model 170.1
FGDR: Gas governor and filter for double solenoid valves VCS Kromschröder
FILTER for double gas valves VGD Siemens
KITTC-...: Tightness control kit to be included over 1200 kW according to EN676
KITPRES...: Maximum pressure switch
KIT & ACS can be added according to local rules installations (ball valve, antivibration coupling...)

Standard version running on manual fuel selection mode and on request kit for automatic fuel changeover.
The automatic changeover system can be triggered by a gas pressure switch or by a timer.

EN676 configuration:

- Double gas valves with actuators and regulator VGD Siemens§ + gas filter
- KITTC-... Tightness control device must be included over 1200 kW according to EN676
- KITPRES... Maximum pressure switch as option or in compliance with local safety regulations

§ VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTIFLAM 300.1 change spring and damping (see pag. 53).

Gas train matching table and pressure drop diagrams for natural gas/LPG are available in the gas train technical documentation.

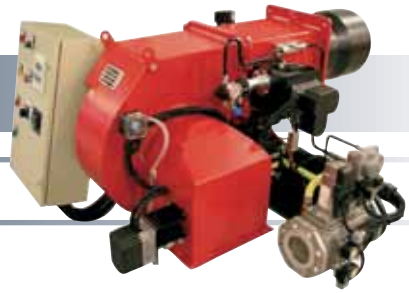
KIT - ACS (see dedicated pages)

- KIT automatic fuel changeover
- PID modulating KIT and probe
- KIT Wieland plugs
- Antivibration coupling and ball valve

Available configurations on request:

- CV: Continuous ventilation version
- OEM and special application version only on request
- KITSWIRL: Swirl system for flame customized in our FLEXSHOP

DUAL FUEL BURNERS (GAS/HEAVY OIL)



MULTIFLAM

Two stages gas / Two stages heavy oil - 50°E fuel viscosity at 50°C

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTIFLAM 200.1	414	2150	TC	3142669	STD	-	35	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142670	STD	-	35	700	3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"

Two stages progressive mechanical gas / Two stages progressive mechanical heavy oil - 50°E fuel viscosity at 50°C

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTIFLAM 300.1 PR	630	3000	TC	3142656	STD	3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142657	STD	3142073	22	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	35		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	55		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	100	600	3123860	VGD 20.503	2"	3121384	Filter 2"
MULTIFLAM 400.1 PR	875	3900	TC	3142658	STD	3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142659	STD	3142073	30	700	3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	50		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	90		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	170	600	3123860	VGD 20.503	2"	3121384	Filter 2"

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTIFLAM 300.1 change spring and damping (see pag. 53)

model	output [kW]		burner body		silencer	connection pipe code	pressure [mbar]		gas train (§)			gas governor and filter	
	min	max	blast tube	code			min	max	code	type	Ø	code	type
MULTIFLAM 500.1 PR	1200	5000	TC	3142660	STD	3143105	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142661	STD	3143105	35	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142073	45		3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	75		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	140		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	250	600	3123860	VGD 20.503	2"	3121384	Filter 2"
MULTIFLAM 600.1 PR	1500	5800	TC	3142662	STD	3143105	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"
			TL	3142663	STD	3143105	50	700	3142666	VGD 40.125	DN125	3142206	Filter DN125
						3142073	60		3141869	VGD 40.100	DN100	3142205	Filter DN100
						-	100		3142026	VGD 40.080	DN80	3142088	Filter DN80
						3142935	180		3124110	VGD 40.065	DN65	3124111	Filter DN65
						3143080	340	600	3123860	VGD 20.503	2"	3121384	Filter 2"

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTIFLAM 300.1 change spring and damping (see pag. 53)

KIT - ACCESSORIES

description	
Silencer	see accessories page
Tightness control	see accessories page
Modulation kit	see accessories page
Probe	see accessories page
LPG kit	see accessories page
Additional gas accessories	see accessories page
Automatic fuel changeover kit	see accessories page
Oil heating pumping unit	see accessories page

Two stages progressive mechanical gas / Two stages progressive mechanical heavy oil - 50°E fuel viscosity at 50°C

model	output [kW]		burner body		silencer	pressure [mbar]		gas train (§)		gas governor and filter
	min	max	blast tube	code		min	max	type	Ø	
MULTIFLAM 700.1 PR	1500	7500	TC	-	STD	60	700	VGD 40.125	DN125	Filter DN125
						75		VGD 40.100	DN100	Filter DN100
						140		VGD 40.080	DN80	Filter DN80
						280		VGD 40.065	DN65	Filter DN65
MULTIFLAM 800.1 PR	2000	8500	TC	-	STD	85	700	VGD 40.125	DN125	Filter DN125
						110		VGD 40.100	DN100	Filter DN100
						210		VGD 40.080	DN80	Filter DN80
						410		VGD 40.065	DN65	Filter DN65
MULTIFLAM 1000.1 PR	2500	10500	TC	-	STD	115	700	VGD 40.125	DN125	Filter DN125
						165		VGD 40.100	DN100	Filter DN100
						290		VGD 40.080	DN80	Filter DN80
						550		VGD 40.065	DN65	Filter DN65
MULTIFLAM 1200.1 PR	2700	13000	TC	-	STD	160	700	VGD 40.150	DN150	Filter DN150
						175		VGD 40.125	DN125	Filter DN125
						230		VGD 40.100	DN100	Filter DN100
						420		VGD 40.080	DN80	Filter DN80
MULTIFLAM 1500.1 PR	3690	15000	TC	-	STD	125	700	VGD 40.150	DN150	Filter DN150
						150		VGD 40.125	DN125	Filter DN125
						230		VGD 40.100	DN100	Filter DN100
						450		VGD 40.080	DN80	Filter DN80
MULTIFLAM 1800.1 PR	4000	17000	TC	-	STD	175	700	VGD 40.150	DN150	Filter DN150
						210		VGD 40.125	DN125	Filter DN125
						330		VGD 40.100	DN100	Filter DN100

! § VGD Siemens: default blank spring, head pressure 0...22 mbar; from MULTIFLAM 300.1 change spring and damping (see pag. 53)

MULTIFLAM - DUOBLOCK AND ELECTRONIC BURNERS

Versions from 2 to 25 MW are available on request for selected output to match main boilers and industry application.

GAS TRAIN: MAX GAS

EN676

MultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch.

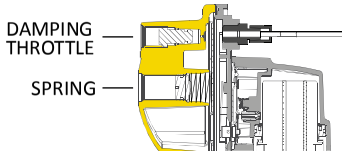
WARNING:
EN676 compulsory kit and accessories in order to comply to the safety regulations. Additional accessories and kits shall be installed by the installer in accordance to the local safety regulations and codes of practise.

Configuration	MB-DLE MultiBloc Dungs MAX GAS 40-250	Ø	Code
	GT-D1-MBC65DLE-RP15-MAXGAS40-120	RP 15 - 1/2"	3141885
	GT-D1-MBC120DLE-RP20-MAXGAS40-120	RP 20 - 3/4"	3141886
	GT-D1-MBDLE403-RP15-MAXGAS40-120	RP 15 - 1/2"	3123944
	GT-D1-MBDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	3123560
	GT-D1-MBDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	3123525
	GT-D1-MBDLE410-RP25-MAXGAS170-250	RP 25 - 1"	3123947
	GT-D1-MBDLE412-RP32-MAXGAS170-250	RP 32 - 1"1/4	3141899
	GT-D1-MBDLE415-RP40-MAXGAS170-250	RP 40 - 1"1/2	3123969
	MB-ZRDLE MultiBloc Dungs MAX GAS 40-250	**Ø**	**Code**
	GT-D2-MBZRDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	3123960
	GT-D2-MBZRDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	3123961
	GT-D2-MBZRDLE410-RP25-MAXGAS170-250	RP 25 - 1"	3123962
	GT-D2-MBZRDLE412-RP32-MAXGAS170-250	RP 32 - 1"1/4	3141901
	GT-D2-MBZRDLE415-RP40-MAXGAS170-250	RP 40 - 1"1/2	3123879
	MB-DLE MultiBloc Dungs MAX GAS 350-500	**Ø**	**Code**
	GT-D2-MBDLE407-RP20-MAXGAS350-500	RP 20 - 3/4"	3142392
	GT-D2-MBDLE410-RP25-MAXGAS350-500	RP 25 - 1"	3142665
	GT-D2-MBDLE412-RP32-MAXGAS350-500	RP 32 - 1"1/4	3142295
	GT-D2-MBDLE415-RP40-MAXGAS350-500	RP 40 - 1"1/2	3142296
Configuration	**VCS Kromschröder MAX GAS 170-250**	**Ø**	**Code**
Export EN676 + FGDR Double solenoid valves VCS Kromschröder and min pressure switch + ACS gas governor & filter	GT-K1-VCS125-RP25-MAXGAS170-250	RP 25 - 1"	3141906
	GT-K1-VCS240-RP40-MAXGAS170-250	RP 40 - 1"1/2	3142251
	VCS Kromschröder MAX GAS 350-500	**Ø**	**Code**
	GT-K2-VCS125-RP25-MAXGAS350-500/MULTI	RP 25 - 1"	3142374
	GT-K2-VCS240-RP40-MAXGAS350-500/MULTI	RP 40 - 1"1/2	3142375
	GT-K2-VCS350-RP50-MAXGAS350-500/MULTI	RP 50 - 2"	3142376
Configuration	**Export gas trains MAX GAS 40-250**	**Ø**	**Code**
Only Export (not EN676)	GT-D1-GBLE055-RP15-MAXGAS40-120	RP 15 - 1/2"	3142027
	GT-B1-E6GSRP-RP15-MAXGAS40-120	RP 15 - 1/2"	3141888
	GT-B1-EG12L-RP15-MAXGAS40-120	RP 15 - 1/2"	3141887
	GT-K1-VAS125-RP25-MAXGAS170-250	RP 25 - 1"	3142815
	GT-K1-VAS240-RP40-MAXGAS170-250	RP 40 - 1"1/2	3142816

GAS TRAIN - GTCP: BLU - MULTICALOR - MULTIFLAM

GT Configuration	Designation MB-DLE MultiBloc Dungs	Ø	Code
EN676 MultiBloc Dungs: compact double solenoid valve with integrated filter, regulator and min pressure switch.	GT-D2-MBDLE407-RP20-BLU/MULTI	RP 20 - 3/4"	3141843
	GT-D2-MBDLE410-RP25-BLU/MULTI	RP 25 - 1"	3142022
	GT-D2-MBDLE412-RP32-BLU/MULTI	RP 32 - 1"1/4	3141845
	GT-D2-MBDLE415-RP40-BLU/MULTI	RP 40 - 1"1/2	3141846
	GT-D2-MBDLE420-RP50-BLU/MULTI	RP 50 - 2"	3141847
GT Configuration	**Designation VCS Kromschröder**	**Ø**	**Code**
Export / EN676 + FGDR Double solenoid valves VCS Kromschröder and min pressure switch + ACS gas governor & filter	GT-K2-VCS125-RP25-BLU/MULTI	RP 25 - 1"	3142024
	GT-K2-VCS240-RP40-BLU/MULTI	RP 40 - 1"1/2	3142025
	GT-K2-VCS350-RP50-BLU/MULTI	RP 50 - 2"	3141862
GT Configuration	**Designation VGD Siemens**	**Ø**	**Code**
Export / EN676 + FGDR Double gas valves with actuators and regulator VGD Siemens and min pressure switch + ACS gas filter. Default blank spring: head pressure 0...22 mbar **WARNING**: from BLU 3000.1 - MULTICALOR 300.1 - MULTIFLAM 300.1 change spring and damping	GT-S2-VGD20-RP50-BLU/MULTI	RP 50 - 2"	3123860
	GT-S2-VGD40-DN65-BLU/MULTI	DN 65 - 2" 1/2	3124110
	GT-S2-VGD40-DN80-BLU/MULTI	DN 80 - 3"	3142026
	GT-S2-VGD40-DN100-BLU/MULTI	DN 100 - 4"	3141869
	GT-S2-VGD40-DN100+VDK-BLU/MULTI	DN 100 - 4" + VDK	3141871
	GT-S2-VGD40-DN125-BLU/MULTI	DN 125 - 5"	3142666
	GT-S2-VGD40-DN125+VDK-BLU/MULTI	DN 125 - 5" + VDK	3141872
	Yellow setpoint spring for SKP25...	Head pressure: 15...120 mbar	3142204
	Damping throttle for SKP25...	Head pressure: 15...120 mbar	3142207

Gas trains include ACTUATORS



GAS TRAIN CONNECTION PIPE	Description		Designation	Code
 WARNING: From BLU 1700.1 - MULTICALOR 170.1 - MULTIFLAM 200.1, in order to fit the gas train, the corresponding connection pipe must be ordered (GTCP size and fitting depend on the burner and the gas train selected)	GTCP RP50-DN65 platform 260		GTCP-RP50-DN65-260	3141842
	GTCP RP50 platform 280		GTCP-RP50-280	3142074
	GTCP RP50 platform 320/380		GTCP-RP50-320/380	3142075
	GTCP RP50 BLU 1500 with MB415-420		GTCP-RP50-BLU1500-MB415-420	3142076
	GTCP RP50 adaptor Multiflam		GTCP-RP50-ADAPTOR-MULTIFLAM	3143080
	GTCP DN65 platform 260/280/320		GTCP-DN65-260/280/320	3142197
	GTCP DN80 platform 260/280/320 *		GTCP-DN80-260/280/320	3142069
	GTCP DN65 platform 380		GTCP-DN65-380	3142071
	GTCP DN80 platform 380 *		GTCP-DN80-380	3142070
	GTCP reducer from DN80 to DN65 Multiflam		GTCP-REDUCERDN80TODN65	3142935
	GTCP reducer from DN100 to DN80 platform 320/380 (*)		GTCP-REDUCERDN100TODN80	3142073
	GTCP reducer from DN125 to DN80 platform 320/380 (*)		GTCP-REDUCERDN125TODN80	3143105
	GTCP DN125 platform 380		GTCP-DN125-380	3142198
	GTCP DN65 platform 630		GTCP-DN65-630	3142423
	GTCP DN80 platform 630/710		GTCP-DN80-630/710	3142424
	GTCP DN100 platform 630/710		GTCP-DN100-630/710	3142422
	GTCP DN125 platform 630/710	Both codes necessary for gas train DN125	GTCP-DN125-630/710	3142422
	GTCP reducer from DN125 to DN100	Both codes necessary for gas train DN125	GTCP-REDUCERDN125TODN100	3142425

ACCESSORIES FOR GAS

GAS GOVERNOR and FILTER FGDR	Max gas pressure	Code
RP 15 - 1/2" *	500 mbar	3142519
RP 20 - 3/4" *	500 mbar	3142520
RP 25 - 1" *	500 mbar	3142521
RP 32 - 1" 1/4 *	500 mbar	3142522
RP 40 - 1" 1/2 *	500 mbar	3142523
RP 50 - 2" *	500 mbar	3142524
FS1B RP 50 - 2"	1 bar	3142051
FS1B DN 65 - 2" 1/2	1 bar	3141983
FS1B DN 80 - 3"	1 bar	3142538
FS1B DN 100 - 4"	1 bar	on request
FS1B DN 125 - 5"	1 bar	on request

*** Default spring is neutral for outlet pressure range 10-30 mbar**

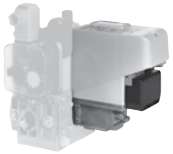
SPRING for GAS GOVERNOR and FILTER FGDR	Gas pressure range	Code
Green spring FGDR 15-20-25	5÷15 mbar	3142547
Neutral spring FGDR 15-20-25	10÷30 mbar	3142548
Violet spring FGDR 15-20-25	25÷80 mbar	3142549
Brown spring FGDR 15-20-25	70÷160 mbar	3142550
Blue spring FGDR 15-20-25	150÷280 mbar	3142551
White spring FGDR 15-20-25	270÷350 mbar	3142552
Green spring FGDR 32-40	5÷15 mbar	3142553
Neutral spring FGDR 32-40	10÷25 mbar	3142554
Violet spring FGDR 32-40	20÷70 mbar	3142555
Brown spring FGDR 32-40	65÷130 mbar	3142556
White spring FGDR 32-40	120÷250 mbar	3142557
Black spring FGDR 32-40	240÷350 mbar	3142558
Green spring FGDR 50	5÷15 mbar	3142559
Neutral spring FGDR 50	10÷35 mbar	3142560
Violet spring FGDR 50	30÷80 mbar	3142561
Brown spring FGDR 50	70÷220 mbar	3142562
Blue spring FGDR 50	210÷350 mbar	3142563

GAS FILTER	Code
RP 15 - 1/2"	3141957
RP 20 - 3/4"	3142045
RP 25 - 1"	3142046
RP 32 - 1"1/4	3141961
RP 40 - 1"1/2	3141954
RP 50 - 2"	3121384
DN 65 - 2"1/2	3124111
DN 80 - 3"	3142088
DN 100 - 4"	3142205
DN 125 - 5"	3142206

ANTIVIBRATION COUPLING	Code
RP 15 - 1/2"	3122321
RP 20 - 3/4"	3122322
RP 25 - 1"	3122323
RP 32 - 1"1/4	3122324
RP 40 - 1"1/2	3122325
RP 50 - 2"	3122326
DN 65 - 2"1/2	3142060
DN 80 - 3"	3122328
DN 100 - 4"	3122329
DN 125 - 5"	3142061

BALL VALVE	Code
RP 15 - 1/2"	3142000
RP 20 - 3/4"	3142254
RP 25 - 1"	3121430
RP 32 - 1"1/4	3142253
RP 40 - 1"1/2	3142101
RP 50 - 2"	3142102
DN 65 - 2"1/2	3142062
DN 80 - 3"	3121435
DN 100 - 4"	3141997
DN 125 - 5"	3141998

KIT - ACS FOR GAS

TIGHTNESS CONTROL		Gas train	Code
	Kit tightness control VPS504 for VCS gas valve	KITTC-VPS504-VCS	3141929
	Kit tightness control VPS504 LPG for VCS gas valve	KITTC-LPGVPS504-VCS	3142238
	Kit tightness control VPS504 for MB and VGD65-80 valve	KITTC-VPS504-MB-VGDDN65-80	3122303
	Kit tightness control VPS504 LPG for MB and VGD65-80 valve	KITTC-LPGVPS504-MB-VGDDN65-80	3142190
	Kit tightness control VPS504 for VGD20503 valve	KITTC-VPS504-VGD20503	3122305
	Kit tightness control VPS504 LPG for VGD20503 valve	KITTC-LPGVPS504-VGD20503	3142688
	Kit tightness control VDK for VGD100-125	KITTC-VDK200	3141922
	Kit tightness control LDU	KITTC-LDU11	3142314
	Kit adaptor for kit VPS pilot gas train		3142754

MAXIMUM GAS PRESSURE SWITCH		Output range	Gas pressure	Code
	KITPRES50	100÷5800 kW	2,5÷50 mbar	3141921
	KITPRES150	7000÷25000 kW	30÷150 mbar	3142033

MANOMETER + PUSH BUTTON		Gas pressure	Code
	Gas manometer	0...60 mbar 1/2"	3142056
	Gas manometer	0...250 mbar 1/4"	3142055
	Gas manometer	0...1000 mbar 1/4"	3142054
	Push button 1/4"	Diameter 1/4"	3142058
	Push button 1/2"	Diameter 1/2"	3142057

KIT LPG / KIT GN		Gas train	Code
	KITLPG-MAXGAS40-120	MAX GAS 40-120	3122301
	KITADAPTOR-MAXGAS40-120	MAX GAS 40-120	3122299
	KITLPG-MAXGAS170-250	MAX GAS 170-250	3122302
	KITADAPTOR-MAXGAS170-250	MAX GAS 170-250	3122300
	KITLPG-MAXGAS350-500	MAX GAS 350-500	3142431
	KITLPG-BLU500.1	BLU 500.1	3124487
	KITLPG-BLU700.1	BLU 700.1	3124488
	KITLPG-BLU1000.1-1500.1	BLU 1000.1-1200.1-1500.1	3124489
	KITLPG-BLU1700.1-2000.1	BLU 1700.1-2000.1	3142667
	Other model kit on request		

KIT - ACS: LOAD CONTROLLER - PROBE

MODULATING PID CONTROLLER - KIT FOR PROGRESSIVE VERSION		Code
KITMD-RWF40	KITMD-RWF40	3122291

MATCHING PROBE FOR FULL MD VERSION		Code
Water probe up to 0÷130° C	PROBE-WATER130C	3122316
Steam probe 0÷2 bar	PROBE-STEAM2BAR	3124100
Steam probe 0÷4 bar	PROBE-STEAM4BAR	3122317
Steam probe 0÷10 bar	PROBE-STEAM10BAR	3122318
Steam probe 0÷16 bar	PROBE-STEAM16BAR	3122319
Steam probe 0÷40 bar	PROBE-STEAM40BAR	3122320
External probe from -35° up to 50° C	PROBE-EXTERNAL50C	3122315
Hot air or liquid probe up to 0÷450° C	PROBE-HOTAIR-LIQUID450C	3122314

SILENCER

PLATFORM	GAS	LIGHT OIL	HEAVY OIL	GAS/LIGHT OIL	GAS/HEAVY OIL
KITSIL-260	BLU 700.1 - 1200.1	MAIOR 45 - 120	OILFLAM 50.1 - 120.1	MULTICALOR 45 - 140	MULTIFLAM 50.1 - 120.1
KITSIL-280	BLU 1500.1 - 2000.1	MAIOR 150.1 - 200.1	OILFLAM 170.1 - 200.1	MULTICALOR 170.1 - 200.1	MULTIFLAM 170.1 - 200.1
KITSIL-320	BLU 3000.1 - 4000.1	MAIOR 300.1 - 400.1	OILFLAM 300.1 - 400.1	MULTICALOR 300.1 - 400.1	MULTIFLAM 300.1 - 400.1
KITSIL-380	BLU 5000.1 - 6000.1	MAIOR 500.1 - 600.1	OILFLAM 500.1 - 600.1	MULTICALOR 500.1 - 600.1	MULTIFLAM 500.1 - 600.1
KITSIL-630	BLU 7000.1 - 12000.1	MAIOR 700.1 - 1200.1	OILFLAM 700.1 - 1200.1	MULTICALOR 700.1 - 1200.1	MULTIFLAM 700.1 - 1200.1
KITSIL-710	BLU 15000.1 - 18000.1	MAIOR 1500.1 - 1800.1	OILFLAM 1500.1 - 1800.1	MULTICALOR 1500.1 - 1800.1	MULTIFLAM 1500.1 - 1800.1
DUOBLOCK	Separate ventilator silencer / Sound proof platform on request				

PLATFORM	Code
KITSIL-260	3141911
KITSIL-280	3122298
KITSIL-320	3141913
KITSIL-380	3141914
KITSIL-630	3142276
KITSIL-710	3142668

KIT - ACS: OIL OPTIONS

KIT FOR AUTOMATIC FUEL SWITCH GAS/OIL FOR DUAL FUEL BURNERS	Description	Code
KIT-AUTOMATICFUELSWITCH-MULTI	MULTICALOR - MULTIFLAM	3142021

Standard version running on manual fuel selection mode and with the automatic changeover the system change fuel triggered by a gas pressure switch or by a timer

KIT BIODIESEL	Description	Code
KITBIODIESEL-PUMP-AS47	MAX 1-30 and MAX P 25 AB HS	3141917
KITBIODIESEL-PUMP-AT2/AT3	MAX P 12-15 AB HS	3124103

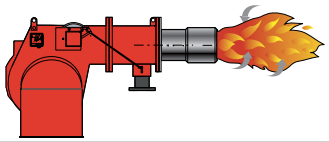
MAGNETIC + SELFCLEANING FILTER	Description	Code
KITOIL50KG-MAGNETIC+SELFCLEANING-FILTER	MAXFLAM range	3142092
KITOIL250KG-MAGNETIC+SELFCLEANING-FILTER	OILFLAM range	3141965

KIT WIELAND PLUGS	Description	Code
KITWP-MAIOR35-300.1PAB	MAIOR 45 - 300.1	3142037
KITWP-BLU500.1-2000.1PAB	BLU 500.1 - 2000.1 PAB	3142034
KITWP-BLU/MULTICALOR-PR/MD	BLU - MULTICALOR PR/MD	3141932

SEPARATE PRE-HEATER UNIT
From OILFLAM 300.1 pre-heater can be supplied separately with extra cost

LIGHT OIL PUMPING UNIT
Separate service tanks and pump units

HEAVY OIL HEATING AND PUMPING UNIT
“OIL RING” can be design and delivered assembled on skid or offered as single component

SWIRL SYSTEM	Available for different fuel burner blast tube
	Swirls for blast tube that can reduce flame lenght up to 10-50 % depending on fuel, backpressure and shape of combustion chamber

DIAGNOSTIC TOOLS FOR THERMOWATT CONTROL

DIAGNOSTIC TOOL	Code
E-BCU Diagnostic tool for 1 stage BCU	3142931
PC interface for BCU	3833018

BURNER SELECTION FORM

SECTION 1 - GENERAL INFORMATION

CUSTOMER - COUNTRY	
REFERENCE SALES PERSON	
REQUEST DATE	
INSTALLATION LOCATION	

SEGMENT

- ☐ heating
- ☐ heating OEM
- ☐ bakery
- ☐ dryers
- ☐ projects
- ☐ other industry

SECTION 2 - BOILER INFORMATION

BOILER TYPE

- ☐ three pass boiler
- ☐ reverse flame boiler
- ☐ water tube boiler
- ☐ diathermic boiler

Boiler brand	
Boiler model	
Boiler manuf. year	

APPLICATION TYPE

- ☐ incinerator
- ☐ dryer / hot air generator
- ☐ oven

HEAT TRANSFER MEDIUM

- ☐ steam (saturated)
- ☐ steam (superheated)
- ☐ hot water
- ☐ salt / oil
- ☐ others

STEAM	Steam capacity		[TPH]
	Required steam pressure		bar
	Steam temperature		[°C]
OTHER	Medium temperature		[°C]
	Medium inlet temperature		[°C]

POWER REQUIREMENT

Boiler Output		[kW]
Boiler Input		[kW]
Boiler efficiency		[%]
Burner power		[kW]

1 kW = 860 kcal/h

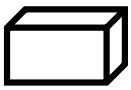
BOILER LOCATION	outdoor
	indoor
HEIGHT ABOVE SEA LEVEL	[m]

FURNACE CHAMBER DATA

Backpressure		[mbar]
Furnace position		horizontal
		top-down
		bottom-up
Required blast tube Lenght		min [mm]
		max [mm]

DIMENSIONS [mm]

Inner diameter	
Length	
Return chamber length	
Length	
Height	
Width	



ELECTRICAL SUPPLY DATA

Voltage single phase	110 V	220 V	230 V	240 V			
Voltage three phase	220 V	380 V	400 V	415 V	440 V	460 V	480 V
Frequency	50 Hz	60 Hz					
Required IP factor	IP40	IP54					

other:

SECTION 3 - FUEL INFORMATION

LIGHT OIL - HEAVY OIL			GAS / LPG			BIOGAS-TOWNGAS (Max H2S<0,1%)		
Type:			Type:			Type:		
Lower calorific value		[kcal/kg]	Lower calorific value		[kcal/m³]	Lower calorific value		[kcal/m³]
Viscosity at 50°C		[°E]	Supply pressure		[mbar]	Supply pressure		[mbar]
Required flowrate		[kg/h]	Required flowrate		[m³/h]	Required flowrate		[m³/h]

BURNER SELECTION FORM

SECTION 4 - BURNER

BURNER TYPE	☐ Monoblock	☐ Duoblock	Combustion air temperature ☐ [°C] (Max 200°C) Heat exchanger pressure losses ☐ [mbar] Current fan (if existing) flowrate: ☐ [m³/h] pressure: ☐ [mbar]

BURNER POWER	refer to the field "burner power" in the section "power requirement"

NOMINAL TURNDOWN RATIO	mechanical:	1:3	electronic with inverter:	1:8
	electronic:	1:6	electronic with inverter:	1:10

EMISSIONS LEVEL	NOx:	Gas:	<120 mg/kWh	<80 mg/kWh
		EN676	Class 2	Class 3
	CO:	EN676	0...100 mg/kWh	

Light Oil:	<250 mg/kWh	<185 mg/kWh	<120 mg/kWh
EN267	Class 1	Class 2	Class 3
EN267	0...110 mg/kWh		0...60 mg/kWh

FUEL SUPPLY	☐ single fuel	FUEL 1:	☐ Automatic fuel changeover
	☐ two fuels	FUEL 2:	
	☐ three fuels	FUEL 3:	

CONTROL TYPE	☐ 1 stage
	☐ 2 stages
	☐ 2 stage progressive mechanical
	☐ modulating mechanical with PID
	☐ modulating electronic
OPTIONS FOR ELECTRONIC VERSION	☐ inverter (modulating electronic only)
	☐ O_2 trim (modulating electronic only)
	☐ CO trim (modulating electronic only)
ELECTRICAL CONFIGURATION	☐ standard electrical panel
	☐ loosen form with derivative panel
	☐ separate switch cabinet

☐ Other requirements: specify

SECTION 5 - GAS TRAIN CONFIGURATION

		Gas governor and filter	Tightness control	Maximum pressure switch
Gas train type	☐ Dungs MultiBloc	☐ FGDR Max 500 mbar	☐ VPS	☐ KITPRES50
	☐ Siemens VGD	☐ FS1B Max 1 bar	☐ VDK	☐ up to 6 MW
	☐ Kromschröder VCS	☐ ST4B Max 4 bar	☐ LDU	☐ KITPRES150
	☐ Honeywell	☐ Filter Max 1 bar	☐ Electronic	☐ up to 25 MW

☐ Other requirements: specify

NOTES - ADDITIONAL INFORMATION

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