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COMBUSTION SYSTEMS

MONOBLOCK BURNERS

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From 1967 to the Future...

Established in Istanbul in 1967, Termo Isı Sistemleri Ticaret ve Sanayi A.Ş. has become one of the leading companies in the heating sector today with its Ecostar and Ecodense brands.

Based in Kartal, Istanbul, Termo Isı carries out its production in its factory in Çorlu/Tekirdağ, which has an open area of 50.000 m² and a closed area of 15.000 m². With its 150 experienced and well-equipped employees, widespread dealer and service network in the country, and partner companies abroad, it meets the demands of its customers with products and services at universal quality standards.

As Turkey's leading burner brand, Ecostar specializes in two main burner groups: monoblock (domestic) and duoblock (industrial). In the burner group, Ecostar has the most diverse and widest range of products in our country, including liquid, gas and dual fuel products and special burners for different fuel types. With an approach focused on the environment and energy conversion, we have added new burner series with low NOx and CO emissions to our product range, and continue making investments in such products uninterruptedly.

In addition to domestic and industrial burner groups, Ecostar provides services with its special products developed for all industries in need of heat, with hot air generators, high temperature resistant process burners for industrial furnaces and fluidized bed boilers.

Condensing boiler production also started in 2016 under the Ecodense brand, and has become one of the key players in the sector with its growing market share in a short time. The Ecodense product range includes wall mounted, floor mounted and roof top series condensing boilers and premix condensing combi boilers.

Producing products to meet the heating and hot water needs of our clients with our expert teams and wide product range, Ecodense also works to expand its product range by constantly developing new products.

Termo Isı also provides service with a solution-oriented approach that prioritizes customer satisfaction.It carries out turnkey contracting projects for publicand private sector in the country and abroad, which can respond to the different demands of its customers with the experience gained over many years. Our company has the equipment to carry out all mechanical, construction, electrical and automation works on a turnkey basis, and its contracting services include engineering, project planning, design, supply, manufacturing, assembly, testing and commissioning.

As Termo Isı Sistemleri, we are also getting stronger in the field of export thanks to our brands Ecostar, which regularly receives the award of the most burner exporting company in Turkey, and Ecodense, which has made rapid progress in the last 5 years. Today, we export to more than 50 countries in a wide geography from South America to Australia, from Russia to South Africa. We aim to increase the weight of our export turnover to 50% from the current 35% in the near future. We have the flexibility to tailor our products to the needs of international markets. We aim to work with our partners for a long time and to constantly enter new countries with new partners.

We make efficient and environmentally-friendly innovative designs with our R&D center employing 30 experienced personnel work in our factory. With our long established history of nearly 55 years and the pride of making domestic production, we continue to work and improve ourselves in both Turkey and export markets, in line with our goals.

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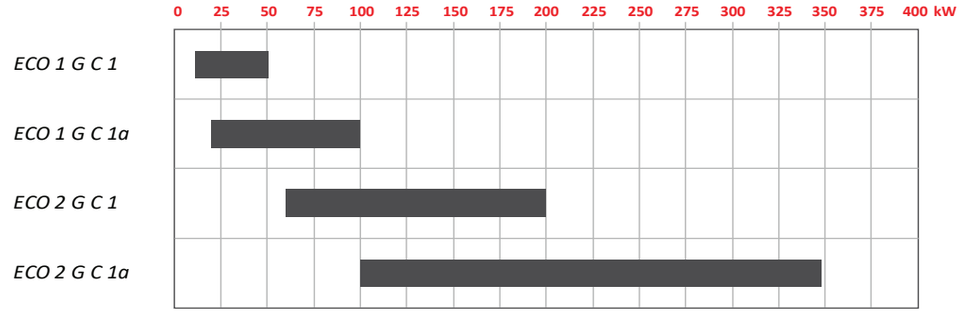
BURNER SYSTEM EQUIPMENT

MODEL	ABBREVIATION	AIRFRAME SIZE	TYPE	ENGINE SPEED	CLASSIFICATION	CAPACITY RANGE
ECOSTAR	ECO	1 2 30 45 50 55 60 65 70 75	G (Gas) OS (Heavy Oil) OL (Motorin) KS (Gas/Heavy Oil) KL (Gas/Light Oil) P (Lpg) PS (Lpg/Heavy Oil) PL (Lpg/Light Oil) ZZ (Special Fuel)	C (50 Hz)	1 (One-Stage) 2 (Two-Stage) 3 (Modulating) (Mechanics) (Electronics) (Pneumatics)	A B C L

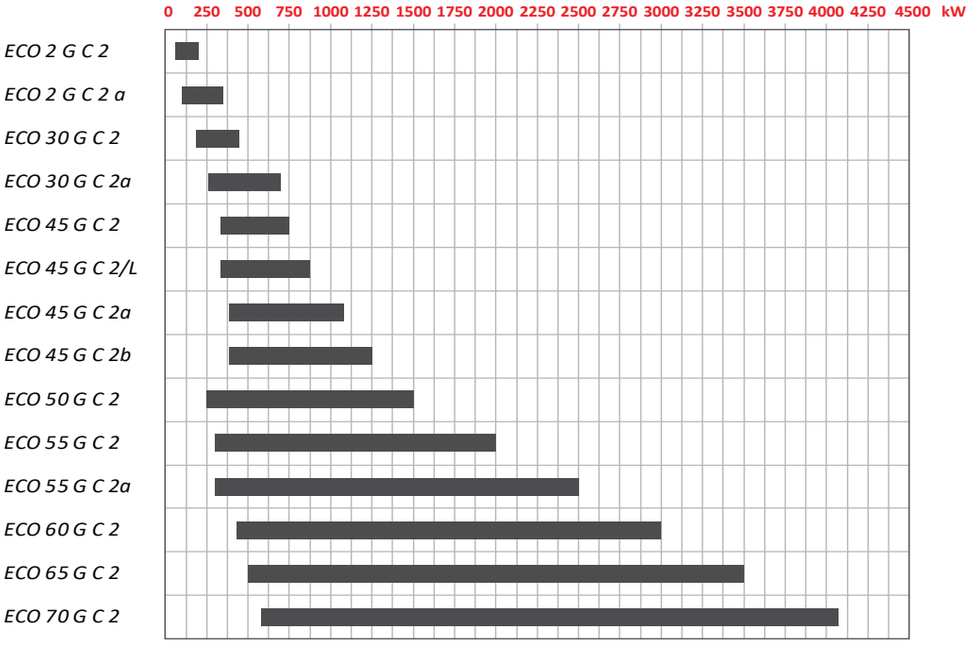
MODEL	ABBREVIATION	AIRFRAME SIZE	TYPE	ENGINE SPEED	CLASSIFICATION	CAPACITY RANGE
NEW GENERATION	NG	50 55 60 65 70 75 8 9	G (Gas) OS (Heavy Oil) OL (Light Oil) KS (Gas/Heavy Oil) KL (Gas/Light Oil) P (Lpg) PS (Lpg/Heavy Oil) PL (Lpg/Light Oil) ZZ (Special Fuel)	C (50 Hz)	3 (Modulating) (Mechanics) (Electronics) (Pneumatics)	A B C

MODEL	ABBREVIATION	AIRFRAME SIZE	TYPE	ENGINE SPEED	CLASSIFICATION	CAPACITY RANGE
LOW NOX LOW NOX (FGR)	LNX	90 120 200 300 400 560 670 720 1150	G (Gas) P (Lpg)	C (50 Hz)	3 (Modulating) (Mechanics) (Electronics) (Pneumatics)	A B C

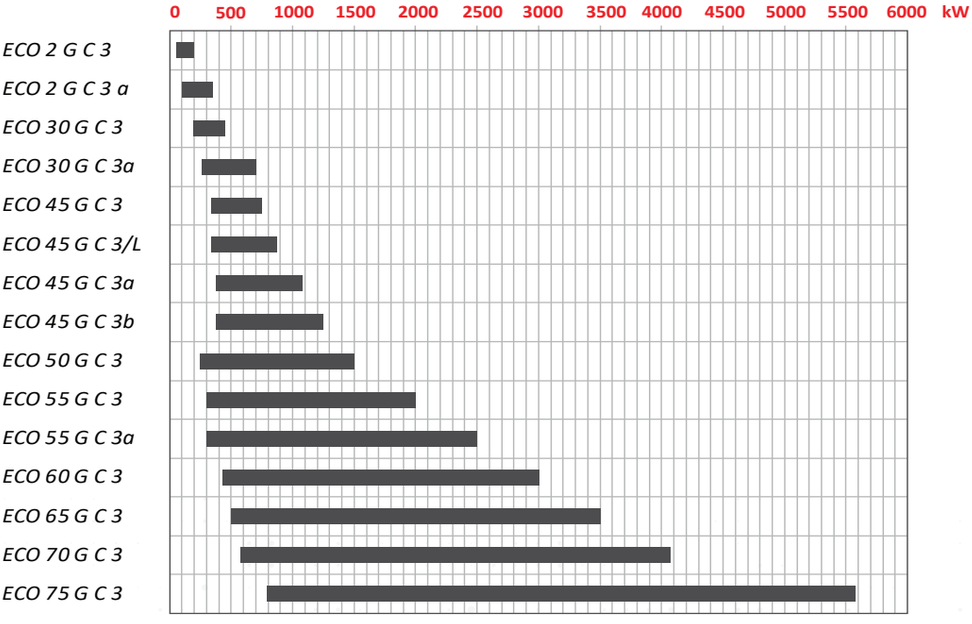
ONE STAGE GAS BURNERS



TWO STAGE GAS BURNERS



MODULATING GAS BURNERS



One-Stage Gas Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Single-stage operation,
- Ability to operate with natural gas and LPG fuel,
- Ability to operate at 300 mbar and 21 mbar gas pressure,
- Wide thermal capacity adjustment range according to the heat requirement,
- Adequate gas pressure control with minimum gas pressurestat,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Brülörü kazandan sökmeden tüm parçalara kolayca ulaşabilme,
- Easy access to all parts without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance,
- Environmentally-friendly with lower NOx and CO emissions.

Product Specifications and Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG GAS CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 1 GC1	8.600	43.000	10	50	1,0	5,2	0,4	1,9	0,11	1N240
ECO 1 GC1a	17.200	86.000	20	100	2,1	10,4	0,8	3,8	0,11	1N240
ECO 2 GC1	51.600	172.000	60	200	6,3	20,8	2,3	7,6	0,15	1N240
ECO 2 GC1a	86.000	299.280	100	348	10,4	36,3	3,8	13,3	0,15	1N240
*Low Calorific Value: LCV Natural Gas : 8250 kcal /Nm³ , LCV LPG : 22500 kcal /Nm³										

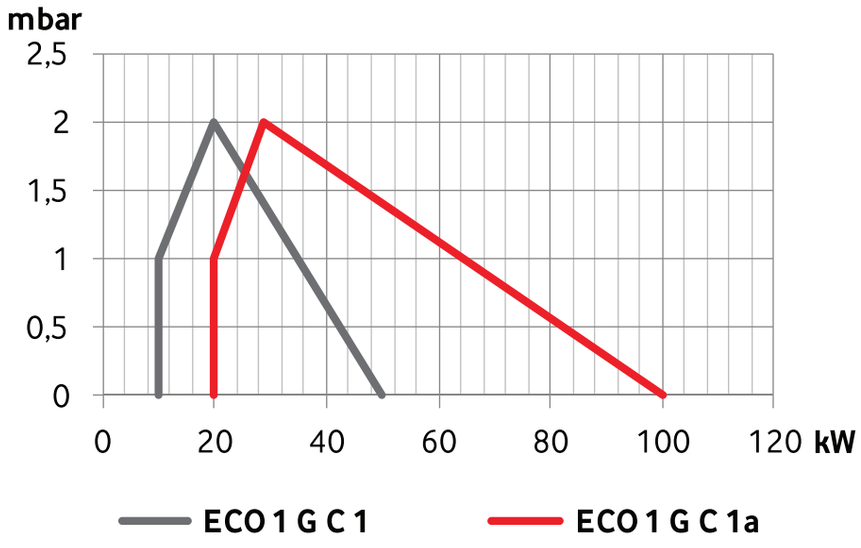
SPECIFICATIONS	ECO1GC1	ECO1GC1a	ECO2GC1	ECO2GC1a
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Adjustable flame tube extension	✗	✗	✓	✓
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Flame control	İO	İO	İO	İO
Ignition	DA	DA	DA	DA
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✗	✗	✓	✓
7 pin power supply and first stage socket	✓	✓	✓	✓
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP20	IP20

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

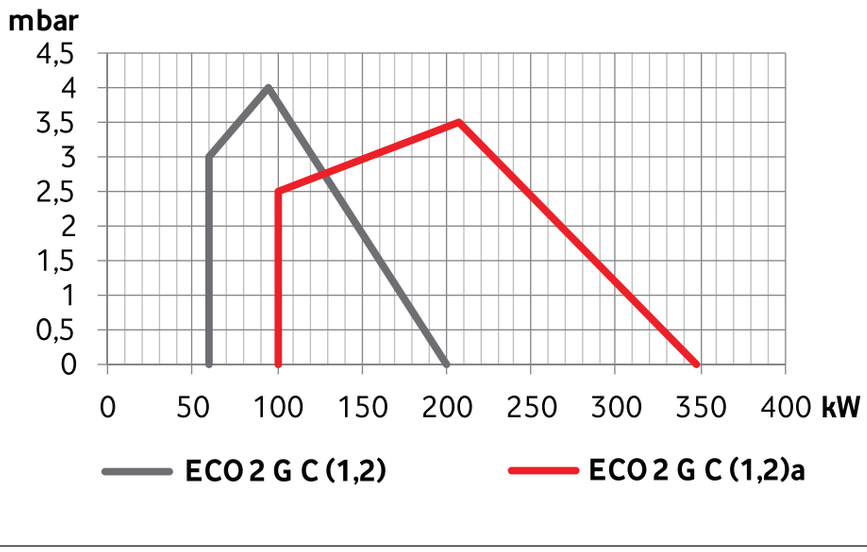
Back Pressure Diagrams

One Stage

ECO-1 G C 1 / 1 a

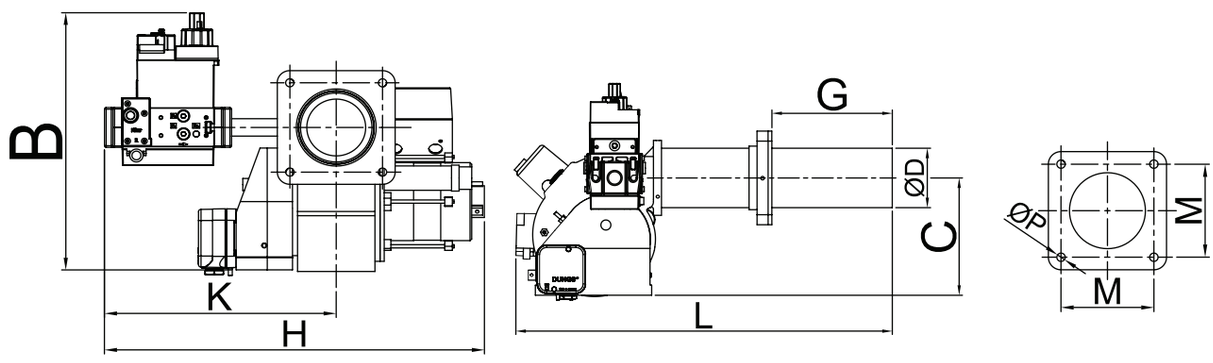


ECO-2 G C (1 -2-3)/(1 -2-3) a

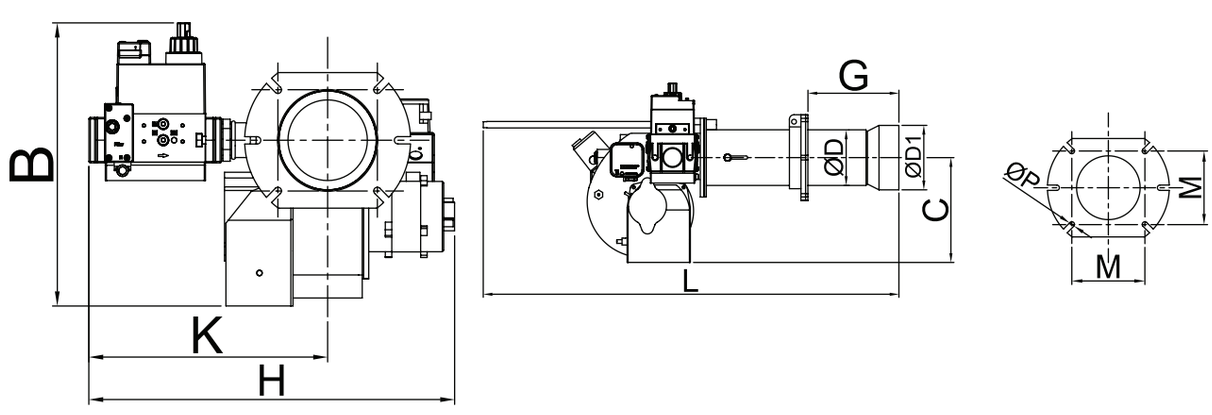


Dimensions Tables

ECO 1



ECO 2



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 1 G	565	50	310	455	275	320	175	10	110	89	-
ECO 2 G	960	310	320	510	335	400	225	10	142	120	139

Two-Stage Gas Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Two-stage operation,
- Ability to operate with natural gas and LPG fuel,
- Ability to operate at 300 mbar and 21 mbar gas pressure up to model ECO 55 GC 2,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and ionization electrode,
- Adequate gas pressure control with minimum gas pressurestat,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance,
- Environmentally-friendly with lower NOx and CO emissions.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG GAS CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 2 G C2	51.600	172.000	60	200	6,25	20,85	2,29	7,64	0,15	1N 240
ECO 2 G C2 a	86.000	299.280	100	348	10,42	36,28	3,82	13,30	0,15	1N 240
ECO 30 G C2	163.400	387.000	190	450	19,81	46,91	7,26	17,20	0,37	1N 240
ECO 30 G C2a	223.600	602.000	260	700	27,10	72,97	9,94	26,76	0,75	3N 400
ECO 45 G C2	288.100	645.000	335	750	34,92	78,18	12,80	28,67	0,75	3N 400
ECO 45 G C2/L	288.100	749.920	335	872	34,92	90,90	12,80	33,33	0,75	3N 400
ECO 45 G C2a	331.100	928.800	385	1080	40,13	112,58	14,72	41,28	1,1	3N 400
ECO 45 G C2b	331.100	1.075.000	385	1250	40,13	130,30	14,72	47,78	1,5	3N 400
ECO 50 G C2	215.000	1.290.000	250	1500	26,06	156,36	9,56	57,33	2,2	3N 400
ECO 55 G C2	258.000	1.720.000	300	2000	31,27	208,48	11,47	76,44	3	3N 400
ECO 55 G C2a	258.000	2.150.000	300	2500	31,27	260,61	11,47	95,56	3	3N 400
ECO 60 G C2	369.800	2.580.000	430	3000	44,82	312,73	16,44	114,67	4	3N 400
ECO 65 G C2	430.000	3.010.000	500	3500	52,12	364,85	19,11	133,78	5,5	3N 400
ECO 70 G C2	498.800	3.500.200	580	4070	60,46	424,27	22,17	155,56	7,5	3N 400

* Low Calorific Value: LCV Natural Gas : 8250 kcal /Nm³ , LCV LPG : 22500 kcal /Nm³

Product Specifications Tables

SPECIFICATIONS	ECO 2 G C2	ECO 2 G C2a	ECO 30 G C2	ECO 30 G C2a	ECO 45 G C2	ECO 45 G C2L	ECO 45 G C2a
Control Type	2K	2K	2K	2K	2K	2K	2K
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM
Adjustable flame tube extension	✓	✓	✓	✓	✓	✓	✓
Gas Valve	✓	✓	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○	○	○
Air pressure switch	✓	✓	✓	✓	✓	✓	✓
Flame control	iO	iO	iO	iO	iO	iO	iO
Ignition	DA	DA	DA	DA	DA	DA	DA
VPS Gas leak device	○	○	○	○	○	○	○
Sliding boiler connection flange	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓
7 pin power supply and first stage socket	✓	✓	✗	✗	✗	✗	✗
7 pin second stage connection socket	✓	✓	✗	✗	✗	✗	✗
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP40	IP40	IP40	IP40	IP40

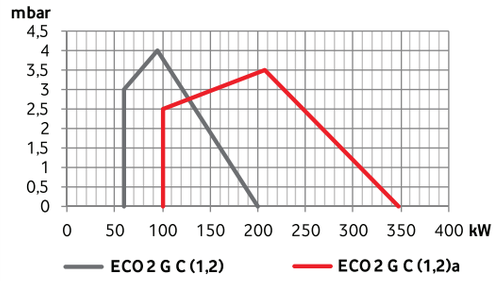
SPECIFICATIONS	ECO 45 G C2b	ECO 50 G C2	ECO 55 G C2	ECO 55 G C2a	ECO 60 G C2	ECO 65 G C2	ECO 70 G C2
Control Type	2K	2K	2K	2K	2K	2K	2K
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM
Adjustable flame tube extension	✓	✓	✓	✓	✗	✓	✓
Gas Valve	✓	✓	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○	○	○
Air pressure switch	✓	✓	✓	✓	✓	✓	✓
Flame control	iO	iO	iO	iO	iO	iO	iO
Ignition	DA	DA	DA	DA	DA	DA	DA
VPS Gas leak device	✓	✓	✓	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓
7 pin power supply and first stage socket	✗	✗	✗	✗	✗	✗	✗
7 pin second stage connection socket	✗	✗	✗	✗	✗	✗	✗
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	iO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

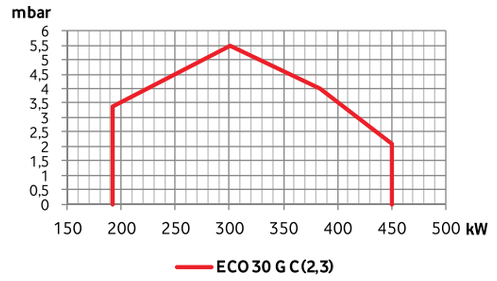
Back Pressure Diagrams

Two Stage

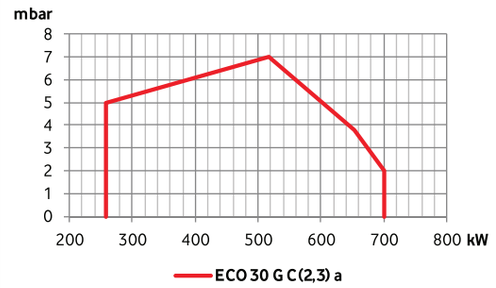
ECO-2 G C (1 -2-3)/(1 -2-3) a



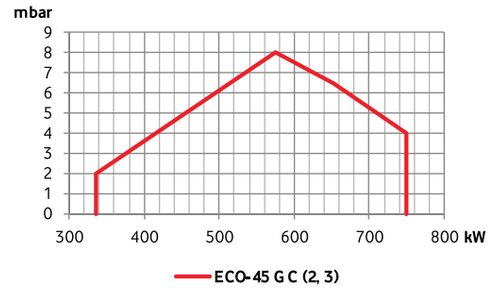
ECO-30 G C (2-3)



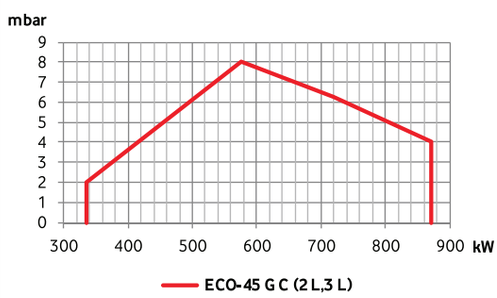
ECO-30 G C (2-3) a



ECO-45 G C (2-3)



ECO-45 G C (2-3) L



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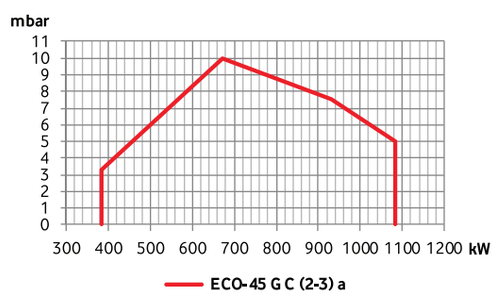

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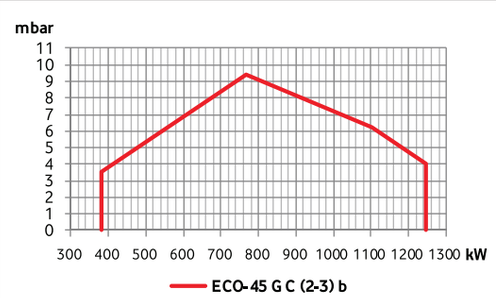
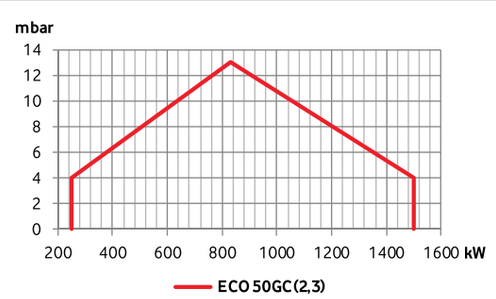


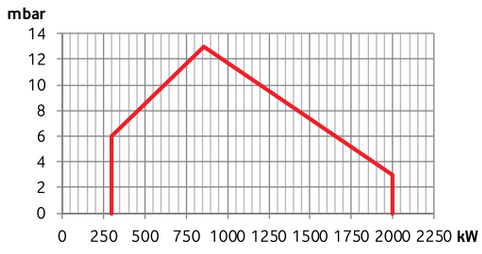
ECO-50 G C (2-3)



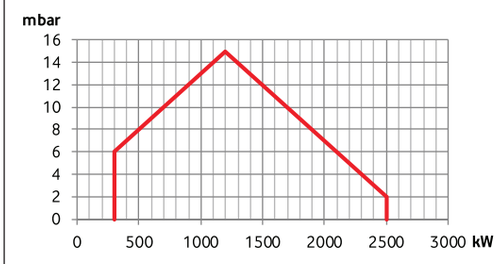
Back Pressure Diagrams

Two Stage

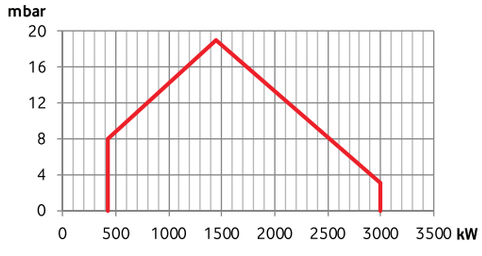
ECO-55 G C (2-3)



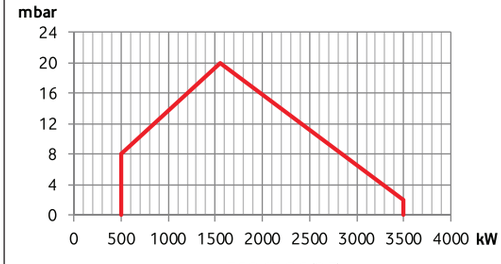
ECO-55 G C (2-3) a



ECO-60 G C (2-3)



ECO-65 G C (2-3)



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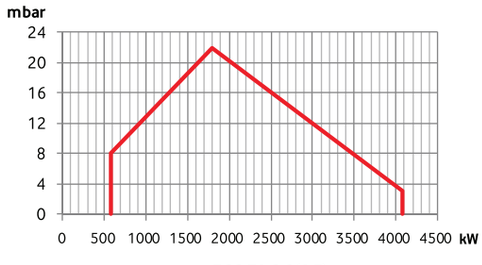
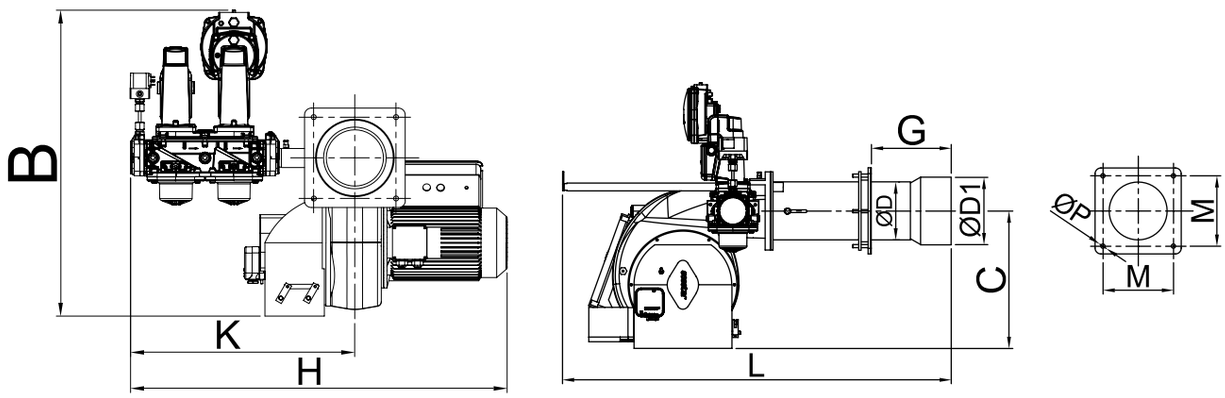
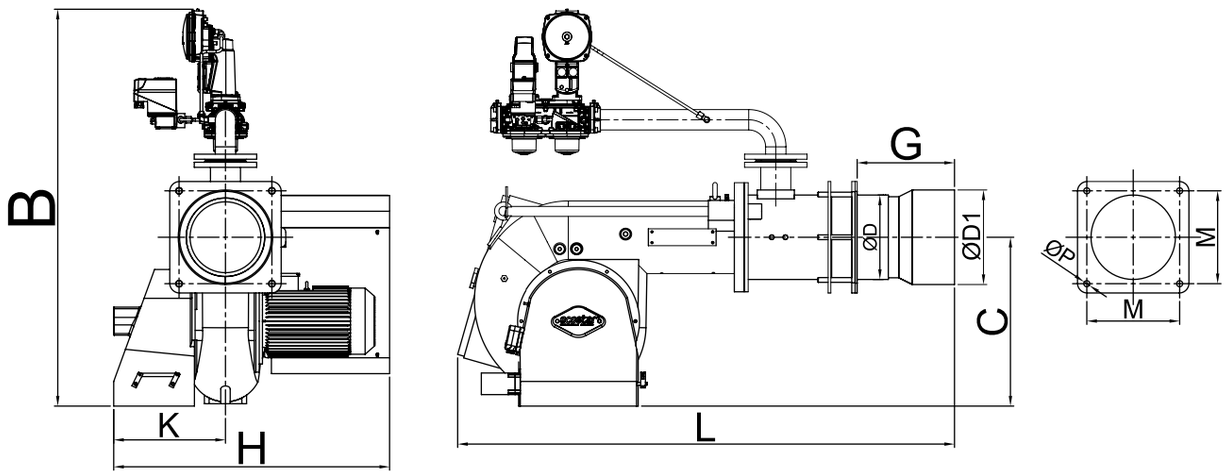


Dimensions Tables

ECO 2 ECO 30 ECO 45

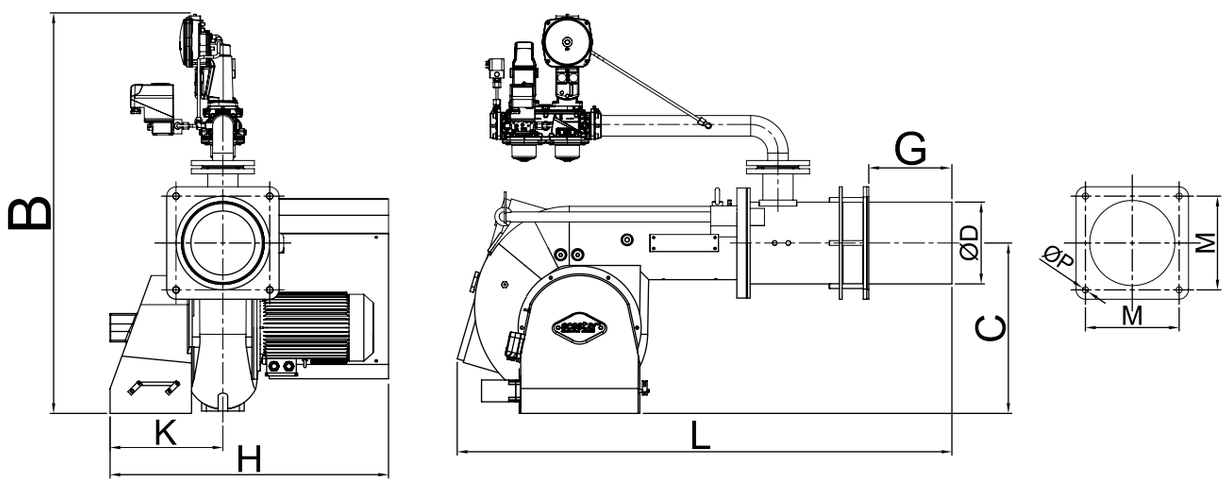


ECO 50 ECO 55 ECO 65 ECO 70



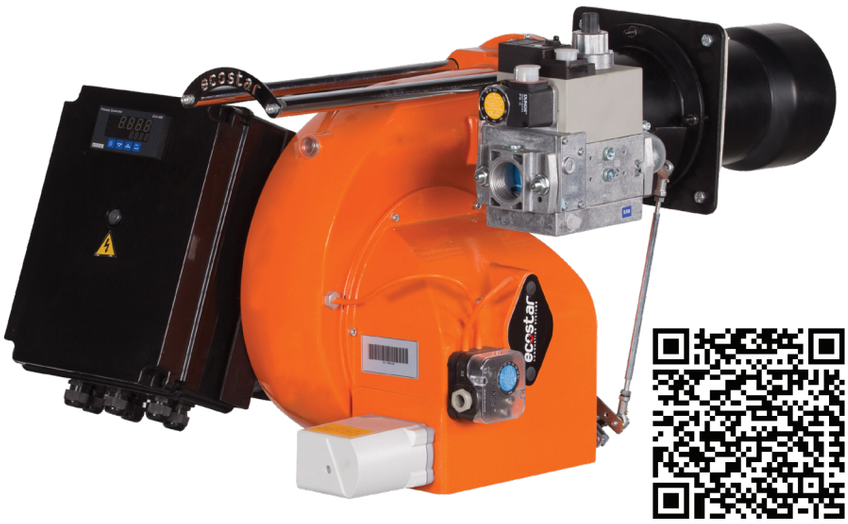
Dimensions Tables

ECO 60



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 2 G	960	106	320	510	335	400	225	10	142	120	139
ECO 30 G	960	130	320	730	400	570	305	10	142	131	153
ECO 45 G	1030	150	390	830	490	680	350	11	180	148	172
ECO 50 G	1300	280	440	680	255	1075	422	18	275	218	236
ECO 55 G	1300	280	440	680	255	1075	422	18	275	218	236
ECO 60 G	1450	200	355	850	330	1180	510	18	275	240	-
ECO 65 G	1500	200	440	815	330	1185	510	18	275	250	280
ECO 70 G	1500	200	440	820	330	1185	510	18	275	250	280

Modulating Gas Burners



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SPECIFICATIONS

- Modulating operation,
- Mechanical, pneumatic or electronic modulating control options,
- Ability to operate with natural gas and LPG fuel,
- Ability to operate at 300 mbar and 21 mbar gas pressure up to model ECO 55 GC 3,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and ionization electrode,
- Adequate gas pressure control with minimum gas pressurestat,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance,
- Environmentally-friendly with lower NOx and CO emissions.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG GAS CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 2 G C3	51.600	172.000	60	200	6,25	20,85	2,29	7,64	0,15	1N 240
ECO 2 G C3 a	86.000	299.280	100	348	10,42	36,28	3,82	13,30	0,15	1N 240
ECO 30 G C3	163.400	387.000	190	450	19,81	46,91	7,26	17,20	0,37	1N 240
ECO 30 G C3a	223.600	602.000	260	700	27,10	72,97	9,94	26,76	0,75	3N 400
ECO 45 G C3	288.100	645.000	335	750	34,92	78,18	12,80	28,67	0,75	3N 400
ECO 45 G C3/L	288.100	749.920	335	872	34,92	90,90	12,80	33,33	0,75	3N 400
ECO 45 G C3a	331.100	928.800	385	1080	40,13	112,58	14,72	41,28	1,1	3N 400
ECO 45 G C3b	331.100	1.075.000	385	1250	40,13	130,30	14,72	47,78	1,5	3N 400
ECO 50 G C3	215.000	1.290.000	250	1500	26,06	156,36	9,56	57,33	2,2	3N 400
ECO 55 G C3	258.000	1.720.000	300	2000	31,27	208,48	11,47	76,44	3	3N 400
ECO 55 G C3a	258.000	2.150.000	300	2500	31,27	260,61	11,47	95,56	3	3N 400
ECO 60 G C3	369.800	2.580.000	430	3000	44,82	312,73	16,44	114,67	4	3N 400
ECO 65 G C3	430.000	3.010.000	500	3500	52,12	364,85	19,11	133,78	5,5	3N 400
ECO 70 G C3	498.800	3.500.200	580	4070	60,46	424,27	22,17	155,56	7,5	3N 400
ECO 75 G C3	686.280	4.800.000	798	5581	83,19	581,82	30,50	213,33	11	3N 400

*Low Calorific Value: LCV Natural Gas : 8250 kcal /Nm³ , LCV LPG : 22500 kcal /Nm³

Product Specifications Tables

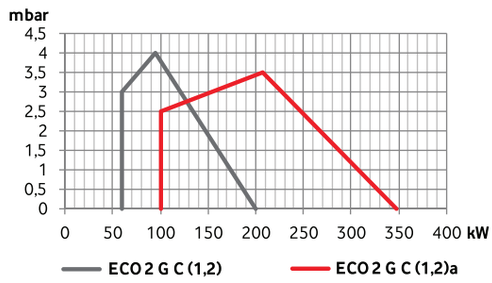
SPECIFICATIONS	ECO 2 G C 3	ECO 2 G C 3a	ECO 30 G C 3	ECO 30 G C 3a	ECO 45 G C 3	ECO 45 G C 3L	ECO 45 G C 3a
Control Type	O	O	O	O	O	O	O
Mechanical Modulating (21mbar)	✓	✓	✓	✓	✓	✓	✗
Mechanical Modulating (300 mbar)	✓	✓	✓	✓	✓	✓	✓
Pneumatic Modulating (21mbar)	✗	✗	✗	✗	✗	✗	✓
Pneumatic Modulating (300 mbar)	✗	✗	✗	✗	✗	✗	✗
Electronic Modulating (21mbar)	○	○	○	○	○	○	○
Electronic Modulating (300 mbar)	○	○	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM
Adjustable flame tube extension	✓	✓	✓	✓	✓	✓	✓
Gas Valve	✓	✓	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○	○	○
Air pressure switch	✓	✓	✓	✓	✓	✓	✓
Flame control	iO	iO	iO	iO	iO	iO	iO
Ignition	DA	DA	DA	DA	DA	DA	DA
VPS Gas leak device	○	○	○	○	○	○	○
Sliding boiler connection flange	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP40

SPECIFICATIONS	ECO 45 G C 3b	ECO 50 G C 3	ECO 55 G C 3	ECO 55 G C 3a	ECO 60 G C 3	ECO 65 G C 3	ECO 70 G C 3	ECO 75 G C 3
Control Type	O	O	O	O	O	O	O	O
Mechanical Modulating (21mbar)	✗	✓	✗	✓	✗	✗	✗	✗
Mechanical Modulating (300 mbar)	✓	✓	✓	✓	✗	✗	✗	✗
Pneumatic Modulating (21mbar)	✓	✓	✓	✓	✗	✗	✗	✗
Pneumatic Modulating (300 mbar)	✗	✓	✓	✓	✓	✓	✓	✓
Electronic Modulating (21mbar)	○	○	○	○	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM	SM
Adjustable flame tube extension	✓	✓	✓	✓	✗	✓	✓	✗
Gas Valve	✓	✓	✓	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○	○	○	○
Air pressure switch	✓	✓	✓	✓	✓	✓	✓	✓
Flame control	iO	iO	iO	iO	iO	iO	iO	F
Ignition	DA	DA	DA	DA	DA	DA	DA	PA
VPS Gas leak device	✓	✓	✓	✓	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓	✓
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP54	IP54

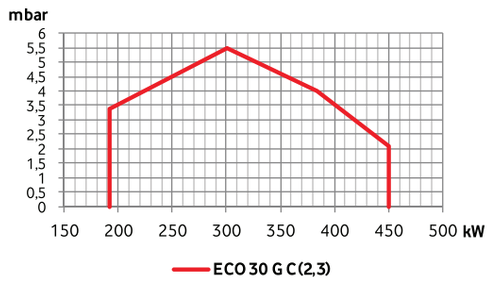
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	iO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

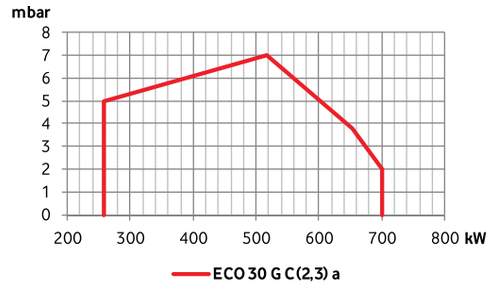
ECO-2 G C (1 -2-3)/(1 -2-3) a



ECO-30 G C (2-3)



ECO-30 G C (2-3) a



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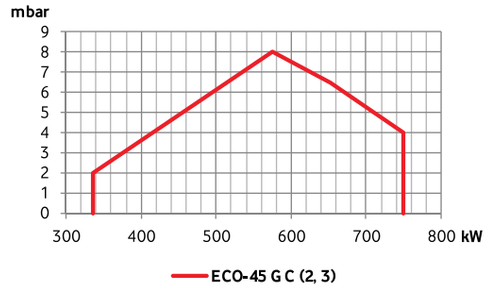

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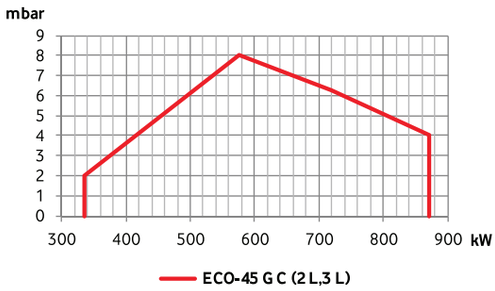

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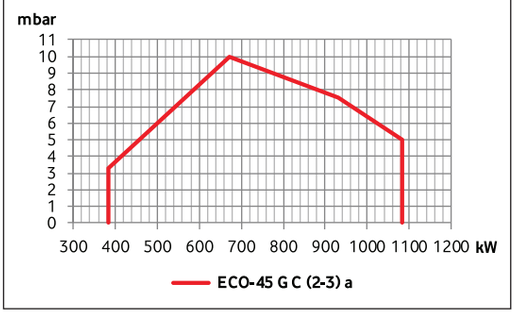

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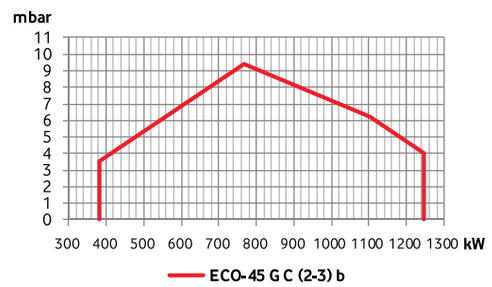
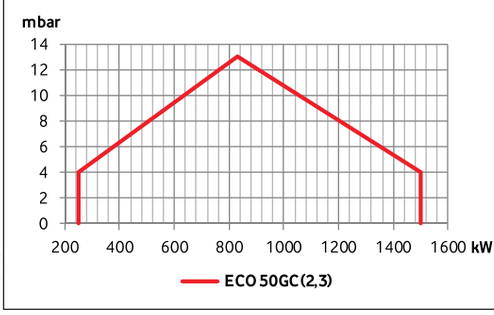
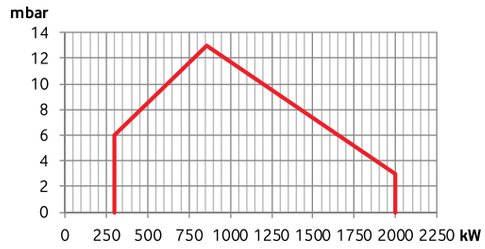


ECO-50 G C (2-3)

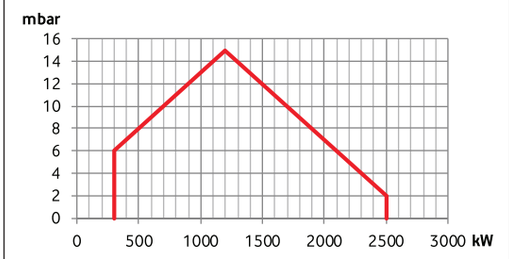


Back Pressure Diagrams
Modulating

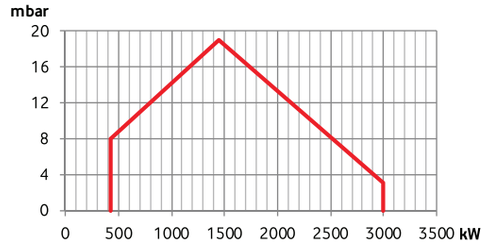
ECO-55 G C (2-3)



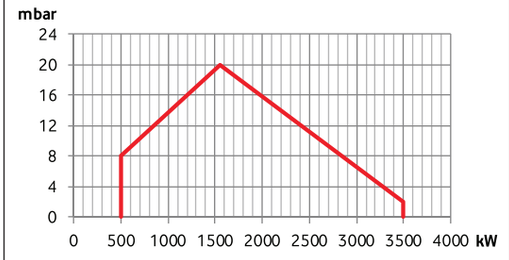
ECO-55 G C (2-3) a



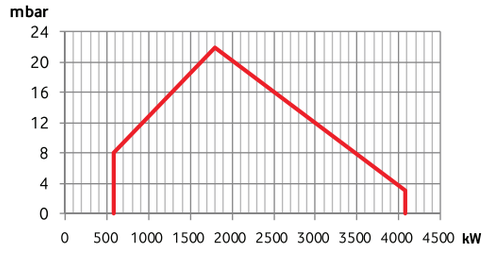
ECO-60 G C (2-3)



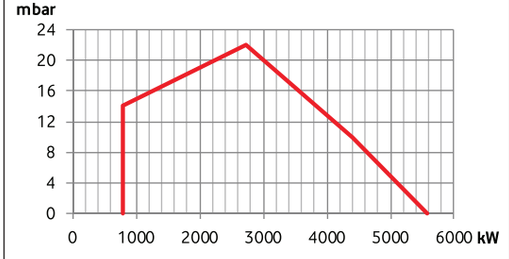
ECO-65 G C (2-3)



ECO-70 G C (2-3)

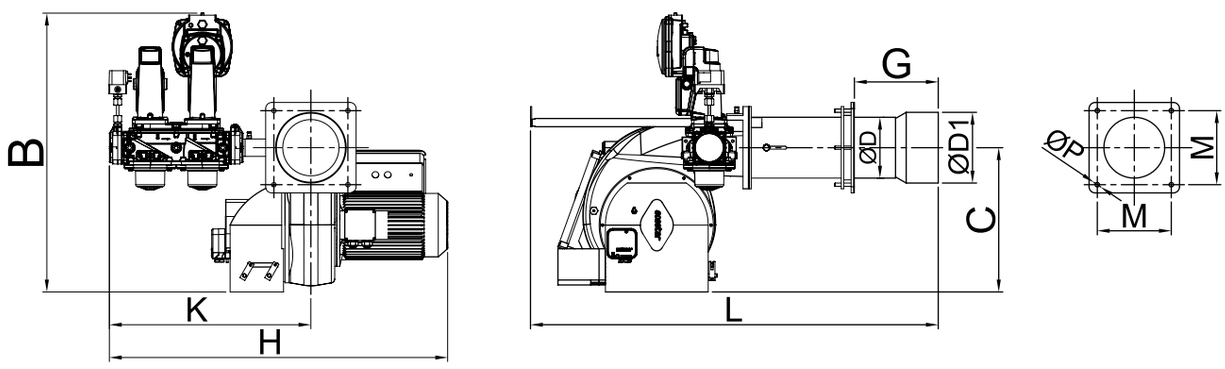


ECO-75 G C 3

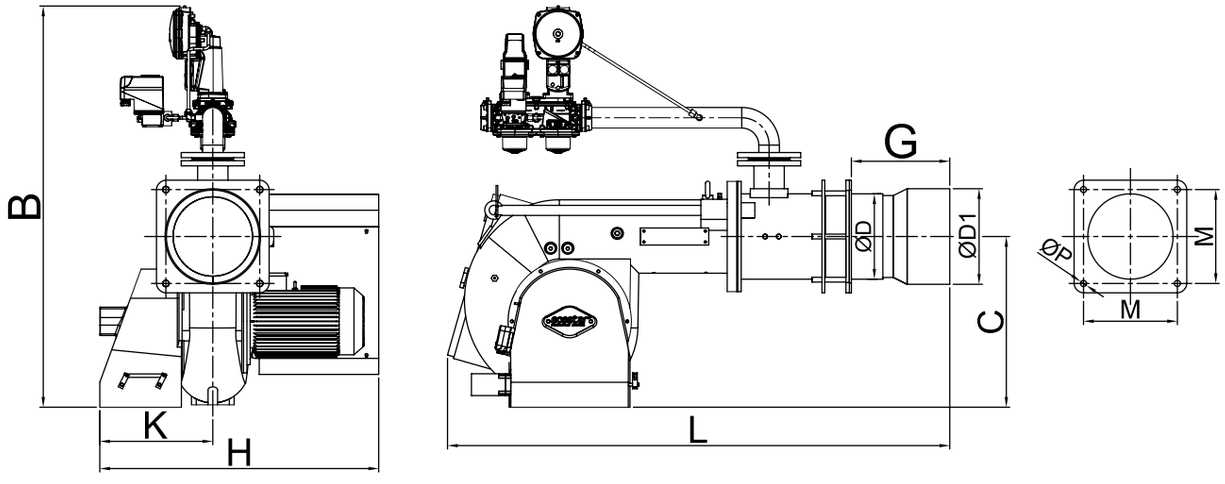


Dimensions Tables

ECO 2 ECO 30 ECO 45

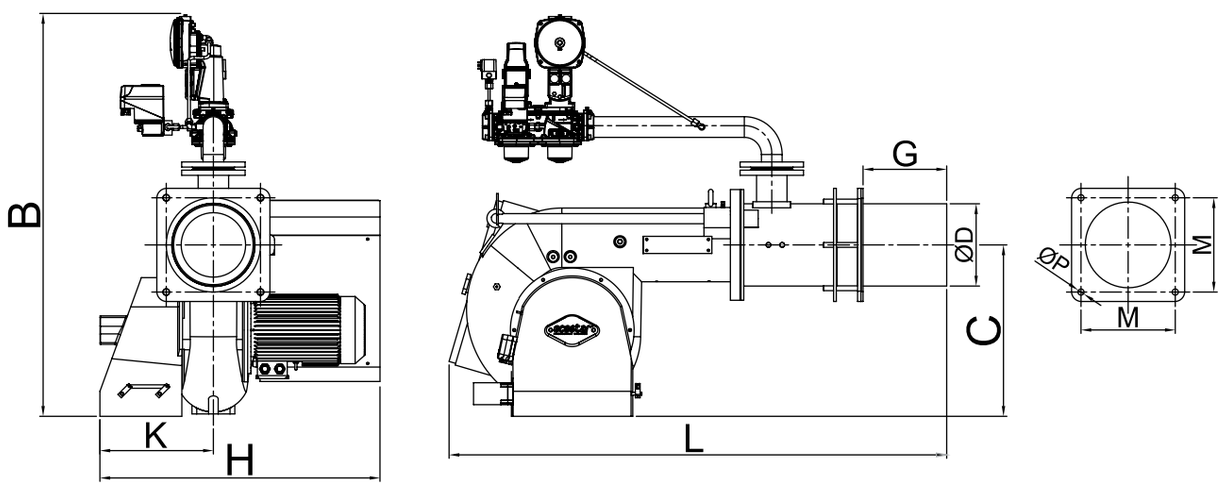


ECO 50 ECO 55 ECO 65 ECO 70



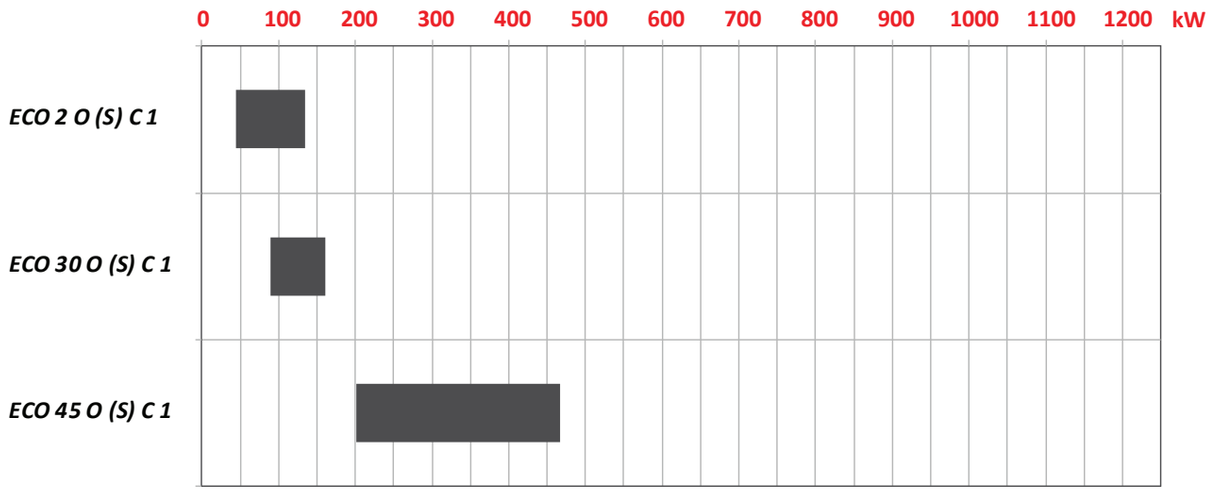
Dimensions Tables

ECO 60 ECO 75

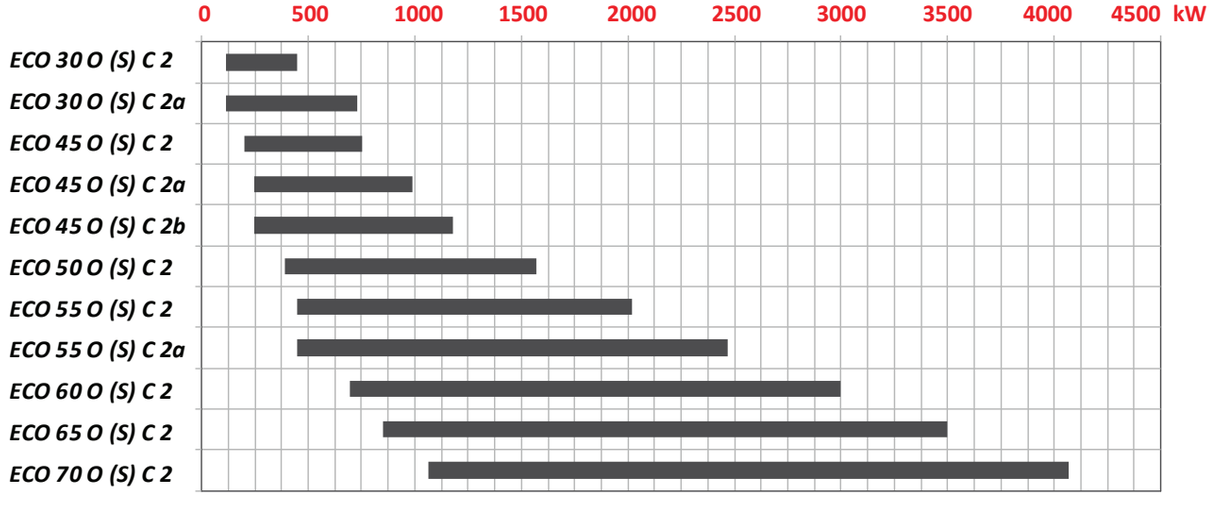


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 2 G	960	106	320	510	335	400	225	10	142	120	139
ECO 30 G	960	130	320	730	400	570	305	10	142	131	153
ECO 45 G	1030	150	390	830	490	680	350	11	180	148	172
ECO 50 G	1300	280	440	680	255	1075	422	18	275	218	236
ECO 55 G	1300	280	440	680	255	1075	422	18	275	218	236
ECO 60 G	1450	200	355	850	330	1180	510	18	275	240	-
ECO 65 G	1500	200	440	815	330	1185	510	18	275	250	280
ECO 70 G	1500	200	440	820	330	1185	510	18	275	250	280
ECO 75 G	1450	200	340	885	350	1300	530	22	335	300	-

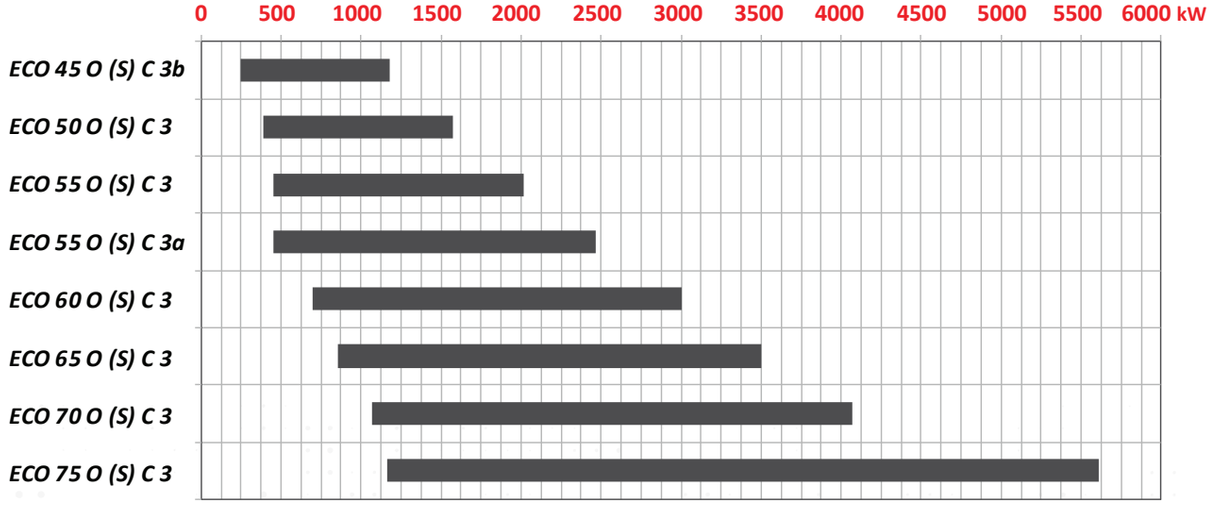
ONE STAGE HEAVY OIL BURNERS



TWO STAGE HEAVY OIL BURNERS



MODULATING HEAVY OIL BURNERS



One-Stage Heavy Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Optimum fuel / air mixture with special combustion nozzle,
- High pressure, light build fan design,
- Low noise level due to light and aerodynamic body made of high quality aluminum,
- Sliding flange for connection to different boiler types,
- Automatic control equipment of the burner according to European standard EN-267,
- Easy access to all equipment without dismounting the burner from the boiler,
- High efficiency operation thanks to air flow rate adjustment from both the suction and the barrel,
- Easy installation and operation,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- High pressure mechanical atomization at nozzle,
- Direct ignition and pilot ignition options. (Pilot ignition is optional for some models.)

Product Specifications and Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		HEAVY OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	OIL HEATER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	kW	VAC
ECO 2 O (S) C 1	38.600	115.800	45	135	4	12	0,37	-	1,5	3N 400
ECO 30 O (S) C 1	77.200	137.995	90	160	8	14	0,37	-	3	3N 400
ECO 45 O (S) C 1	173.700	401.440	202	467	18	42	1,10	-	3	3N 400
* Low Calorific Value H Heavy Oil : 9650 kcal/kg										

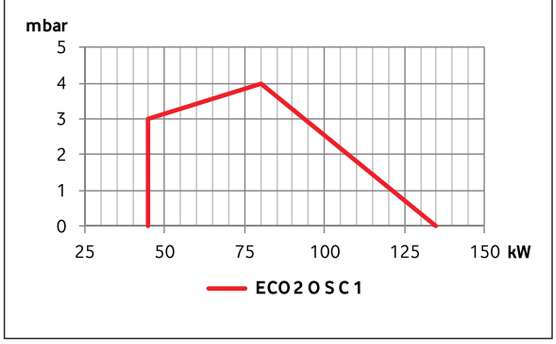
SPECIFICATIONS	ECO2OSC1	ECO30OSC1	ECO45OSC1
Control Type	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M
Ignition	DA	DA	DA
Flame control	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓
Liquid fuel hoses	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓
Different flame tube length	○	○	○
Fuel Preparation Stations (Heavy Oil Station)	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓
Electrical protection class	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

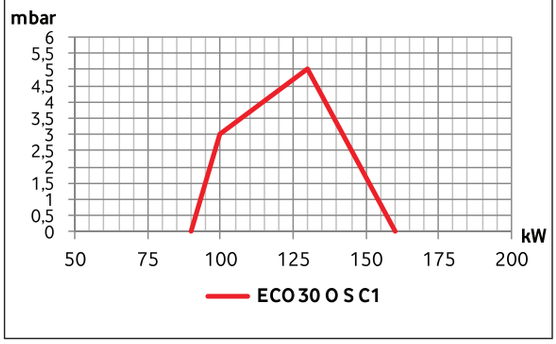
Back Pressure Diagrams

One Stage

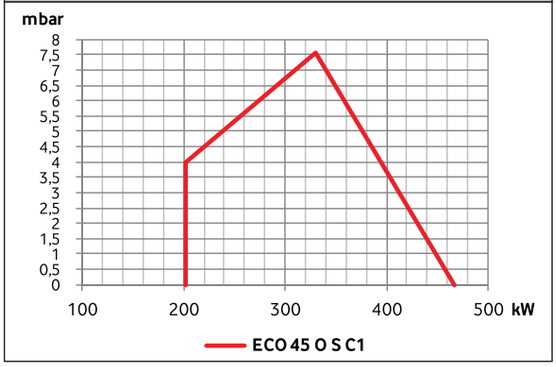
ECO-2 O S C 1



ECO-30 O S C 1

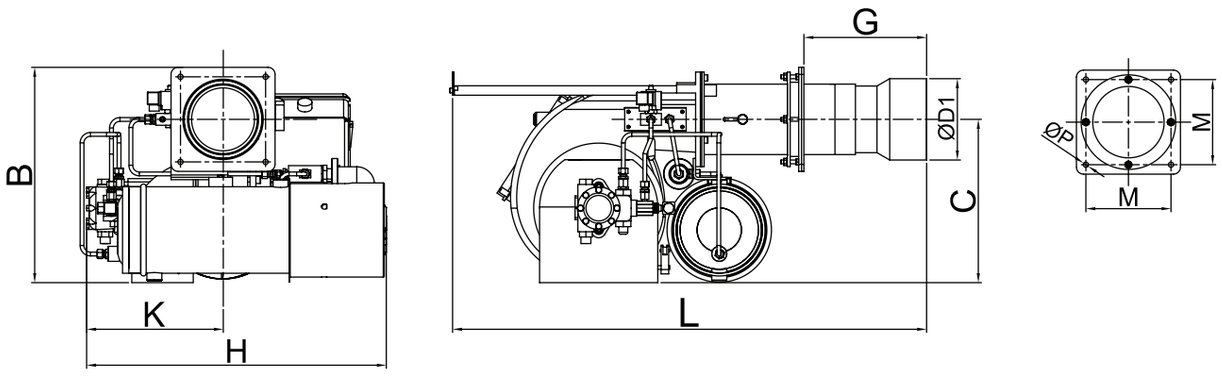


ECO-45 O S C 1



Dimensions Tables

ECO 2 ECO 30 ECO 45



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 2 O (S)	820	106	270	495	220	320	230	10	142	120	139
ECO 30 O (S)	880	130	265	550	250	400	305	10	142	130	153
ECO 45 O (S)	1040	150	310	600	300	460	350	12	180	148	172

Two-Stage Heavy Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Two-stage operation,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		HEAVY OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	OIL HEATER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	kW	VAC
ECO 30 O (S) C 2	96.500	386.000	112	449	10	40	0,37	-	3	3N 400
ECO 30 O (S) C 2a	96.500	627.250	112	729	10	65	0,75	-	3	3N 400
ECO 45 O (S) C 2	173.700	646.550	202	752	18	67	1,1	-	3	3N 400
ECO 45 O (S) C 2a	212.300	849.200	247	990	22	88	1,1	-	6	3N 400
ECO 45 O (S) C 2b	212.300	1.013.250	247	1180	22	105	1,5	-	6	3N 400
ECO 50 O (S) C 2	337.750	1.351.000	393	1571	35	140	2,2	-	6	3N 400
ECO 55 O (S) C 2	386.000	1.737.000	449	2020	40	180	3	-	12	3N 400
ECO 55 O (S) C 2a	386.000	2.123.000	449	2469	40	220	3	-	12	3N 400
ECO 60 O (S) C 2	598.300	2.576.550	696	3000	62	267	4	0,75	14	3N 400
ECO 65 O (S) C 2	733.400	3.010.800	853	3500	76	312	5,5	0,75	14	3N 400
ECO 70 O (S) C 2	916.750	3.502.950	1066	4070	95	363	7,5	0,75	2 x 9	3N 400

* Low Calorific Value H Heavy Oil : 9650 kcal/kg

Product Specifications Tables

SPECIFICATIONS	ECO300SC2	ECO300SC2a	ECO450SC2	ECO450SC2a	ECO450SC2b	ECO500SC2	ECO550SC2
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM
Ignition	DA	DA	DA	DA	DA	DA	DA
Flame control	F	F	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○	○	○
Fuel Preparation Stations (Heavy Oil Station)	○	○	○	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP40

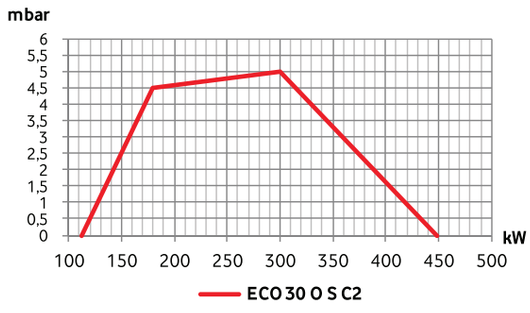
SPECIFICATIONS	ECO550SC2a	ECO600SC2	ECO650SC2	ECO700SC2
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Ignition	DA	DA	DA	DA
Flame control	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Different flame tube length	○	○	○	○
Fuel Preparation Stations (Heavy Oil Station)	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

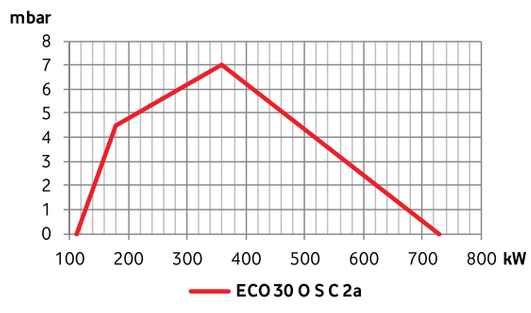
Back Pressure Diagrams

Two Stage

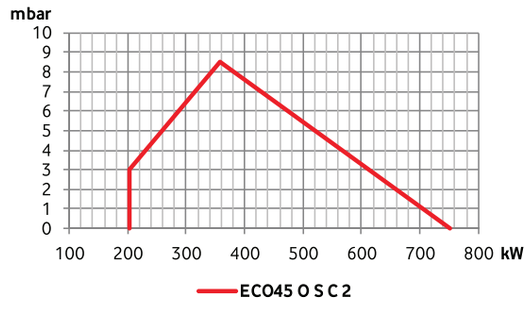
ECO-30 O S C 2



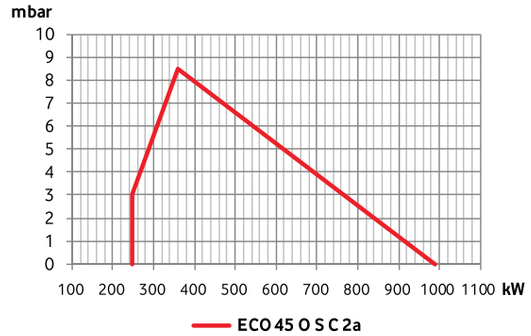
ECO-30 O S C 2a



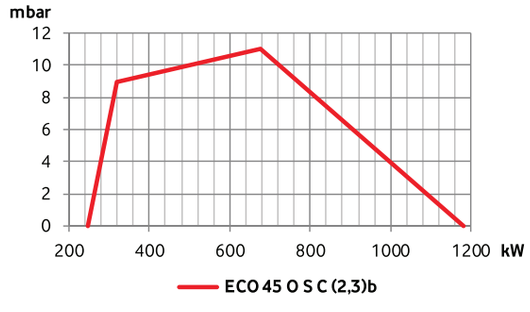
ECO-45 O S C 2



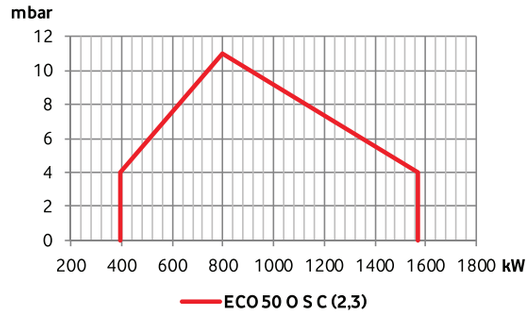
ECO-45 O S C 2a



ECO-45 O S C (2,3)b



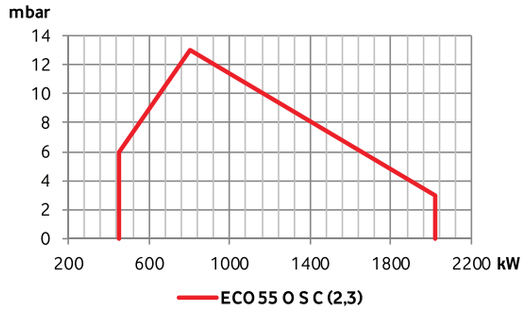
ECO-50 O S C (2,3)



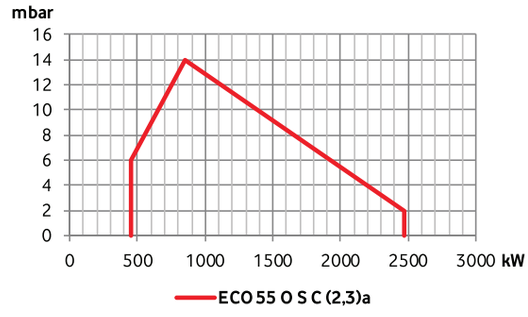
Back Pressure Diagrams

Two Stage

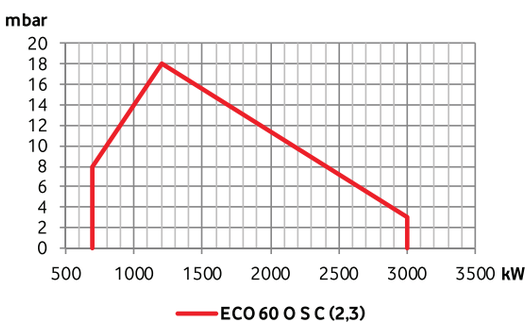
ECO-55 O S C (2,3)



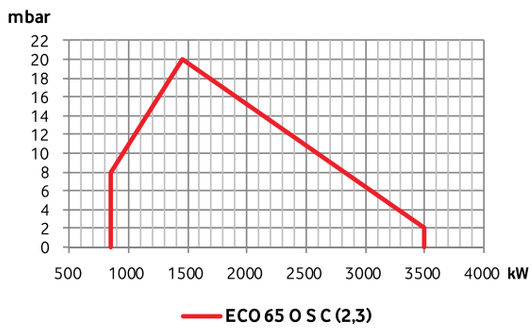
ECO-55 O S C (2,3)a



ECO-60 O S C (2,3)

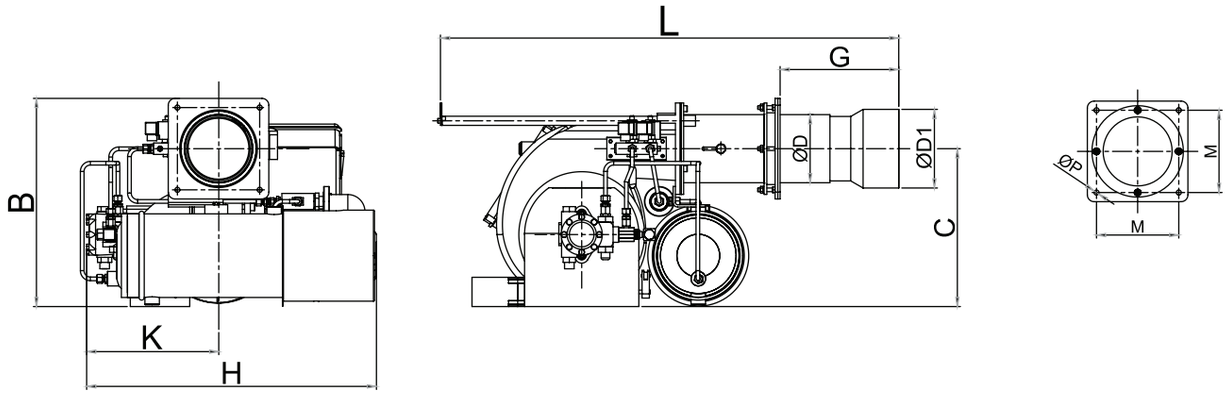


ECO-65 O S C (2,3)

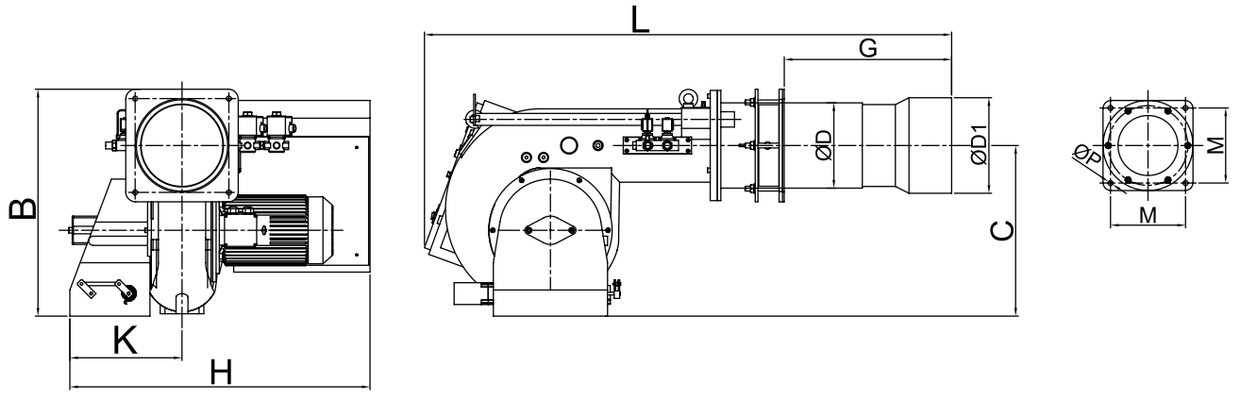


Dimensions Tables

ECO 30 ECO 45 ECO 50 ECO 55

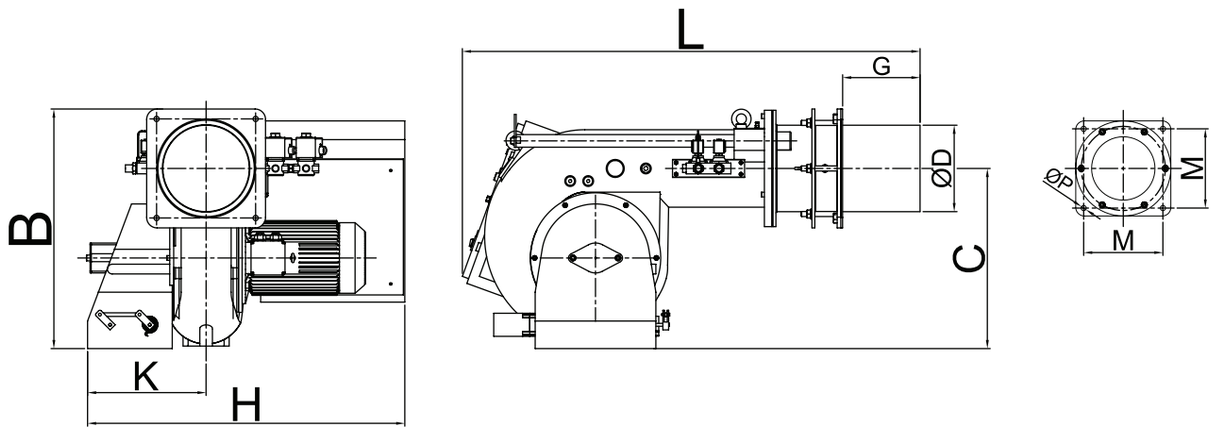


ECO 65 ECO 70



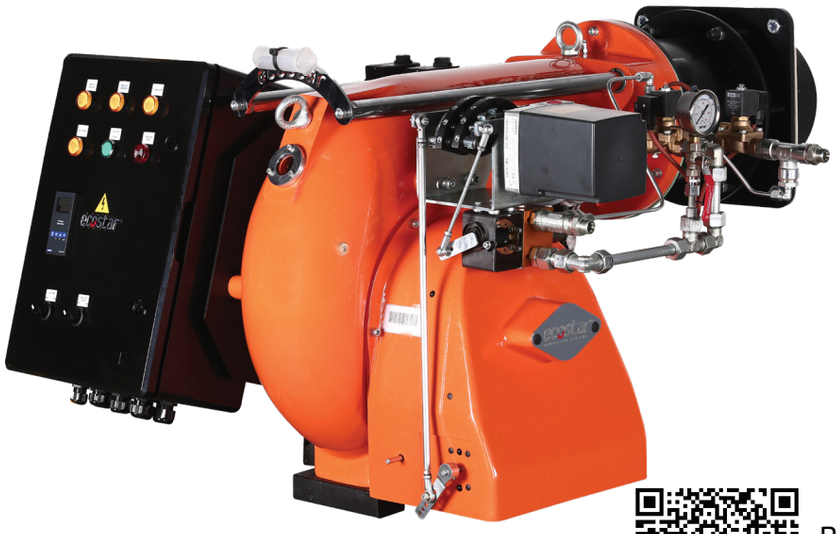
Dimensions Tables

ECO 60 ECO 75



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 30 O (S)	880	130	265	550	250	400	305	10	142	130	153
ECO 45 O (S)	1040	150	310	600	300	460	350	12	180	148	172
ECO 50 O (S)	1370	280	440	780	360	590	422	18	275	218	236
ECO 55 O (S)	1370	280	440	780	360	590	422	18	275	218	236
ECO 60 O (S)	1300	-	140	890	340	670	510	18	275	240	-
ECO 65 O (S)	1580	200	535	890	340	670	510	18	275	250	280
ECO 70 O (S)	1580	200	535	890	340	670	510	18	275	250	280

Modulating Heavy Oil Burners



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SPECIFICATIONS

- Modulating operation,
- Mechanical and electronic modulating control options,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dis-mounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Product Specifications and Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		HEAVY OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	OIL HEATER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	kW	VAC
ECO 45 O (S) C 3b	212.300	1.013.250	247	1180	22	105	1,5	-	6	3N 400
ECO 50 O (S) C 3	337.750	1.351.000	393	1571	35	140	2,2	-	6	3N 400
ECO 55 O (S) C 3	386.000	1.737.000	449	2020	40	180	3	-	12	3N 400
ECO 55 O (S) C 3a	386.000	2.123.000	449	2469	40	220	3	-	12	3N 400
ECO 60 O (S) C 3	598.300	2.576.550	696	3000	62	267	4	1,1	14	3N 400
ECO 65 O (S) C 3	733.400	3.010.800	853	3500	76	312	5,5	1,5	2 x 9	3N 400
ECO 70 O (S) C 3	916.750	3.502.950	1066	4070	95	363	7,5	1,5	2 x 9	3N 400
ECO 75 O (S) C 3	1.003.600	4.825.000	1167	5610	104	500	11	1,5	2 x 14	3N 400
* Low Calorific Value H Heavy Oil : 9650 kcal/kg										

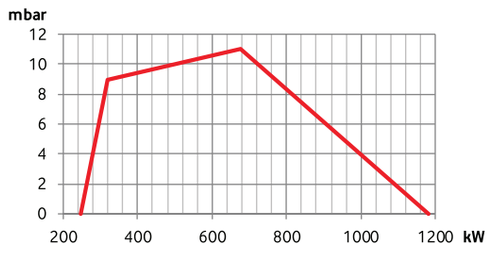
SPECIFICATIONS	ECO 45 O SC 3b	ECO 50 O SC 3	ECO 55 O SC 3	ECO 55 O SC 3a	ECO 60 O SC 3	ECO 65 O SC 3	ECO 70 O SC 3	ECO 75 O SC 3
Control Type	O	O	O	O	O	O	O	O
Mechanical Modulating	✓	✓	✓	✓	○	○	○	○
Electronic Modulating	○	○	○	○	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM	SM
Ignition	DA	DA	DA	DA	DA	DA	DA	DA
Flame control	F	F	F	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○	○	○	○
Fuel Preparation Stations (Gas line/Heavy Oil Station)	○	○	○	○	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

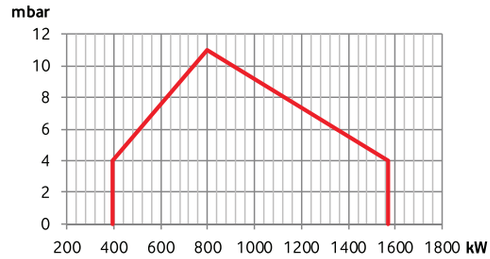
Back Pressure Diagrams

Modulating

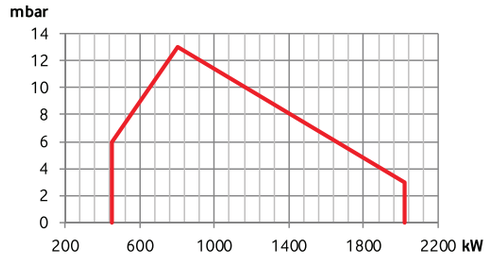
ECO-45 O S C (2,3)b



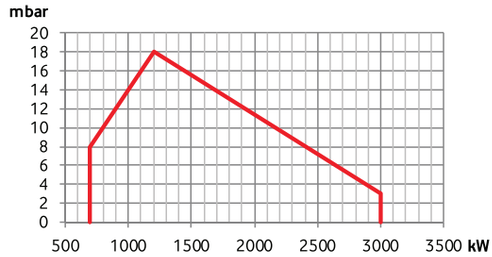
ECO-50 O S C (2,3)



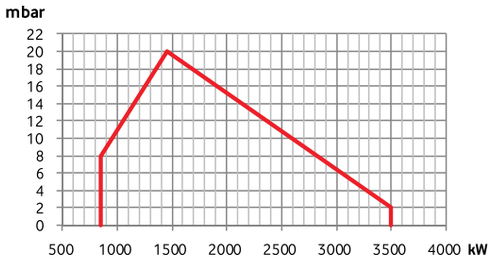
ECO-55 O S C (2,3)



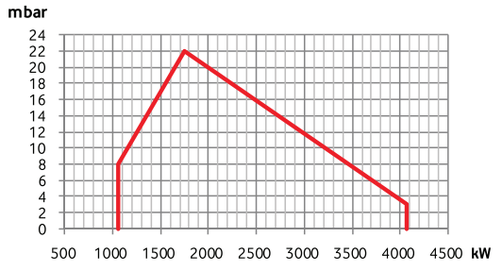
ECO-60 O S C (2,3)



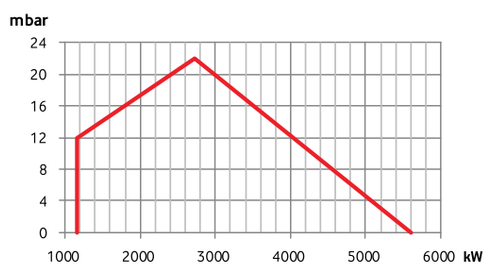
ECO-65 O S C (2,3)



ECO-70 O S C (2,3)

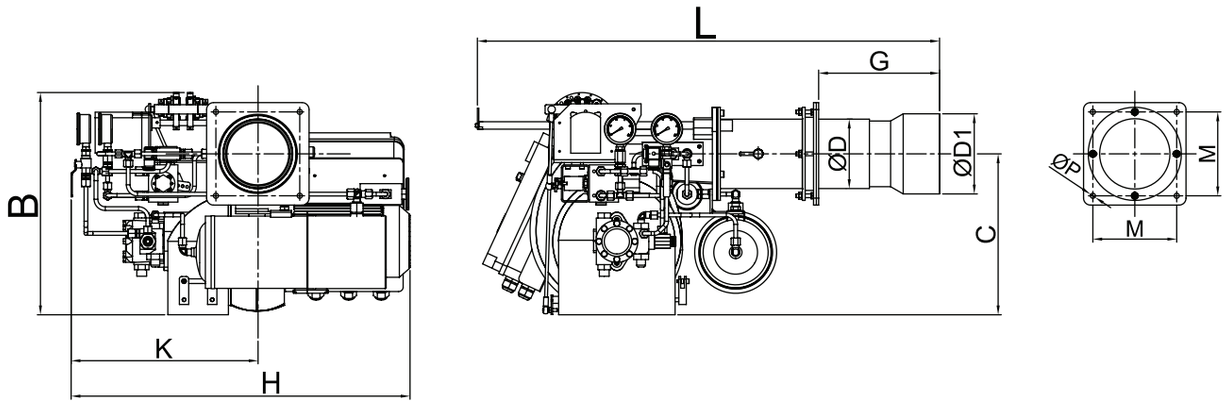


ECO-75 O S C 3

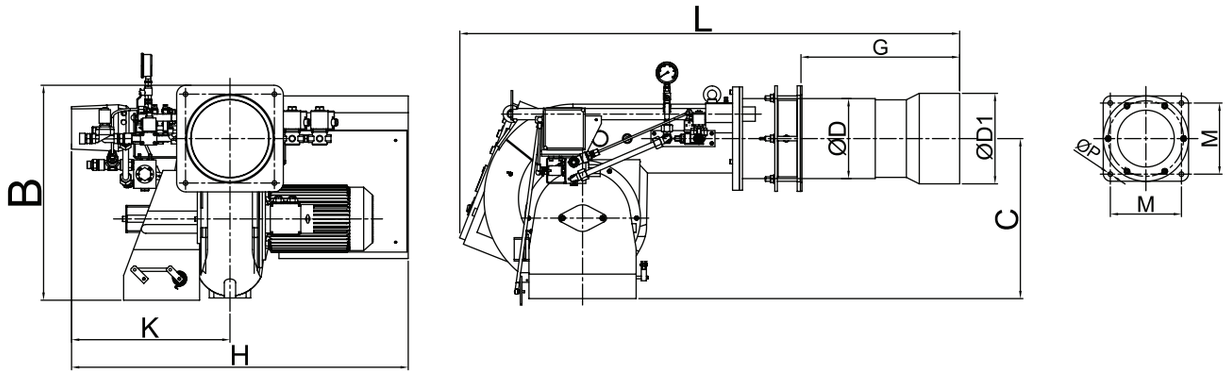


Dimensions Tables

ECO 45 ECO 50 ECO 55

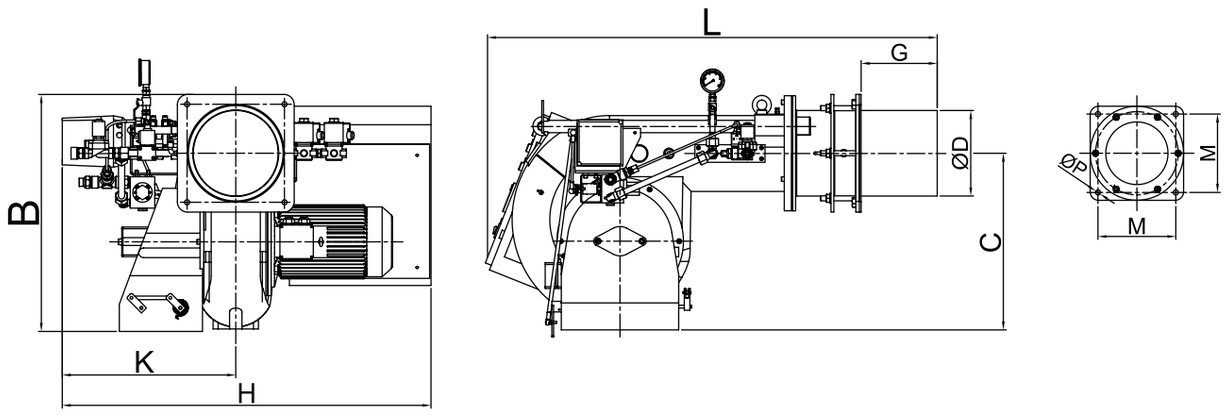


ECO 65 ECO 70



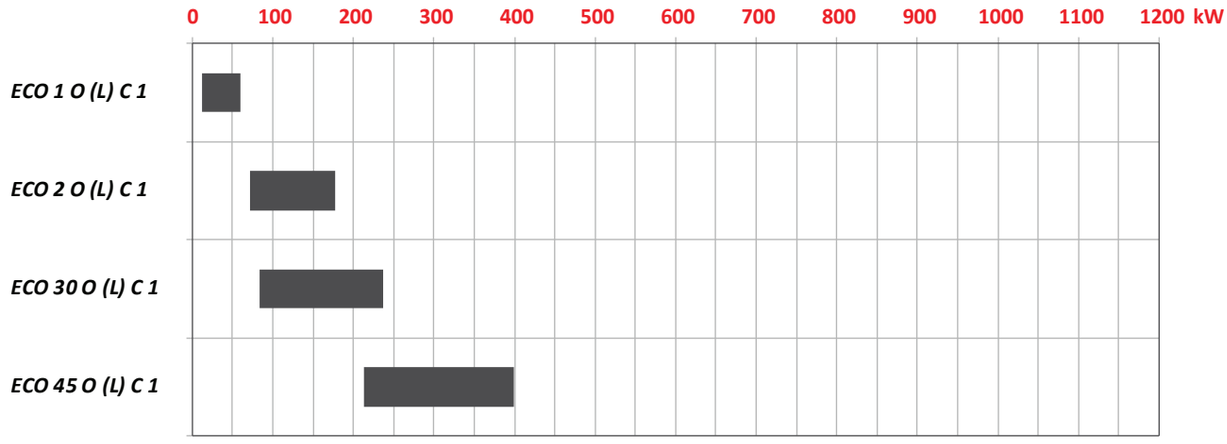
Dimensions Tables

ECO 60 ECO 75

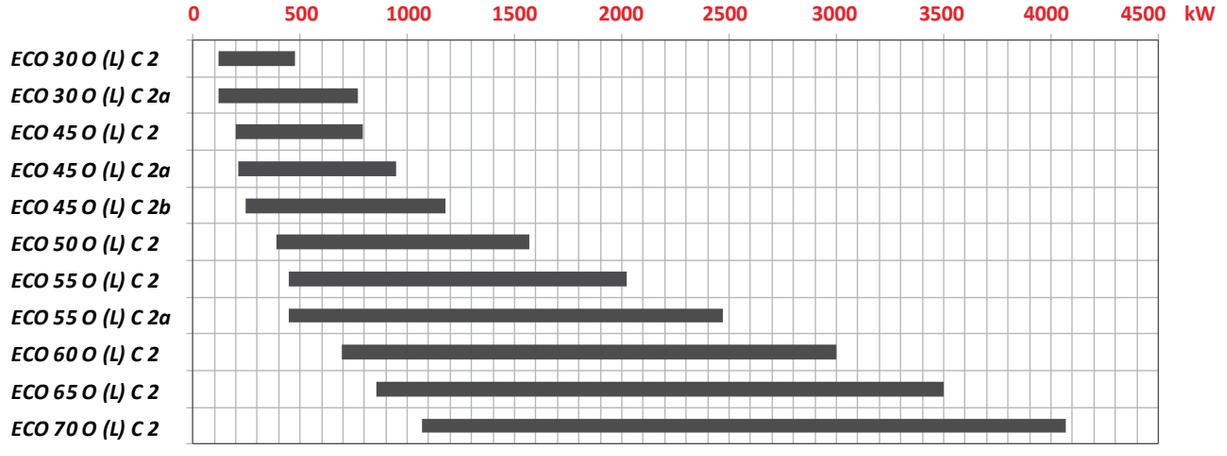


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 O (S)	1040	150	310	750	400	460	350	12	180	148	172
ECO 50 O (S)	1370	280	440	1000	520	590	422	18	275	218	236
ECO 55 O (S)	1370	280	440	1000	520	590	422	18	275	218	236
ECO 60 O (S)	1300	-	140	1100	550	670	510	18	275	240	-
ECO 65 O (S)	1580	200	535	1100	550	670	510	18	275	250	280
ECO 70 O (S)	1580	200	535	1100	550	670	510	18	275	250	280
ECO 75 O (S)	1500	200	285	1200	580	730	525	22	335	300	-

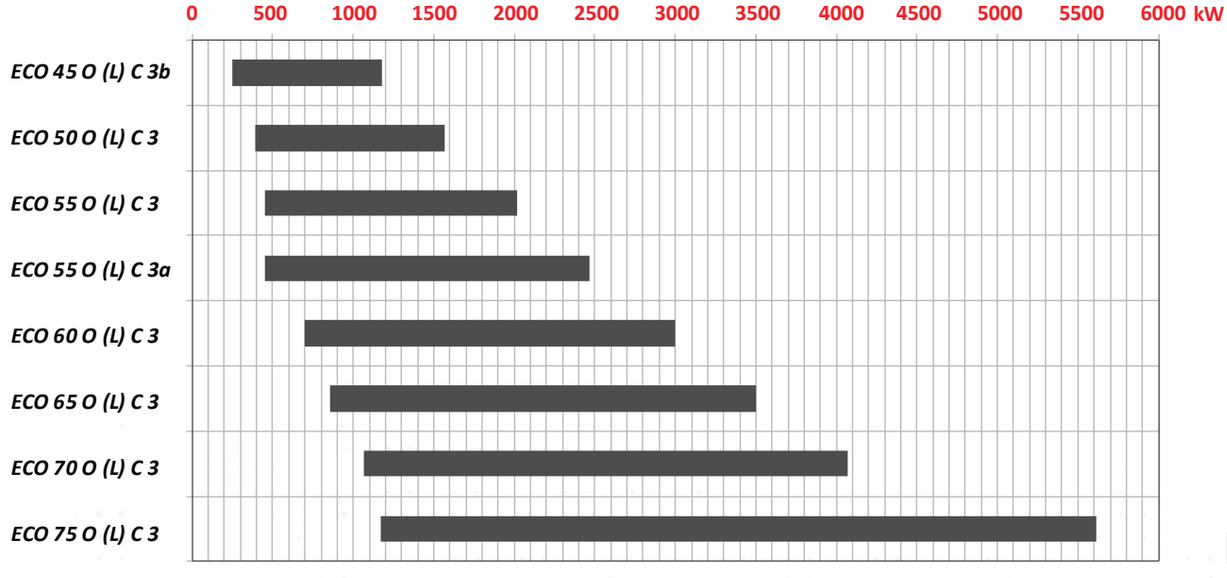
ONE STAGE LIGHT OIL BURNERS



TWO STAGE LIGHT OIL BURNERS



MODULATING LIGHT OIL BURNERS



One-Stage Light Oil Burners

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SPECIFICATIONS

- Single-stage operation,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- High efficiency operation thanks to air flow rate adjustment from both the suction and the barrel,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without removing the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Product Specifications and Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	VAC
ECO 1 O (L) C 1	10.200	51.000	12	59	1	5	0,11	-	1N 240
ECO 2 O (L) C 1	61.200	153.000	71	178	6	15	0,37	-	3N 400
ECO 30 O (L) C 1	71.400	204.000	83	237	7	20	0,37	-	3N 400
ECO 45 O (L) C 1	183.600	342.720	213	399	18	34	1,1	-	3N 400
* Low Calorific Value H Light Oil : 10200kcal/kg									

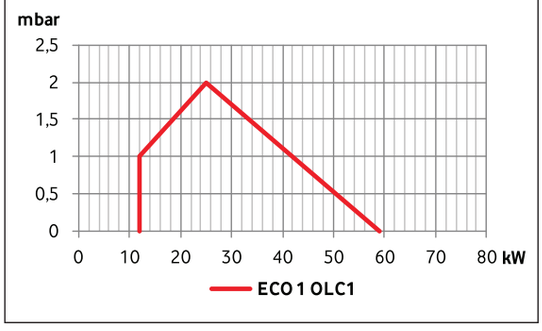
SPECIFICATIONS	ECO1OLC1	ECO2OLC1	ECO30LC1	ECO45OLC1
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Flame control	F	F	F	F
Ignition	DA	DA	DA	DA
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Handling Shaft for Servicing	✗	✓	✓	✓
Different flame tube length	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP20	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

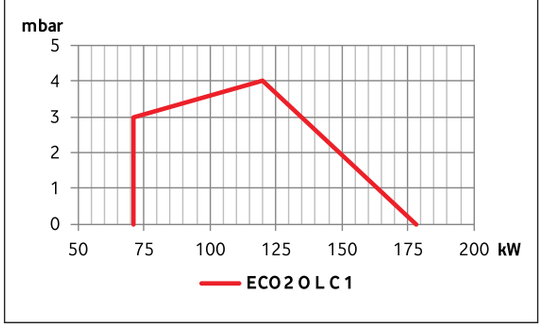
Back Pressure Diagrams

One Stage

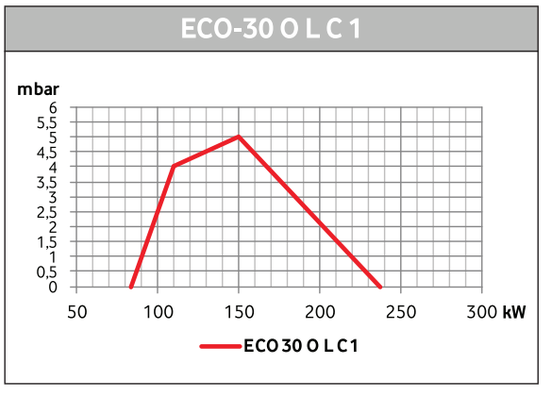
ECO-1 O L C 1



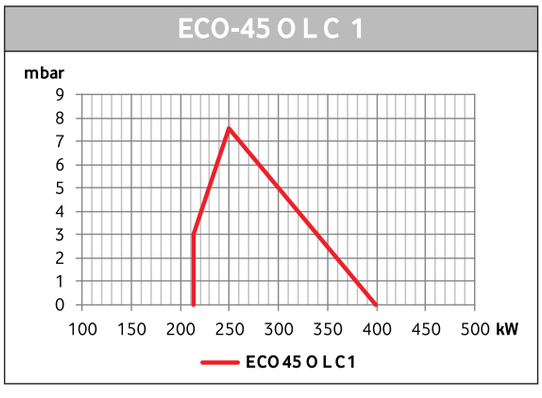
ECO-2 O L C 1



ECO-30 O L C 1

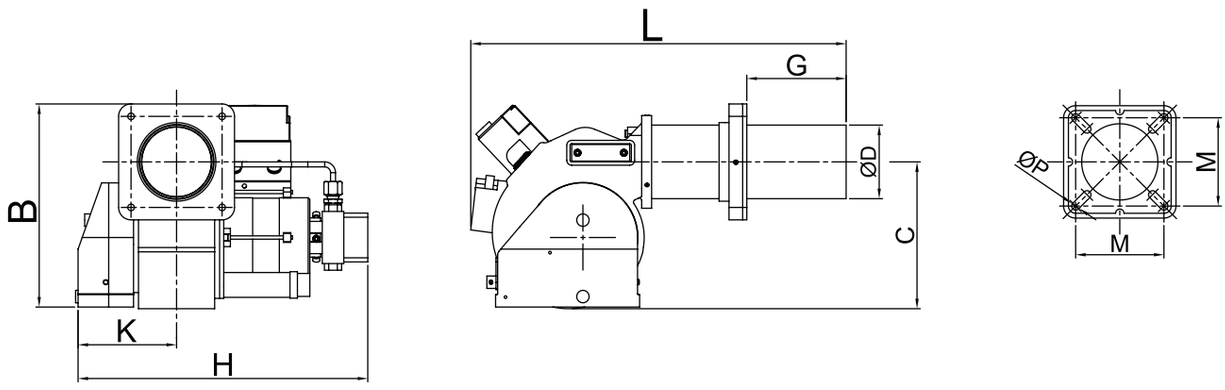


ECO-45 O L C 1

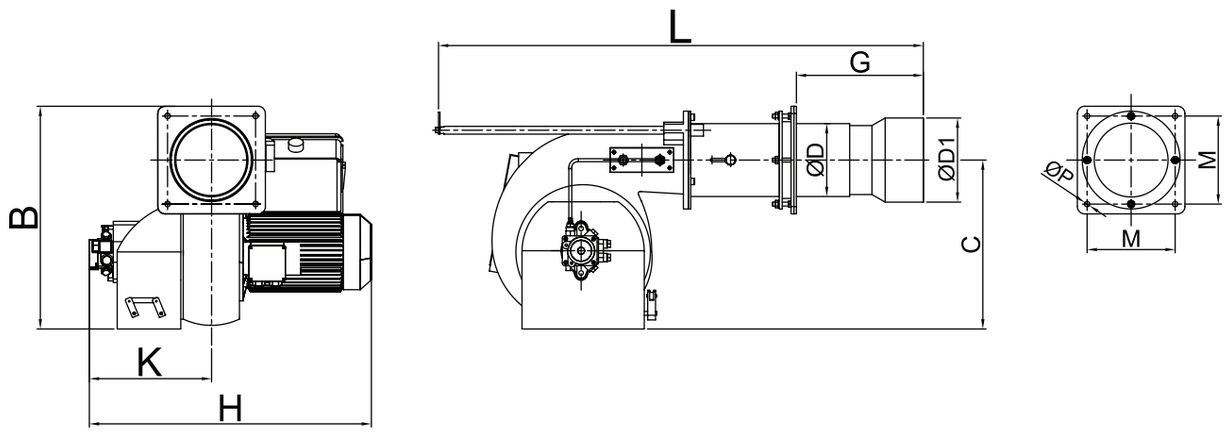


Dimensions Tables

ECO 1



ECO 2 ECO 30 ECO 45



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 1 O (L)	560	50	310	340	125	250	175	10	110	89	-
ECO 2 O (L)	820	106	290	390	220	320	230	10	142	120	139
ECO 30 O (L)	790	130	245	545	240	400	305	10	142	130	153
ECO 45 O (L)	1040	150	350	600	300	460	350	12	180	148	172

Two-Stage Light Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Two-stage operation,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- High efficiency operation thanks to air flow rate adjustment from both the suction and the barrel,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	VAC
ECO 30 O (L) C2	102.000	408.000	119	474	10	40	0,37	-	3N 400
ECO 30 O (L) C2a	102.000	663.000	119	771	10	65	0,75	-	3N 400
ECO 45 O (L) C2	173.400	683.400	200	795	17	67	1,1	-	3N 400
ECO 45 O (L) C2a	183.600	816.000	213	949	18	80	1,1	-	3N 400
ECO 45 O (L) C2b	214.200	1.020.000	247	1180	21	100	1,5	-	3N 400
ECO 50 O (L) C2	336.600	1.346.400	393	1571	33	132	2,2	-	3N 400
ECO 55 O (L) C2	387.600	1.734.000	449	2020	38	170	3	-	3N 400
ECO 55 O (L) C2a	387.600	2.121.600	449	2469	38	208	3	-	3N 400
ECO 60 O (L) C2	601.800	2.580.600	696	3000	59	253	4	0,75	3N 400
ECO 65 O (L) C2	734.400	3.009.000	853	3500	72	295	5,5	0,75	3N 400
ECO 70 O (L) C2	918.000	3.498.600	1066	4070	90	343	7,5	0,75	3N 400

* Low Calorific Value H Light Oil : 10200kcal/kg

Product Specifications Tables

SPECIFICATIONS	ECO300LC2	ECO300LC2a	ECO450LC2	ECO450LC2a	ECO450LC2b	ECO500LC2
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM	SM
Ignition	DA	DA	DA	DA	DA	DA
Pilot gas valve	○	○	○	○	○	○
Flame control	F	F	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40

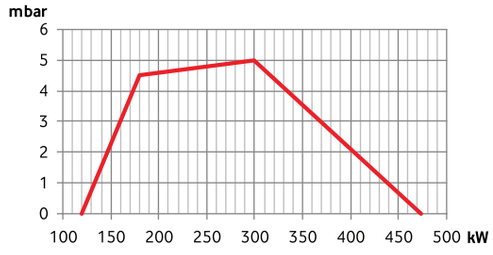
SPECIFICATIONS	ECO550LC2	ECO550LC2a	ECO600LC2	ECO650LC2	ECO700LC2
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM
Ignition	DA	DA	DA	DA	DA
Pilot gas valve	○	○	○	○	○
Flame control	F	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

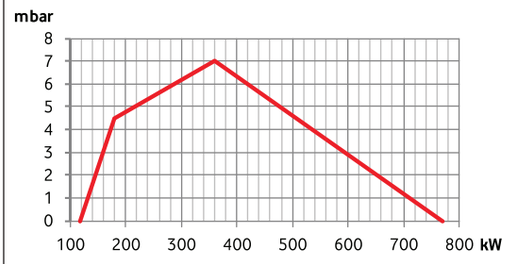
Back Pressure Diagrams

Two Stage

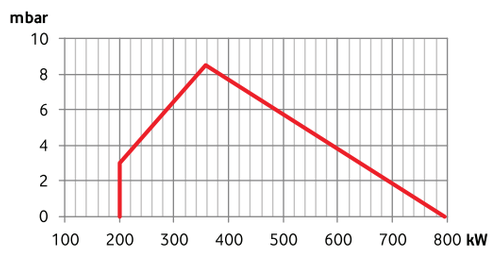
ECO-30 O L C 2



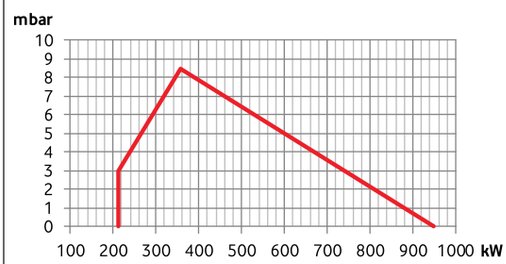
ECO-30 O L C 2a



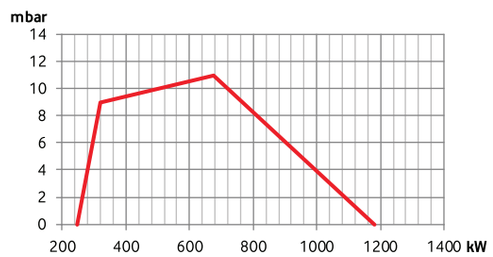
ECO-45 O L C 2



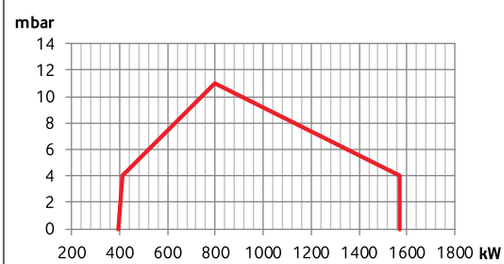
ECO-45 O L C 2a



ECO-45 O L C (2,3)b



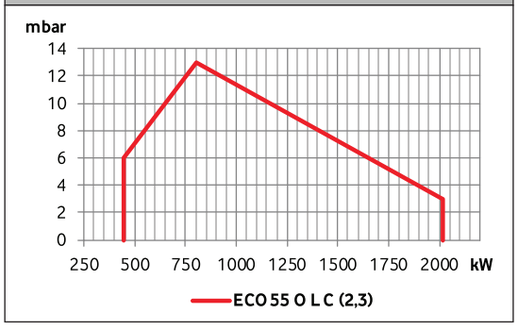
ECO-50 O L C (2,3)



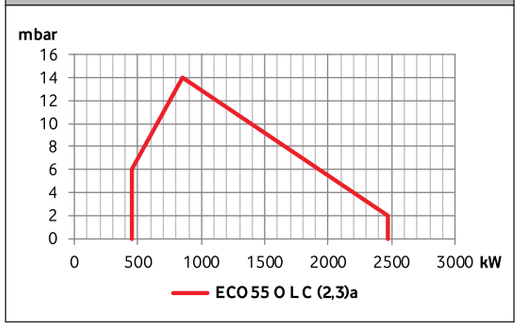
Back Pressure Diagrams

Two Stage

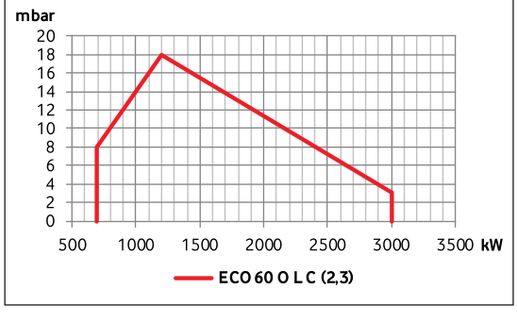
ECO-55 O L C (2,3)



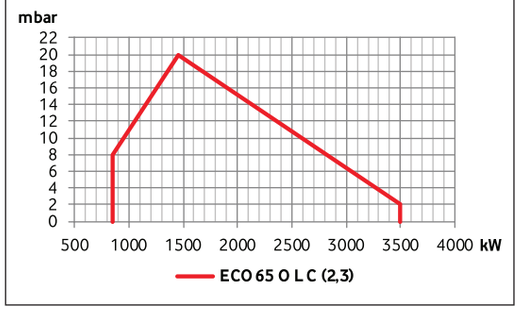
ECO-55 O L C (2,3)a



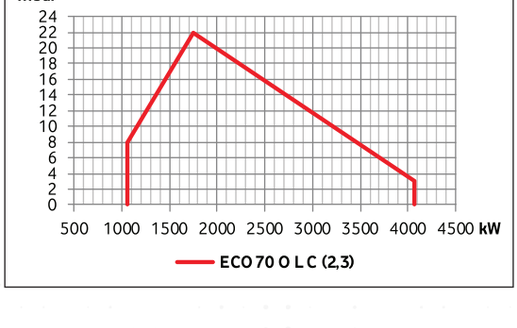
ECO-60 O L C (2,3)



ECO-65 O L C (2,3)

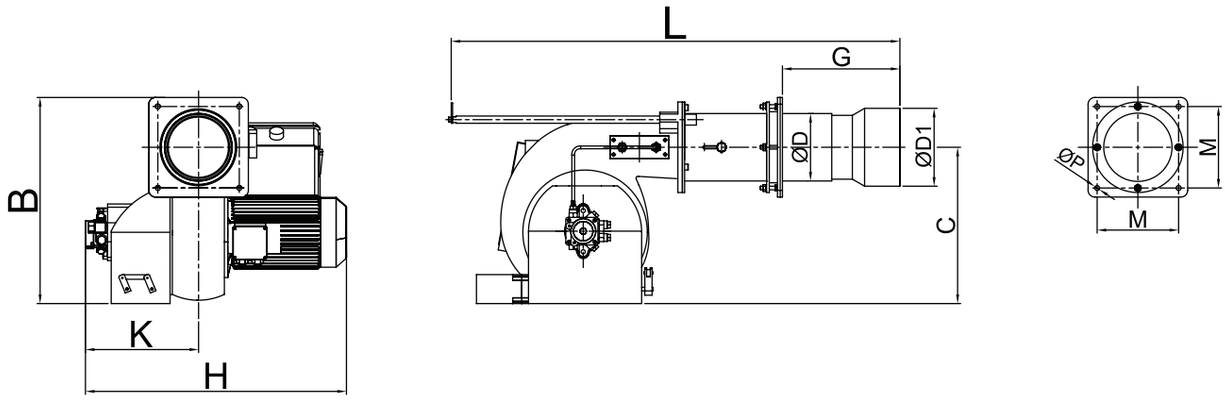


ECO-70 O L C (2,3)

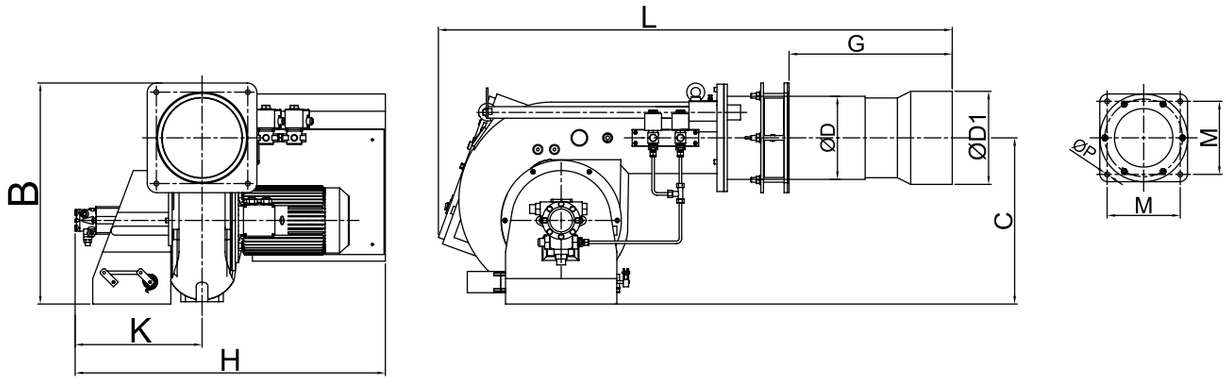


Dimensions Tables

ECO 30 ECO 45 ECO 50 ECO 55

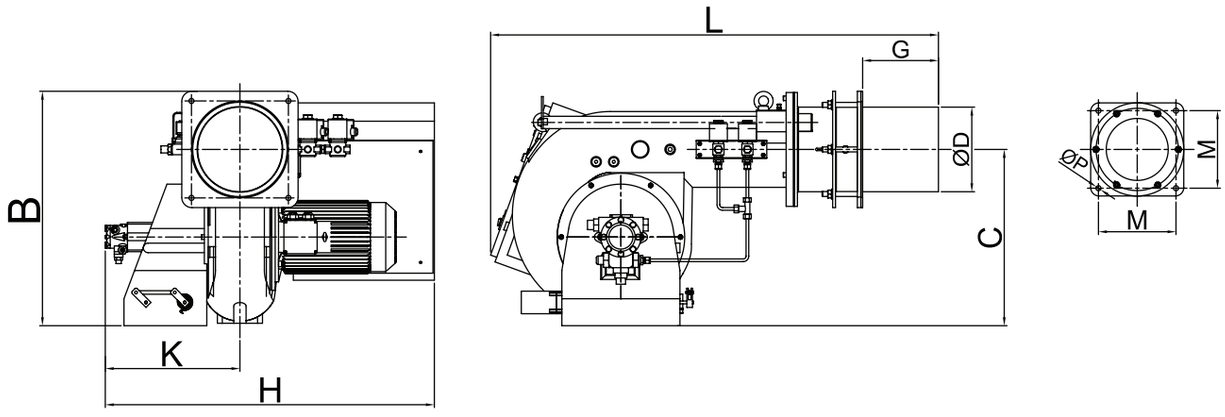


ECO 65 ECO 70



Dimensions Tables

ECO 30 ECO 45 ECO 50 ECO 55



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 30 O (L)	790	130	245	545	240	400	305	10	142	130	153
ECO 45 O (L)	1040	150	350	600	300	460	350	12	180	148	172
ECO 50 O (L)	1370	280	440	780	360	590	422	18	275	218	236
ECO 55 O (L)	1370	280	440	780	360	590	422	18	275	218	236
ECO 60 O (L)	1300	-	140	950	400	670	510	18	275	240	-
ECO 65 O (L)	1580	200	535	950	400	670	510	18	275	250	280
ECO 70 O (L)	1580	200	535	950	400	670	510	18	275	250	280

Modulating Light Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Modulating operation,
- Mechanical and electronic modulating control options,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- High efficiency operation thanks to air flow rate adjustment from both the suction and the barrel,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Product Specifications and Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	VAC
ECO 45 O (L) C3b	214.200	1.020.000	247	1180	21	100	1,5	-	3N 400
ECO 50 O (L) C3	336.600	1.346.400	393	1571	33	137	2,2	-	3N 400
ECO 55 O (L) C3	387.600	1.734.000	449	2020	38	170	3	-	3N 400
ECO 55 O (L) C3a	387.600	2.121.600	449	2469	38	208	3	-	3N 400
ECO 60 O (L) C3	601.800	2.580.600	696	3000	59	253	4	1,1	3N 400
ECO 65 O (L) C3	734.400	3.009.000	853	3500	72	295	5,5	1,5	3N 400
ECO 70 O (L) C3	918.000	3.498.600	1066	4070	90	343	7,5	1,5	3N 400
ECO 75 O (L) C3	1.009.800	4.824.600	1167	5610	99	473	11	1,5	3N 400
* Low Calorific Value H Light Oil : 10200kcal/kg									

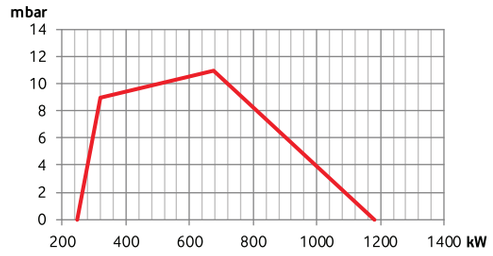
SPECIFICATIONS	ECO 45 O LC3b	ECO 50 O LC3	ECO 55 O LC3	ECO 55 O LC3a	ECO 60 O LC3	ECO 65 O LC3	ECO 70 O LC3	ECO 75 O LC3
Control Type	O	O	O	O	O	O	O	O
Mechanical Modulating	✓	✓	✓	✓	○	○	○	○
Electronic Modulating	○	○	○	○	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM	SM	SM	SM
Pilot ignition	DA	DA	DA	DA	DA	DA	DA	PA
Pilot gas valve	○	○	○	○	○	○	○	✓
Flame control	F	F	F	F	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○	○	○	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

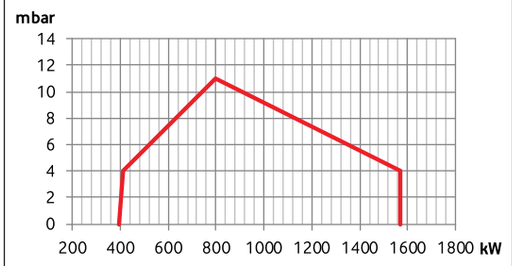
Back Pressure Diagrams

Modulating

ECO-45 O L C (2,3)b



ECO-50 O L C (2,3)



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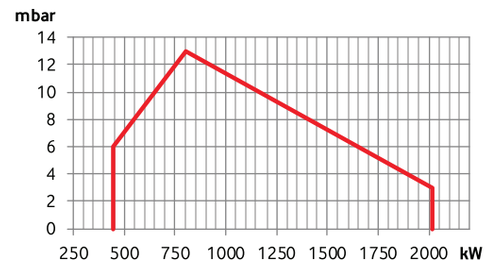
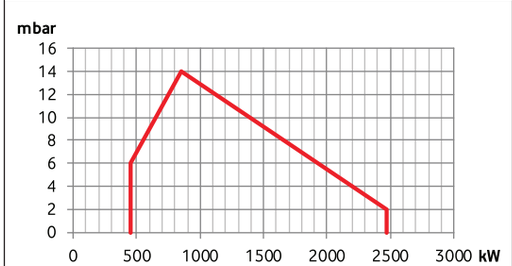
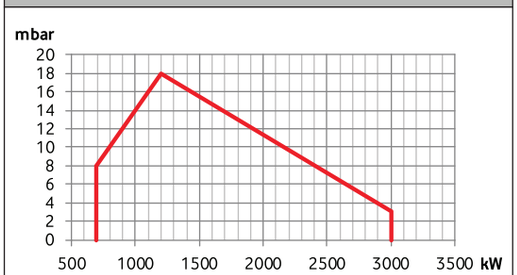


ECO-55 O L C (2,3)a



ECO-60 O L C (2,3)



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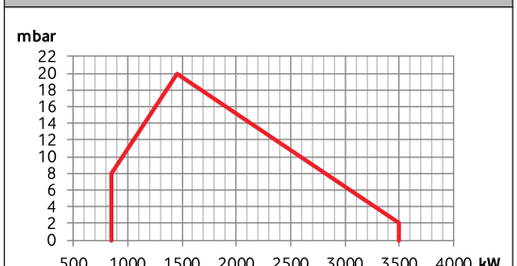
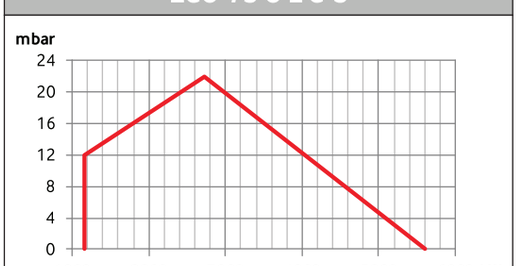


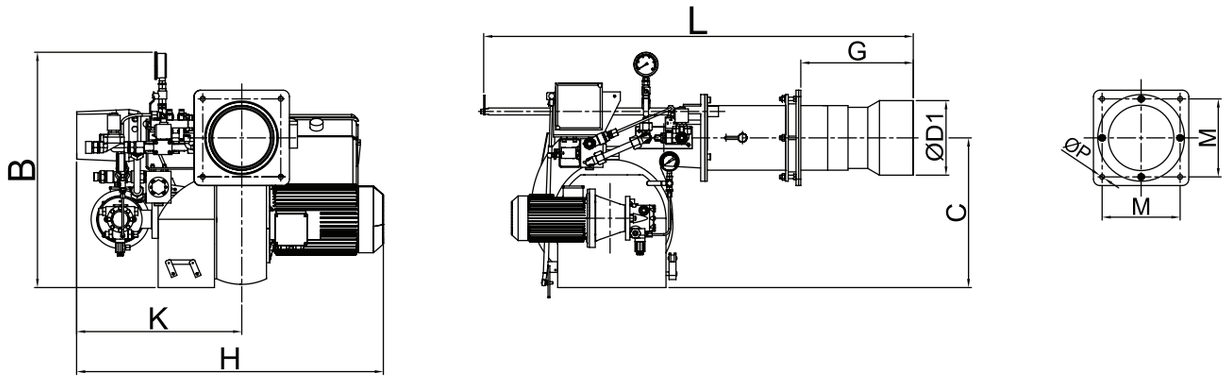
ECO-70 O L C (2,3)

ECO-75 O L C 3

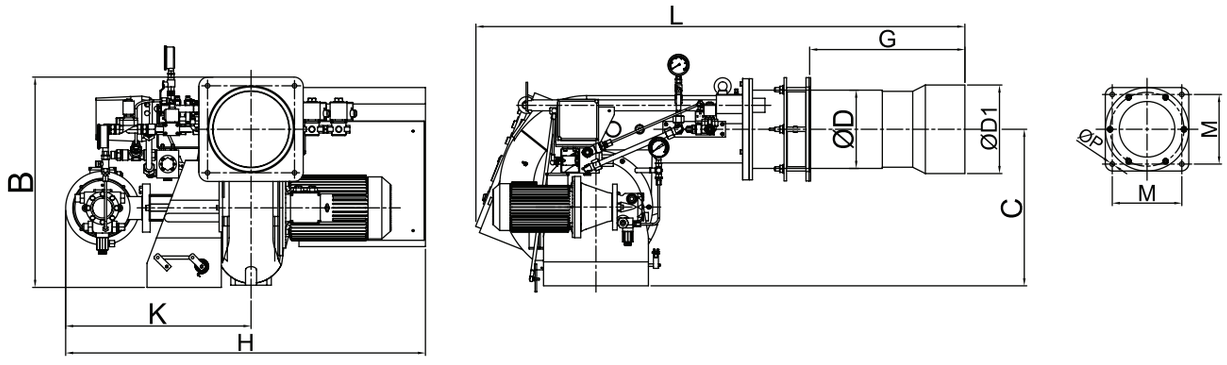


Dimensions Tables

ECO 45 ECO 50 ECO 55

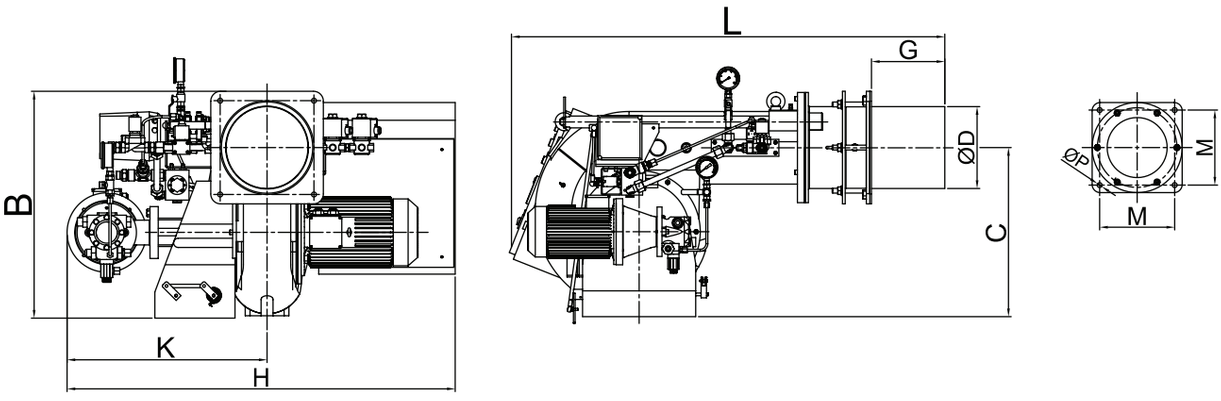


ECO 65 ECO 70



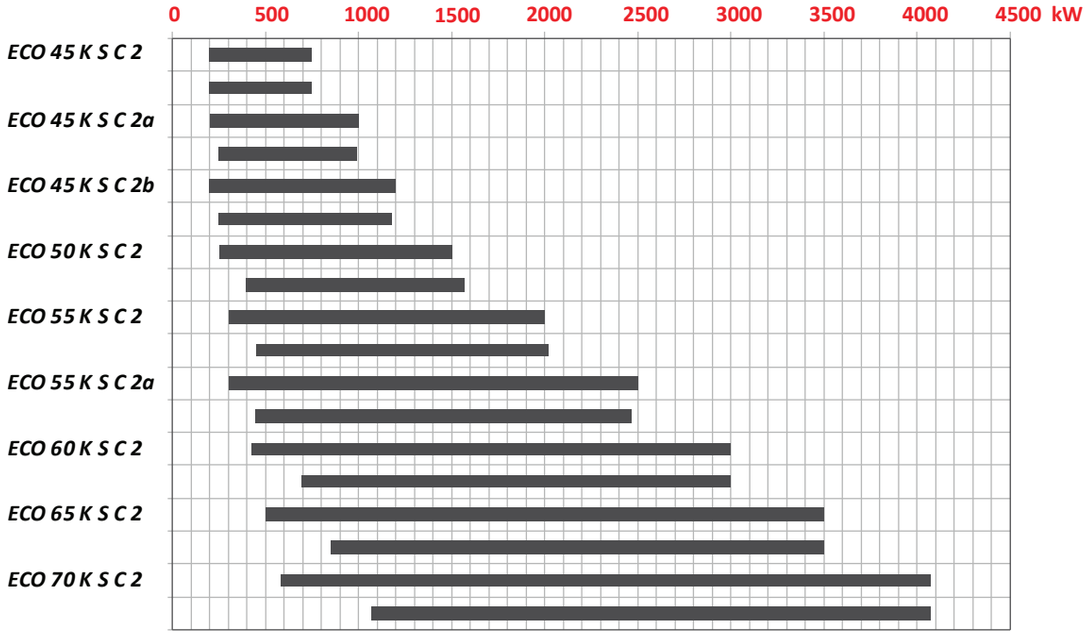
Dimensions Tables

ECO 60 ECO 75

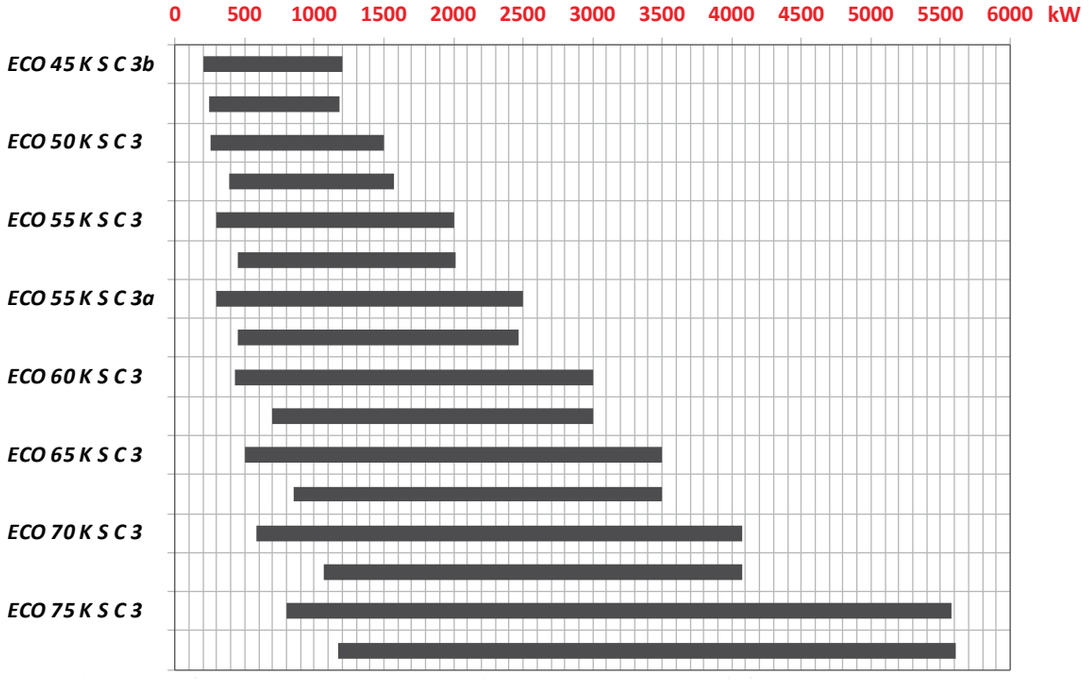


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 O (L)	1040	150	350	750	400	460	350	12	180	148	172
ECO 50 O (L)	1370	280	440	1000	520	590	422	18	275	218	236
ECO 55 O (L)	1370	280	440	1000	520	590	422	18	275	218	236
ECO 60 O (L)	1300	-	140	1100	550	670	510	18	275	240	-
ECO 65 O (L)	1580	200	535	1100	550	670	510	18	275	250	280
ECO 70 O (L)	1580	200	535	1100	550	670	510	18	275	250	280
ECO 75 O (L)	1500	200	285	1200	580	730	525	22	335	300	-

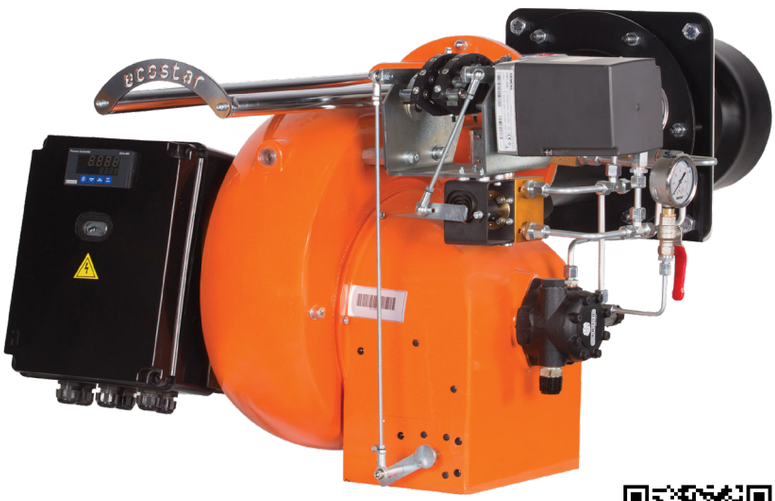
TWO STAGE GAS-HEAVY OIL DUAL BURNERS



MODULATING GAS-HEAVY OIL DUAL BURNERS



Two Stage Gas + Heavy Oil Burners



Please read the code to download our e-Catalog.

SPECIFICATIONS

- Two-stage operation with natural gas and heavy oil,
- Operating at 21 mbar gas pressure up to model ECO 55 K (S) C 2,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	GAS CAPACITY		GAS CAPACITY		NATURAL GAS CONSUMPTION		HEAVY-OIL CAPACITY		HEAVY-OIL CAPACITY		HEAVY OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 45 K S C2	172.000	645.000	200	750	20,8	78,2	172.000	645.000	200	750	17,82	66,84
ECO 45 K S C2a	172.000	860.000	200	1000	20,8	104,2	212.420	851.400	247	990	22,01	88,23
ECO 45 K S C2b	172.000	1.032.000	200	1200	20,8	125,1	212.420	1.014.800	247	1180	22,01	105,16
ECO 50 K S C2	215.000	1.290.000	250	1500	26,1	156,4	337.750	1.351.000	393	1571	35,00	140,00
ECO 55 K S C2	258.000	1.720.000	300	2000	31,3	208,5	386.000	1.737.000	449	2020	40,00	180,00
ECO 55 K S C2a	258.000	2.150.000	300	2500	31,3	260,6	386.000	2.123.000	449	2469	40,00	220,00
ECO 60 K S C2	369.800	2.580.000	430	3000	44,8	312,7	598.560	2.580.000	696	3000	62,03	267,36
ECO 65 K S C2	430.000	3.010.000	500	3500	52,1	364,8	733.580	3.010.000	853	3500	76,02	311,92
ECO 70 K S C2	498.800	3.500.200	580	4070	60,5	424,3	916.760	3.500.200	1066	4070	95,00	362,72
* Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy Oil : 9650 kcal/kg												

BURNER TYPE	FAN MOTOR POWER	OIL PUMP POWER	OIL HEATER	MAIN SUPPLY
	kW	kW	kW	VAC
ECO 45 K S C2	0,75	0,37	3	3N 400
ECO 45 K S C2a	1,1	0,37	6	3N 400
ECO 45 K S C2b	1,5	0,37	6	3N 400
ECO 50 K S C2	2,2	0,75	6	3N 400
ECO 55 K S C2	3	0,75	12	3N 400
ECO 55 K S C2a	3	0,75	12	3N 400
ECO 60 K S C2	4	0,75	14	3N 400
ECO 65 K S C2	5,5	0,75	14	3N 400
ECO 70 K S C2	7,5	0,75	2 x 9	3N 400
* Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy Oil : 9650 kcal/kg				

Product Specifications Tables

SPECIFICATIONS	ECO45KSC2	ECO45KSC2a	ECO45KSC2b	ECO50KSC2	ECO55KSC2
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM
Gas Valve	✔	✔	✔	✔	✔
Minimum gas pressure switch	✔	✔	✔	✔	✔
Maximum gas pressure switch	○	○	○	○	○
Air pressure switch	✔	✔	✔	✔	✔
Liquid fuel heating and pumping station	✔	✔	✔	✔	✔
Liquid fuel hoses	✔	✔	✔	✔	✔
Flame control	F	F	F	F	F
VPS Gas leak device	○	○	✔	✔	✔
Sliding boiler connection flange	✔	✔	✔	✔	✔
Handling Shaft for Servicing	✔	✔	✔	✔	✔
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✔	✔	✔	✔	✔
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

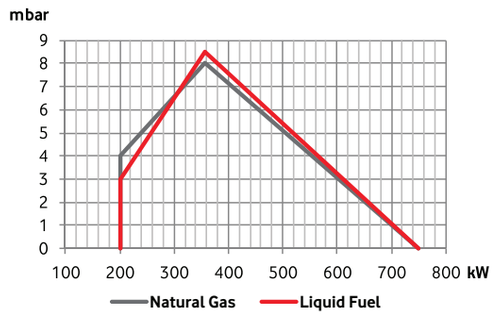
SPECIFICATIONS	ECO 55 KS C2a	ECO 60 KS C2	ECO 65 KS C2	ECO 70 KS C2
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel heating and pumping station	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

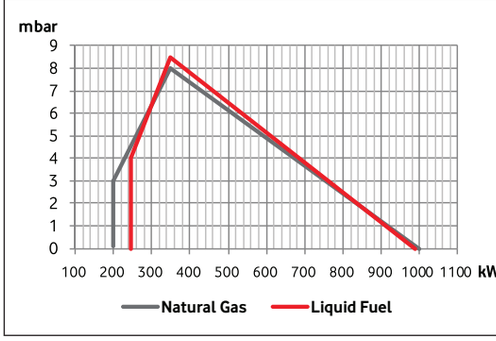
Back Pressure Diagrams

Two Stage

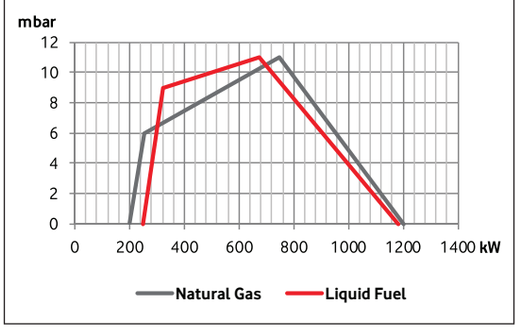
ECO-45 K S C 2



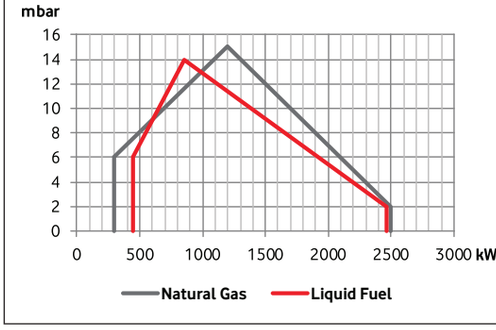
ECO-45 K S C 2 a



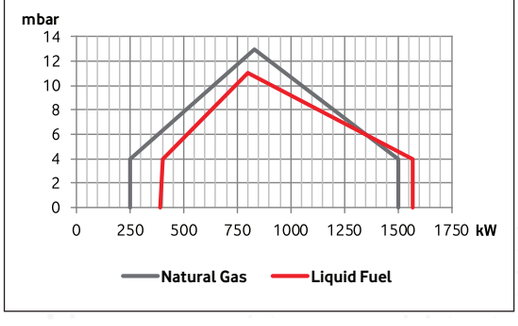
ECO-45 K S C (2-3)b



ECO-55 K S C (2-3)a



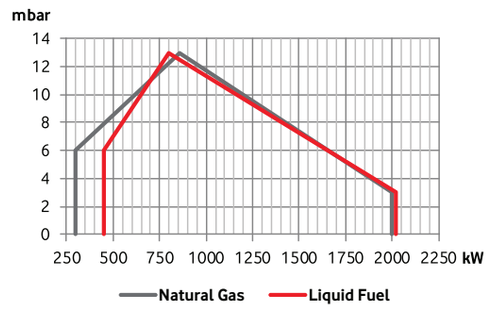
ECO-50 K S C (2-3)



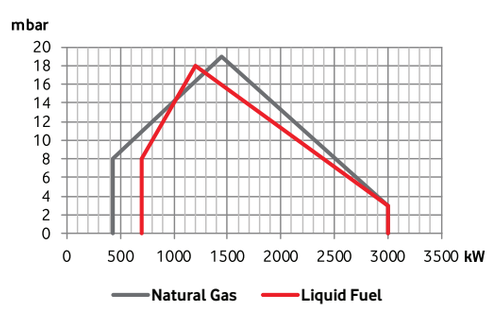
Back Pressure Diagrams

Two Stage

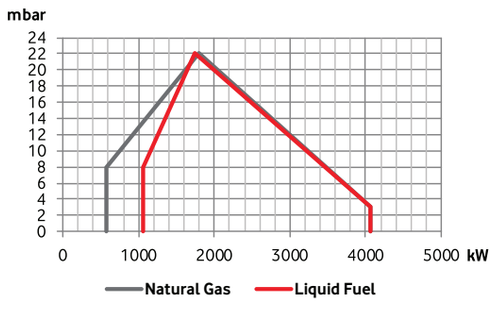
ECO-55 K S C (2-3)



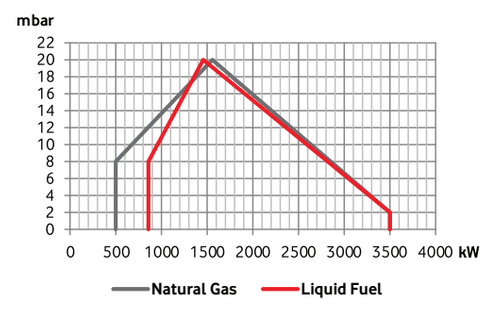
ECO-60 K S C (2-3)



ECO-70 K S C (2-3)

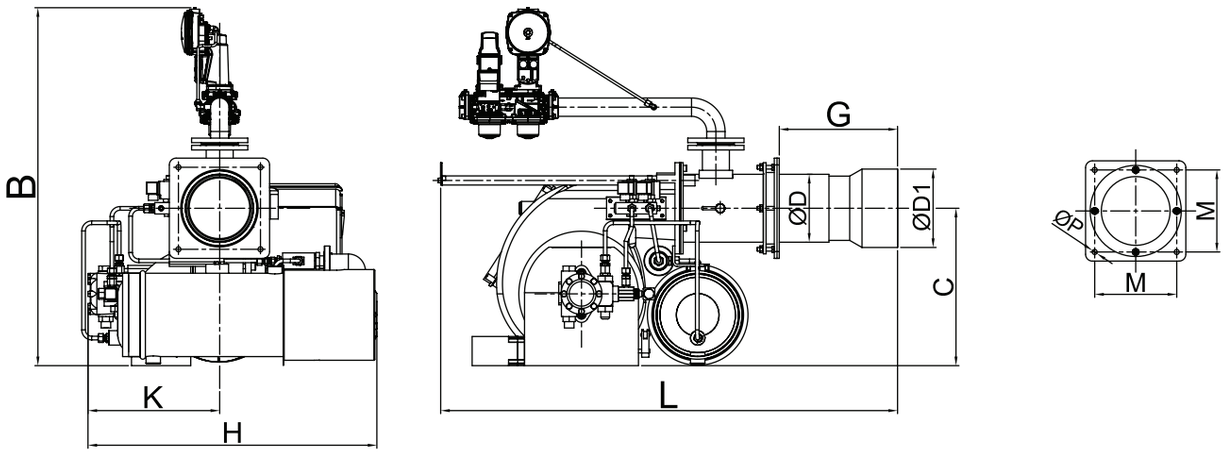


ECO-65 K S C (2-3)

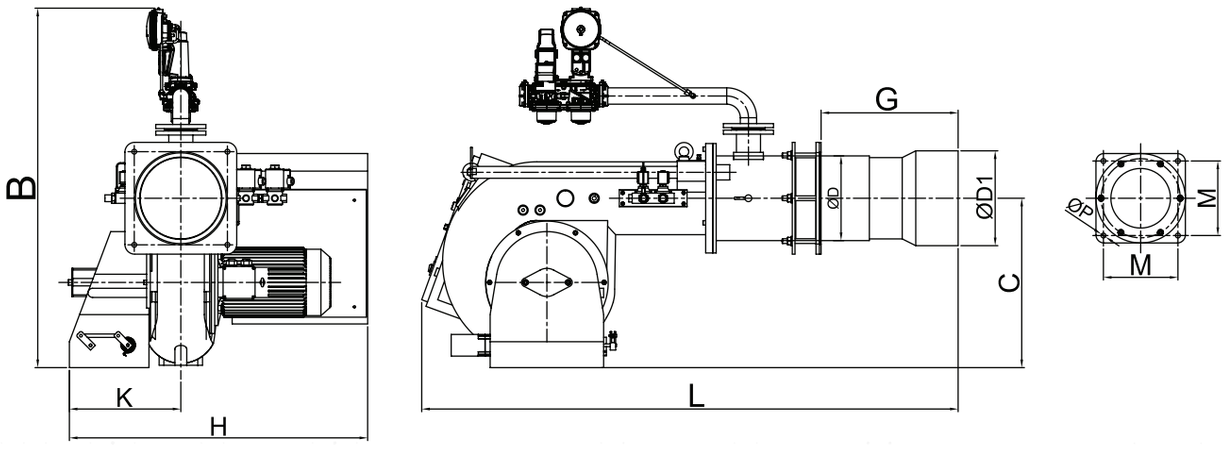


Dimensions Tables

ECO 45 ECO 50 ECO 55

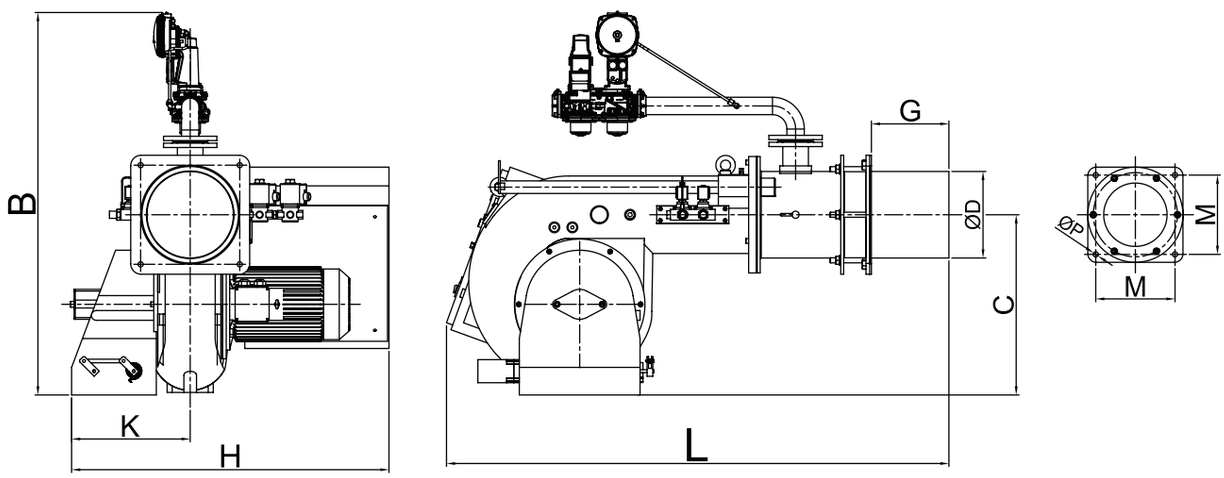


ECO 65 ECO 70



Dimensions Tables

ECO 60



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 K (S)	1040	150	310	750	400	680	350	12	180	148	172
ECO 50 K (S)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 55 K (S)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 60 K (S)	1300	-	140	1100	550	1180	510	18	275	240	-
ECO 65 K (S)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 70 K (S)	1580	200	535	1100	550	1185	510	18	275	250	280

Modulating Gas + Heavy Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Modulating operation with natural gas and heavy oil,
- Mechanical, pneumatic and electronic modulating control options,
- Operating at 21 mbar gas pressure up to model ECO 55 K (S) C 3,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	GAS CAPACITY		GAS CAPACITY		NATURAL GAS CONSUMPTION		HEAVY-OIL CAPACITY		HEAVY-OIL CAPACITY		HEAVY OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 45 K S C3b	172.000	1.032.000	200	1200	21	125	212.420	1.014.800	247	1180	22,01	105,16
ECO 50 K S C3	215.000	1.290.000	250	1500	26	156	337.750	1.351.000	393	1571	35,00	140,00
ECO 55 K S C3	258.000	1.720.000	300	2000	31	208	386.000	1.737.000	449	2020	40,00	180,00
ECO 55 K S C3a	258.000	2.150.000	300	2500	31	261	386.000	2.123.000	449	2469	40,00	220,00
ECO 60 K S C3	369.800	2.580.000	430	3000	45	313	598.560	2.580.000	696	3000	62,03	267,36
ECO 65 K S C3	430.000	3.010.000	500	3500	52	365	733.580	3.010.000	853	3500	76,02	311,92
ECO 70 K S C3	498.800	3.500.200	580	4070	60	424	916.760	3.500.200	1066	4070	95,00	362,72
ECO 75 K S C3	686.000	4.800.000	798	5581	83	582	1.003.620	4.824.600	1167	5610	104,00	499,96
* Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy Oil : 9650 kcal/kg												

BURNER TYPE	FAN MOTOR POWER	OIL PUMP POWER	OIL HEATER	MAIN SUPPLY
	kW	kW	kW	VAC
ECO 45 K S C3b	1,5	0,37	6	3N 400
ECO 50 K S C3	2,2	0,75	6	3N 400
ECO 55 K S C3	3	1,1	12	3N 400
ECO 55 K S C3a	3	1,1	12	3N 400
ECO 60 K S C3	4	1,1	14	3N 400
ECO 65 K S C3	5,5	1,5	2 x 9	3N 400
ECO 70 K S C3	7,5	1,5	2 x 9	3N 400
ECO 75 K S C3	11	1,5	2 x 14	3N 400
* Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy Oil : 9650 kcal/kg				

Product Specifications Tables

SPECIFICATIONS	ECO45KSC3b	ECO50KSC3	ECO55KSC3	ECO55KSC3a
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✓	✓	✓	✓
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21mbar)	○	○	○	○
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel heating and pumping station	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

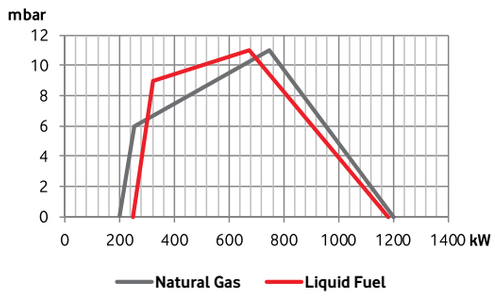
SPECIFICATIONS	ECO 45 KSC 3b	ECO 50 KSC 3	ECO 55 KSC 3	ECO 55 KSC 3a
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel heating and pumping station	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

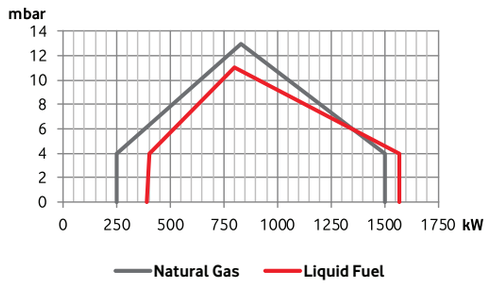
Back Pressure Diagrams

Modulating

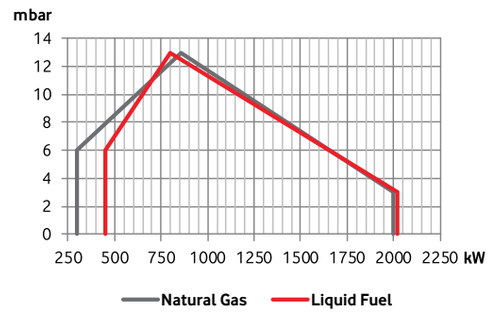
ECO-45 K S C (2-3)b



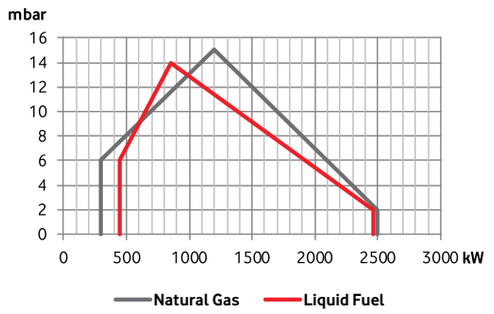
ECO-50 K S C (2-3)



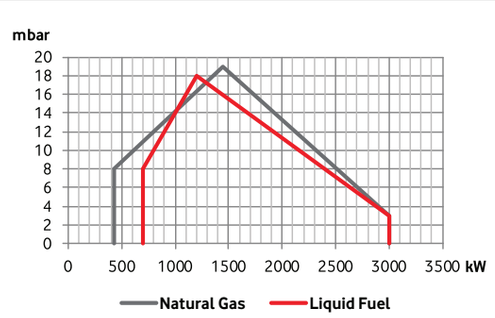
ECO-55 K S C (2-3)



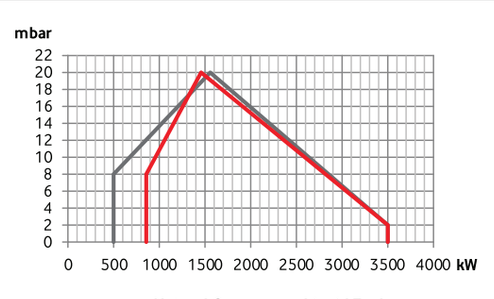
ECO-55 K S C (2-3)a



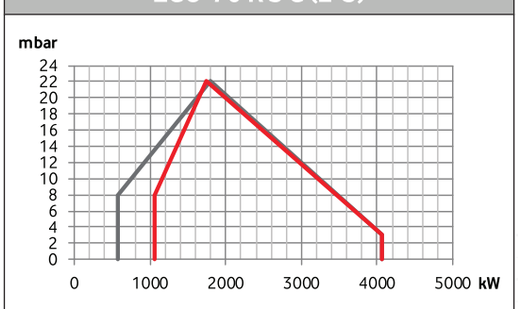
ECO-60 K S C (2-3)



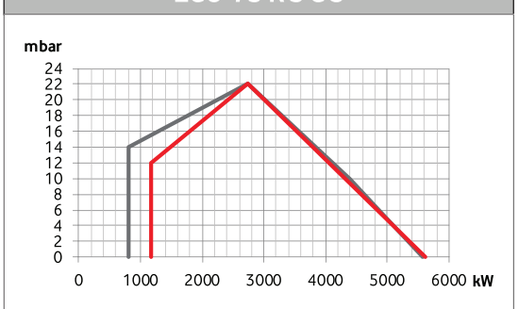
ECO-65 K S C (2-3)



ECO-70 K S C (2-3)

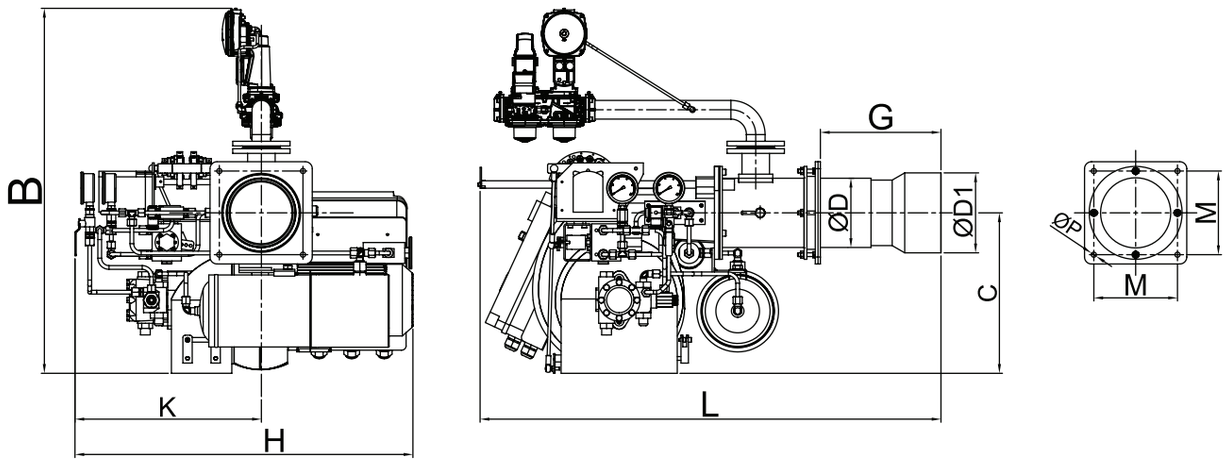


ECO-75 K S C 3

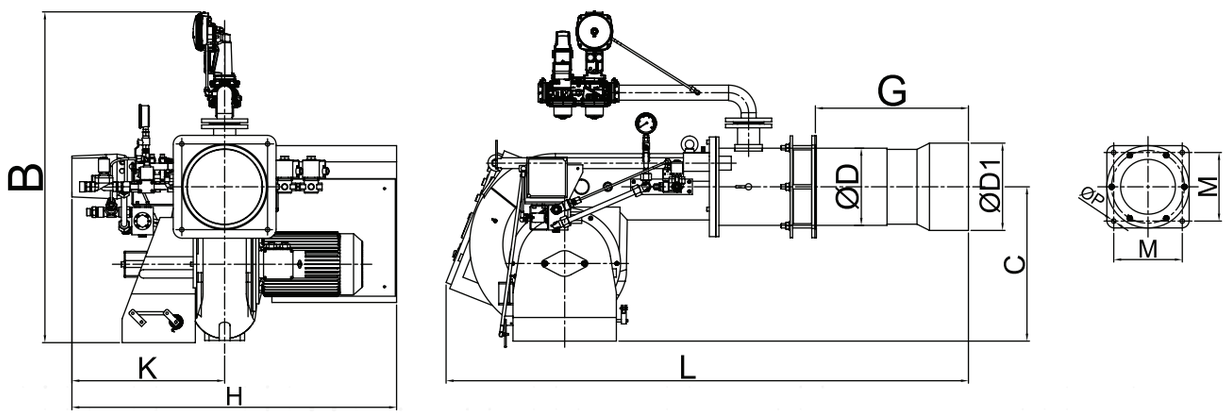


Dimensions Tables

ECO 45 ECO 50 ECO 55

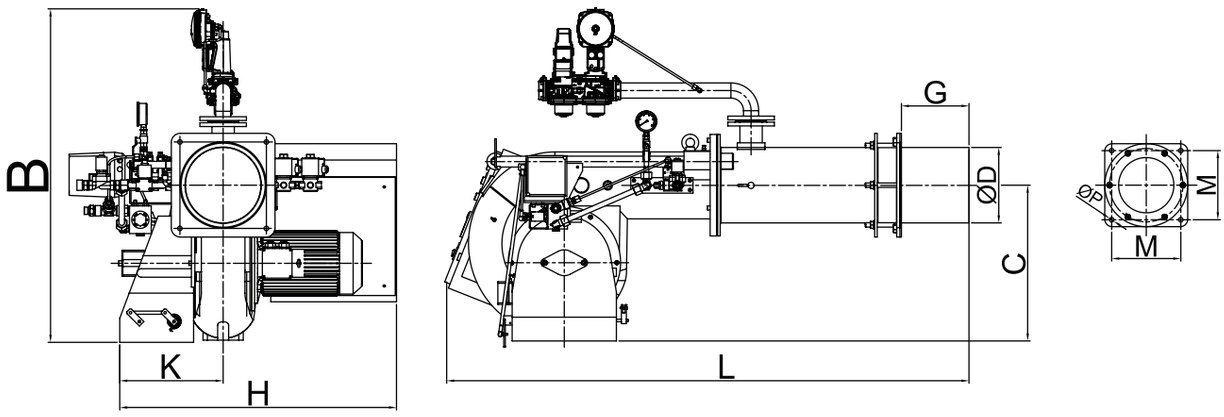


ECO 65 ECO 70



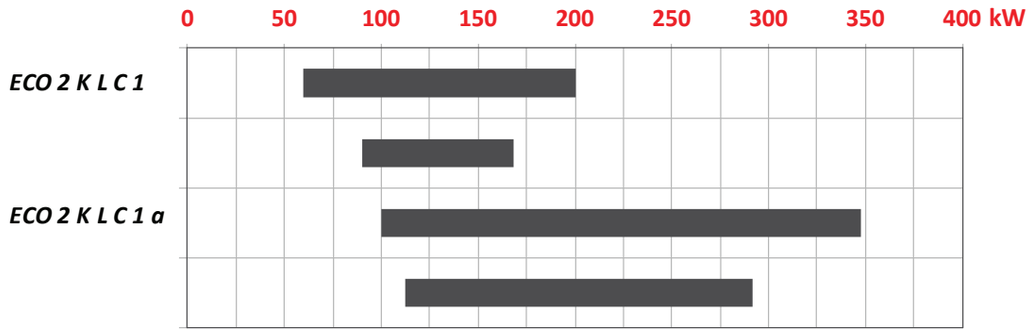
Dimensions Tables

ECO 60 ECO 75

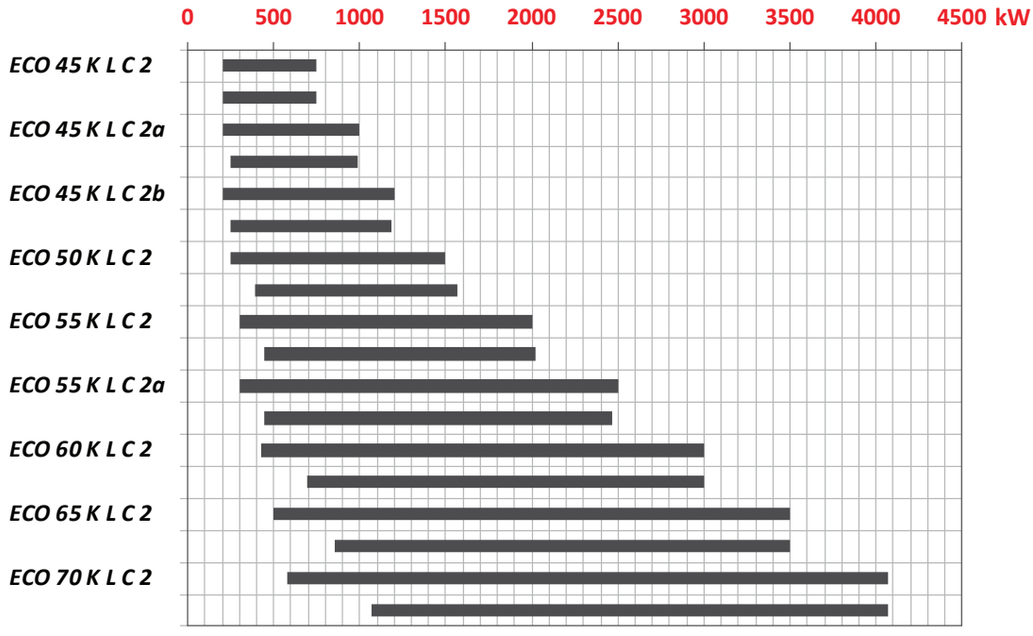


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 K (S)	1040	150	310	750	400	680	350	12	180	148	172
ECO 50 K (S)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 55 K (S)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 60 K (S)	1300	-	140	1100	550	1180	510	18	275	240	-
ECO 65 K (S)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 70 K (S)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 75 K (S)	1500	200	285	1200	580	1300	525	22	335	300	-

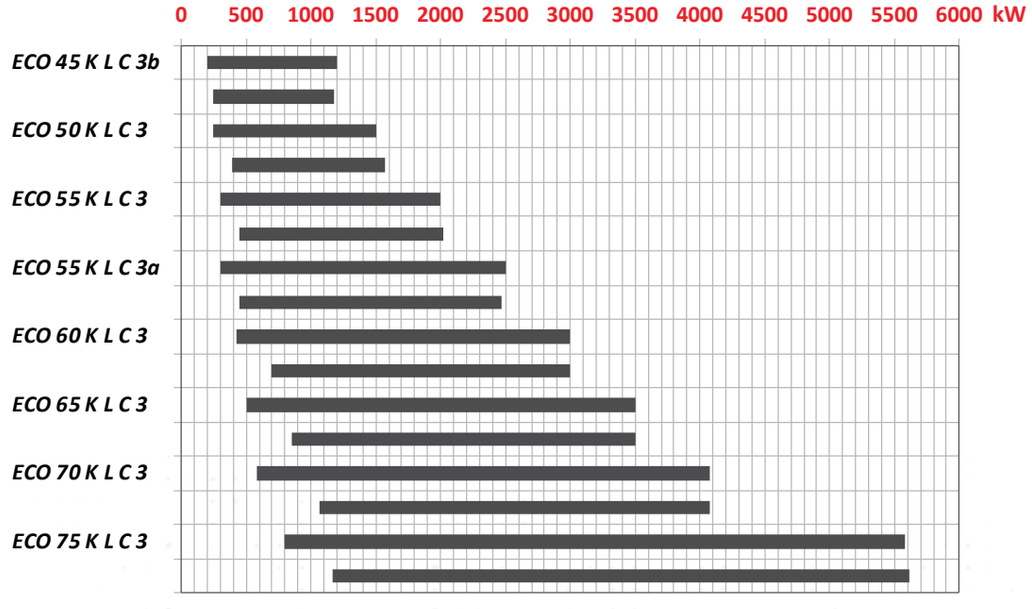
ONE-STAGE GAS - LIGHT OIL DUAL BURNERS



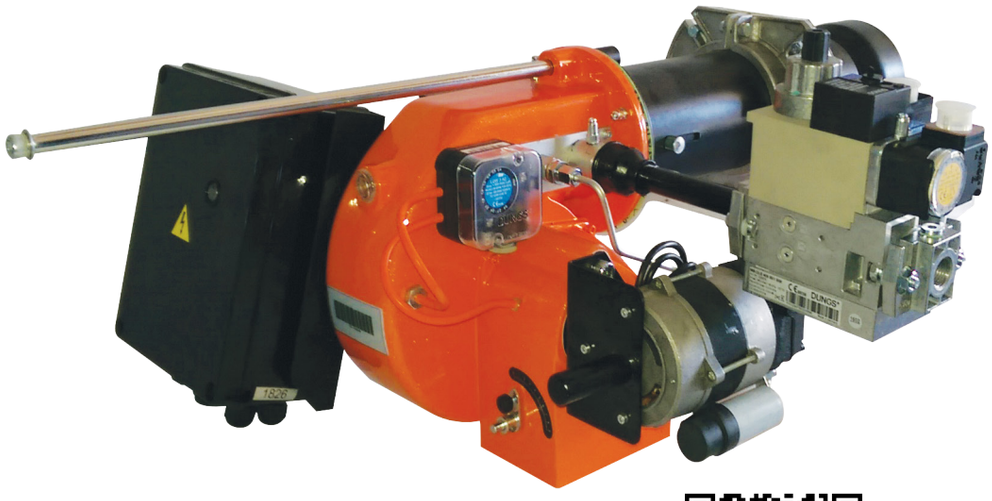
TWO-STAGE GAS - LIGHT OIL DUAL BURNERS



MODULATİNG GAS - LIGHT OIL DUAL BURNERS



One Stage Gas + Light Oil Burners



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SPECIFICATIONS

- Single-stage operation with natural gas and light oil,
- Wide range of thermal capacity adjustment according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Product Specifications and Capacity Tables

BURNER TYPE	GAS CAPACITY		GAS CAPACITY		NATURAL GAS CONSUMPTION		LIGHT OIL CAPACITY		LIGHT OIL CAPACITY		LIGHT OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 2 K L C 1	51.600	172.000	60	200	6,3	20,8	77.400	144.480	90	168	7,6	14,2
ECO 2 K L C 1 a	86.000	299.280	100	348	10,4	36,3	96.320	251.120	112	292	9,4	24,6
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg												

BURNER TYPE	FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	kW	kW	VAC
ECO 2 K L C 1	0,15	0,15	1N 240
ECO 2 K L C 1a	0,15	0,15	1N 240
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg			

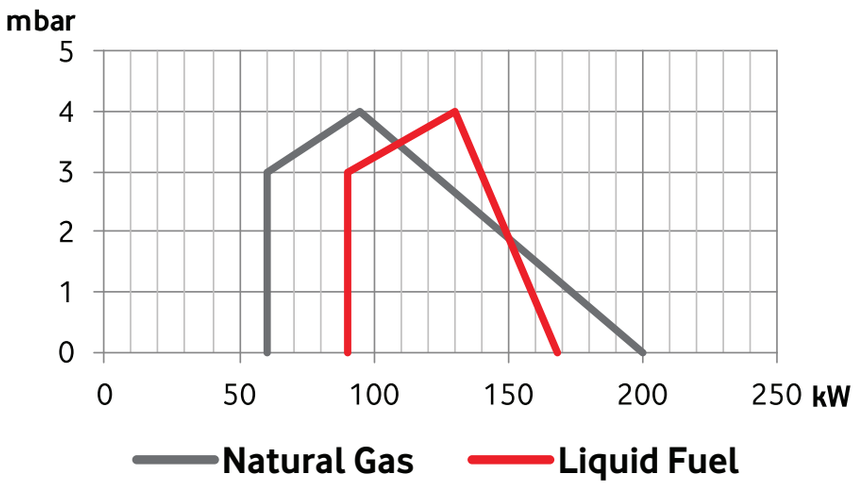
SPECIFICATIONS	ECO 2 K L C 1	ECO 2 K L C 1a
Control Type	**1K**	**1K**
Air flow adjustment	M	M
Gas Valve	✔	✔
Minimum gas pressure switch	✔	✔
Maximum gas pressure switch	○	○
Air pressure switch	✔	✔
Liquid fuel pumps and fuel hoses	✔	✔
Flame control	F	F
VPS Gas leak device	○	○
Sliding boiler connection flange	✔	✔
Handling Shaft for Servicing	✔	✔
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✔	✔
Electrical protection class	IP40	IP40

✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

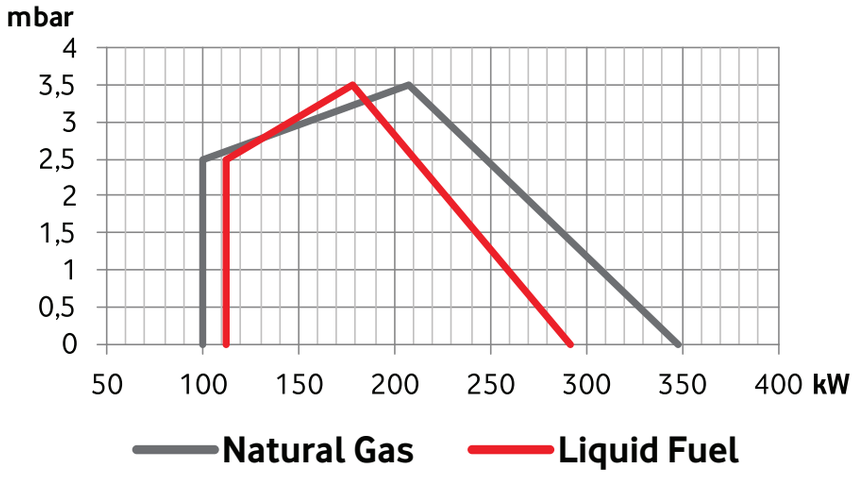
Back Pressure Diagrams

One Stage

ECO-2 K L C 1

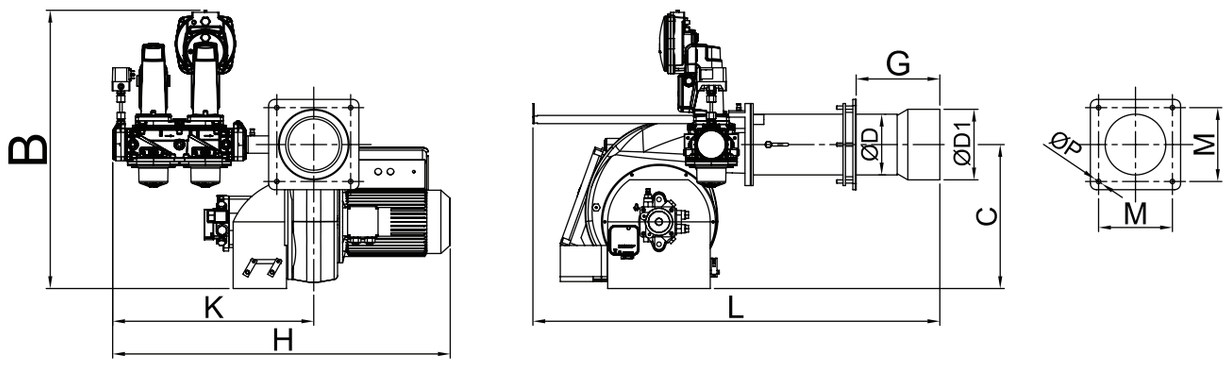


ECO-2 K L C 1 a



Dimensions Tables

ECO 2



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 2 K (L)	950	106	320	560	335	320	230	10	142	120	139

Two Stage Gas + Light Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Two-stage operation with natural gas and light oil,
- Operating at 21 mbar gas pressure up to model ECO 55 K (L) C 2,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct or pilot ignition option (pilot ignition is optional for certain models),
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	GAS CAPACITY		GAS CAPACITY		NATURAL GAS CONSUMPTION		LIGHT OIL CAPACITY		LIGHT OIL CAPACITY		LIGHT OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 45 K L C2	172.000	645.000	200	750	20,85	78,18	172.000	645.000	200	750	16,86	63,24
ECO 45 K L C2a	172.000	860.000	200	1000	20,85	104,24	212.420	851.400	247	990	20,83	83,47
ECO 45 K L C2b	172.000	1.032.000	200	1200	20,85	125,09	212.420	1.014.800	247	1180	20,83	99,49
ECO 50 K L C2	215.000	1.290.000	250	1500	26,06	156,36	337.750	1.351.000	393	1571	33,11	132,45
ECO 55 K L C2	258.000	1.720.000	300	2000	31,27	208,48	386.000	1.737.000	449	2020	37,84	170,29
ECO 55 K L C2a	258.000	2.150.000	300	2500	31,27	260,61	386.000	2.123.000	449	2469	37,84	208,14
ECO 60 K L C2	369.800	2.580.000	430	3000	44,82	312,73	598.560	2.580.000	696	3000	58,68	252,94
ECO 65 K L C2	430.000	3.010.000	500	3500	52,12	364,85	733.580	3.010.000	853	3500	71,92	295,10
ECO 70 K L C2	498.800	3.500.200	580	4070	60,46	424,27	916.760	3.500.200	1066	4070	89,88	343,16
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg												

BURNER TYPE	FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	kW	kW	VAC
ECO 45 K L C2	0,75	0,37	3N 400
ECO 45 K L C2a	1,1	0,37	3N 400
ECO 45 K L C2b	1,5	0,37	3N 400
ECO 50 K L C2	2,2	0,75	3N 400
ECO 55 K L C2	3	0,75	3N 400
ECO 55 K L C2a	3	0,75	3N 400
ECO 60 K L C2	4	0,75	3N 400
ECO 65 K L C2	5,5	0,75	3N 400
ECO 70 K L C2	7,5	0,75	3N 400
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg			

Product Specifications Tables

SPECIFICATIONS	ECO 45 K L C 2	ECO 45 K L C 2a	ECO 45 K L C 2b	ECO 50 K L C 2	ECO 55 K L C 2
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○
Air pressure switch	✓	✓	✓	✓	✓
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
VPS Gas leak device	○	○	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40

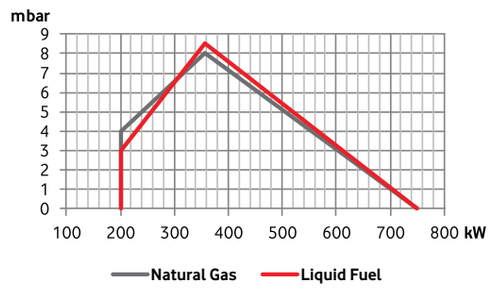
SPECIFICATIONS	ECO 55 K L C 2a	ECO 60 K L C 2	ECO 65 K L C 2	ECO 70 K L C 2
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

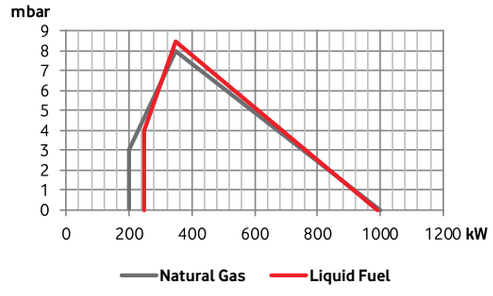
Back Pressure Diagrams

Two Stage

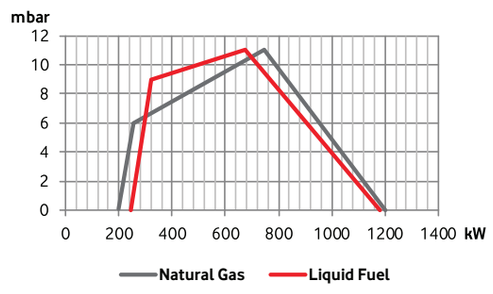
ECO-45 K L C 2



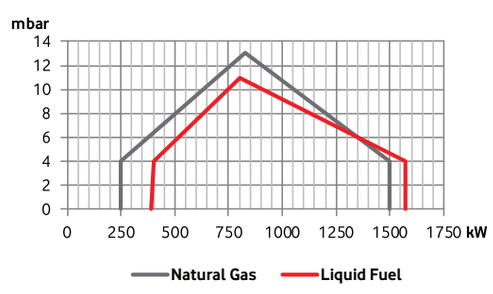
ECO-45 K L C 2 a



ECO-45 K L C (2-3)b



ECO-50 K L C (2-3)



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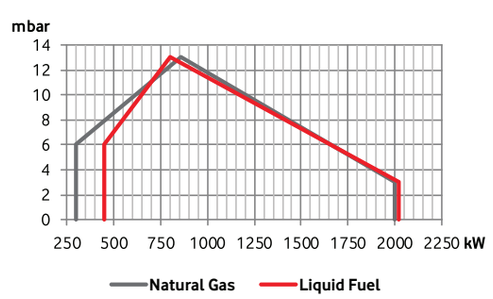
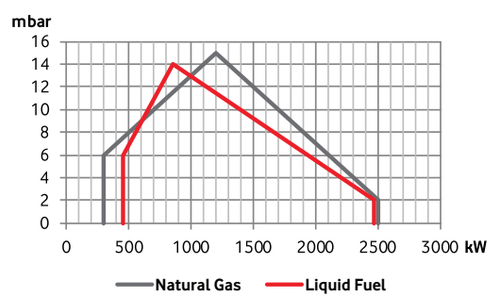


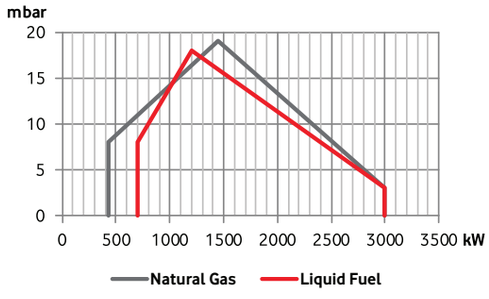
ECO-55 K L C (2-3)a



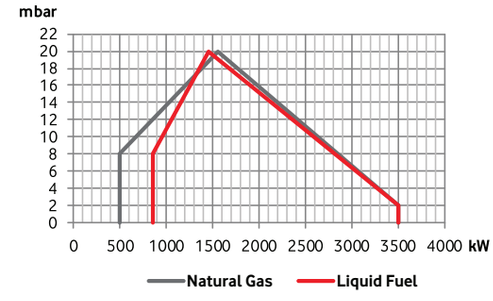
Back Pressure Diagrams

Two Stage

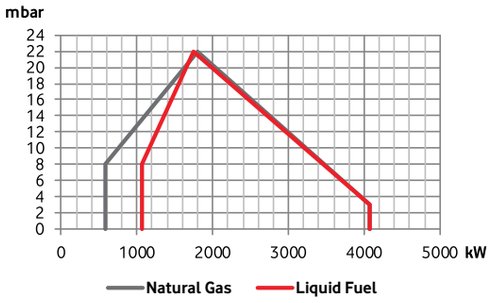
ECO-60 K L C (2-3)



ECO-65 K L C (2-3)

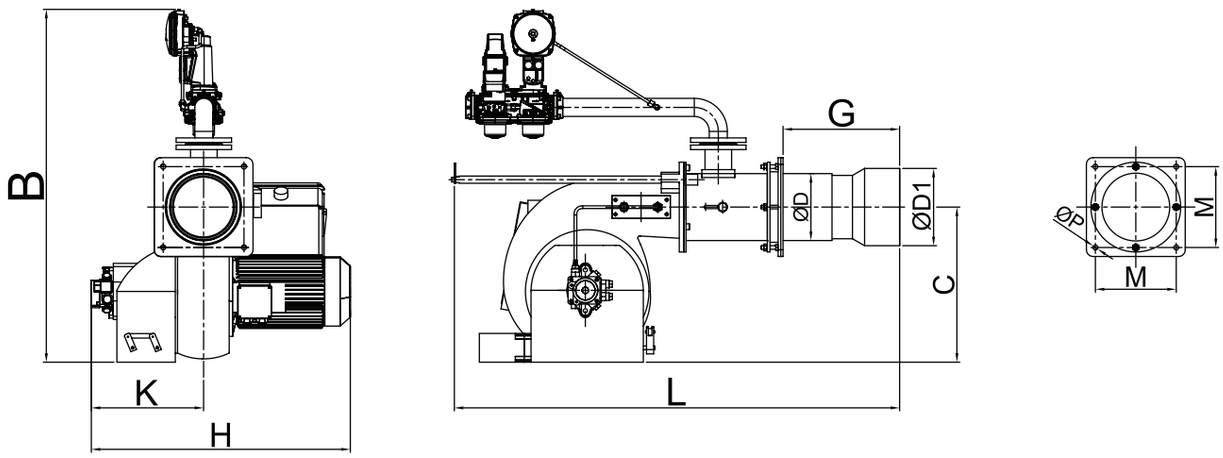


ECO-70 K L C (2-3)

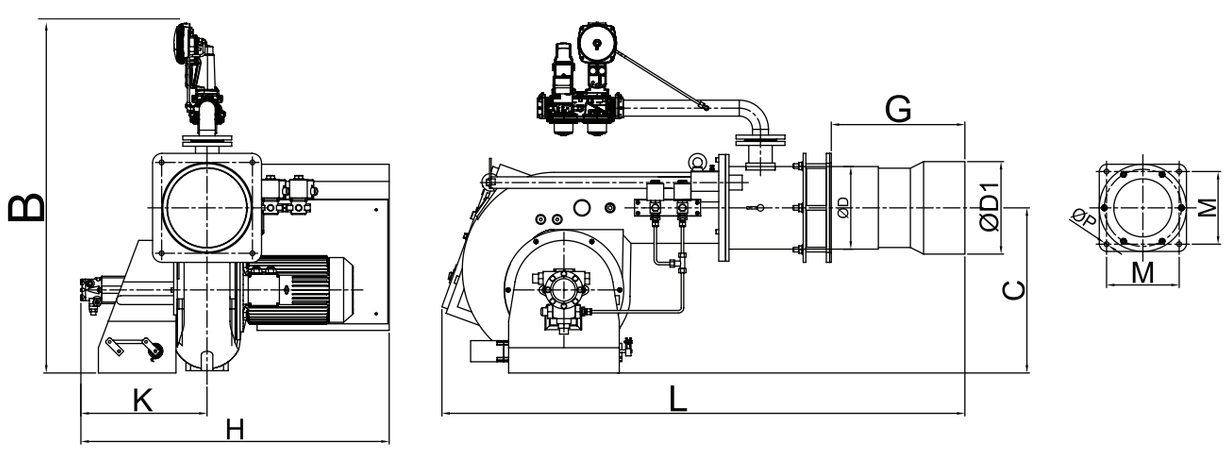


Dimensions Tables

ECO 30 ECO 45 ECO 50 ECO 55

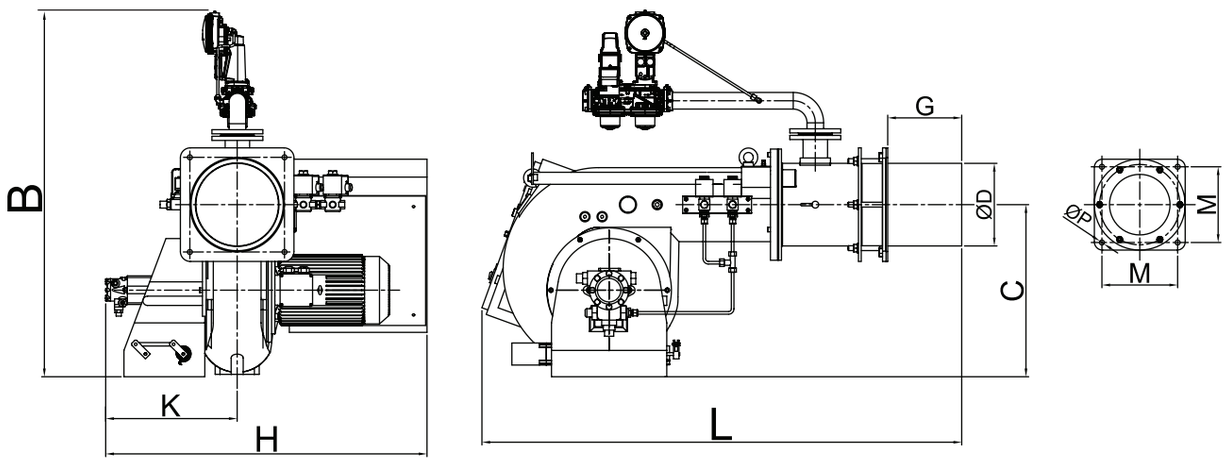


ECO 65 ECO 70



Dimensions Tables

ECO 60



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 K (L)	1040	150	350	750	400	680	350	12	180	148	172
ECO 50 K (L)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 55 K (L)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 60 K (L)	1300	-	140	1100	550	1180	510	18	275	240	-
ECO 65 K (L)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 70 K (L)	1580	200	535	1100	550	1185	510	18	275	250	280

Modulating Gas + Light Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATIONS

- Modulating operation with natural gas and light oil,
- Mechanical, pneumatic and electronic modulating control options,
- Operating at 21 mbar gas pressure up to model ECO 55 K (L) C 3,
- Wide thermal capacity adjustment range according to the heat requirement,
- Direct ignition and optional pilot ignition,
- Flame control with ignition and photocell,
- Uniform fuel mixture with a unique combustion head with high combustion efficiency,
- Combustion air control with air pressurestat,
- Operation at low noise levels with its aluminum alloy, light body,
- Minimum friction losses on body and combustion nozzle,
- Combustion air flow adjustment with internal fan flap,
- Easy access to all parts without dismounting the burner from the boiler,
- High pressure mechanical atomization at nozzle,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat
- Sliding flange for connection to different boiler types,
- Compact design requiring minimal maintenance.

Capacity Tables

BURNER TYPE	GAS CAPACITY		GAS CAPACITY		NATURAL GAS CONSUMPTION		LIGHT OIL CAPACITY		LIGHT OIL CAPACITY		LIGHT OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 45 K L C3b	172.000	1.032.000	200	1200	20,85	125,09	212.420	1.014.800	247	1180	20,83	99,49
ECO 50 K L C3	215.000	1.290.000	250	1500	26,06	156,36	337.750	1.351.000	393	1571	33,11	132,45
ECO 55 K L C3	258.000	1.720.000	300	2000	31,27	208,48	386.000	1.737.000	449	2020	37,84	170,29
ECO 55 K L C3a	258.000	2.150.000	300	2500	31,27	260,61	386.000	2.123.000	449	2469	37,84	208,14
ECO 60 K L C3	369.800	2.580.000	430	3000	44,82	312,73	598.560	2.580.000	696	3000	58,68	252,94
ECO 65 K L C3	430.000	3.010.000	500	3500	52,12	364,85	733.580	3.010.000	853	3500	71,92	295,10
ECO 70 K L C3	498.800	3.500.200	580	4070	60,46	424,27	916.760	3.500.200	1066	4070	89,88	343,16
ECO 75 K L C3	686.000	4.800.000	798	5581	83,15	581,82	1.003.620	4.824.600	1167	5610	98,39	473,00
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg												

BURNER TYPE	FAN MOTOR POWER	OIL PUMP POWER	MAIN SUPPLY
	kW	kW	VAC
ECO 45 K L C3b	1,5	0,37	3N 400
ECO 50 K L C3	2,2	0,75	3N 400
ECO 55 K L C3	3	1,1	3N 400
ECO 55 K L C3a	3	1,1	3N 400
ECO 60 K L C3	4	1,1	3N 400
ECO 65 K L C3	5,5	1,5	3N 400
ECO 70 K L C3	7,5	1,5	3N 400
ECO 75 K L C3	11	1,5	3N 400
Net Calorific Value H Natural Gas: 8250 kcal/Nm³ H Diesel oil: 10200 kcal/kg			

Product Specifications Tables

SPECIFICATIONS	ECO 45 KLC3b	ECO 50 KLC3	ECO 55 KLC3	ECO 55 KLC3a
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✓	✓	✓	✓
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21mbar)	○	○	○	○
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40

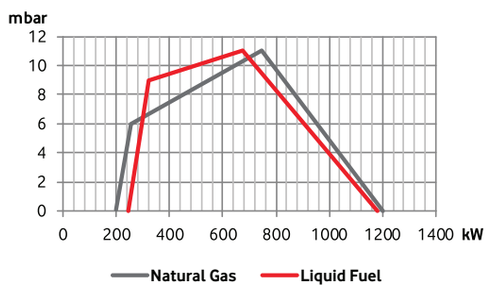
SPECIFICATIONS	ECO 60 KLC3	ECO 65 KLC3	ECO 70 KLC3	ECO 75 KLC3
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Flame control	F	F	F	F
VPS Gas leak device	✓	✓	✓	✓
Sliding boiler connection flange	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Complies with TS EN 676+A2, TSE EN 267 +A1 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

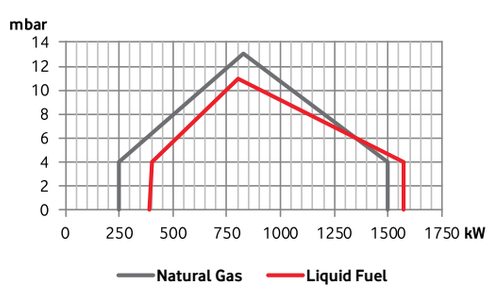
Back Pressure Diagrams

Modulating

ECO-45 K L C (2-3)b



ECO-50 K L C (2-3)



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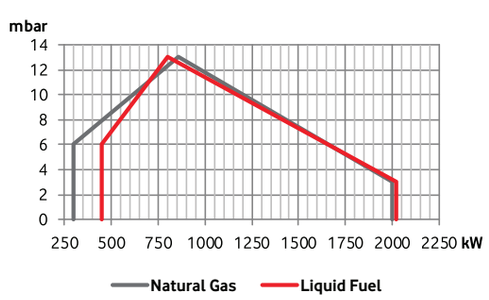
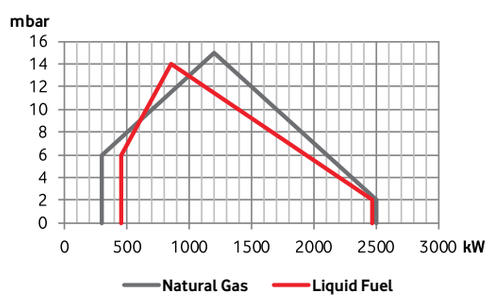
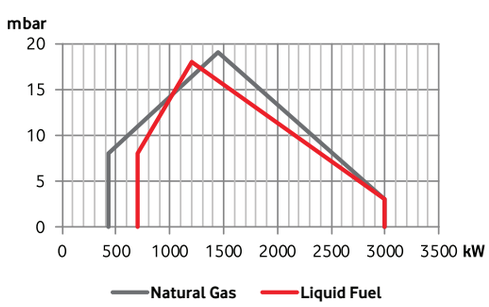


ECO-55 K L C (2-3)a



ECO-60 K L C (2-3)



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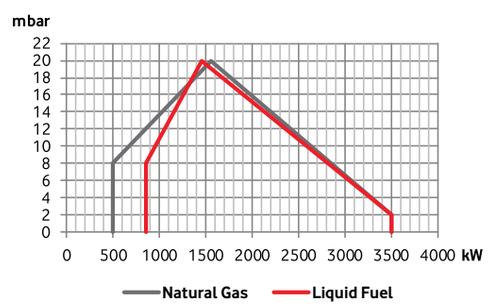

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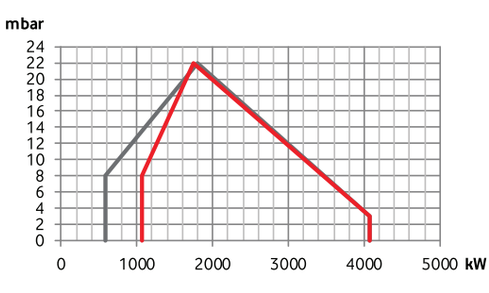
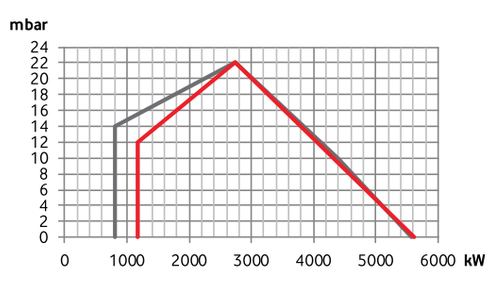
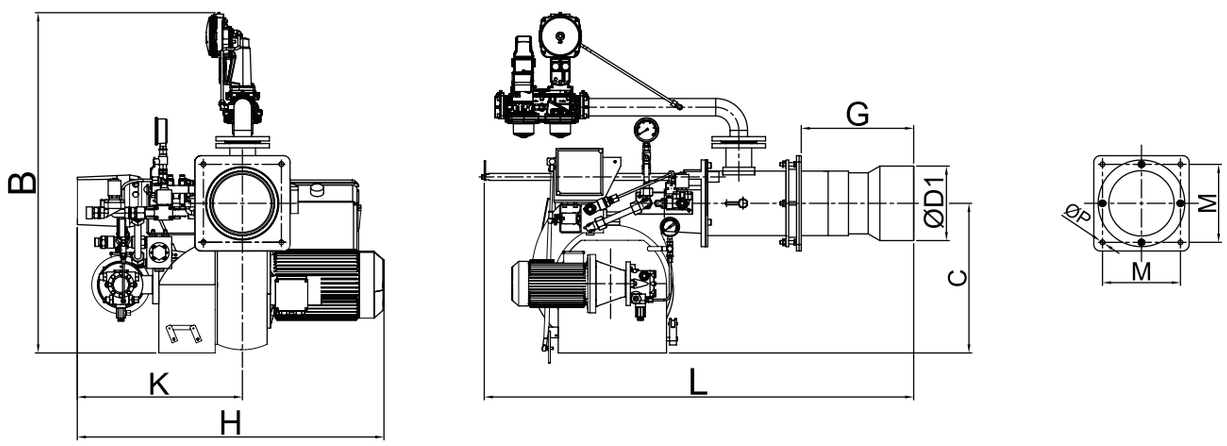


ECO-75 K L C 3

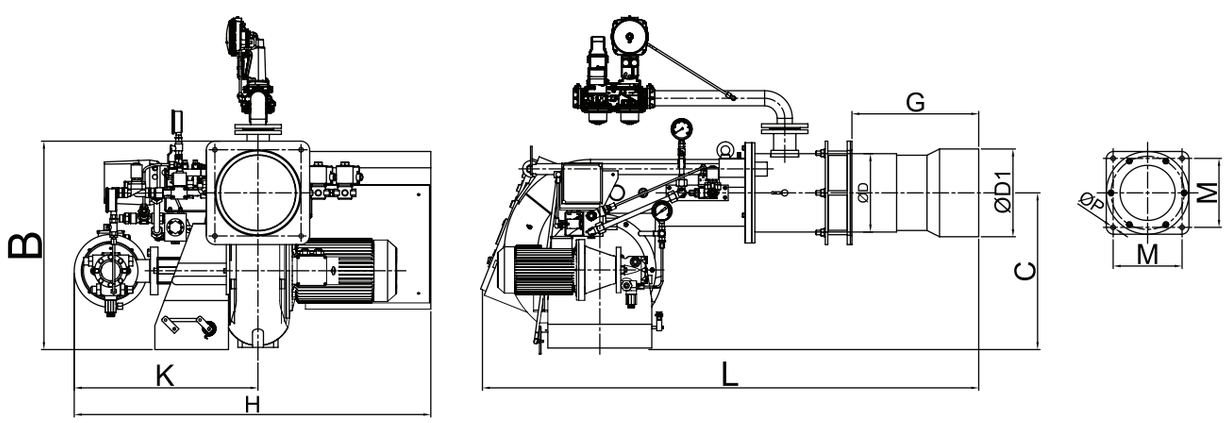


Dimensions Tables

ECO 45 ECO 50 ECO 55

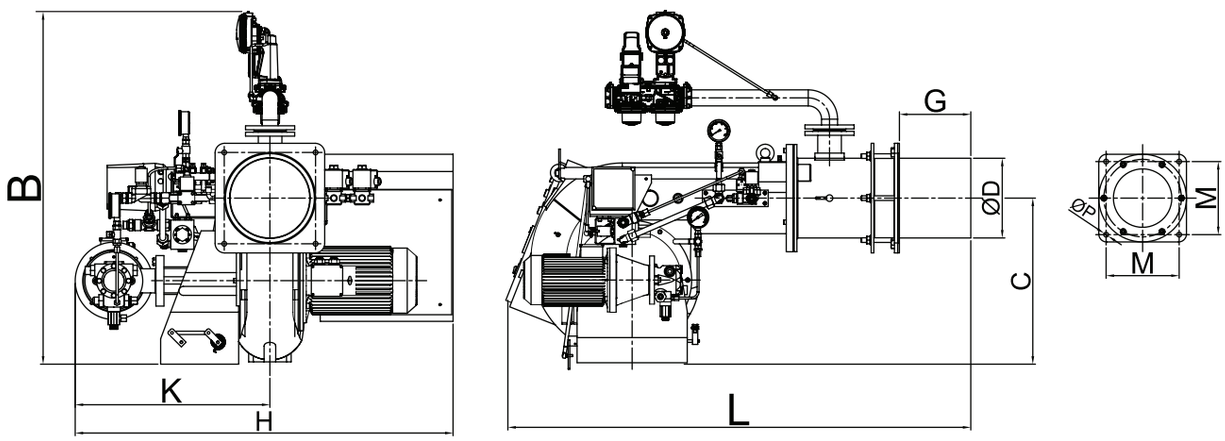


ECO 65 ECO 70



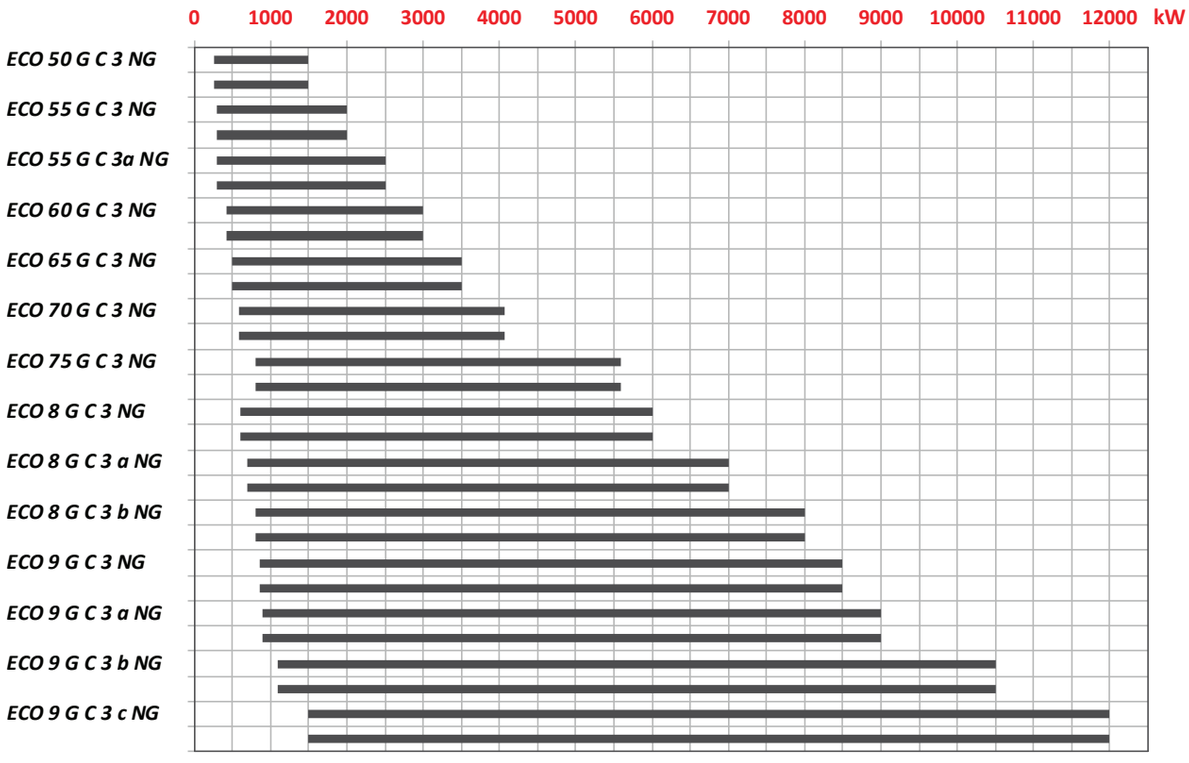
Dimensions Tables

ECO 60 ECO 75

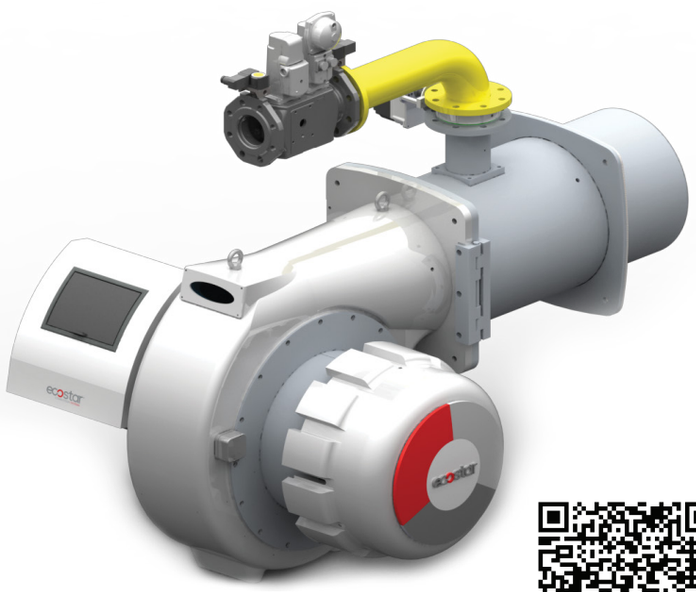


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 45 K (L)	1040	150	350	750	400	680	350	12	180	148	172
ECO 50 K (L)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 55 K (L)	1370	280	440	1000	520	1075	422	18	275	218	236
ECO 60 K (L)	1300	-	140	1100	550	1180	510	18	275	240	-
ECO 65 K (L)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 70 K (L)	1580	200	535	1100	550	1185	510	18	275	250	280
ECO 75 K (L)	1500	200	285	1200	580	1300	525	22	335	300	-

NEW GENARATION MODULATING GAS BURNERS



NG Series Gas Burners



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SPECIFICATIONS

- Easy maintenance with hinged system without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Lower noise level with special muffler system,
- Early diminishing of error sources thanks to the plug-socket connection that allows minimizing the number of cable connections,
- Combustion cap adjustable to desired capacity,
- High combustion efficiency by providing optimum fuel-air mixture with fuel-air servo motors that can be adjusted with high precision,
- High performance fan,
- User-friendly operator panel,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Adequate gas supply control with minimum gas pressurestat,
- Combustion air control with air pressurestat,
- Leak control with integrated gas leak controller,
- Pilot ignition system integrated into the gas valve without requiring an additional burner pilot line (Standard for Eco 75 and above, optional for lower capacities.)

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 50 G C 3 NG	215.000	1.290.000	250	1500	26,1	156,4	9,6	57,3	2,2	3N 400
ECO 55 G C 3 NG	258.000	1.720.000	300	2000	31,3	208,5	11,5	76,4	3	3N 400
ECO 55 G C 3a NG	258.000	2.150.000	300	2500	31,3	260,6	11,5	95,6	3	3N 400
ECO 60 G C 3 NG	369.800	2.580.000	430	3000	44,8	312,7	16,4	114,7	4	3N 400
ECO 65 G C 3 NG	430.000	3.010.000	500	3500	52,1	364,8	19,1	133,8	5,5	3N 400
ECO 70 G C 3 NG	498.800	3.500.200	580	4070	60,5	424,3	22,2	155,6	7,5	3N 400
ECO 75 G C 3 NG	686.280	4.800.000	798	5581	83,2	581,8	30,5	213,3	11	3N 400
ECO 8 G C 3 NG	516.000	5.160.000	600	6000	62,5	625,5	22,9	229,3	11	3N 400
ECO 8 G C 3 a NG	602.000	6.020.000	700	7000	73,0	729,7	26,8	267,6	11	3N 400
ECO 8 G C 3 b NG	688.000	6.880.000	800	8000	83,4	833,9	30,6	305,8	15	3N 400
ECO 8,5 G C 3 NG	623.500	6.235.000	750	7250	75,6	755,8	27,7	277,1	18,5	3N 400
ECO 8,5 G C 3 a NG	713.800	7.138.000	800	8300	86,5	865,2	31,7	317,2	22	3N 400
ECO 8.5 G C 3 b NG	946.000	9.030.000	1100	10500	114,7	1094,5	42,0	401,3	22	3N 400
ECO 9 G C 3 NG	731.000	7.310.000	850	8500	88,6	886,1	32,5	324,9	18,5	3N 400
ECO 9 G C 3 a NG	774.000	7.740.000	900	9000	93,8	938,2	34,4	344,0	22	3N 400
ECO 9 G C 3 b NG	946.000	9.030.000	1100	10500	114,7	1094,5	42,0	401,3	22	3N 400
ECO 9 G C 3 c NG	1.290.000	10.320.000	1500	12000	156,4	1250,9	57,3	458,7	22	3N 400
* Low Calorific Value: LCV Natural Gas : 8250 kcal /Nm³ , LCV LPG : 22500 kcal /Nm³										

Product Specifications Tables

SPECIFICATIONS	ECO 50 G C 3 NG	ECO 55 G C 3 NG	ECO 55 G C 3a NG	ECO 60 G C 3 NG	ECO 65 G C 3 NG
Control Type	O	O	O	O	O
Mechanical Modulating (21mbar)	✓	✓	✓	✗	✗
Mechanical Modulating (300 mbar)	✓	✓	✓	✗	✗
Pneumatic Modulating (21mbar)	✓	✓	✓	✗	✗
Pneumatic Modulating (300 mbar)	✓	✓	✓	✓	✓
Electronic Modulating (21mbar)	✓	✓	✓	✗	✗
Electronic Modulating (300 mbar)	✓	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓	✓
Ignition	DA	DA	DA	DA	DA
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas Leak Control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame Control	İO	İO	İO	İO	İO
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

SPECIFICATIONS	ECO 70 G C3 NG	ECO 75 G C3 NG	ECO 8 G C3 NG	ECO 8 G C3a NG	ECO 8 G C3b NG
Control Type	O	O	O	O	O
Mechanical Modulating (21mbar)	✗	✗	✗	✗	✗
Mechanical Modulating (300 mbar)	✗	✗	✗	✗	✗
Pneumatic Modulating (21mbar)	✗	✗	✗	✗	✗
Pneumatic Modulating (300 mbar)	✓	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗	✗
Electronic Modulating (300 mbar)	✓	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓	✓
Ignition	DA	PA	PA	PA	PA
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas Leak Control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame Control	İO	F	F	F	F
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

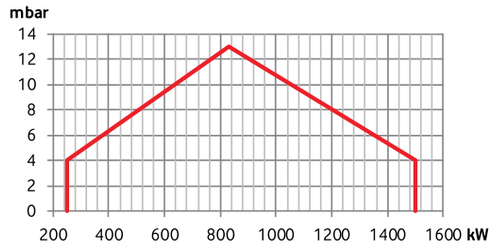
SPECIFICATIONS	ECO 9 G C 3 NG	ECO 9 G C 3a NG	ECO 9 G C 3b NG	ECO 9 G C 3c NG
Control Type	O	O	O	O
Mechanical Modulating (21mbar)	✗	✗	✗	✗
Mechanical Modulating (300 mbar)	✗	✗	✗	✗
Pneumatic Modulating (21mbar)	✗	✗	✗	✗
Pneumatic Modulating (300 mbar)	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗
Electronic Modulating (300 mbar)	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Ignition	DA	PA	PA	PA
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓
Gas Leak Control	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Flame Control	F	F	F	F
Hinged body for servicing purposes	✓	✓	✓	✓
Different flame tube length	○	○	○	○
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

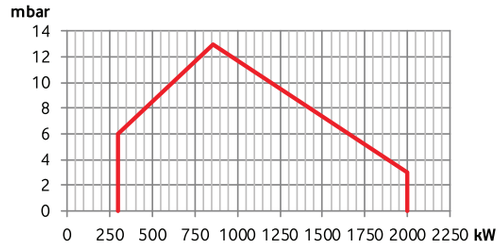
Back Pressure Diagrams

Modulating

ECO 50 G C 3 NG



ECO 55 G C 3 NG



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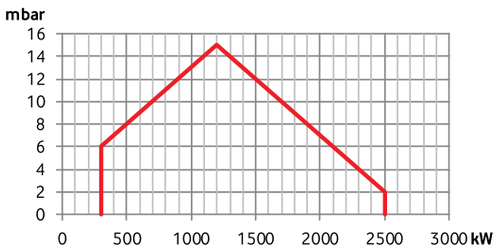
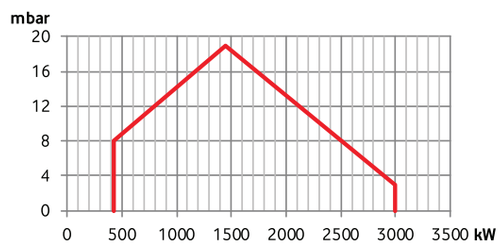
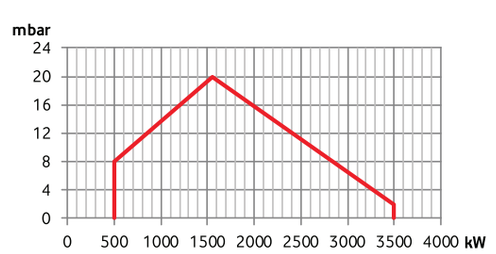


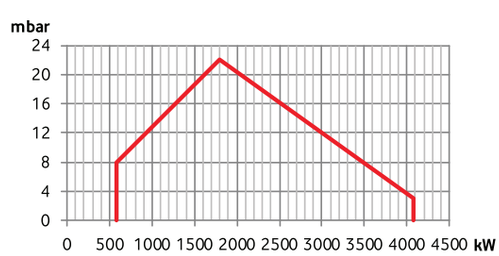
ECO 60 G C 3 NG



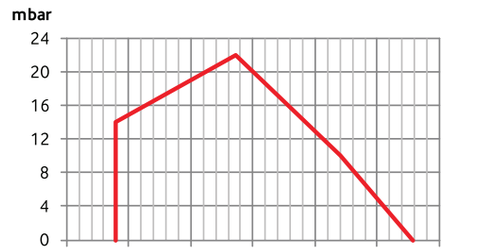
ECO 65 G C 3 NG



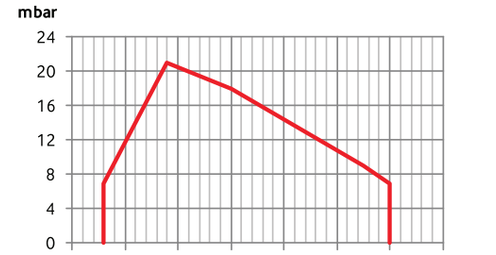
ECO 70 G C 3 NG



ECO-75 G C 3-NG



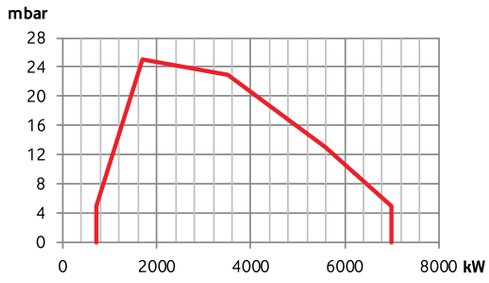
ECO 8 G C 3 NG



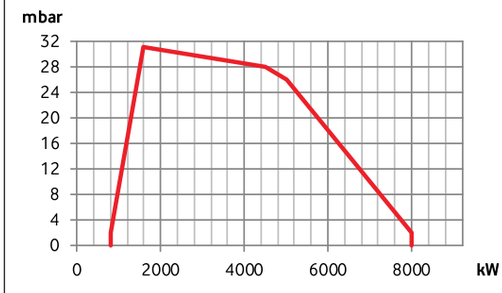
Back Pressure Diagrams

Modulating

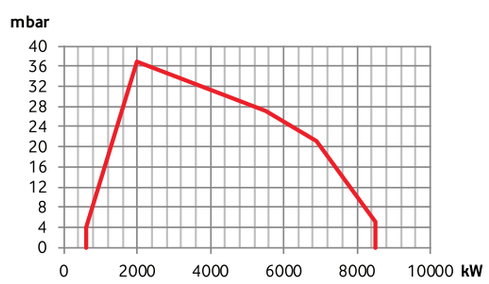
ECO 8 G C 3a NG



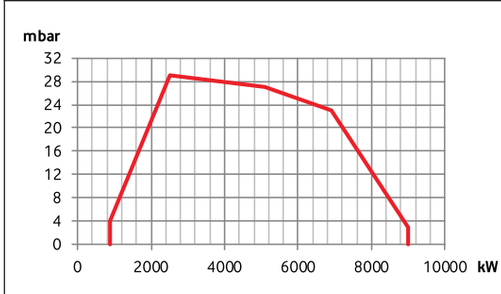
ECO 8 G C 3b NG



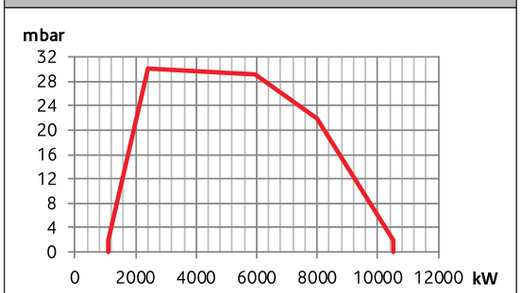
ECO 9 G C 3 NG



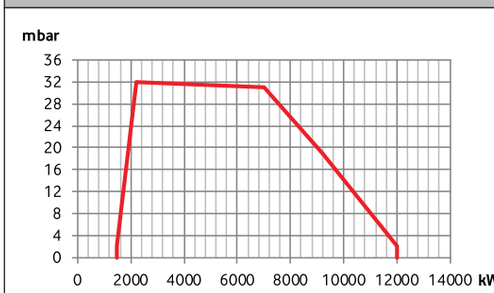
ECO 9 G C 3a NG



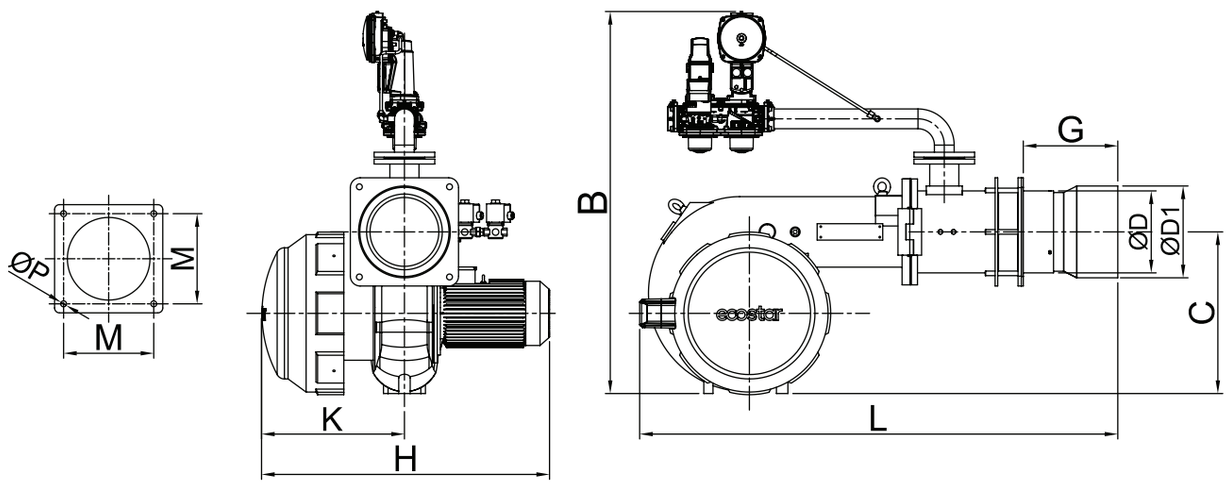
ECO 9 G C 3b NG



ECO 9 G C 3c NG

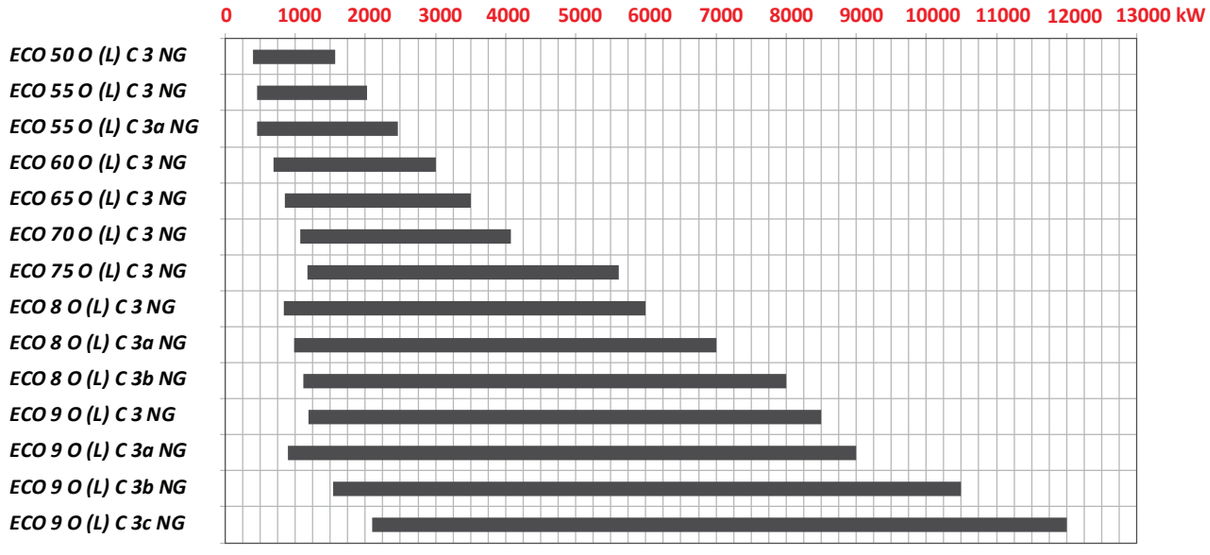


Dimensions Tables

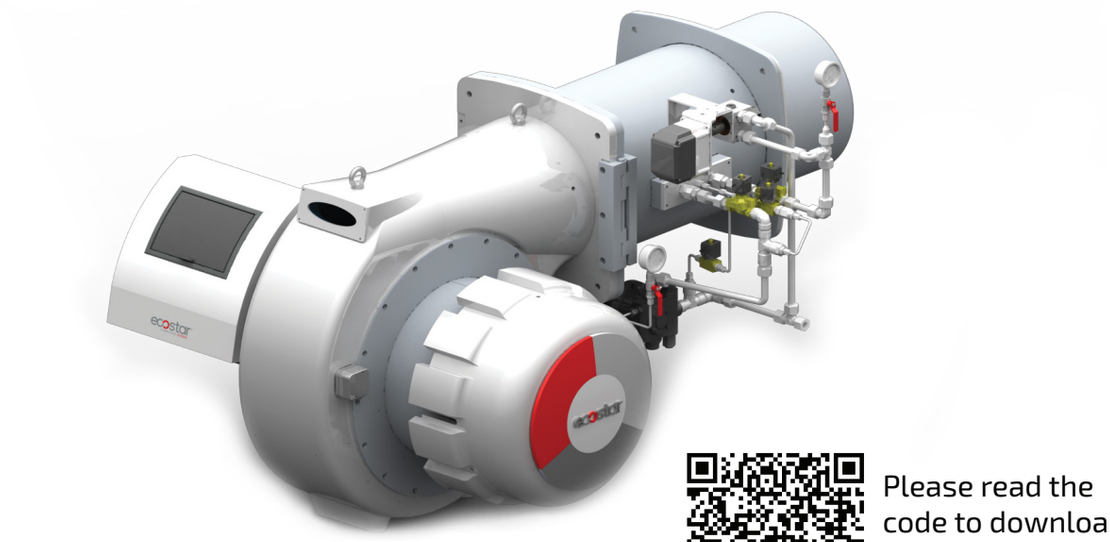


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 50 GC3 NG	1330	280	440	930	450	1075	440	18	275	218	236
ECO 55 GC3 NG	1330	280	440	930	450	1075	440	18	275	218	236
ECO 60 GC3 NG	1450	200	355	980	450	1180	500	18	275	250	-
ECO 65 GC3 NG	1550	200	440	980	450	1185	500	18	275	250	280
ECO 70 GC3 NG	1550	200	440	980	450	1185	500	18	275	250	280
ECO 75 GC3 NG	1450	200	340	1160	575	1300	530	22	335	300	-
ECO 8 GC3 NG	1700	-	305	1210	610	1600	695	18	400	408	-
ECO 9 GC3 NG	1955	-	375	1320	620	2030	1055	22	450	508	-

NEW GENARATION MODULATING LIGHT OIL BURNERS



NG Series Light Oil Burners



Please read the code to download our e-Catalog.

SPECIFICATIONS

- Easy maintenance with hinged system without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Lower noise level with special muffler system,
- Early diminishing of error sources thanks to the plug-socket connection that allows minimizing the number of cable connections,
- Combustion cap adjustable to desired capacity,
- High combustion efficiency by providing optimum fuel-air mixture with fuel-air servo motors that can be adjusted with high precision,
- High performance fan,
- User-friendly operator panel,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Combustion air control with air pressurestat,
- High pressure mechanical atomization at nozzle,
- Pilot ignition.

Capacity Table

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FUEL PUMP POWER	FUEL HEATER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	kW	VAC
ECO 50 O (L) C 3 NG	337.980	1.351.060	393	1571	33,1	132,5	2,2	-	3N 400
ECO 55 O (L) C 3 NG	386.140	1.737.200	449	2020	37,9	170,3	3	-	3N 400
ECO 55 O (L) C 3a NG	386.140	2.123.340	449	2469	37,9	208,2	3	-	3N 400
ECO 60 O (L) C 3 NG	598.560	2.580.000	696	3000	58,7	252,9	4	1,1	3N 400
ECO 65 O (L) C 3 NG	733.580	3.010.000	853	3500	71,9	295,1	5,5	1,5	3N 400
ECO 70 O (L) C 3 NG	916.760	3.500.200	1066	4070	89,9	343,2	7,5	1,5	3N 400
ECO 75 O (L) C 3 NG	1.003.620	4.824.600	1167	5610	98,4	473,0	11	1,5	3N 400
ECO 8 O (L) C 3 NG	722.400	5.160.000	840	6000	70,8	505,9	11	2,2	3N 400
ECO 8 O (L) C 3a NG	842.800	6.020.000	980	7000	82,6	590,2	11,0	2,2	3N 400
ECO 8 O (L) C 3b NG	963.200	6.880.000	1120	8000	94,4	674,5	15	2,2	3N 400
ECO 8.5 O (L) C 3 NG	851.400	6.235.000	990	7250	83,5	611,3	18,5	2,2	3N 400
ECO 8.5 O (L) C 3a NG	963.200	6.880.000	1120	8000	94,4	674,5	22	2,2	3N 400
ECO 8.5 O (L) C 3b NG	1.143.800	7.955.000	1330	9250	112,1	779,9	22	2,2	3N 400
ECO 9 O (L) C 3 NG	1.023.400	7.310.000	1190	8500	100,3	716,7	18,5	3	3N 400
ECO 9 O (L) C 3a NG	774.860	7.740.000	901	9000	76,0	758,8	22	3	3N 400
ECO 9 O (L) C 3b NG	1.326.120	9.030.000	1542	10500	130,0	885,3	22	3	3N 400
ECO 9 O (L) C 3c NG	1.806.000	10.320.000	2100	12000	177,1	1011,8	22	3	3N 400
* Low Calorific Value: H Light oil : 10200 kcal/kg									

Product Specifications Tables

SPECIFICATIONS	ECO 50 O LC 3 NG	ECO 55 O LC 3 NG	ECO 55 O LC 3a NG	ECO 60 O LC 3 NG	ECO 65 O LC 3 NG
Control Type	O	O	O	O	O
Mechanical Modulating	✓	✓	✓	✓	✓
Electronic Modulating	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Ignition	DA	DA	DA	DA	DA
Pilot gas valve	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/ Heavy Oil Station)	○	○	○	○	○
Complies with TS EN 267+A1 and CE	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

SPECIFICATIONS	ECO70OLC3NG	ECO75OLC3NG	ECO80LC3NG	ECO80LC3aNG	ECO80LC3bNG
Control Type	O	O	O	O	O
Mechanical Modulating	✓	✓	✗	✗	✗
Electronic Modulating	○	○	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Ignition	DA	PA	PA	PA	PA
Pilot gas valve	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/ Heavy Oil Station)	○	○	○	○	○
Complies with TS EN 267+A1 and CE	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

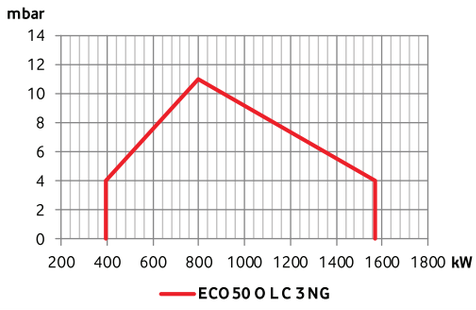
Product Specifications Tables

SPECIFICATIONS	ECO90LC3NG	ECO90LC3aNG	ECO90LC3bNG	ECO90LC3cNG
Control Type	O	O	O	O
Mechanical Modulating	✗	✗	✗	✗
Electronic Modulating	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Ignition	DA	PA	PA	PA
Pilot gas valve	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Flame control	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓
Different flame tube length	○	○	○	○
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line/ Heavy Oil Station)	○	○	○	○
Complies with TS EN 267+A1 and CE	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

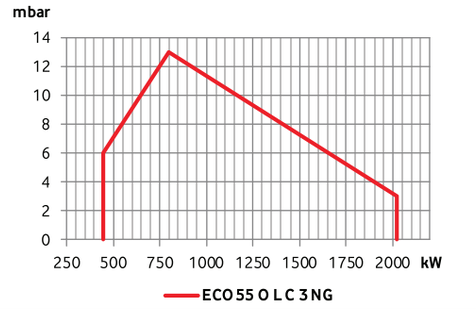
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams

ECO 50 O L C 3 NG



ECO 55 O L C 3 NG



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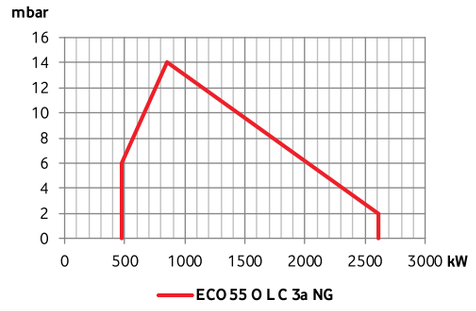

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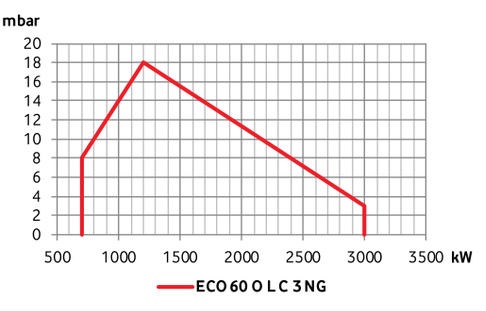
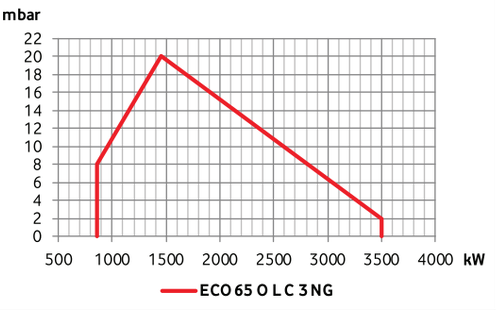


ECO 65 O L C 3 NG



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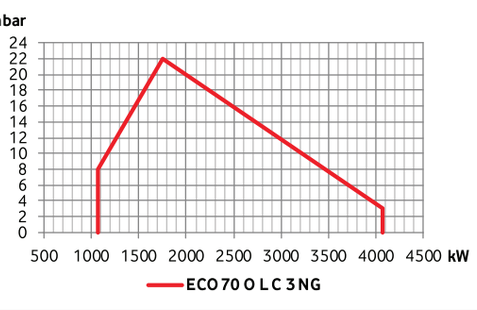

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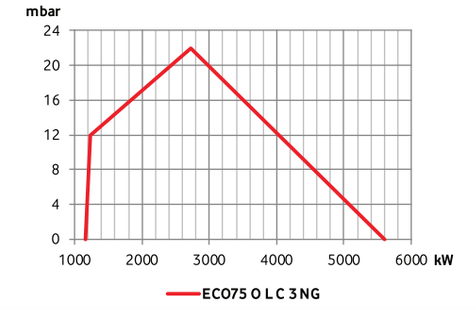

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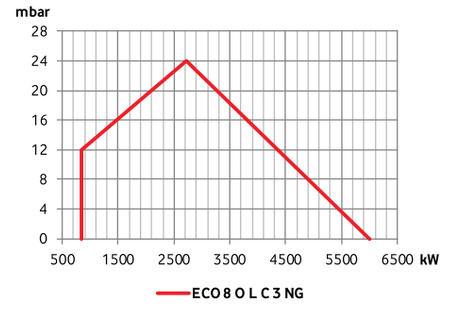
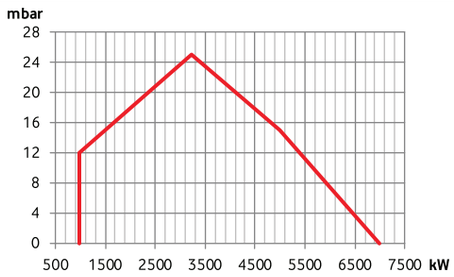
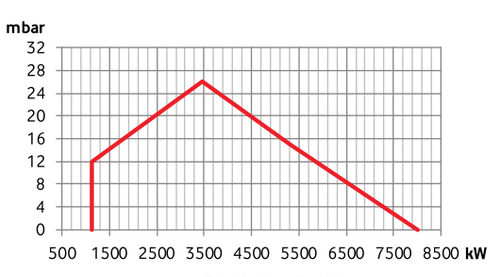


Back Pressure Diagrams

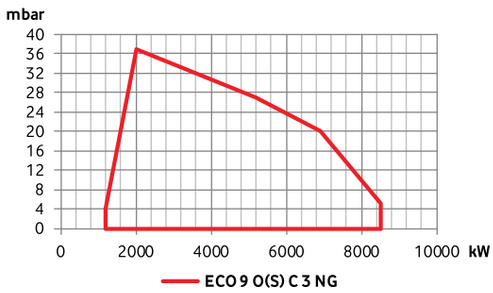
ECO 8 O L C 3a NG



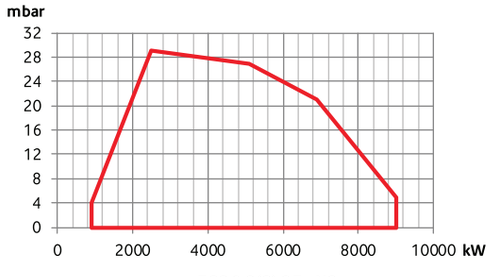
ECO 8 O L C 3b NG



ECO 9 O(L) C 3 NG



ECO 9 O(L) C 3a NG



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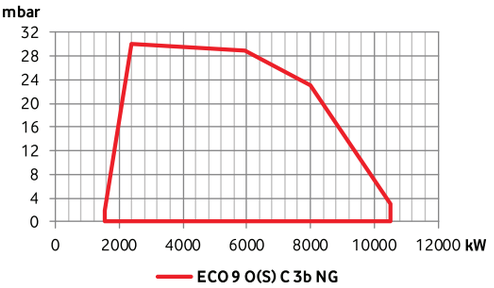
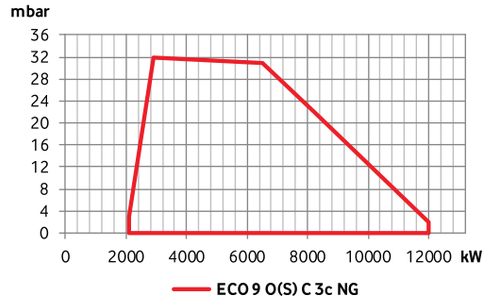
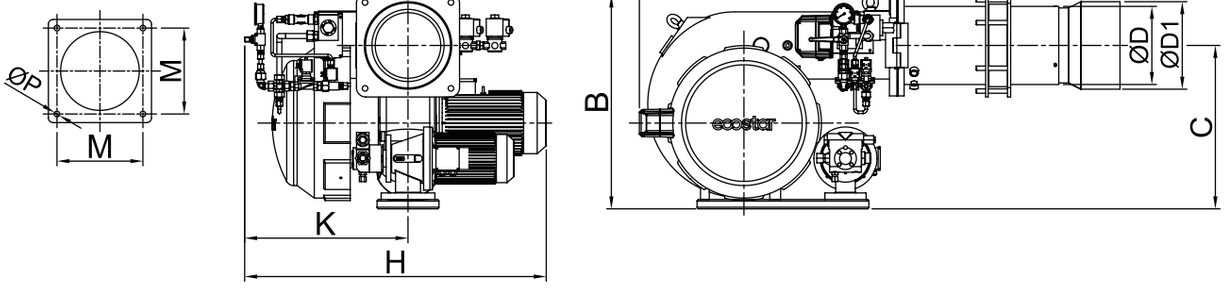


ECO 9 O(L) C 3c NG

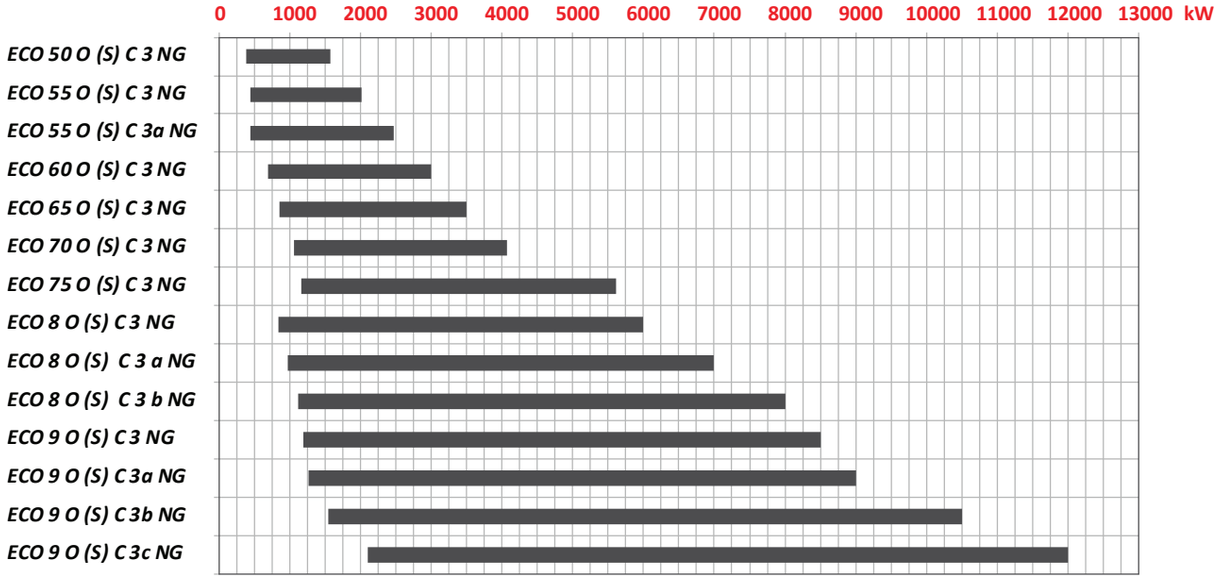


Dimensions Tables

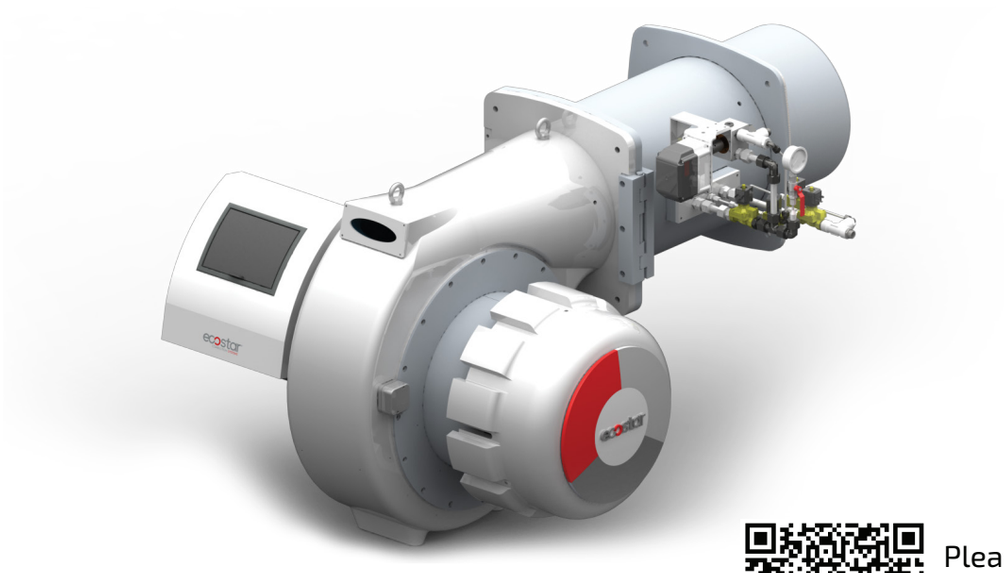


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 50 OLC3 NG	1470	280	440	945	525	640	475	18	275	218	236
ECO 55 OLC3 NG	1470	280	440	945	525	640	475	18	275	218	236
ECO 60 OLC3 NG	1400	-	140	1000	560	700	550	18	275	240	-
ECO 65 OLC3 NG	1650	200	535	1000	560	700	550	18	275	250	280
ECO 70 OLC3 NG	1650	200	535	1000	560	700	550	18	275	250	280
ECO 75 OLC3 NG	1600	200	285	1160	600	780	580	22	335	300	-
ECO 8 OLC3 NG	1830	-	300	1210	610	960	695	18	400	408	-
ECO 9 OLC3 NG	2110	-	375	1320	620	1370	1055	22	450	508	-

NEW GENARATION HEAVY-OIL BURNERS



NG Series Heavy Oil Burners



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SPECIFICATIONS

- Easy maintenance with hinged system without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Lower noise level with special muffler system,
- Early diminishing of error sources thanks to the plug-socket connection that allows minimizing the number of cable connections,
- Combustion cap adjustable to desired capacity,
- High combustion efficiency by providing optimum fuel-air mixture with fuel-air servo motors that can be adjusted with high precision,
- High performance fan,
- User-friendly operator panel,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Adequate gas supply control with minimum gas pressurestat,
- Combustion air control with air pressurestat,
- High pressure mechanical atomization at nozzle,
- Pilot ignition.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		HEAVY OIL CONSUMPTION	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h
ECO 50 O (S) C 3 NG	337.980	1.351.060	393	1571	35,0	140,0
ECO 55 O (S) C 3 NG	386.140	1.737.200	449	2020	40,0	180,0
ECO 55 O (S) C 3a NG	386.140	2.123.340	449	2469	40,0	220,0
ECO 60 O (S) C 3 NG	598.560	2.580.000	696	3000	62,0	267,4
ECO 65 O (S) C 3 NG	733.580	3.010.000	853	3500	76,0	311,9
ECO 70 O (S) C 3 NG	916.760	3.500.200	1066	4070	95,0	362,7
ECO 75 O (S) C 3 NG	1.003.620	4.824.600	1167	5610	104,0	500,0
ECO 8 O (S) C 3 NG	722.400	5.160.000	840	6000	74,9	534,7
ECO 8 O (S) C 3 a NG	842.800	6.020.000	980	7000	87,3	623,8
ECO 8 O (S) C 3 b NG	963.200	6.880.000	1120	8000	99,8	713,0
ECO 8.5 O (S) C 3 NG	851.400	6.235.000	990	7250	88,2	646,1
ECO 8.5 O (S) C 3a NG	963.200	6.880.000	1120	8000	99,8	713,0
ECO 8.5 O (S) C 3b NG	1.143.800	7.955.000	1330	9250	118,5	824,4
ECO 9 O (S) C 3 NG	1.023.400	7.310.000	1190	8500	106,1	757,5
ECO 9 O (S) C 3a NG	1.083.600	7.740.000	1260	9000	112,3	802,1
ECO 9 O (S) C 3b NG	1.324.400	9.030.000	1540	10500	137,2	935,8
ECO 9 O (S) C 3c NG	1.806.000	10.320.000	2100	12000	187,2	1069,4
Low Calorific Value: H Heavy oil : 9650 kcal/kg						

Capacity Tables

BURNER TYPE	FAN MOTOR POWER	FUEL PUMP POWER	FUEL HEATER	MAIN SUPPLY
	kW	kW	kW	VAC
ECO 50 O (S) C 3 NG	2,2	-	6,0	3N 400
ECO 55 O (S) C 3 NG	3	-	12	3N 400
ECO 55 O (S) C 3a NG	3	-	12	3N 400
ECO 60 O (S) C 3 NG	4	1,1	14	3N 400
ECO 65 O (S) C 3 NG	5,5	1,5	2 x 9,0	3N 400
ECO 70 O (S) C 3 NG	7,5	1,5	2 x 9,0	3N 400
ECO 75 O (S) C 3 NG	11	1,5	2 x 14,0	3N 400
ECO 8 O (S) C 3 NG	11	2,2	2 x 14,0	3N 400
ECO 8 O (S) C 3 a NG	11	2,2	2 x 16,0	3N 400
ECO 8 O (S) C 3 b NG	15	2,2	2 x 16,0	3N 400
ECO 8.5 O (S) C 3 NG	18,5	3	37	3N 400
ECO 8.5 O (S) C 3a NG	22	3	37	3N 400
ECO 8.5 O (S) C 3b NG	22	3	37	3N 400
ECO 9 O (S) C 3 NG	18,5	4	37	3N 400
ECO 9 O (S) C 3a NG	22	4	37	3N 400
ECO 9 O (S) C 3b NG	22	4	37	3N 400
ECO 9 O (S) C 3c NG	22	4	37	3N 400
Low Calorific Value: H Heavy oil : 9650 kcal/kg				

Product Specifications Tables

SPECIFICATIONS	ECO 50 O SC3 NG	ECO 55 O SC3a NG	ECO 55 O SC3a NG	ECO 60 O SC3 NG	ECO 65 O SC3 NG
Control Type	O	O	O	O	O
Mechanical Modulating	✔	✔	✔	✔	✔
Electronic Modulating	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Pilot Ignition	✔	✔	✔	✔	✔
Pilot gas valve	✔	✔	✔	✔	✔
Air pressure switch	✔	✔	✔	✔	✔
Flame Control	F	F	F	F	F
Liquid fuel heating and pumping station	✔	✔	✔	✔	✔
Liquid fuel hoses	✔	✔	✔	✔	✔
Hinged body for servicing purposes	✔	✔	✔	✔	✔
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/Heavy Oil Station)	○	○	○	○	○
Complies with TS EN 267+A1	✔	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔	✔
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

SPECIFICATIONS	ECO70SC3NG	ECO75SC3NG	ECO80SC3NG	ECO80SC3aNG	ECO80SC3bNG
Control Type	O	O	O	O	O
Mechanical Modulating	✓	✓	✗	✗	✗
Electronic Modulating	○	○	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Pilot Ignition	✓	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame Control	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/Heavy Oil Station)	○	○	○	○	○
Complies with TS EN 267+A1	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

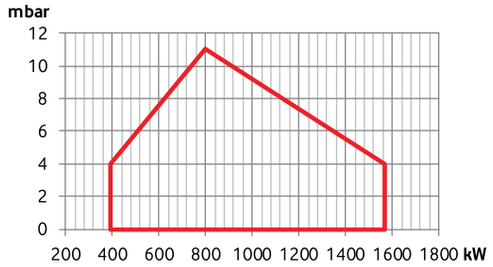
Product Specifications Tables

SPECIFICATIONS	ECO90SC3NG	ECO90SC3aNG	ECO90SC3bNG	ECO90SC3cNG
Control Type	O	O	O	O
Mechanical Modulating	✖	✖	✖	✖
Electronic Modulating	✔	✔	✔	✔
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Pilot Ignition	✔	✔	✔	✔
Pilot gas valve	✔	✔	✔	✔
Air pressure switch	✔	✔	✔	✔
Flame Control	F	F	F	F
Liquid fuel heating and pumping station	✔	✔	✔	✔
Liquid fuel hoses	✔	✔	✔	✔
Hinged body for servicing purposes	✔	✔	✔	✔
Different flame tube length	○	○	○	○
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line/Heavy Oil Station)	○	○	○	○
Complies with TS EN 267+A1	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔
Electrical protection class	IP54	IP54	IP54	IP54

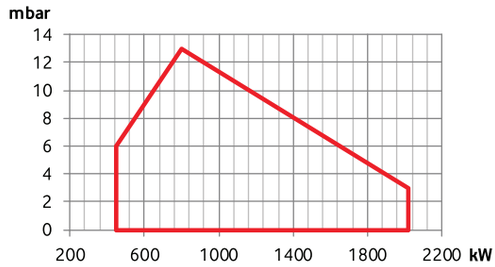
✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

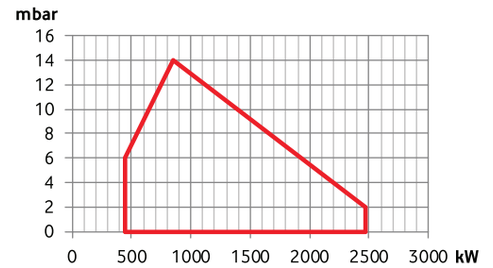
ECO-50 O (S) C 3 NG



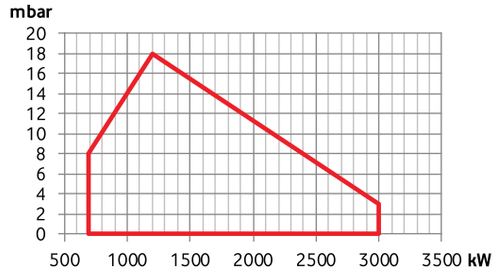
ECO-55 O (S) C 3 NG



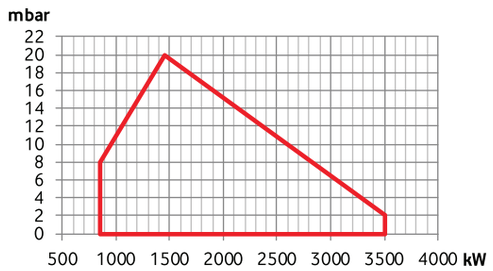
ECO-55 O (S) C 3a NG



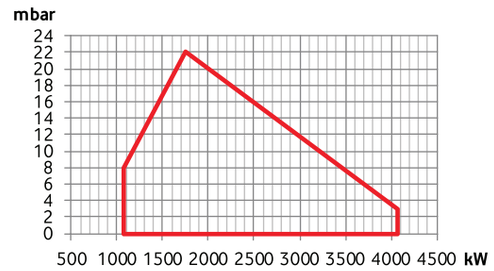
ECO-60 O (S) C 3 NG



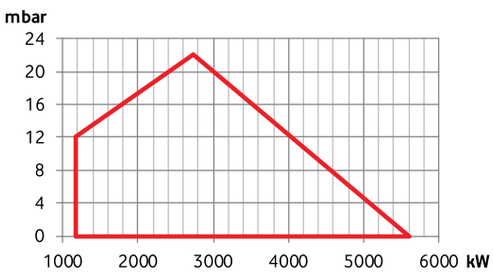
ECO-65 O (S) C 3 NG



ECO-70 O (S) C 3 NG



ECO-75 O (S) C 3 NG



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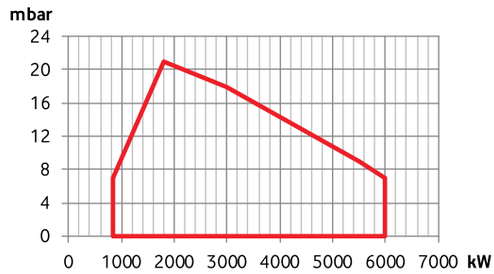
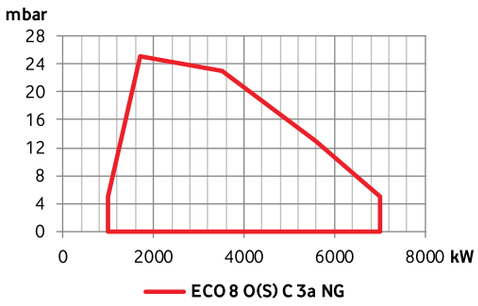


Back Pressure Diagrams
Modulating

ECO 8 O (S) C 3a NG



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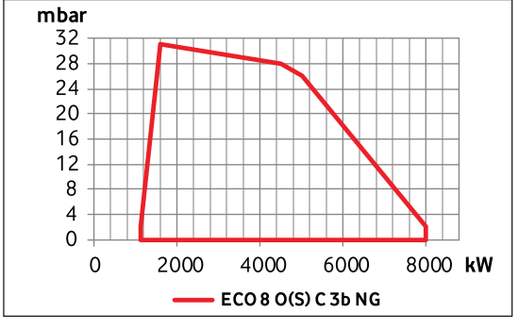

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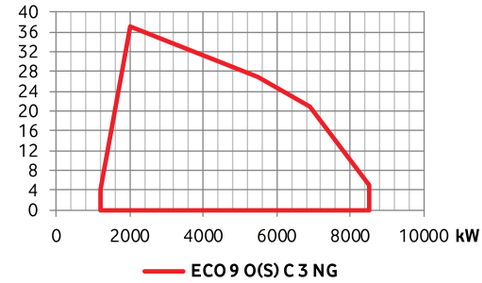

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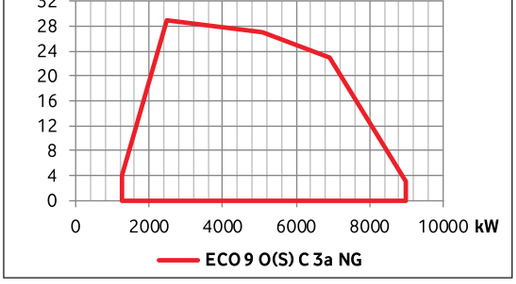

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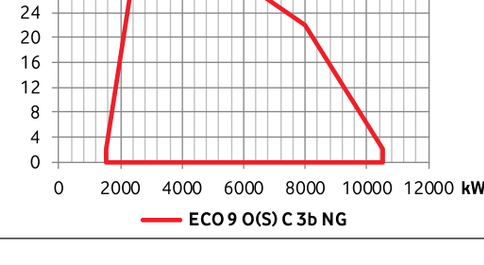
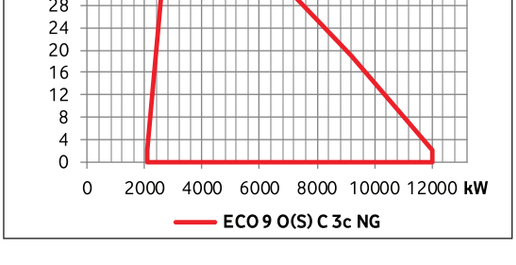
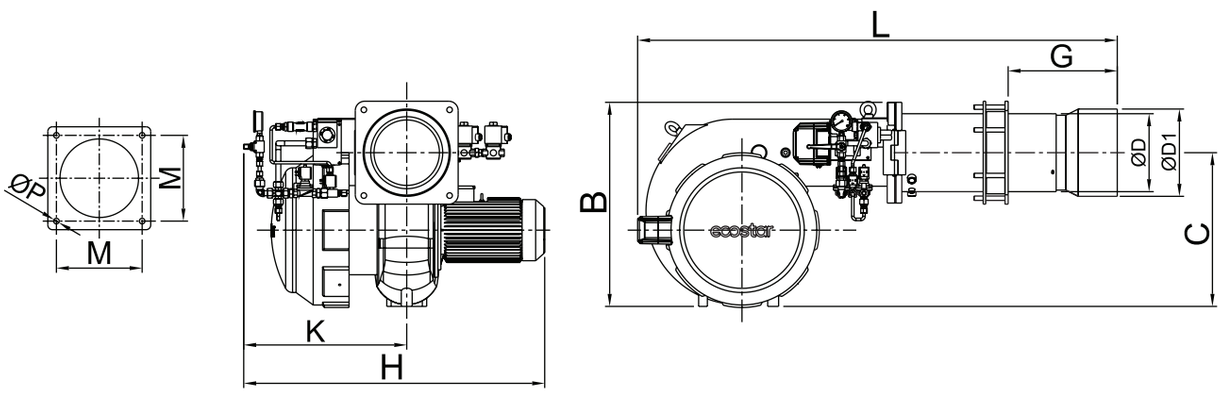


ECO 9 O (S) C 3c NG

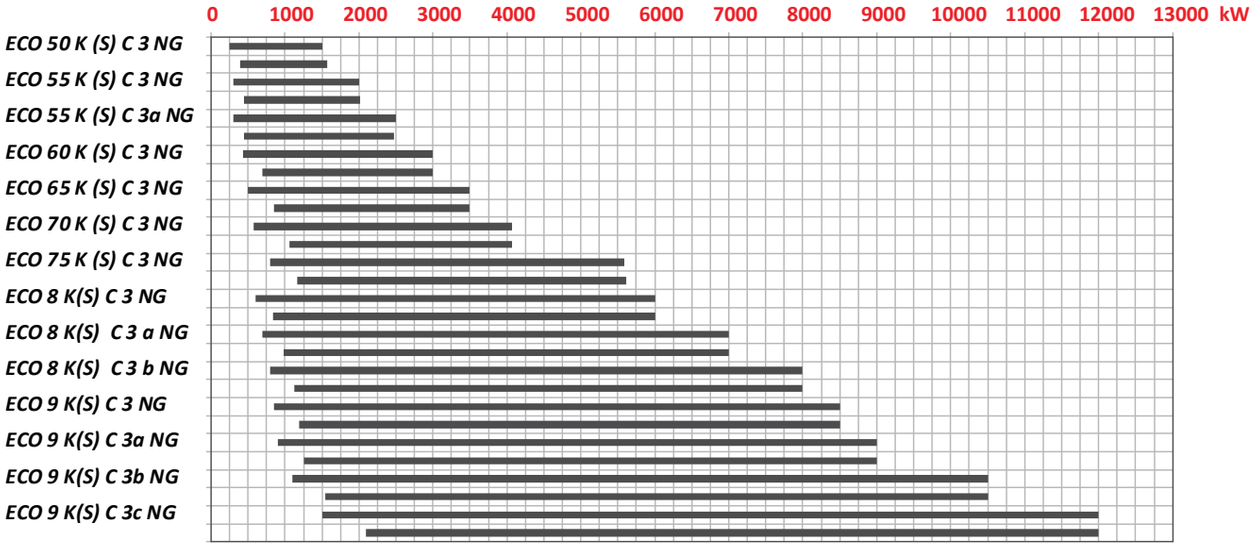


Dimensions Tables

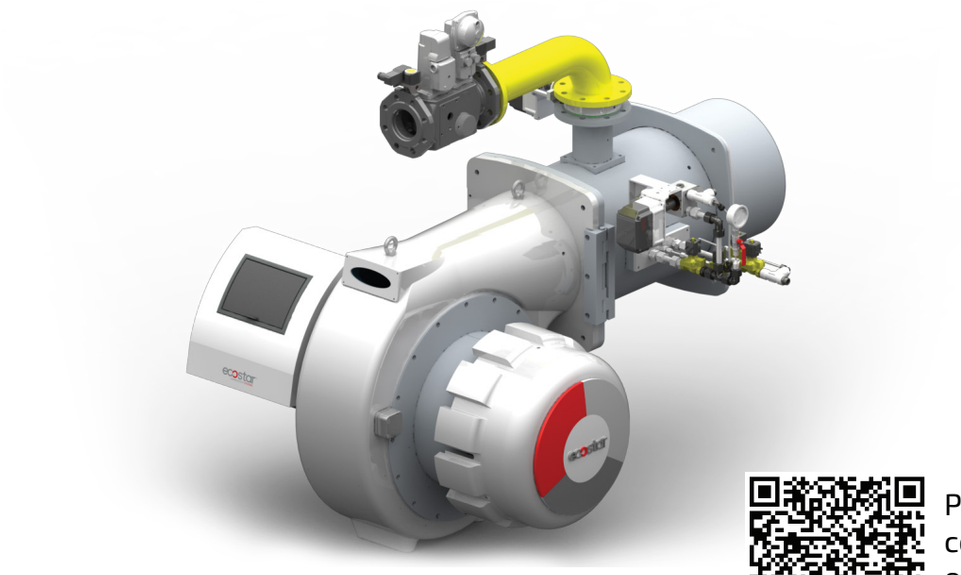


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 50 OSC3 NG	1470	280	440	945	525	590	425	18	275	218	236
ECO 55 OSC3 NG	1470	280	440	945	525	590	425	18	275	218	236
ECO 60 OSC3 NG	1400	-	140	1000	560	670	510	18	275	240	-
ECO 65 OSC3 NG	1650	200	535	1000	560	670	510	18	275	250	280
ECO 70 OSC3 NG	1650	200	535	1000	560	670	510	18	275	250	280
ECO 75 OSC3 NG	1600	200	285	1160	600	730	530	22	335	300	-
ECO 8 OSC3 NG	1830	-	300	1210	610	960	695	18	400	408	-
ECO 9 OSC3 NG	2110	-	375	1320	620	1370	1055	22	450	508	-

NG SERIES GAS HEAVY OIL BURNERS



NG Series Gas Heavy Oil Burners



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SPECIFICATIONS

- Easy maintenance with hinged system without dismounting the burner from the boiler,
- Sliding flange for connection to different boiler types,
- Lower noise level with special muffler system,
- Early diminishing of error sources thanks to the plug-socket connection that allows minimizing the number of cable connections,
- Combustion cap adjustable to desired capacity,
- High combustion efficiency by providing optimum fuel-air mixture with fuel-air servo motors that can be adjusted with high precision,
- High performance fan,
- User-friendly operator panel,
- Specially-designed, compact pre-heater, safety, operation and limiting thermostat,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Adequate gas supply control with minimum gas pressurestat,
- Combustion air control with air pressurestat,
- High pressure mechanical atomization at nozzle,
- Leak control with integrated gas leak controller,
- Pilot ignition.

Capacity Tables

BURNER TYPE	NATURAL GAS CAPACITY		NATURAL GAS CAPACITY		NATURAL GAS CONSUMPTION		HEAVY OIL CAPACITY		HEAVY OIL CAPACITY	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW
ECO 50 K S C 3 NG	215.000	1.290.000	250	1500	26,1	156,4	337.980	1.351.060	393	1571
ECO 55 K S C 3 NG	258.000	1.720.000	300	2000	31,3	208,5	386.140	1.737.200	449	2020
ECO 55 K S C 3a NG	258.000	2.150.000	300	2500	31,3	260,6	386.140	2.123.340	449	2469
ECO 60 K S C 3 NG	369.800	2.580.000	430	3000	44,8	312,7	598.560	2.580.000	696	3000
ECO 65 K S C 3 NG	430.000	3.010.000	500	3500	52,1	364,8	733.580	3.010.000	853	3500
ECO 70 K S C 3 NG	498.800	3.500.200	580	4070	60,5	424,3	916.760	3.500.200	1066	4070
ECO 75 K S C 3 NG	686.280	4.800.000	798	5581	83,2	581,8	1.003.620	4.824.600	1167	5610
ECO 8 K(S) C 3 NG	516.000	5.160.000	600	6000	62,5	625,5	722.400	5.160.000	840	6000
ECO 8 K(S) C 3 a NG	602.000	6.020.000	700	7000	73,0	729,7	842.800	6.020.000	980	7000
ECO 8 K(S) C 3 b NG	688.000	6.880.000	800	8000	83,4	833,9	963.200	6.880.000	1120	8000
ECO 8.5 K(S) C 3 NG	645.000	6.235.000	750	7250	78,2	755,8	851.400	6.235.000	990	7250
ECO 8.5 K(S) C 3a NG	688.000	7.138.000	800	8300	83,4	865,2	963.200	6.880.000	1120	8000
ECO 8.5 K(S) C 3b NG	817.000	7.955.000	950	9250	99,0	964,2	1.143.800	7.955.000	1330	9250
ECO 9 K(S) C 3 NG	731.000	7.310.000	850	8500	88,6	886,1	1.023.400	7.310.000	1190	8500
ECO 9 K(S) C 3a NG	774.000	7.740.000	900	9000	93,8	938,2	1.083.600	7.740.000	1260	9000
ECO 9 K(S) C 3b NG	946.000	9.030.000	1100	10500	114,7	1094,5	1.324.400	9.030.000	1540	10500
ECO 9 K(S) C 3c NG	1.290.000	10.320.000	1500	12000	156,4	1250,9	1.806.000	10.320.000	2100	12000
Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy oil : 9650 kcal/kg										

BURNER TYPE	HEAVY OIL CONSUMPTION		FAN MOTOR POWER	FUEL PUMP POWER	FUEL HEATER	MAIN SUPPLY
	Min. kg/h	Max. kg/h	kW	kW	kW	VAC
ECO 50 K S C 3 NG	35,0	140,0	2,2	-	6	3N 400
ECO 55 K S C 3 NG	40,0	180,0	3	-	12	3N 400
ECO 55 K S C 3a NG	40,0	220,0	3	-	12	3N 400
ECO 60 K S C 3 NG	62,0	267,4	4	1,1	14	3N 400
ECO 65 K S C 3 NG	76,0	311,9	5,5	1,5	2 x 9,0	3N 400
ECO 70 K S C 3 NG	95,0	362,7	7,5	1,5	2 x 9,0	3N 400
ECO 75 K S C 3 NG	104,0	500,0	11	1,5	2 x 14,0	3N 400
ECO 8 K(S) C 3 NG	74,9	534,7	11	2,2	2 x 14,0	3N 400
ECO 8 K(S) C 3 a NG	87,3	623,8	11	2,2	2 x 16,0	3N 400
ECO 8 K(S) C 3 b NG	99,8	713,0	15	2,2	2 x 16,0	3N 400
ECO 8.5 K(S) C 3 NG	88,2	646,1	18,5	2,2	2 x 16,0	3N 400
ECO 8.5 K(S) C 3a NG	99,8	713,0	22	2,2	2 x 16,0	3N 400
ECO 8.5 K(S) C 3b NG	118,5	824,4	22	2,2	2 x 16,0	3N 400
ECO 9 K(S) C 3 NG	106,1	757,5	18,5	4	37,0	3N 400
ECO 9 K(S) C 3a NG	112,3	802,1	22	4	37,0	3N 400
ECO 9 K(S) C 3b NG	137,2	935,8	22	4	37,0	3N 400
ECO 9 K(S) C 3c NG	187,2	1069,4	22	4	37,0	3N 400
Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Heavy oil : 9650 kcal/kg						

Product Specifications Tables

SPECIFICATIONS	ECO 50 K S C 3 NG	ECO 55 K S C 3 NG	ECO 55 K S C 3a NG	ECO 60 K S C 3 NG	ECO 65 K S C 3a NG
Control Type	O	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✓	✓	✓	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓	✓
Electronic Modulating (21 mbar)	○	○	○	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/Fuel Oil Station)	○	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

SPECIFICATIONS	ECO 70 K S C 3 NG	ECO 75 K S C 3 NG	ECO 8 K S C 3 NG	ECO 8 K S C 3a NG	ECO 8 K S C 3b NG
Control Type	O	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✗	✗	✗
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓	✓
Electronic Modulating (21 mbar)	✗	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/Fuel Oil Station)	○	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

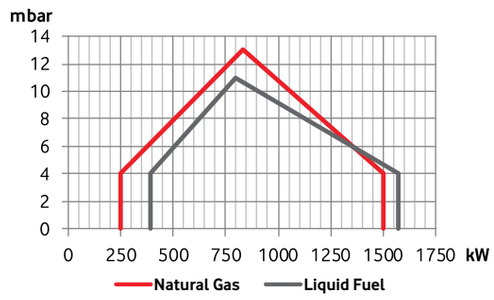
Product Specifications Tables

SPECIFICATIONS	ECO 9 K S C 3 NG	ECO 9 K S C 3a NG	ECO 9 K S C 3b NG	ECO 9 K S C 3c NG
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✗	✗	✗	✗
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21 mbar)	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Flame control	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓
Liquid fuel hoses	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓
Different flame tube length	○	○	○	○
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line/Fuel Oil Station)	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

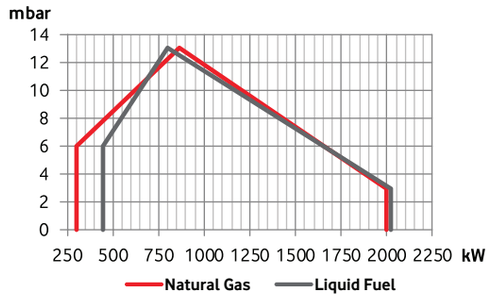
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

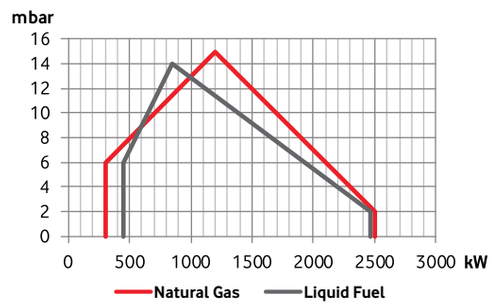
ECO-50 K (S) C 3 NG



ECO-55 K (S) C 3 NG



ECO-55 K (S) C 3a NG



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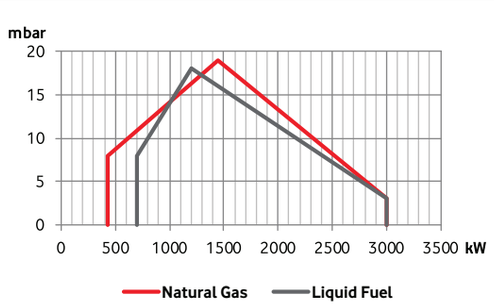
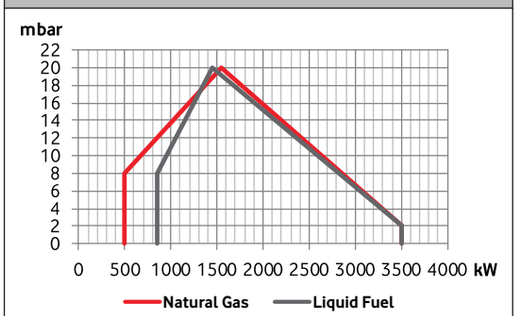


ECO-65 K (S) C 3 NG



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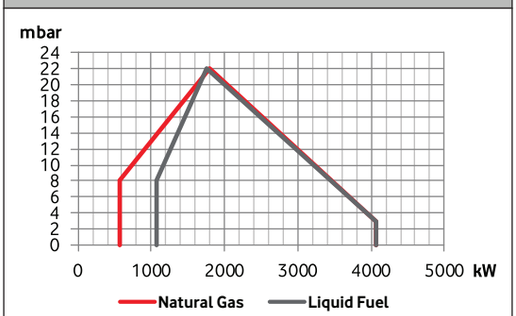

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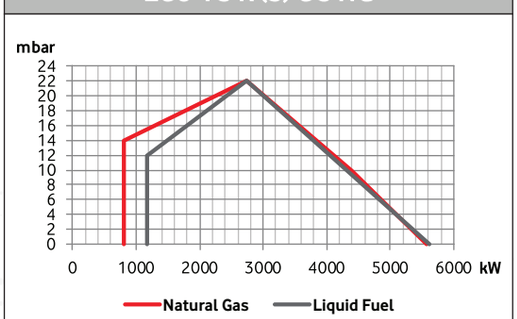
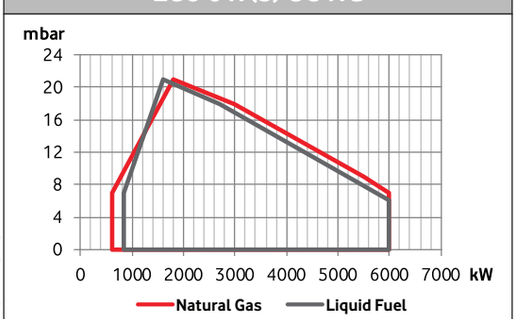
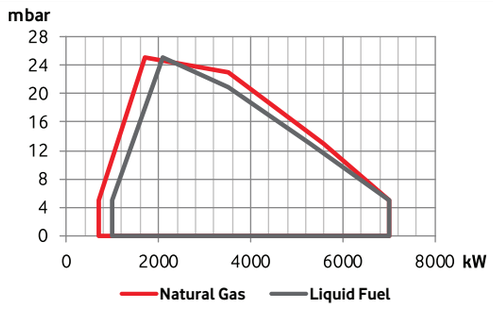


ECO 8 K (S) C 3 NG

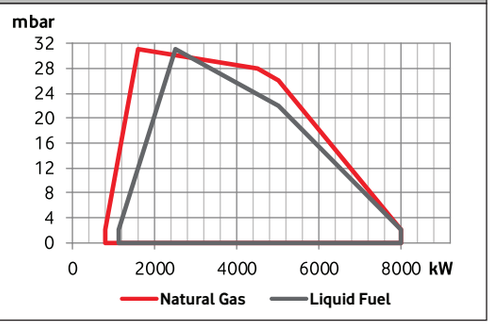


Back Pressure Diagrams
Modulating

ECO 8 K (S) C 3a NG



ECO 8 K (S) C 3b NG



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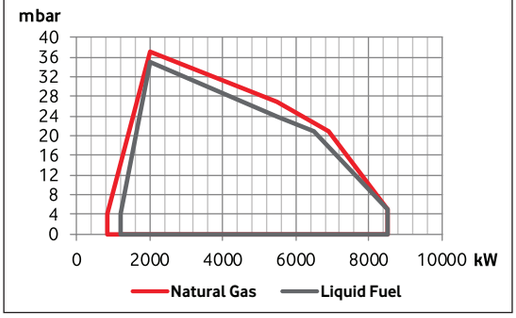

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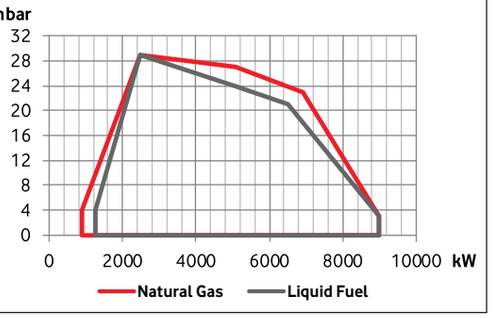

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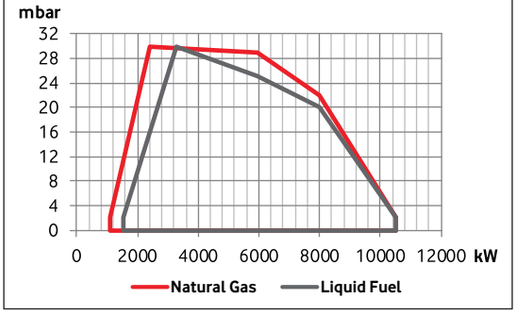
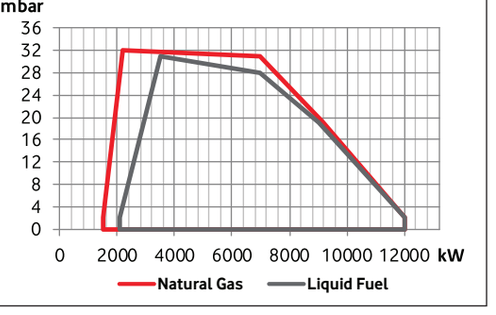
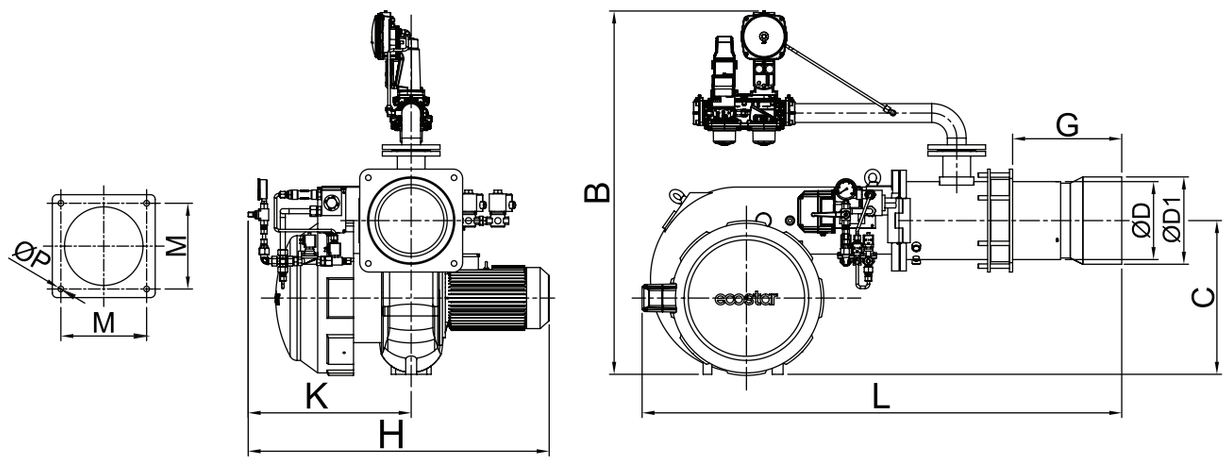


ECO 9 K (S) C 3c NG

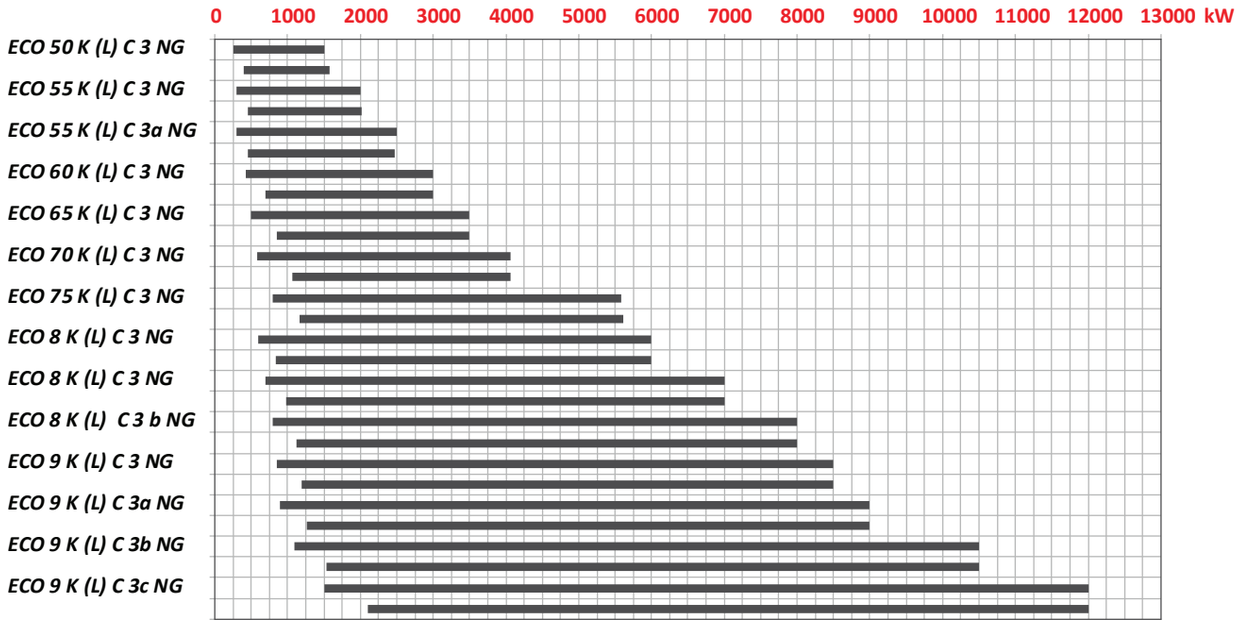


Dimensions Tables

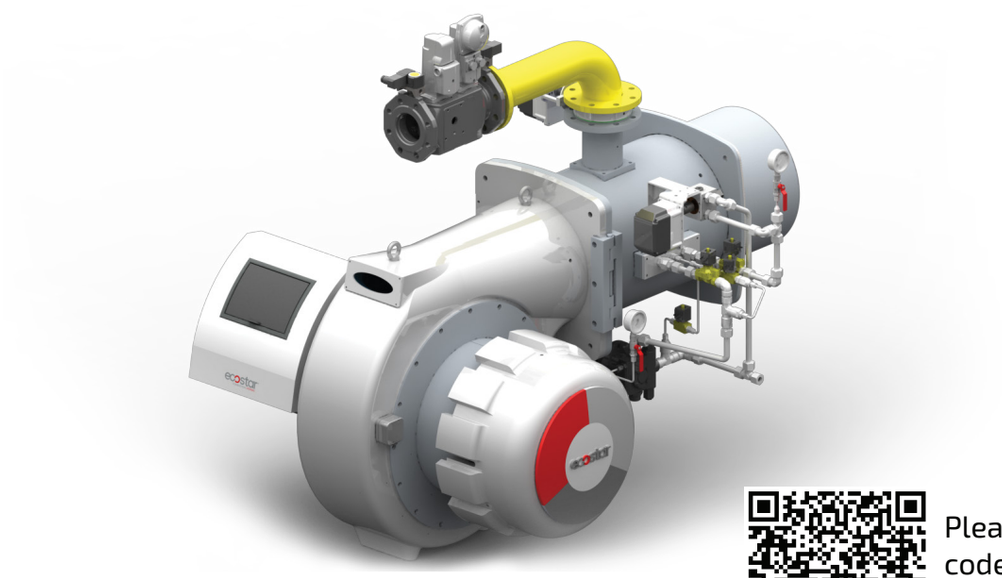


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 50 KSC3 NG	1470	280	440	945	525	1075	490	18	275	218	236
ECO 55 KSC3 NG	1470	280	440	945	525	1075	490	18	275	218	236
ECO 60 KSC3 NG	1550	200	355	1000	560	1180	550	18	275	240	-
ECO 65 KSC3 NG	1650	200	440	1000	560	1185	550	18	275	250	280
ECO 70 KSC3 NG	1650	200	440	1000	560	1185	550	18	275	250	280
ECO 75 KSC3 NG	1600	200	340	1160	600	1300	580	22	335	300	-
ECO 8 KSC3 NG	1830	-	300	1210	610	1600	695	18	400	408	-
ECO 9 KSC3 NG	2110	-	375	1320	620	2030	1055	22	450	508	-

NG SERIES GAS LIGHT OIL BURNERS



NG Series Gas Light Oil Burners



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SPECIFICATIONS

- Easy maintenance with hinged system without dismounting the burner from the boiler,
- Lower noise level with special muffler system,
- Early diminishing of error sources thanks to the plug-socket connection that allows minimizing the number of cable connections,
- Combustion cap adjustable to desired capacity,
- High combustion efficiency by providing optimum fuel-air mixture with gas-air servo motors that allow high precision adjustment,
- High performance fan,
- Easy-to-use operator panel that simplifies fault detection,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Adequate gas supply control with minimum gas pressurestat.
- Combustion air control with air pressurestat,
- High pressure mechanical atomization at nozzle,
- Leak control with integrated gas leak controller (leak age control),
- Pilot ignition,
- Easy installation and operation.

Capacity Tables

BURNER TYPE	NATURAL GAS CAPACITY		NATURAL GAS CAPACITY		NATURAL GAS CONSUMPTION		LIGHT OIL CAPACITY		LIGHT OIL CAPACITY	
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW
ECO 50 K (L) C 3 NG	215.000	1.290.000	250	1500	26,1	156,4	337.980	1.351.060	393	1571
ECO 55 K (L) C 3 NG	258.000	1.720.000	300	2000	31,3	208,5	386.140	1.737.200	449	2020
ECO 55 K (L) C 3a NG	258.000	2.150.000	300	2500	31,3	260,6	386.140	2.123.340	449	2469
ECO 60 K (L) C 3 NG	369.800	2.580.000	430	3000	44,8	312,7	598.560	2.580.000	696	3000
ECO 65 K (L) C 3 NG	430.000	3.010.000	500	3500	52,1	364,8	733.580	3.010.000	853	3500
ECO 70 K (L) C 3 NG	498.800	3.500.200	580	4070	60,5	424,3	916.760	3.500.200	1066	4070
ECO 75 K (L) C 3 NG	686.280	4.800.000	798	5581	83,2	581,8	1.003.620	4.824.600	1167	5610
ECO 8 K (L) C 3 NG	516.000	5.160.000	600	6000	62,5	625,5	722.400	5.160.000	840	6000
ECO 8 K (L) C 3 a NG	602.000	6.020.000	700	7000	73,0	729,7	842.800	6.020.000	980	7000
ECO 8 K (L) C 3 b NG	688.000	6.880.000	800	8000	83,4	833,9	963.200	6.880.000	1120	8000
ECO 8.5 K (L) C 3 NG	645.000	6.235.000	750	7250	78,2	755,8	851.400	6.235.000	990	7250
ECO .8.5 K (L) C 3a NG	688.000	7.138.000	800	8300	83,4	865,2	963.200	6.880.000	1120	8000
ECO 8.5 K (L) C 3b NG	817.000	7.955.000	950	9250	99,0	964,2	1.143.800	9.030.000	1330	10500
ECO 9 K (L) C 3 NG	731.000	7.310.000	850	8500	88,6	886,1	1.023.400	7.310.000	1190	8500
ECO 9 K (L) C 3a NG	774.000	7.740.000	900	9000	93,8	938,2	1.083.600	7.740.000	1260	9000
ECO 9 K (L) C 3b NG	946.000	9.030.000	1100	10500	114,7	1094,5	1.324.400	9.030.000	1540	10500
ECO 9 K (L) C 3c NG	1.290.000	10.320.000	1500	12000	156,4	1250,9	1.806.000	10.320.000	2100	12000
Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Light oil : 10200 kcal/kg										

BURNER TYPE	LIGHT OIL CONSUMPTION		FAN MOTOR POWER	FUEL HEATER	MAIN SUPPLY
	Min. kg/h	Max. kg/h	kW	kW	VAC
ECO 50 K (L) C 3 NG	33,1	132,5	2,2	-	3N 400
ECO 55 K (L) C 3 NG	37,9	170,3	3	-	3N 400
ECO 55 K (L) C 3a NG	37,9	208,2	3	-	3N 400
ECO 60 K (L) C 3 NG	58,7	252,9	4	1,1	3N 400
ECO 65 K (L) C 3 NG	71,9	295,1	5,5	1,5	3N 400
ECO 70 K (L) C 3 NG	89,9	343,2	7,5	1,5	3N 400
ECO 75 K (L) C 3 NG	98,4	473,0	11	1,5	3N 400
ECO 8 K (L) C 3 NG	70,8	505,9	11	2,2	3N 400
ECO 8 K (L) C 3 a NG	82,6	590,2	11	2,2	3N 400
ECO 8 K (L) C 3 b NG	94,4	674,5	15	2,2	3N 400
ECO 8.5 K (L) C 3 NG	83,5	611,3	18,5	2,2	3N 400
ECO .8.5 K (L) C 3a NG	94,4	674,5	22	2,2	3N 400
ECO 8.5 K (L) C 3b NG	112,1	885,3	22	2,2	3N 400
ECO 9 K (L) C 3 NG	100,3	716,7	18,5	3	3N 400
ECO 9 K (L) C 3a NG	106,2	758,8	22	3	3N 400
ECO 9 K (L) C 3b NG	129,8	885,3	22	3	3N 400
ECO 9 K (L) C 3c NG	177,1	1011,8	22	3	3N 400
Low Calorific Value H Natural Gas : 8250 kcal/Nm³ H Light oil : 10200 kcal/kg					

Product Specifications Tables

SPECIFICATIONS	ECO 50 K L C 3 NG	ECO 55 K L C 3 NG	ECO 55 K L C 3a NG	ECO 60 K L C 3 NG	ECO 65 K L C 3 NG
Control Type	O	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✓	✓	✓
Pneumatic Modulating (21mbar) (Gas fuel control)	✓	✓	✓	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓	✓
Electronic Modulating (21mbar)	○	○	○	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/ Diesel Station)	○	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP40	IP40	IP40	IP40	IP40

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Product Specifications Tables

SPECIFICATIONS	ECO 70 KLC3 NG	ECO 75 KLC3 NG	ECO 8 KLC3 NG	ECO 8 KLC3a NG	ECO 8 KLC3b NG
Control Type	O	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✓	✓	✗	✗	✗
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○	○
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Flame control	F	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line/ Diesel Station)	○	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

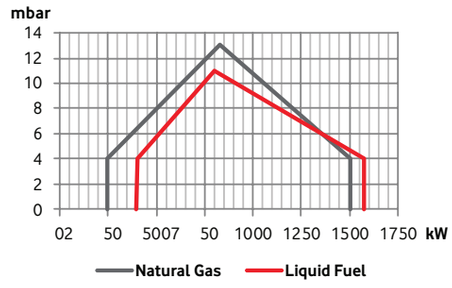
Product Specifications Tables

SPECIFICATIONS	ECO 9 K L C 3 NG	ECO 9 K L C 3a NG	ECO 9 K L C 3b NG	ECO 9 K L C 3c NG
Control Type	O	O	O	O
Mechanical Modulating (Liquid fuel control)	✗	✗	✗	✗
Pneumatic Modulating (21mbar) (Gas fuel control)	✗	✗	✗	✗
Pneumatic Modulating (300 mbar) (Gas fuel control)	✓	✓	✓	✓
Electronic Modulating (21mbar)	✗	✗	✗	✗
Electronic Modulating (300 mbar)	○	○	○	○
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Gas valve	✓	✓	✓	✓
Pilot ignition	✓	✓	✓	✓
Pilot gas valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	✓	✓	✓	✓
Gas leak control	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Flame control	F	F	F	F
Liquid fuel heating and pumping station	✓	✓	✓	✓
Hinged body for servicing purposes	✓	✓	✓	✓
Different flame tube length	○	○	○	○
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line/ Diesel Station)	○	○	○	○
TSE EN-676 Burners-Compatibility for Gas Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

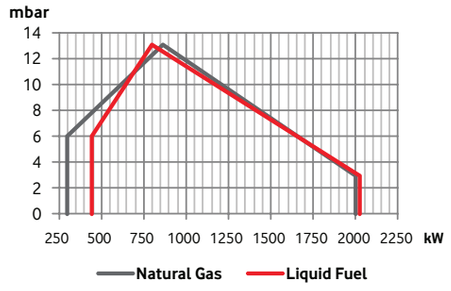
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

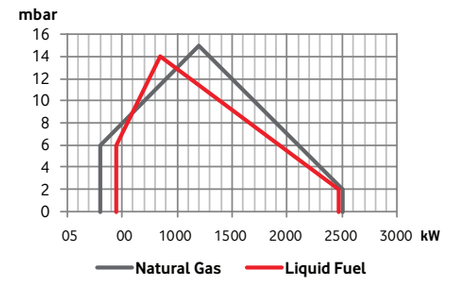
ECO-50 K (L) C 3 NG



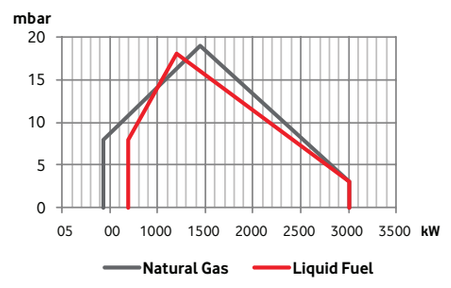
ECO-55 K (L) C 3 NG



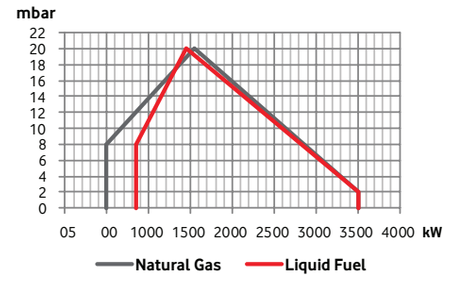
ECO-55 K (L) C 3a NG



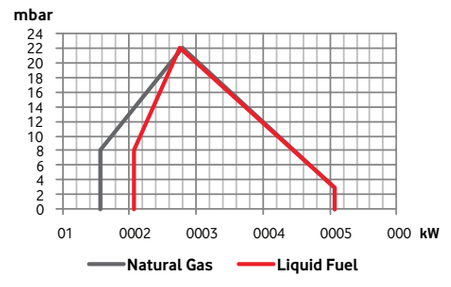
ECO-60 K (L) C 3 NG



ECO-65 K (L) C 3 NG



ECO-70 K (L) C 3 NG



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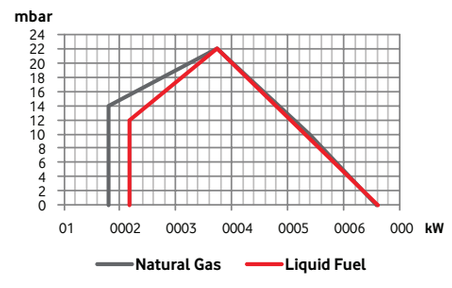
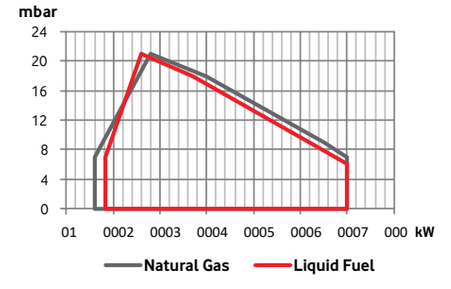
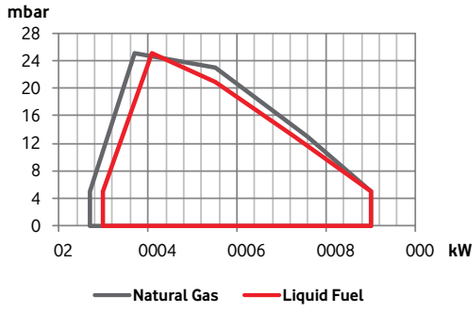


ECO 8 K (L) C 3 NG

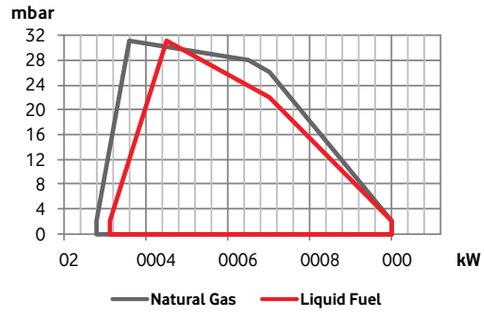


Back Pressure Diagrams
Modulating

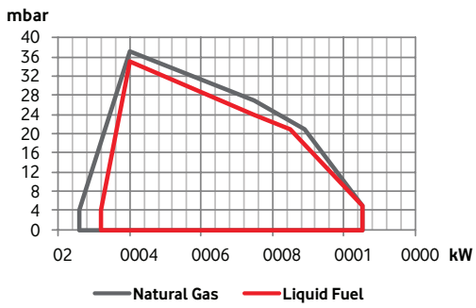
ECO 8 K (L) C 3a NG



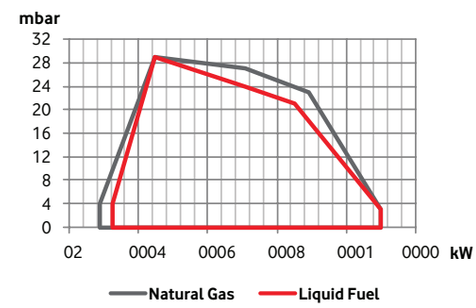
ECO 8 K (L) C 3b NG



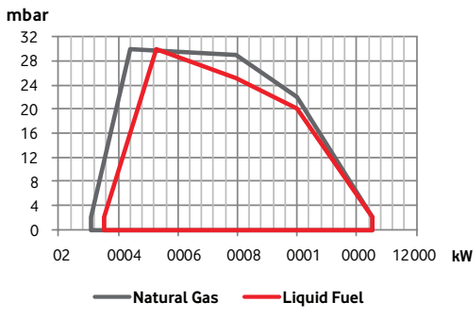
ECO 9 K (L) C 3 NG



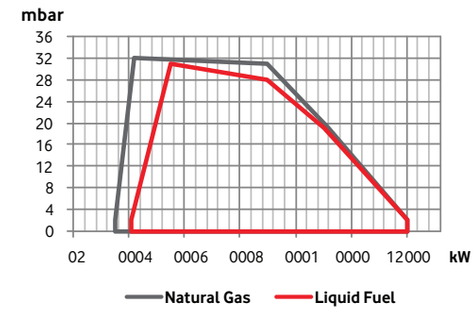
ECO 9 K (L) C 3a NG



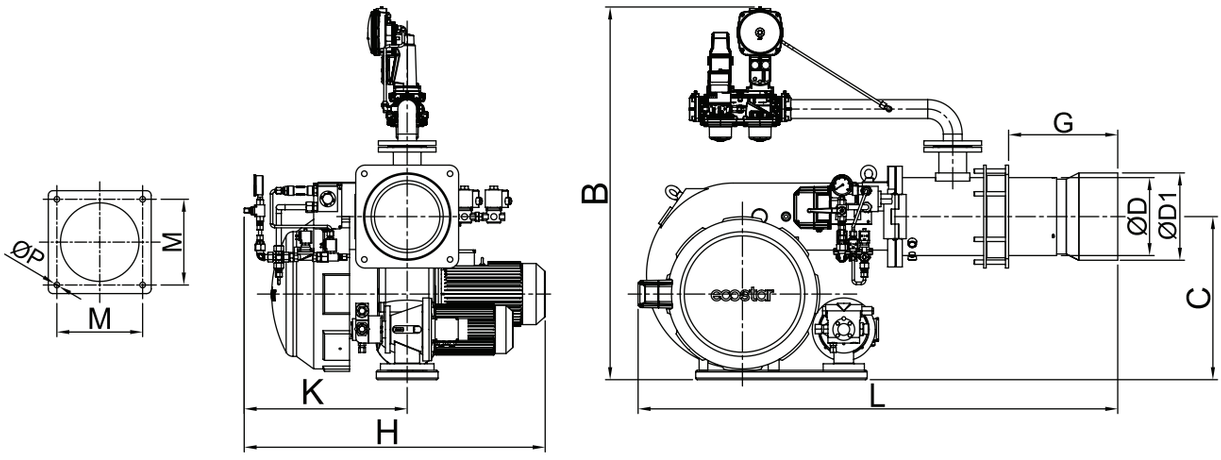
ECO 9 K (L) C 3b NG



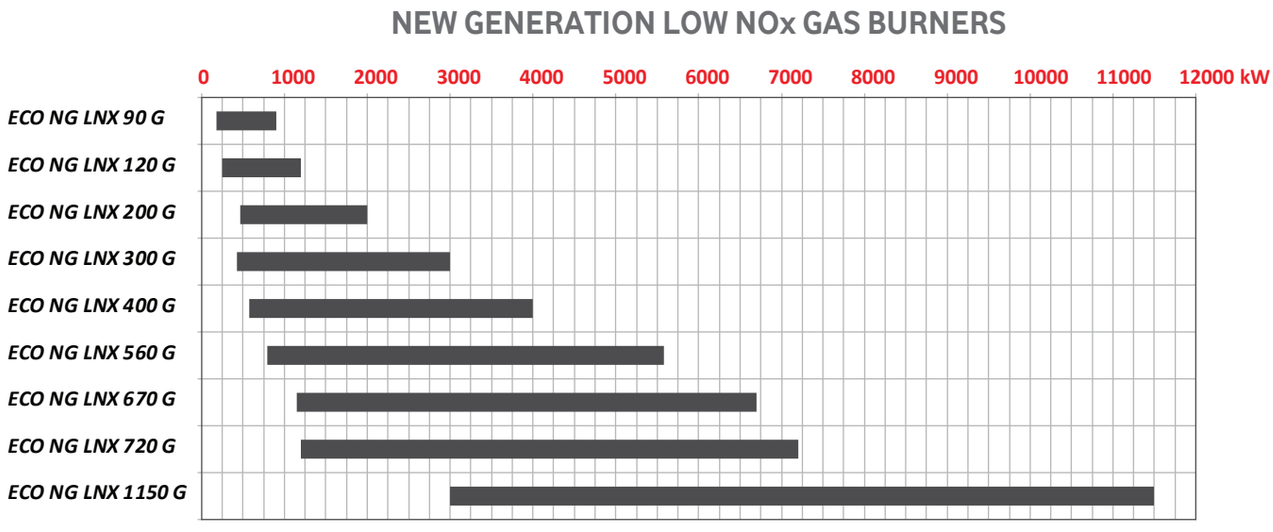
ECO 9 K (L) C 3c NG



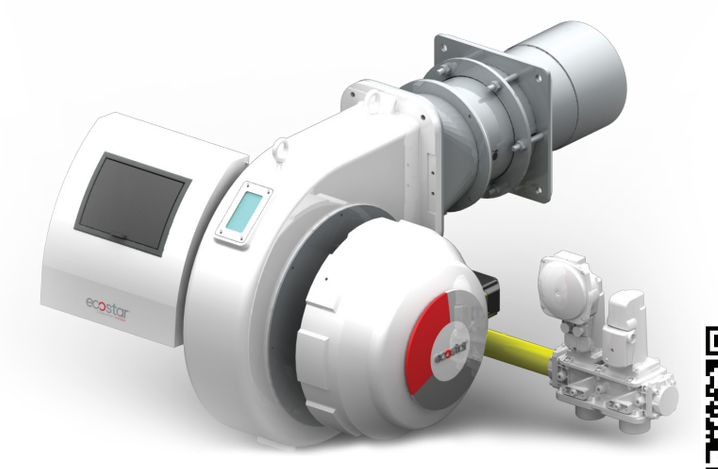
Dimensions Tables



	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO 50 KLC3 NG	1470	280	440	930	450	1075	440	18	275	218	236
ECO 55 KLC3 NG	1470	280	440	930	450	1075	440	18	275	218	236
ECO 60 KLC3 NG	1550	200	355	980	450	1180	500	18	275	240	-
ECO 65 KLC3 NG	1650	200	440	980	450	1185	500	18	275	250	280
ECO 70 KLC3 NG	1650	200	440	980	450	1185	500	18	275	250	280
ECO 75 KLC3 NG	1600	200	340	1160	600	1300	580	22	335	300	-
ECO 8 KLC3 NG	1830	-	300	1210	610	1600	695	18	400	408	-
ECO 9 KLC3 NG	2110	-	375	1320	620	2030	1055	22	450	508	-


NEW GENERATION LOW NOx GAS BURNERS
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000 kW
ECO NG LNX 90 G
ECO NG LNX 120 G
ECO NG LNX 200 G
ECO NG LNX 300 G
ECO NG LNX 400 G
ECO NG LNX 560 G
ECO NG LNX 670 G
ECO NG LNX 720 G
ECO NG LNX 1150 G

New Generation Low NOx Gas Burners



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SPECIFICATIONS

- Low NOx gas burner according to European Standard EN 676:2020, with class 3 NOx and CO emission,
- Operation in any type of combustion chamber according to the standard EN 303,
- High adjustment range of thermal capacity with electronic modulation,
- Modulation rate of 1:6
- High quality aluminum body,
- High-performance reverse wing; high fan efficiency with centrifugal fan; low electrical consumption; low noise level,
- Easy to remove combustion nozzle without dismounting the burner from the boiler thanks to the hinged system design,
- Integrated gas leak control unit,
- Ionization electrode for flame control,
- Minimum and maximum capacity air rate adjustment with electric servomotor control,
- Adjustable combustion nozzle with stainless steel turbulator,
- Three-phase fan motor,
- User-friendly controller showing operating and troubleshooting status,
- Electronic control unit with failure and error code indicator according to European standard EN-298:2012,
- Optional CO/O2 (trim) system integration for combustion optimization,
- Port connection for failure test,
- Opportunity of connecting micro ammeter on ionization cable,
- IP 44 electrical protection.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		NOx EMISSIONS	FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Standard mg/kWh	kW	VAC
ECO NG LNX 90 G	154.800	774.000	180	900	18,76	93,80	<80	1,50	3N 400
ECO NG LNX 120 G	215.000	1.032.000	250	1200	26,06	125,09	<80	2,20	3N 400
ECO NG LNX 200 G	404.200	1.720.000	470	2000	48,99	208,48	<80	3,00	3N 400
ECO NG LNX 300 G	369.800	2.580.000	430	3000	44,82	312,73	<80	4,00	3N 400
ECO NG LNX 400 G	498.800	3.440.000	580	4000	60,46	416,97	<80	7,50	3N 400
ECO NG LNX 560 G	686.280	4.799.660	798	5581	83,19	581,78	<80	11,00	3N 400
ECO NG LNX 670 G	989.000	5.762.000	1150	6700	119,88	698,42	<80	15,00	3N 400
ECO NG LNX 720 G	1.032.000	6.192.000	1200	7200	125,09	750,55	<80	15,00	3N 400
ECO NG LNX 1150 G	2.580.000	9.890.000	3000	11500	312,73	1198,79	<80	22,00	3N 400

*Net Calorific Value H Natural Gas: 8250 kcal/Nm³

Product Specifications Tables

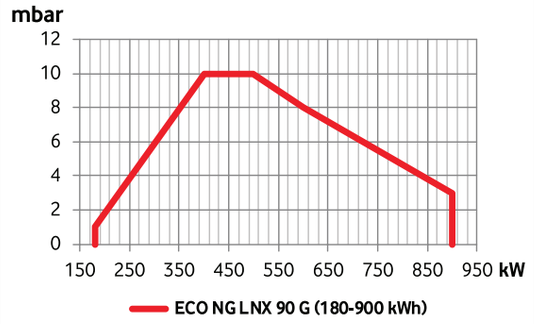
SPECIFICATIONS	ECO NG LNX 90 G	ECO NG LNX 120 G	ECO NG LNX 200 G	ECO NG LNX 300 G	ECO NG LNX 400 G
Control Type	O	O	O	O	O
Electronic Modulating	✓	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓	✓
Ignition	DA	DA	DA	DA	DA
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○
Gas Leak Control	○	○	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Air inlet muffler cover (CTP)	✓	✓	✓	✓	✓
Flame control	iO	iO	iO	iO	iO
UV flame control	○	○	○	○	○
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Movable flame tube extension	✓	✓	✓	✓	✓
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

SPECIFICATIONS	ECO NG LNX 560 G	ECO NG LNX 670 G	ECO NG LNX 720 G	ECO NG LNX 1150 G
Control Type	O	O	O	O
Electronic Modulating	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Ignition	DA	DA	DA	DA
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Gas Leak Control	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Air inlet muffler cover (CTP)	✓	✓	✓	✓
Flame control	iO	iO	iO	iO
UV flame control	○	○	○	○
Hinged body for servicing purposes	✓	✓	✓	✓
Movable flame tube extension	✗	✗	✗	✗
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

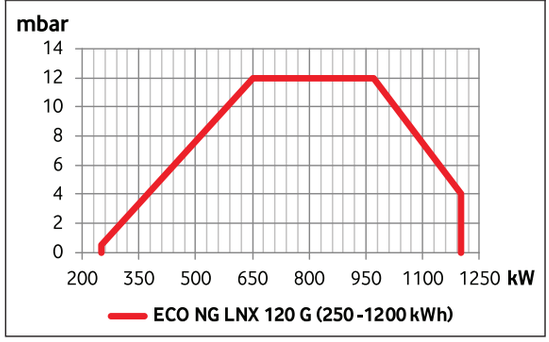
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	iO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

ECO NG LNX 90 G



ECO NG LNX 120 G



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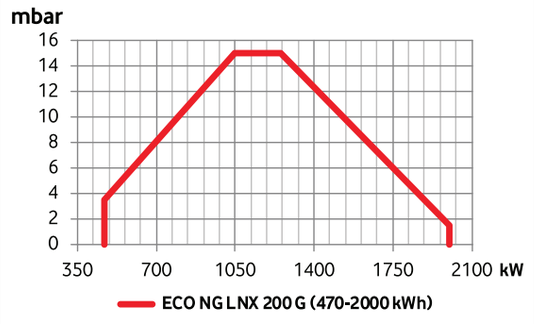
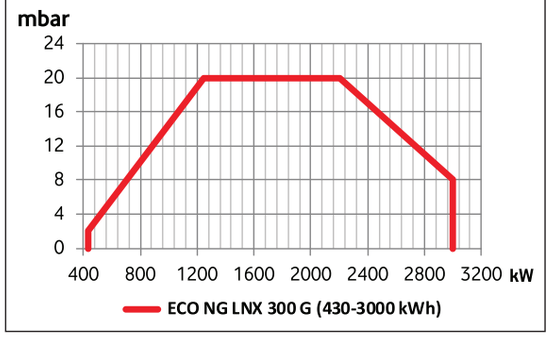
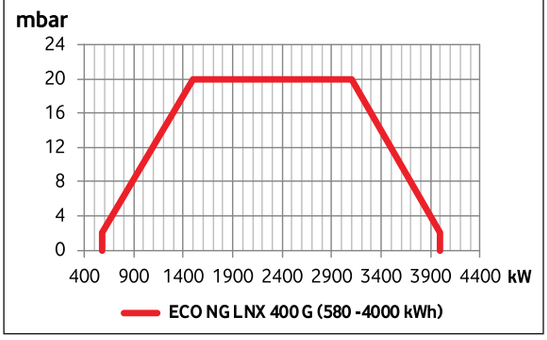


ECO NG LNX 300 G

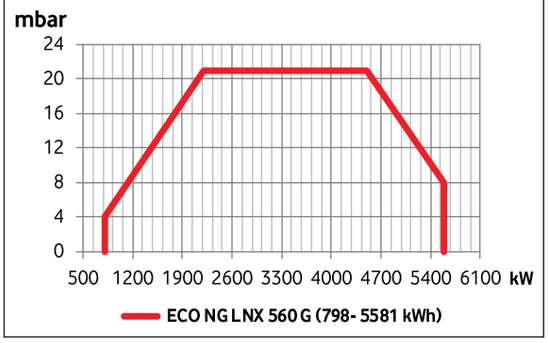


Back Pressure Diagrams
Modulating

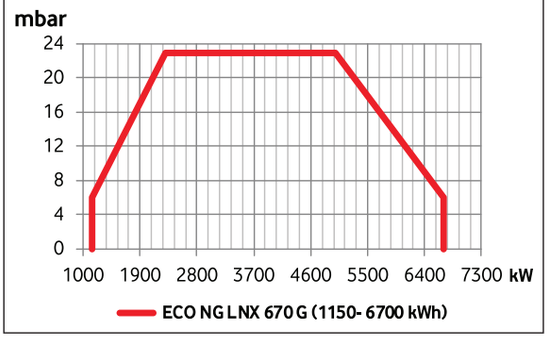
ECO NG LNX 400 G



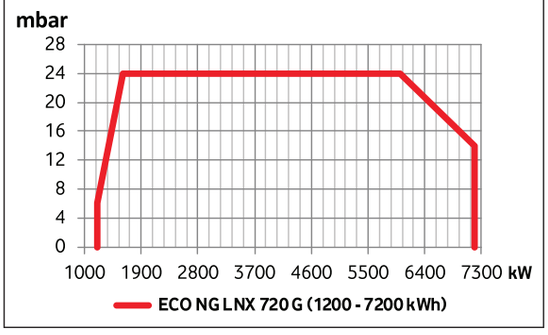
ECO NG LNX 560 G



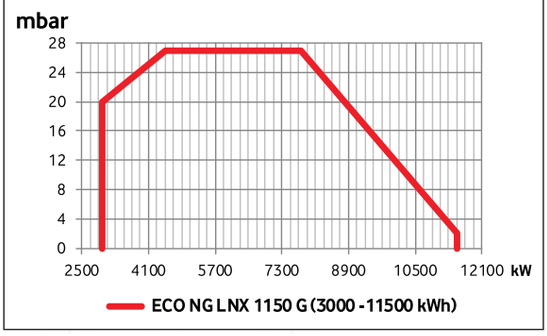
ECO NG LNX 670 G



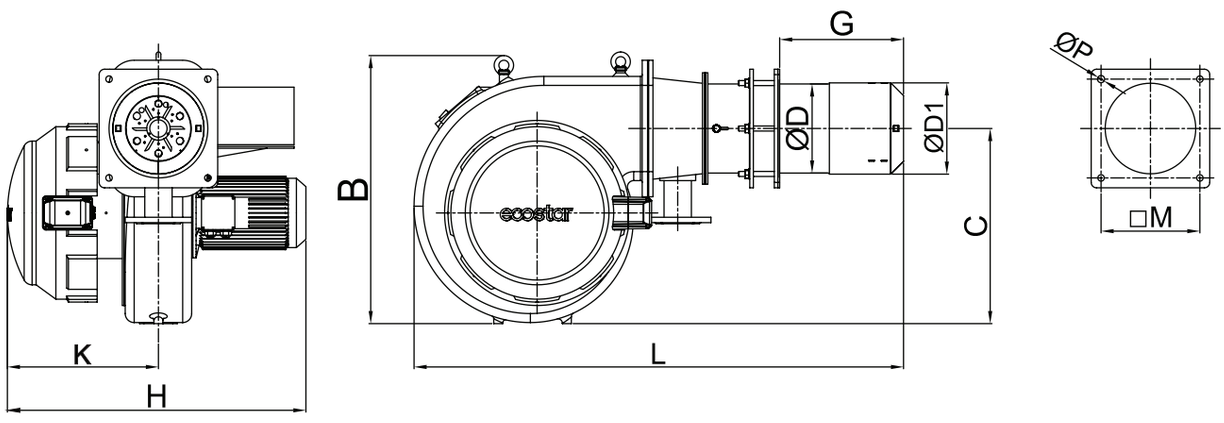
ECO NG LNX 720 G



ECO NG LNX 1150 G

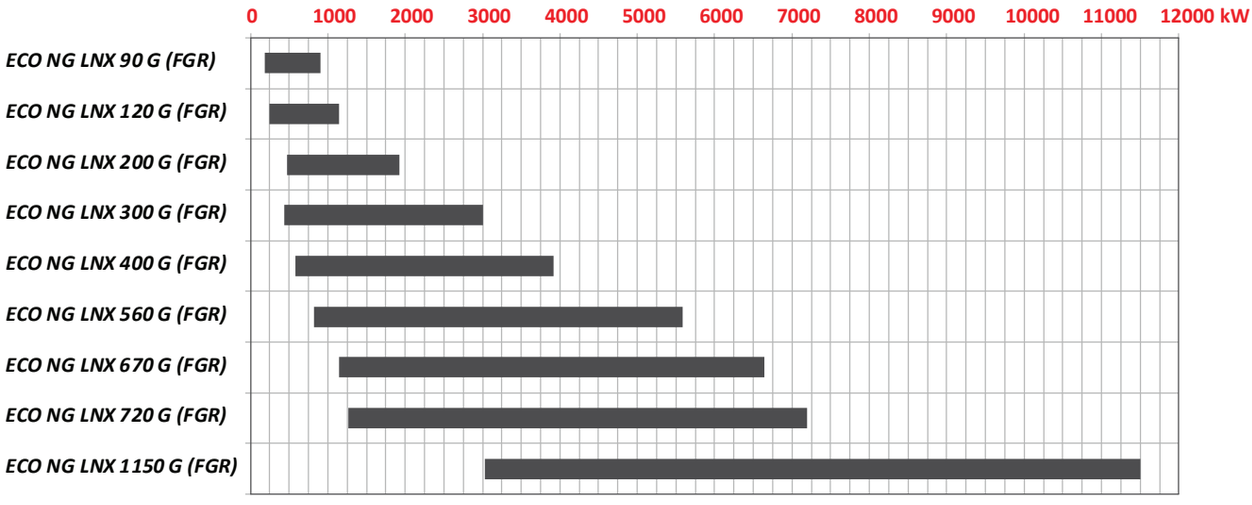


Dimensions Tables

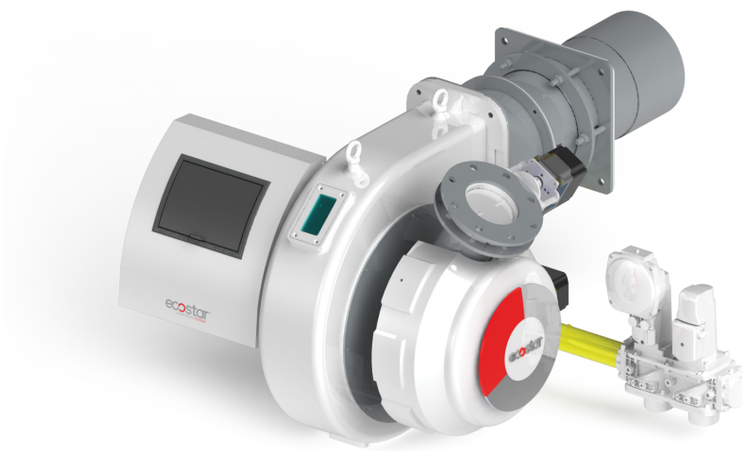


	L	Gmin	Gmax	H	K	B	C	ØP	M	ØD	ØD1
ECO NG LNX 90 G	1350	175	390	790	400	675	510	18	275	218	226
ECO NG LNX 120 G	1350	175	390	790	400	675	510	18	275	218	226
ECO NG LNX 200 G	1450	220	400	850	430	760	550	18	275	248	254
ECO NG LNX 300 G	1600	240	550	1000	500	780	550	22	335	302	310
ECO NG LNX 400 G	1850	210	590	1150	620	875	610	22	400	358	367
ECO NG LNX 560 G	**GET SUPPORT FROM THE SALES DEPARTMENT**										
ECO NG LNX 670 G											
ECO NG LNX 720 G											
ECO NG LNX 1150 G											

NEW GENERATION ULTRA LOW NOx GAS BURNERS



New Generation Low NOx (FGR) Gas Burners



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SPECIFICATIONS

- Low NOx gas burner according to European Standard EN 676:2020, with class 3 NOx and CO emission,
- Operation in any type of combustion chamber according to the standard EN 303,
- Ultra Low NOx gas burner with FGR (Flue gas recirculation) feature,
- Wide adjustment range with electronic modulation feature,
- Modulation rate of 1:6,
- High quality aluminum body,
- High-performance reverse wing; high fan efficiency with centrifugal fan; low electrical consumption; low noise level,
- Easy to remove combustion nozzle without dismounting the burner from the boiler thanks to the hinged system design,
- Integrated gas leak control unit,
- Use of ionization electrode or optional photocell for flame control,
- Precise air and gas FGR flow adjustment at minimum and maximum capacity with electric servomotor control,
- Adjustable combustion nozzle with specially designed stainless turbulator,
- Optional CO/O2 (trim) system integration for combustion optimization,
- User-friendly controller showing operating and troubleshooting status,
- Electronic control unit with failure and error code indicator according to European standard EN-298:2012
- Port connection for failure test,
- Opportunity of connecting micro ammeter on ionization cable,
- IP 44 electrical protection.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		NOx EMISSIONS		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Standard mg/kWh	FGR mg/kWh	kW	VAC
ECO NGLNX 90 G (FGR)	154.800	774.000	180	900	18,76	93,82	<80	<50	1,50	3N 400
ECO NGLNX 120 G (FGR)	215.000	989.000	250	1150	26,06	119,88	<80	<50	2,20	3N 400
ECO NGLNX 200 G (FGR)	404.200	1.651.200	470	1920	48,99	200,15	<80	<50	3,00	3N 400
ECO NGLNX 300 G (FGR)	378.400	2.580.000	440	3000	45,87	312,73	<80	<50	4,00	3N 400
ECO NGLNX 400 G (FGR)	498.800	3.371.200	580	3920	60,46	408,63	<80	<50	7,50	3N 400
ECO NGLNX 560 G (FGR)	705.200	4.799.660	820	5581	85,48	581,78	<80	<50	11,00	3N 400
ECO NGLNX 670 G (FGR)	989.000	5.710.400	1150	6640	119,88	692,17	<80	<50	15,00	3N 400
ECO NGLNX 720 G (FGR)	1.083.600	6.192.000	1260	7200	313,35	750,55	<80	<50	15,00	3N 400
ECO NGLNX 1150 G (FGR)	2.605.800	9.890.000	3030	11500	315,85	1198,79	<80	<50	22,00	3N 400

* Low Calorific Value: LCV Natural Gas : 8250 kcal /Nm³ , LCV LPG : 22500 kcal /Nm³

Product Specifications Tables

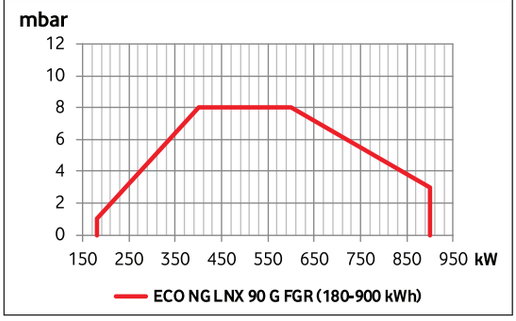
SPECIFICATIONS	ECO NG LNX 90 G (FGR)	ECO NG LNX 120 G (FGR)	ECO NG LNX 200 G (FGR)	ECO NG LNX 300 G (FGR)	ECO NG LNX 400 G (FGR)
Control Type	O	O	O	O	O
Electronic Modulating	✓	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM	SM
Flue gas recirculation adjustment	SM	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓	✓
Ignition	DA	DA	DA	DA	DA
Minimum gas pressure switch	✓	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○	○
Gas Leak Control	○	○	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓
Air inlet muffler cover	✓	✓	✓	✓	✓
Flame control	İO	İO	İO	İO	İO
UV flame control	○	○	○	○	○
Hinged body for servicing purposes	✓	✓	✓	✓	✓
Flue gas recirculation connection (BT 340 controller)	✓	✓	✓	✓	✓
Movable flame tube extension	✓	✓	✓	✓	✓
O2-CO combustion management system connection	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54

SPECIFICATIONS	ECO NG LNX 560 G (FGR)	ECO NG LNX 670 G (FGR)	ECO NG LNX 720 G (FGR)	ECO NG LNX 1150 G (FGR)
Control Type	O	O	O	O
Electronic Modulating	✓	✓	✓	✓
Air flow adjustment	SM	SM	SM	SM
Fuel flow adjustment	SM	SM	SM	SM
Flue gas recirculation adjustment	SM	SM	SM	SM
Gas Valve	✓	✓	✓	✓
Ignition	DA	DA	DA	DA
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Gas Leak Control	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓
Air inlet muffler cover	✓	✓	✓	✓
Flame control	İO	İO	İO	İO
UV flame control	○	○	○	○
Hinged body for servicing purposes	✓	✓	✓	✓
Flue gas recirculation connection (BT 340 controller)	✓	✓	✓	✓
Movable flame tube extension	✗	✗	✗	✗
O2-CO combustion management system connection	○	○	○	○
Combustion air fan inverter connection	○	○	○	○
Fuel preparation stations (Gas line)	○	○	○	○
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54

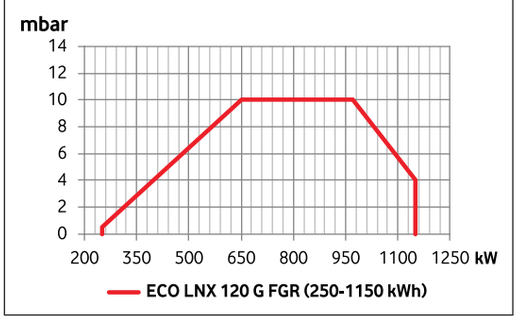
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Modulating

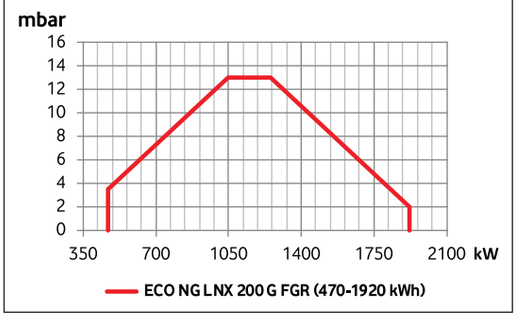
ECO NG LNX 90 G (FGR)



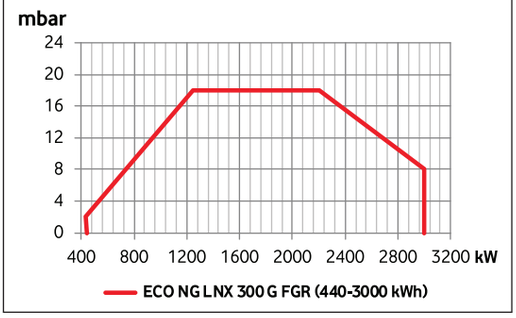
ECO NG LNX 120 G (FGR)



ECO NG LNX 200 G (FGR)



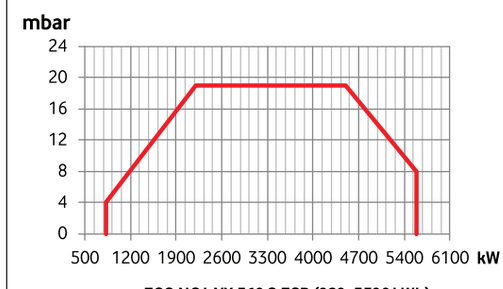
ECO NG LNX 300 G (FGR)



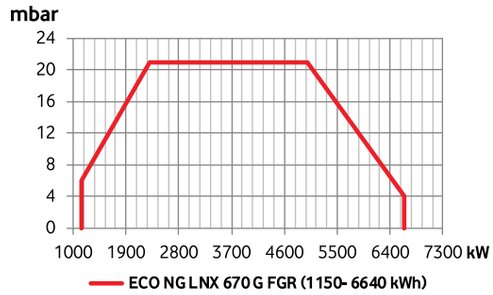
Back Pressure Diagrams
Modulating

ECO NG LNX 400 G (FGR)

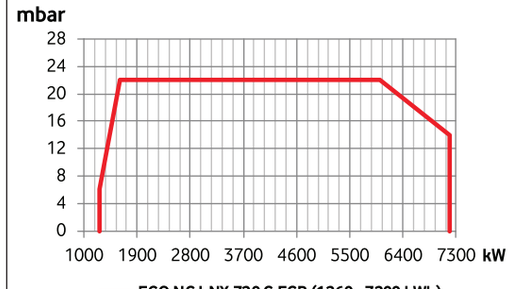
ECO NG LNX 560 G (FGR)



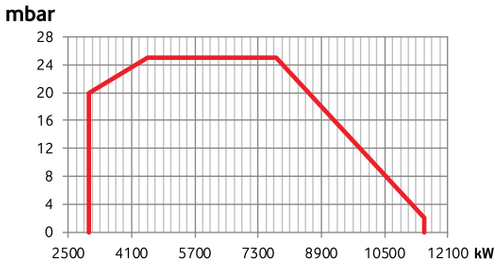
ECO NG LNX 670 G (FGR)



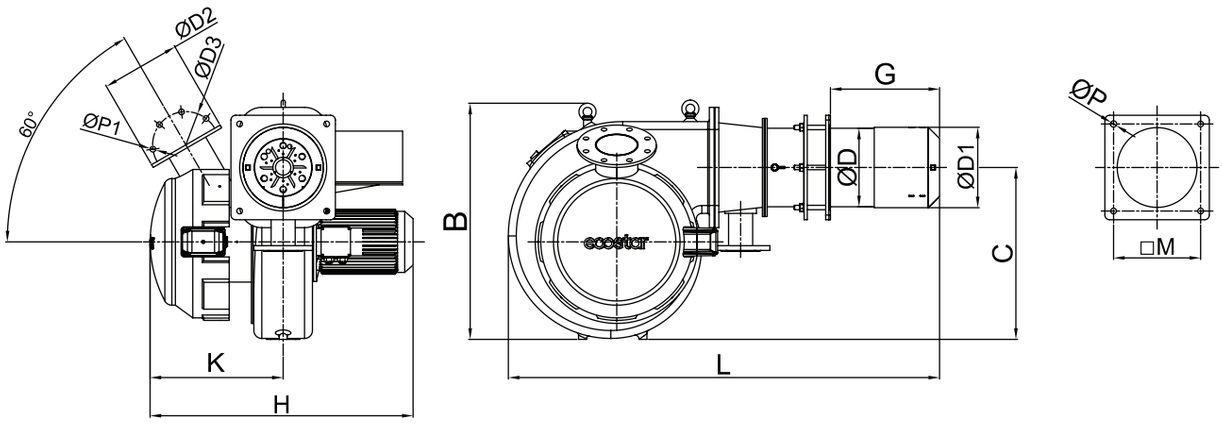
ECO NG LNX 720 G (FGR)



ECO NG LNX 1150 G (FGR)



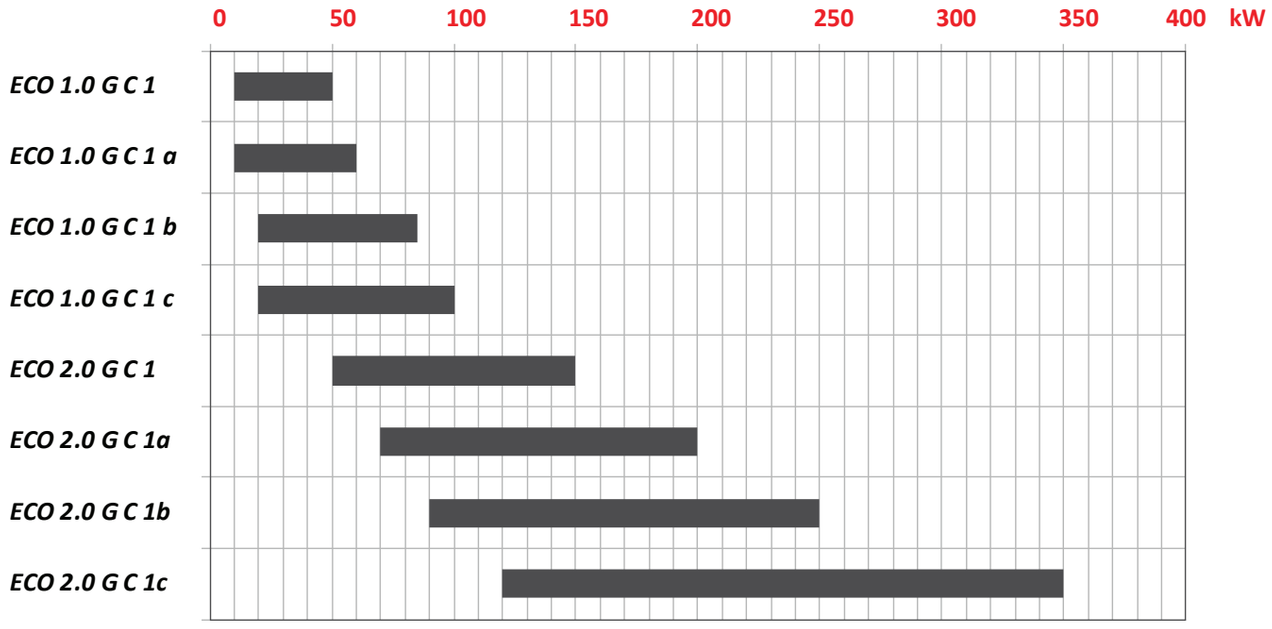
Dimensions Tables



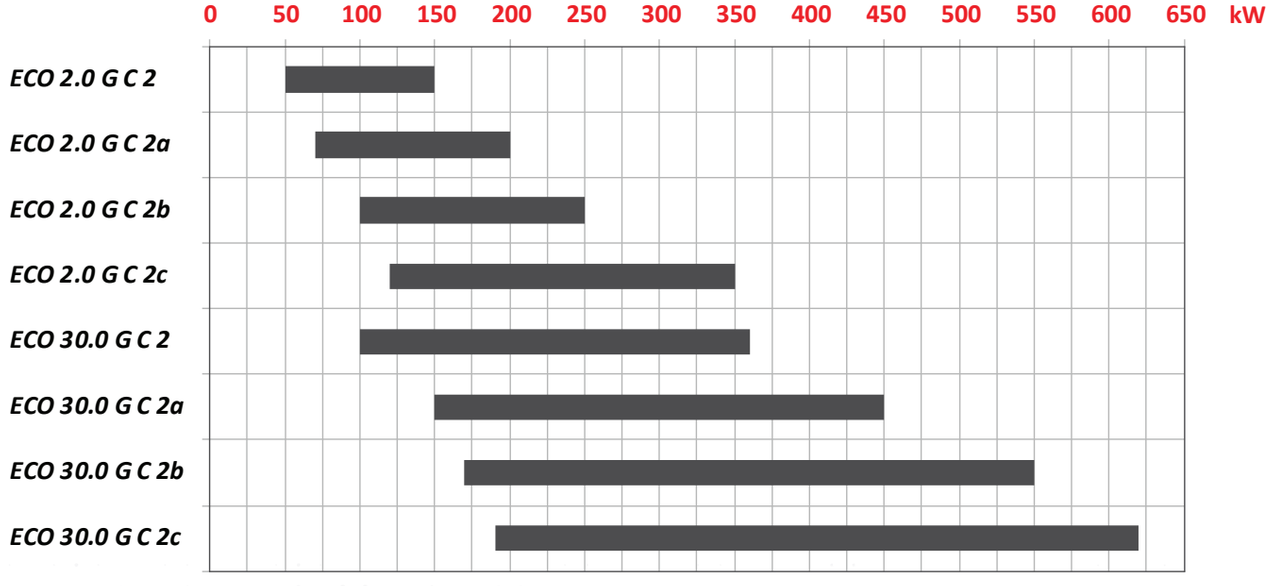
	L	Gmin	Gmax	H	K	B	C
ECO NG LNX 90 G FGR	1350	175	390	790	400	675	510
ECO NG LNX 120 G FGR	1350	175	390	790	400	675	510
ECO NG LNX 200 G FGR	1450	220	400	850	430	760	550
ECO NG LNX 300 G FGR	1600	240	550	1000	500	780	550
ECO NG LNX 400 G FGR	1850	210	590	1150	620	875	610
ECO NG LNX 560 G FGR	GET SUPPORT FROM THE SALES DEPARTMENT						
ECO NG LNX 670 G FGR							
ECO NG LNX 720 G FGR							
ECO NG LNX 1150 G FGR							

	ØP	ØP1	M	ØD	ØD1	ØD2	ØD3
ECO NG LNX 90 G FGR	18	18	275	218	226	220	180
ECO NG LNX 120 G FGR	18	18	275	218	226	220	180
ECO NG LNX 200 G FGR	18	18	275	248	254	250	210
ECO NG LNX 300 G FGR	22	18	335	302	310	250	210
ECO NG LNX 400 G FGR	22	18	400	358	367	250	210
ECO NG LNX 560 G FGR	GET SUPPORT FROM THE SALES DEPARTMENT						
ECO NG LNX 670 G FGR							
ECO NG LNX 720 G FGR							
ECO NG LNX 1150 G FGR							

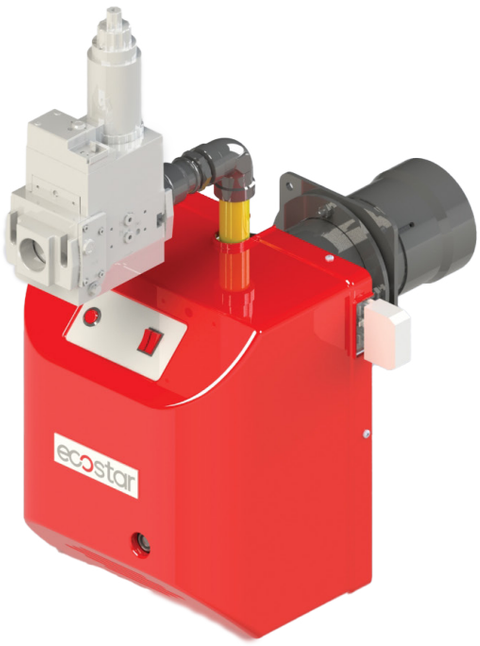
ONE STAGE SQUARE GAS BURNERS



TWO STAGE SQUARE GAS BURNERS



One Stage Square Gas Burners



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SPECIFICATIONS

- Single-stage operation,
- Optimum fuel / air mixture with special gas nozzle,
- Compact design and operation at low noise levels,
- Ionization flame control,
- Sliding flange for connection to different boiler types,
- Easy access to all equipment without dismounting the burner from the boiler,
- Adequate gas supply control with minimum gas pressurestat,
- Combustion air control with air pressurestat,
- Easy installation and operation.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG GAS CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 1.0 G C 1	8.600	43.000	10	50	1,04	5,21	0,38	1,91	0,11	1N 240
ECO 1.0 G C 1 a	8.600	51.600	10	60	1,04	6,25	0,76	3,82	0,11	1N 240
ECO 1.0 G C 1 b	17.200	73.100	20	85	2,08	8,86	1,76	4,82	0,11	1N 240
ECO 1.0 G C 1 c	17.200	86.000	20	100	2,08	10,42	2,76	5,82	0,11	1N 240
ECO 2.0 G C 1	43.000	129.000	50	150	5,21	15,64	1,91	5,73	0,11	1N 240
ECO 2.0 G C 1a	60.200	172.000	70	200	7,30	20,85	2,68	7,64	0,11	1N 240
ECO 2.0 G C 1b	77.400	215.000	90	250	9,38	26,06	3,44	9,56	0,11	1N 240
ECO 2.0 G C 1c	103.200	301.000	120	350	12,51	36,48	4,59	13,38	0,15	1N 240

* Net calorific value : H Natural Gas : 8250 kcal /Nm³

Product Specifications Tables

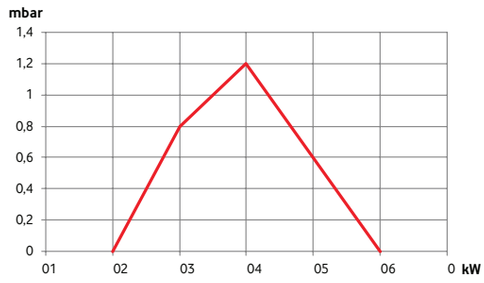
SPECIFICATIONS	ECO 1.0 G C 1	ECO 1.0 G C 1 a	ECO 1.0 G C 1 b	ECO 1.0 G C 1 c
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Adjustable flame tube extension	✓	✓	✓	✓
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Flame control	İO	İO	İO	İO
Ignition	DA	DA	DA	DA
Sliding boiler connection flange	✓	✓	✓	✓
7 pin power supply and first stage socket	✓	✓	✓	✓
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP20	IP20

SPECIFICATIONS	ECO 2.0 G C 1	ECO 2.0 G C 1 a	ECO 2.0 G C 1 b	ECO 2.0 G C 1 c
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Adjustable flame tube extension	✓	✓	✓	✓
Gas Valve	✓	✓	✓	✓
Minimum gas pressure switch	✓	✓	✓	✓
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✓	✓	✓	✓
Flame control	İO	İO	İO	İO
Ignition	DA	DA	DA	DA
Sliding boiler connection flange	✓	✓	✓	✓
7 pin power supply and first stage socket	✓	✓	✓	✓
Complies with TS EN 676 A2 and 2016/426/EC GAR	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP20	IP20

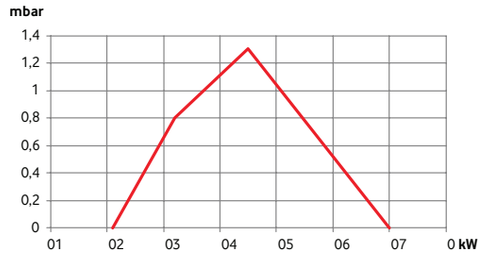
✗	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
One Stage

ECO 1.0 G C 1



ECO 1.0 G C 1a



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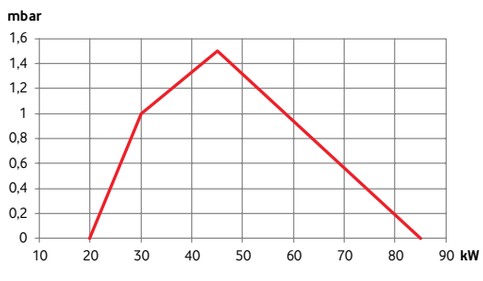
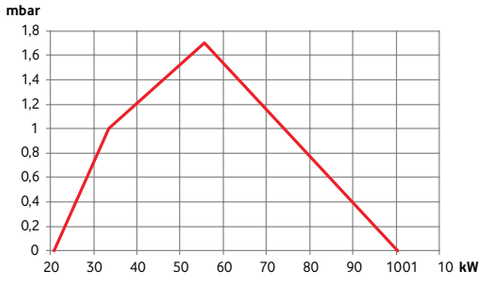
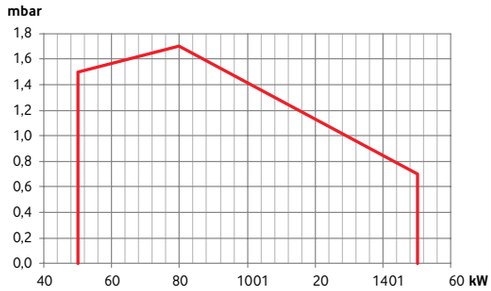


ECO 1.0 G C 1c



ECO 2.0 G C 1



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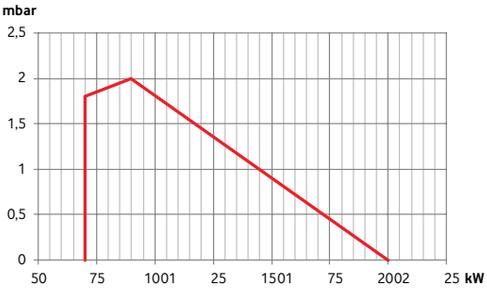

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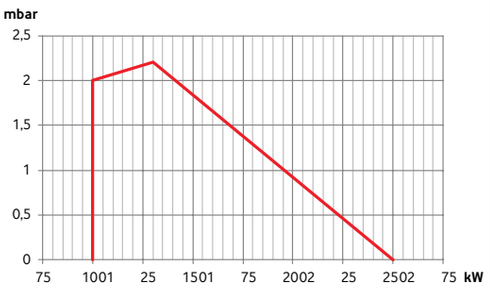
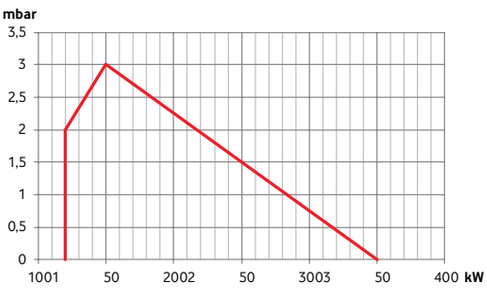
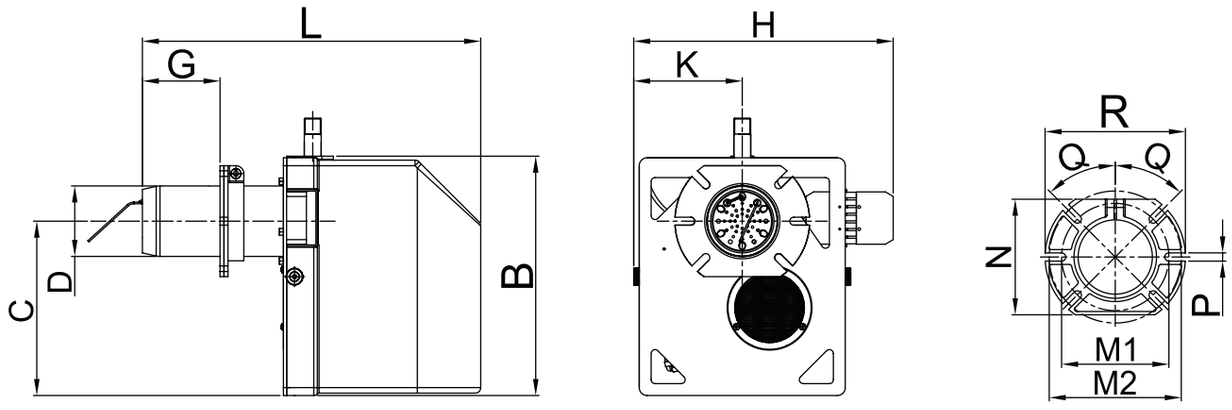


ECO 2.0 G C 1c



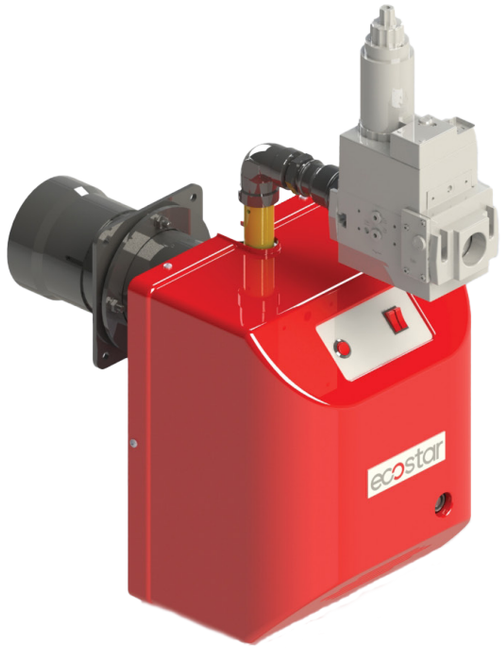
Dimensions Tables



	L	Gmin	Gmax	H	K	B	C
ECO 1.0 G	430	50	125	330	138	350	220
ECO 2.0 G	625	80	250	396	172	455	295

	D	M1	M2	N	R	P	Q
ECO 1.0 G	89	130	160	140	170	10	45
ECO 2.0 G	134	195	220	185	230	10	45

Two Stage Square Gas Burners



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SPECIFICATION

- Two-stage operation,
- Optimum fuel / air mixture with special gas nozzle,
- Compact design and operation at low noise levels,
- Ionization flame control,
- Sliding flange for connection to different boiler types,
- Automatic control equipment of the burner according to European standard EN-298,
- Easy access to all equipment without dismounting the burner from the boiler,
- Adequate gas supply control with minimum gas pressurestat,
- Combustion air control with air pressurestat,
- Easy installation and operation.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG GAS CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm³/h	Max. Nm³/h	Min. Nm³/h	Max. Nm³/h	kW	VAC
ECO 2.0 G C2	43.000	129.000	50	150	5,21	15,64	1,91	5,73	0,11	1N240
ECO 2.0 G C2a	60.200	172.000	70	200	7,30	20,85	2,68	7,64	0,11	1N240
ECO 2.0 G C2b	86.000	215.000	100	250	10,42	26,06	3,82	9,56	0,11	1N240
ECO 2.0 G C2c	103.200	301.000	120	350	12,51	36,48	4,59	13,38	0,15	1N240
ECO 30.0 G C2	86.000	309.600	100	360	10,42	37,53	3,82	13,76	0,25	1N240
ECO 30.0 G C2a	129.000	387.000	150	450	15,64	46,91	5,73	17,20	0,25	1N240
ECO 30.0 G C2b	146.200	473.000	170	550	17,72	57,33	6,50	21,02	0,55	1N240
ECO 30.0 G C2c	163.400	533.200	190	620	19,81	64,63	7,26	23,70	0,55	1N240

* Net calorific value : H Natural Gas : 8250 kcal /Nm³

Product Specifications Tables

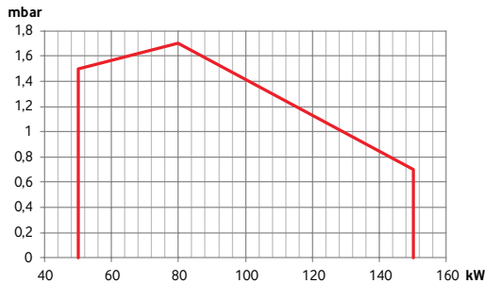
SPECIFICATIONS	ECO2.0GC2	ECO2.0GC2a	ECO2.0GC2b	ECO2.0GC2c
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Adjustable flame tube extension	✔	✔	✔	✔
Gas Valve	✔	✔	✔	✔
Minimum gas pressure switch	✔	✔	✔	✔
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✔	✔	✔	✔
Flame control	İO	İO	İO	İO
Ignition	DA	DA	DA	DA
VPS Gas leak device	○	○	○	○
Sliding boiler connection flange	✔	✔	✔	✔
7 pin power supply and first stage socket	✔	✔	✔	✔
7 pin second stage connection socket	✔	✔	✔	✔
Complies with TS EN 676 A2 and 2016/426/EC GAR	✔	✔	✔	✔
Electrical protection class	IP20	IP20	IP20	IP20

SPECIFICATIONS	ECO30.0GC2	ECO30.0GC2a	ECO30.0GC2b	ECO30.0GC2c
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Adjustable flame tube extension	✔	✔	✔	✔
Gas Valve	✔	✔	✔	✔
Minimum gas pressure switch	✔	✔	✔	✔
Maximum gas pressure switch	○	○	○	○
Air pressure switch	✔	✔	✔	✔
Flame control	İO	İO	İO	İO
Ignition	DA	DA	DA	DA
VPS Gas leak device	○	○	○	○
Sliding boiler connection flange	✔	✔	✔	✔
7 pin power supply and first stage socket	✔	✔	✔	✔
7 pin second stage connection socket	✔	✔	✔	✔
Complies with TS EN 676 A2 and 2016/426/EC GAR	✔	✔	✔	✔
Electrical protection class	IP20	IP20	IP20	IP20

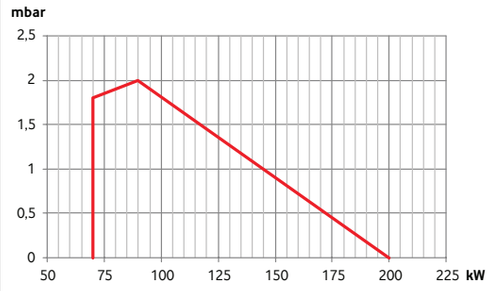
✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Two Stage

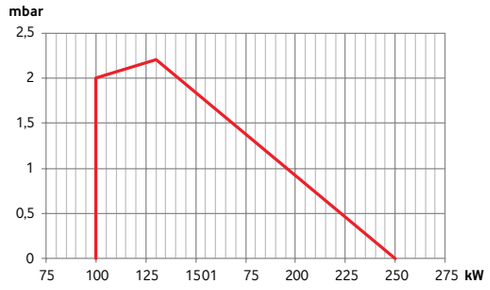
ECO 2.0 G C 2



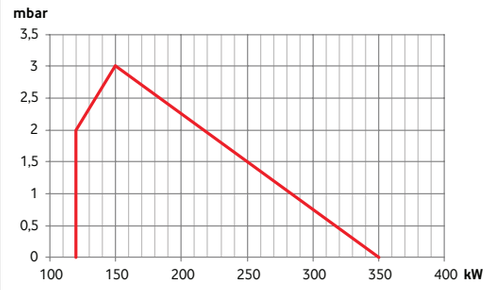
ECO 2.0 G C 2a



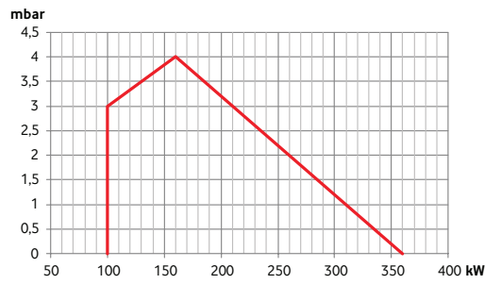
ECO 2.0 G C 2b



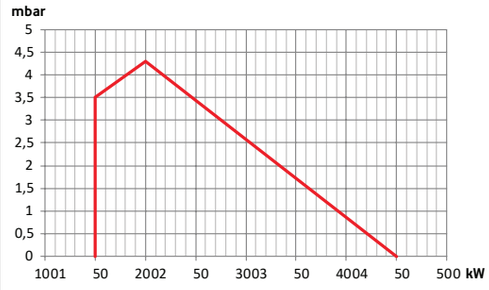
ECO 2.0 G C 2c



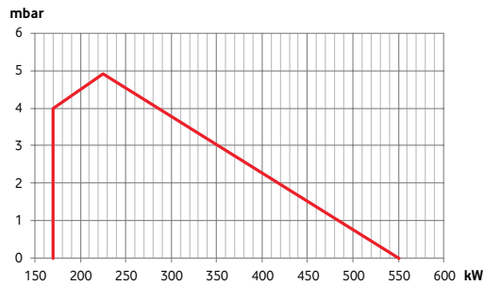
ECO 30.0 G C 2



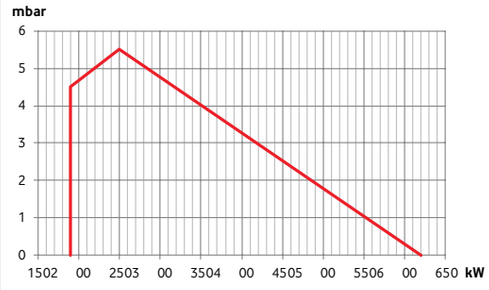
ECO 30.0 G C 2a



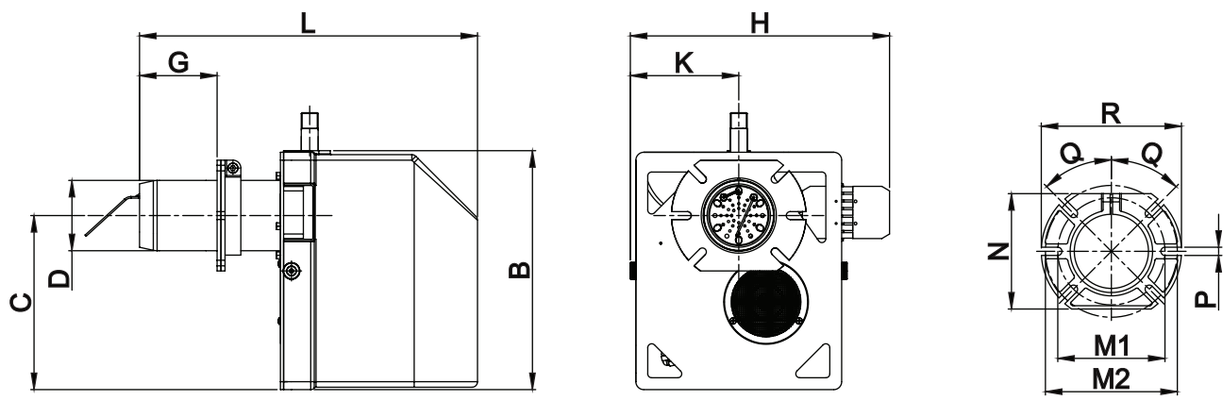
ECO 30.0 G C 2b



ECO 30.0 G C 2c



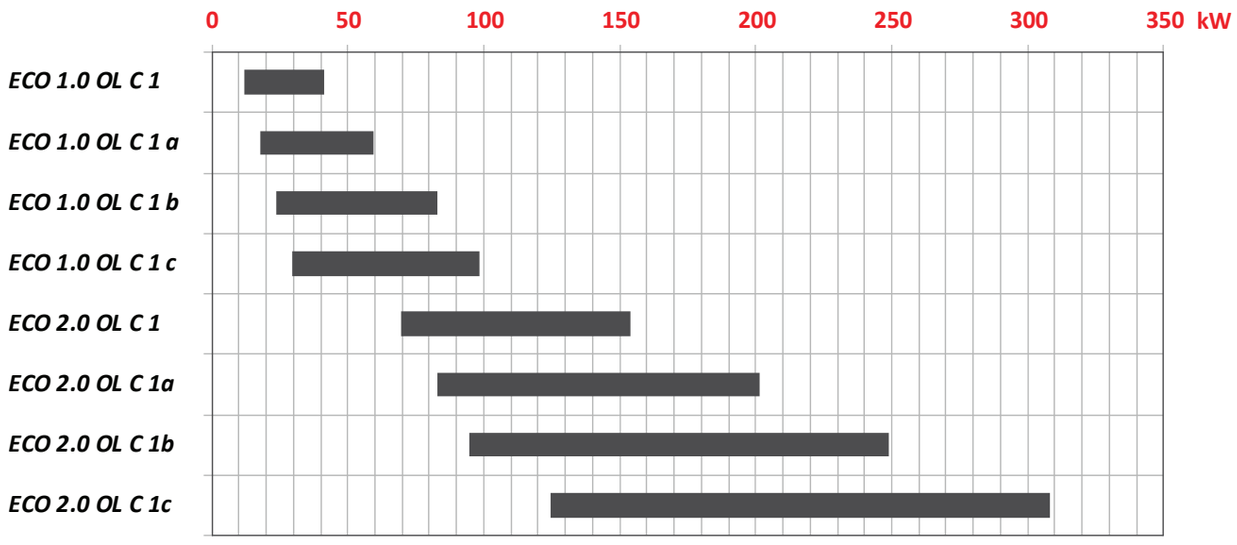
Dimensions Tables



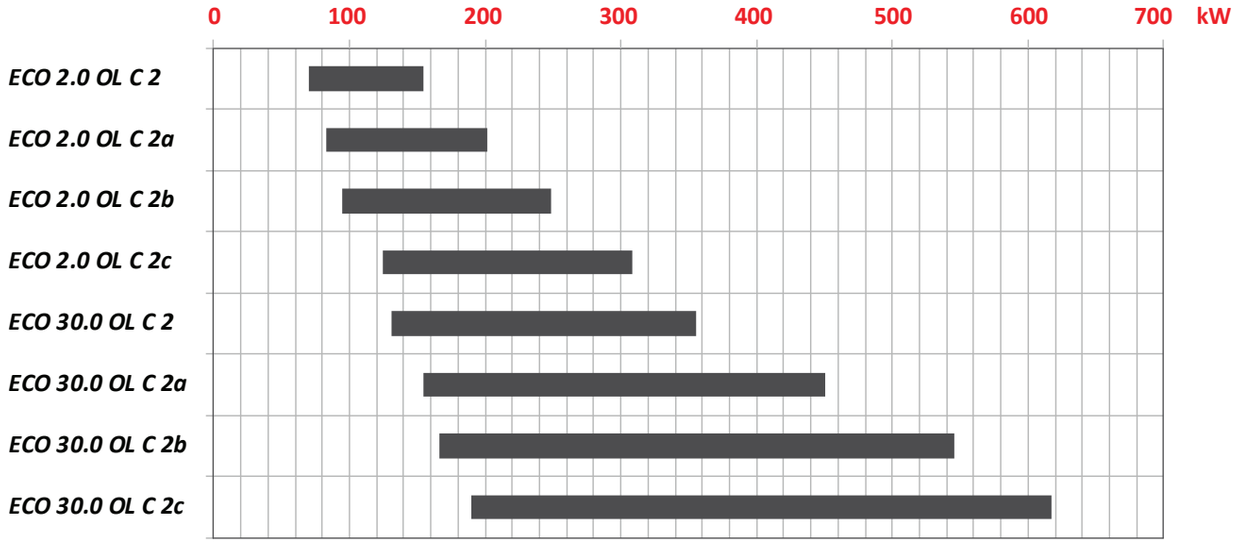
	L	Gmin	Gmax	H	K	B	C
ECO 2.0 G	625	80	250	396	172	455	295
ECO 30.0 G	700	100	270	455	202	515	350

	D	M1	M2	N	R	P	Q
ECO 2.0 G	134	195	220	185	230	10	45
ECO 30.0 G	153	195	220	185	230	10	45

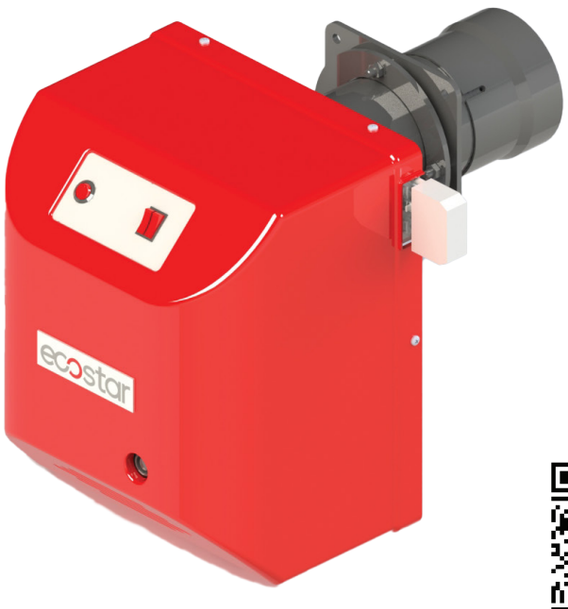
ONE STAGE SQUARE LIGHT OIL BURNERS



TWO STAGE SQUARE LIGHT OIL BURNERS



One Stage Square Light Oil Burners



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SPECIFICATION

- Optimum fuel / air mixture with special gas nozzle,
- Operation by atomizing the fuel mechanically with high pressure from nozzle,
- Compact design and operation at low noise levels,
- Single-stage operation,
- Photocell flame control,
- Sliding flange for connection to different boiler types,
- Automatic control equipment of the burner according to European standard EN-298,
- Easy access to all equipment without dismounting the burner from the boiler,
- Combustion air control with air pressurestat,
- Easy installation and operation.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	VAC
ECO 1.0 OL C 1	10.200	35.700	12	42	1,00	3,50	0,15	1N 240
ECO 1.0 OL C 1 a	15.300	51.000	18	59	1,50	5,00	0,15	1N 240
ECO 1.0 OL C 1 b	20.400	71.400	24	83	2,00	7,00	0,15	1N 240
ECO 1.0 OL C 1 c	25.500	84.660	30	98	2,50	8,30	0,15	1N 240
ECO 2.0 OL C 1	59.976	132.600	70	154	5,88	13,00	0,15	1N 240
ECO 2.0 OL C 1a	71.400	173.400	83	202	7,00	17,00	0,15	1N 240
ECO 2.0 OL C 1b	81.600	214.200	95	249	8,00	21,00	0,25	1N 240
ECO 2.0 OL C 1c	107.100	265.200	125	308	10,50	26,00	0,25	1N 240

* Net Calorific value : H Light Oil : 10200 kcal/kg

Product Specifications Tables

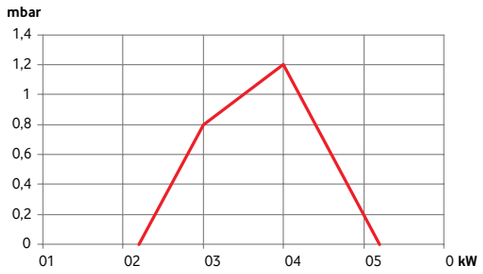
SPECIFICATIONS	ECO1.00LC1	ECO1.00LC1a	ECO1.00LC1b	ECO1.00LC1c
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Flame control	F	F	F	F
Ignition	DA	DA	DA	DA
Liquid fuel pumps and fuel hoses	✔	✔	✔	✔
Different flame tube length	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○
7 pin power supply and first stage socket	✔	✔	✔	✔
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔
Electrical protection class	IP20	IP20	IP20	IP20

SPECIFICATIONS	ECO2.00LC1	ECO2.00LC1a	ECO2.00LC1b	ECO2.00GL1c
Control Type	**1K**	**1K**	**1K**	**1K**
Air flow adjustment	M	M	M	M
Flame control	F	F	F	F
Ignition	DA	DA	DA	DA
Liquid fuel pumps and fuel hoses	✔	✔	✔	✔
Different flame tube length	○	○	○	○
Fuel Preparation Stations (Light Oil Station)	○	○	○	○
7 pin power supply and first stage socket	✔	✔	✔	✔
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔
Electrical protection class	IP20	IP20	IP20	IP20

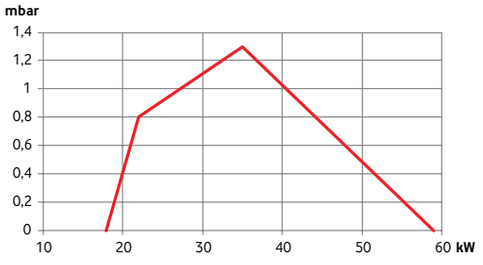
✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
One Stage

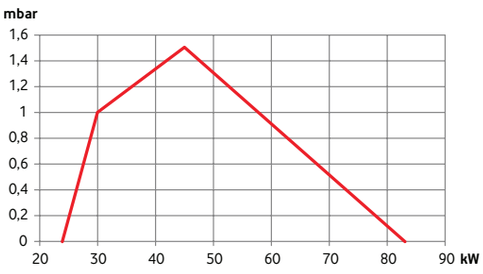
ECO 1 OLC 1



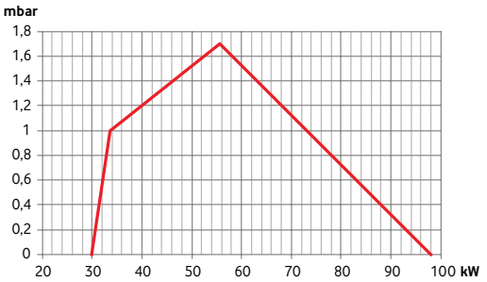
ECO 1 OLC 1a



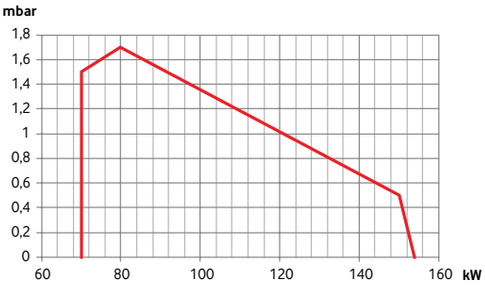
ECO 1 OLC 1b



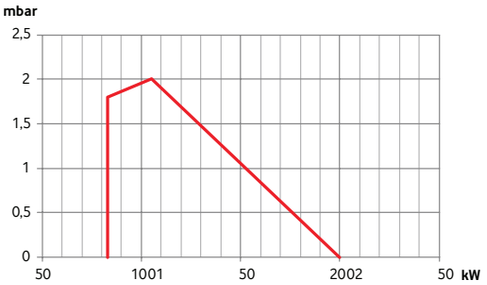
ECO 1 OLC 1c



ECO 2 OLC 1



ECO 2 OLC 1a



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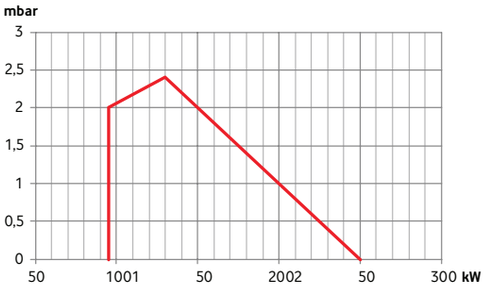
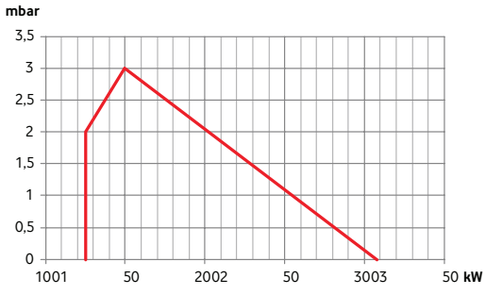
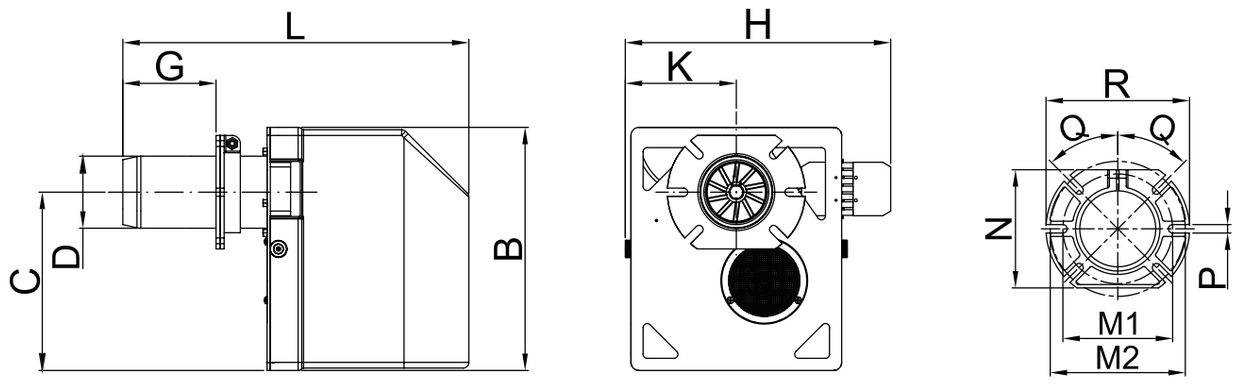


ECO 2 OLC 1c



Dimensions Tables



	L	Gmin	Gmax	H	K	B	C
ECO 1.0 O(L)	430	50	125	330	138	300	220
ECO 2.0 O(L)	625	80	250	396	172	400	295

	D	M1	M2	N	R	P	Q
ECO 1.0 O(L)	89	130	160	140	170	10	45
ECO 2.0 O(L)	134	195	220	185	230	10	45

Two Stage Square Light Oil Burners

Please read the code to download our e-Catalog.

SPECIFICATION

- Optimum fuel / air mixture with special gas nozzle,
- Compact design and operation at low noise levels,
- Two-stage operation,
- Photocell flame control,
- Sliding flange for connection to different boiler types,
- Automatic control equipment of the burner according to European standard EN-298,
- Easy access to all equipment without dismounting the burner from the boiler,
- Combustion air control with air pressurestat,
- Easy installation and operation.

Capacity Tables

BURNER TYPE	CAPACITY		CAPACITY		LIGHT OIL CONSUMPTION		FAN MOTOR POWER	MAIN SUPPLY
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. kg/h	Max. kg/h	kW	VAC
ECO 2.0 OL C2	59.976	132.600	70	154	6	13	0,15	1N 240
ECO 2.0 OL C2a	71.400	173.400	83	202	7	17	0,15	1N 240
ECO 2.0 OL C2b	81.600	214.200	95	249	8	21	0,25	1N 240
ECO 2.0 OL C2c	107.100	265.200	125	308	11	26	0,25	1N 240
ECO 30.0 OL C2	112.200	306.000	130	356	11	30	0,25	1N 240
ECO 30.0 OL C2a	132.600	387.600	154	451	13	38	0,55	1N 240
ECO 30.0 OL C2b	142.800	469.200	166	546	14	46	0,55	1N 240
ECO 30.0 OL C2c	163.200	530.400	190	617	16	52	0,55	1N 240

* Net Calorific value H Light Oil : 10200 kcal/kg

Product Specifications Tables

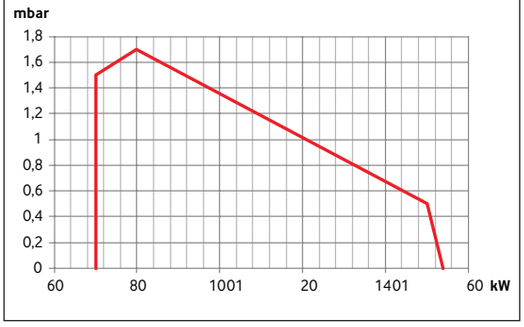
SPECIFICATIONS	ECO2.00LC2	ECO2.00LC2a	ECO2.00LC2b	ECO2.00LC2c
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Ignition	DA	DA	DA	DA
Pilot gas valve	O	O	O	O
Flame control	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Different flame tube length	O	O	O	O
Fuel Preparation Stations (Light Oil Station)	O	O	O	O
7 pin power supply and first stage socket	✓	✓	✓	✓
7 pin second stage connection socket	✓	✓	✓	✓
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP20	IP20

SPECIFICATIONS	ECO30.00LC2	ECO30.00LC2a	ECO30.00LC2b	ECO30.00LC2c
Control Type	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM
Ignition	DA	DA	DA	DA
Pilot gas valve	O	O	O	O
Flame control	F	F	F	F
Liquid fuel pumps and fuel hoses	✓	✓	✓	✓
Handling Shaft for Servicing	✓	✓	✓	✓
Different flame tube length	O	O	O	O
Fuel Preparation Stations (Light Oil Station)	O	O	O	O
7 pin power supply and first stage socket	✓	✓	✓	✓
7 pin second stage connection socket	✓	✓	✓	✓
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✓	✓	✓	✓
CE Declaration of Conformity	✓	✓	✓	✓
Electrical protection class	IP20	IP20	IP20	IP20

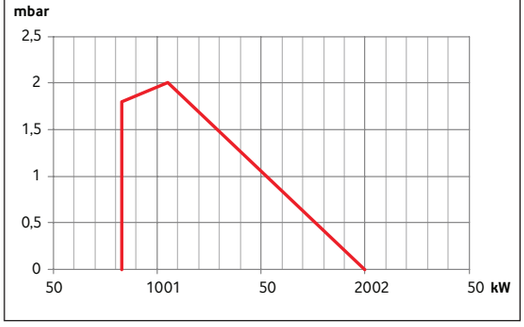
✗	Not Included / N/A	M	Manual
O	Optional	SM	Servomotor
✓	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams
Two Stage

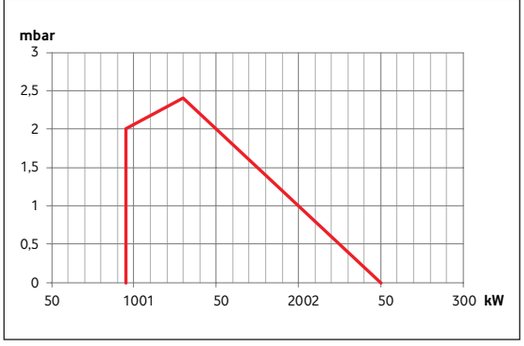
ECO 2 OLC 2



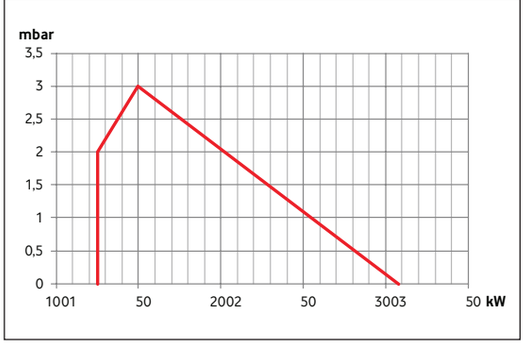
ECO 2 OLC 2a



ECO 2 OLC 2b

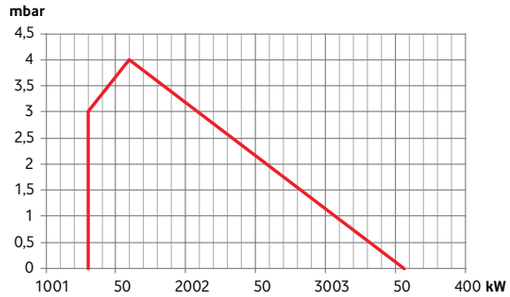


ECO 2 OLC 2c

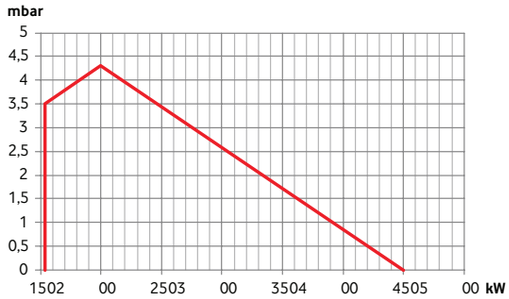


Back Pressure Diagrams
Two Stage

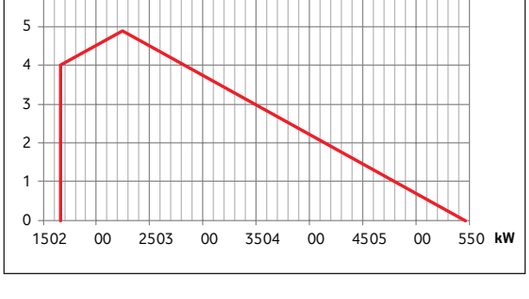
ECO 30 OLC 2



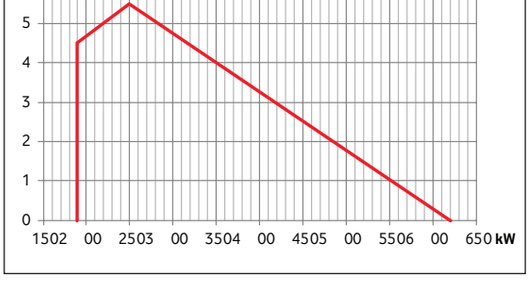
ECO 30 OLC 2a



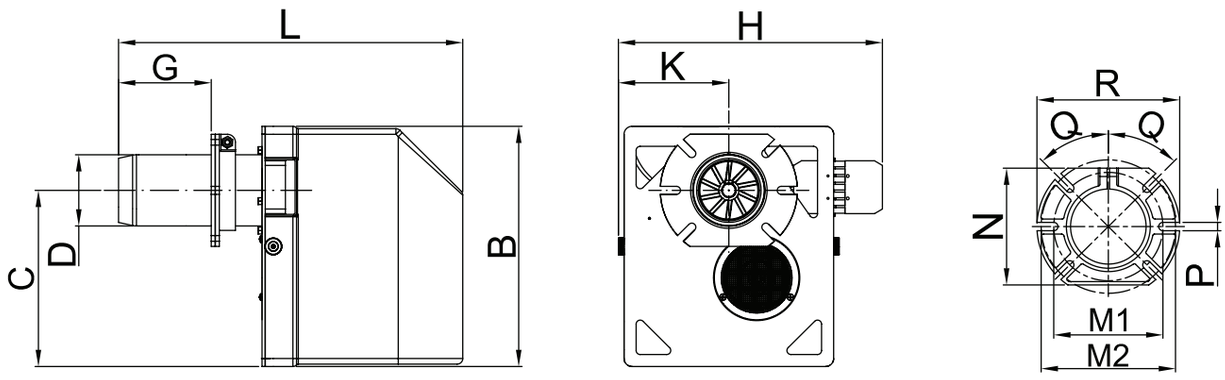
ECO 30 OLC 2b



ECO 30 OLC 2c

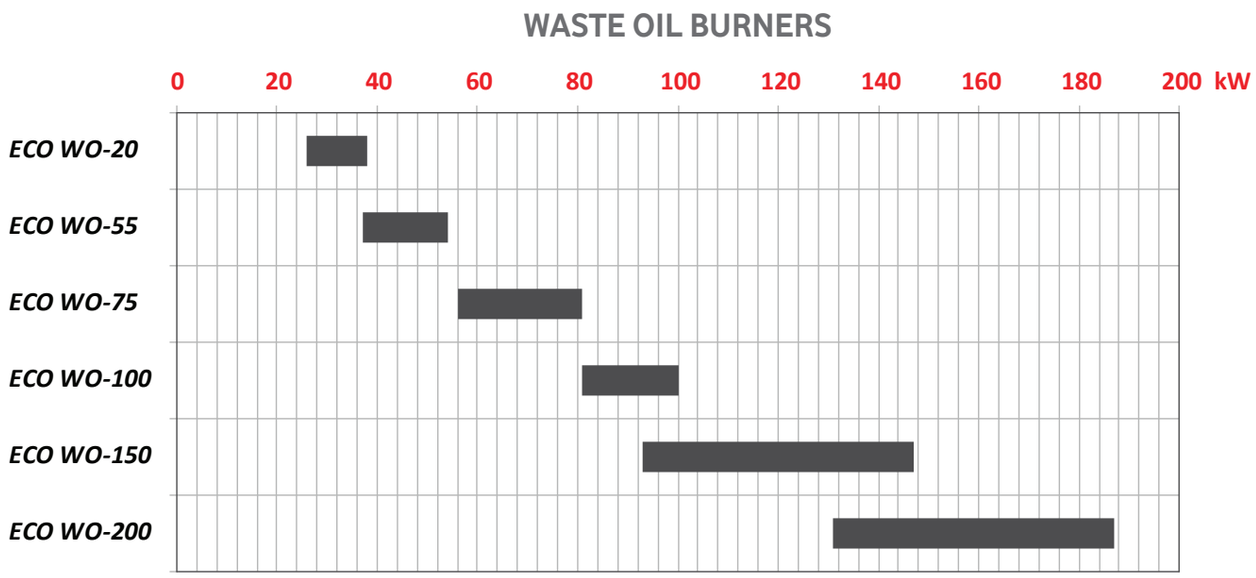


Dimensions Tables

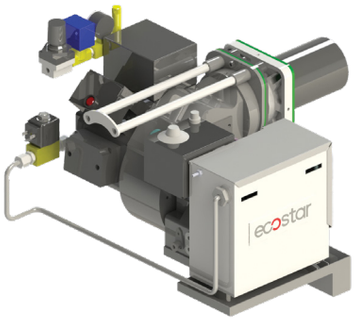


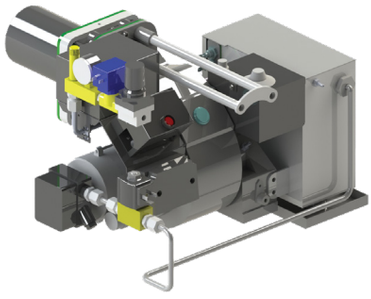
	L	Gmin	Gmax	H	K	B	C
ECO 2.0 O(L)	625	80	250	396	172	400	295
ECO 30.0 O(L)	700	100	270	455	202	460	350

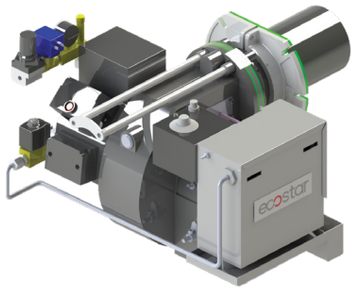
	D	M1	M2	N	R	P	Q
ECO 2.0 O(L)	134	195	220	185	230	10	45
ECO 30.0 O(L)	153	195	220	185	230	10	45


WASTE OIL BURNERS
0
20
40
60
80
100
120
140
160
180
200
kW
ECO WO-20
ECO WO-55
ECO WO-75
ECO WO-100
ECO WO-150
ECO WO-200

Waste Oil Burners







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SPECIFICATIONS

- Operation with light oil and waste oil,
- Two-stage operation,
- Optimum fuel / air mixture with special combustion nozzle,
- Sliding flange for connection to different boiler types,
- Direct ignition,
- Automatic control equipment of the burner according to European standard EN 267,
- Easy access to all equipment without dismounting the burner from the boiler,
- Specially designed, compact, 1kW internal fuel heater,
- Safety-operation and limit thermostat for temperature control,
- 3-stage fuel safety with 2-stage float in the tank and overflow float in the overflow tank,
- Easy installation and operation.

AREAS OF APPLICATION

- Hot water boilers,
- Hot air generators,
- Industrial process heating.

Product Specifications and Capacity Tables

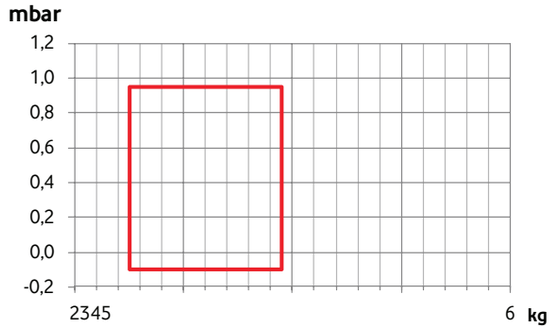
BURNER TYPE	FUEL CONSUMPTION		BURNER CAPACITY		MOTOR POWER	VOLTAGE 50 Hz	HEATER POWER
	Min. kg/h	Max. kg/h	Min. kW	Max. kW	kW	V	kW
ECO WO-20	2,5	3,9	26,00	38,00	0,11	3N 400	1
ECO WO-55	3,6	5,2	37,00	54,00	0,11	3N 400	1
ECO WO-75	5,4	7,8	56,00	81,00	0,15	3N 400	1
ECO WO-100	7,8	9,6	81,00	100,00	0,15	3N 400	1
ECO WO-150	8,9	14,1	93,00	147,00	0,15	3N 400	1
ECO WO-200	12,7	18	131,00	187,00	0,15	3N 400	1

SPECIFICATIONS	ECO WO-20	ECO WO-55	ECO WO-75	ECO WO-100	ECO WO-150	ECO WO-200
Control Type	**2K**	**2K**	**2K**	**2K**	**2K**	**2K**
Air flow adjustment	SM	SM	SM	SM	SM	SM
Ignition system	DA	DA	DA	DA	DA	DA
Flame control	İO	İO	İO	İO	İO	İO
Liquid fuel pumps and fuel hoses	✔	✔	✔	✔	✔	✔
Handling Shaft for Servicing	✔	✔	✔	✔	✔	✔
Fuel heating system	✔	✔	✔	✔	✔	✔
Different flame tube length	○	○	○	○	○	○
Fuel preparation station	✖	✖	✖	✖	○	○
TSE EN267+A1 Burners-Compatibility for Liquid Fuels	✔	✔	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔	✔	✔
Electrical protection class	IP40	IP40	IP40	IP40	IP40	IP40

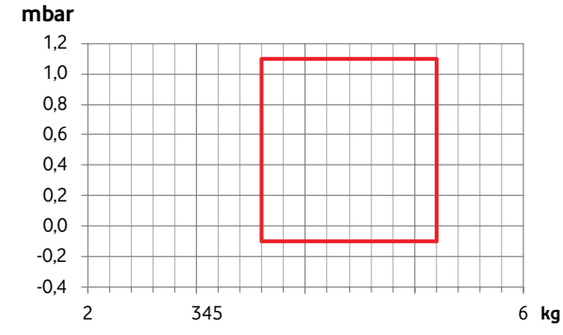
✖	Not Included / N/A	M	Manual
○	Optional	SM	Servomotor
✔	Included / Available	İO	Ionization
1K	Single Stage	F	Photocell
2K	Two Stage	DA	Direct Ignition
O	Modulating	PA	Pilot Ignition

Back Pressure Diagrams

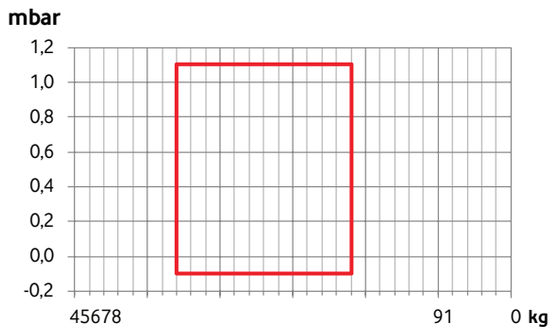
ECO WO-20



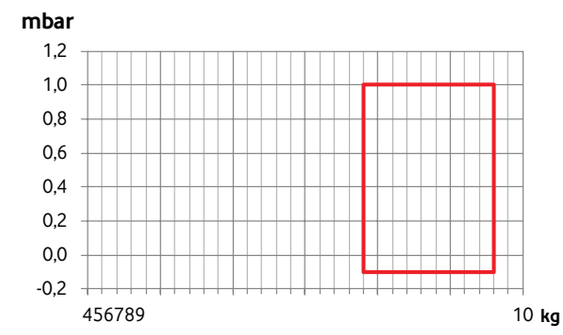
ECO WO-55



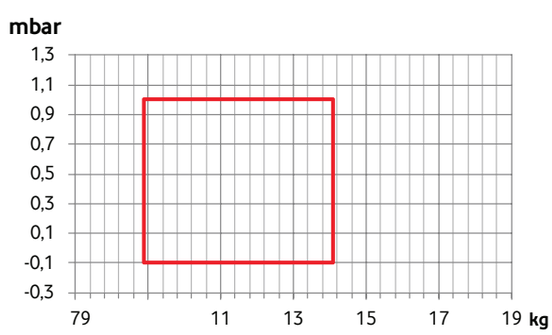
ECO WO-75



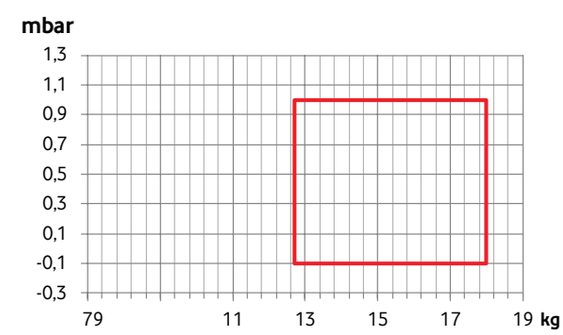
ECO WO-100



ECO WO-150

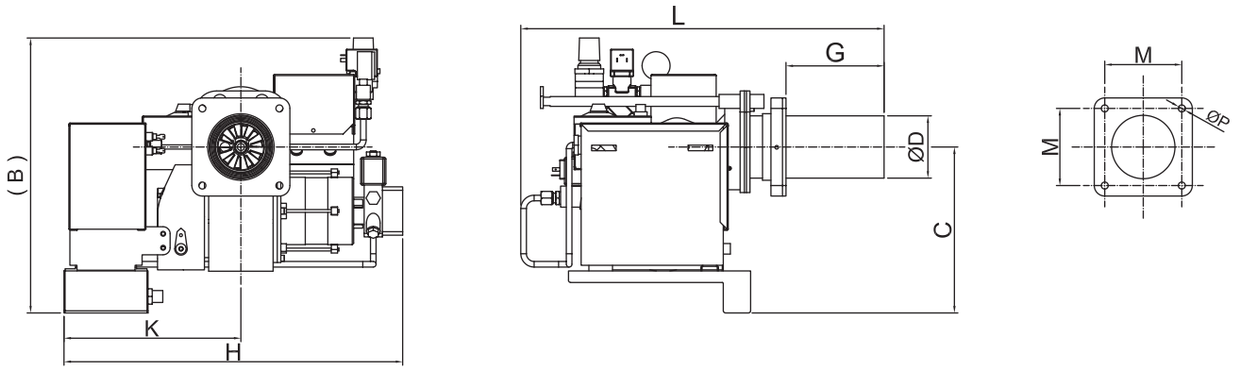


ECO WO-200

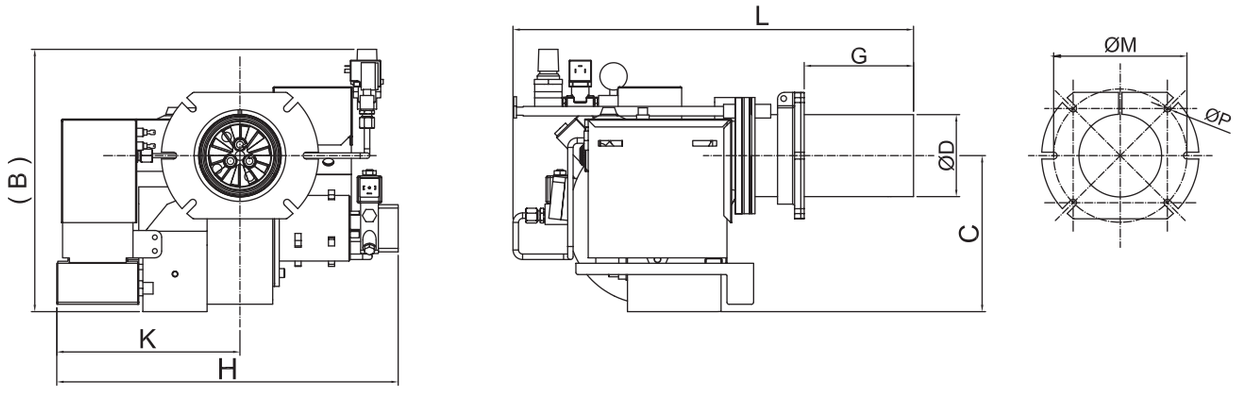


Dimensions Tables

ECO WO 20/55

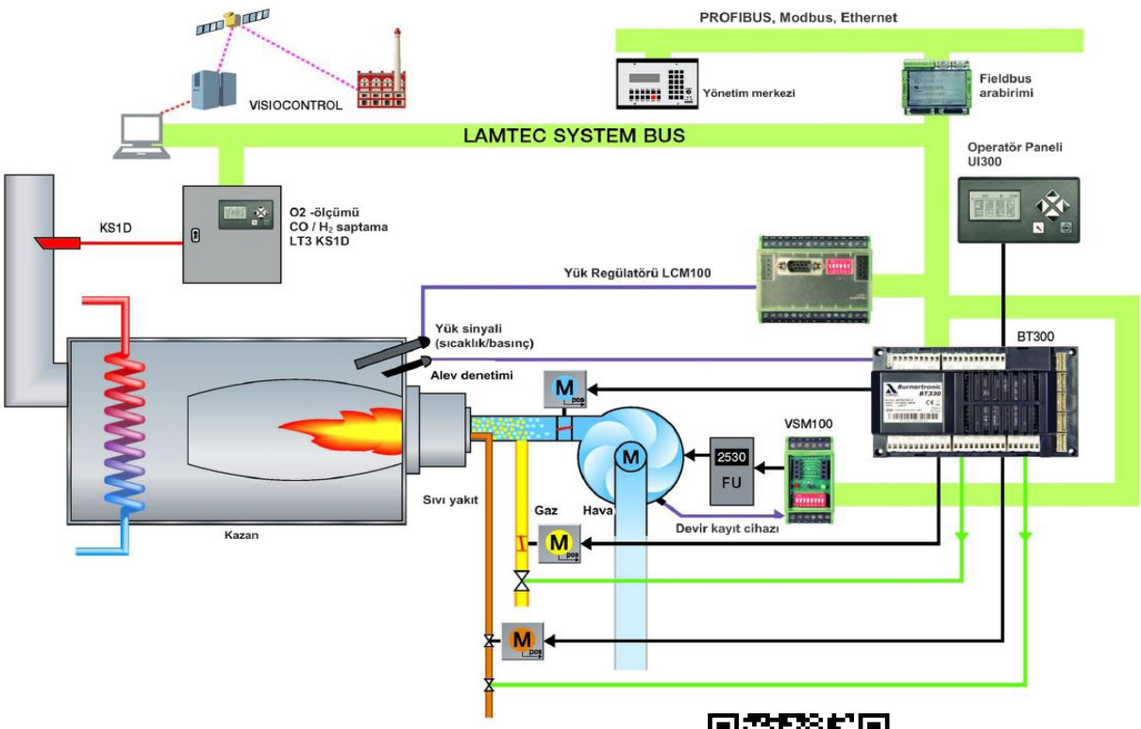


ECO WO 70/100/150/200



	L	Gmax	H	K	B	C	ØP	M	ØD
ECO WO 20/55	520	140	485	250	400	240	10	110	89
ECO WO 70/100/ 150/200	590	165	500	270	400	230	10	195	120

Electronic Air Fuel Control



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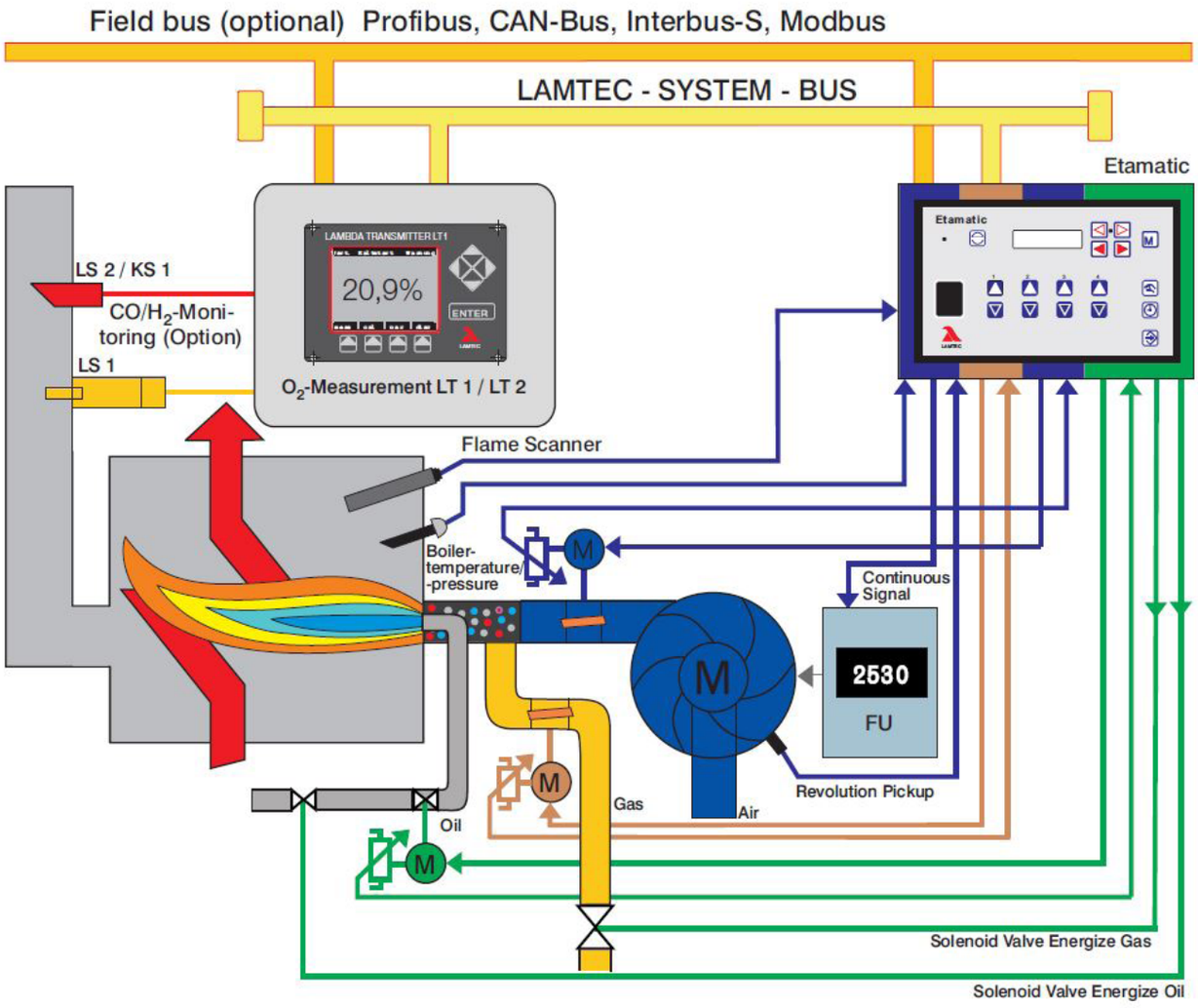
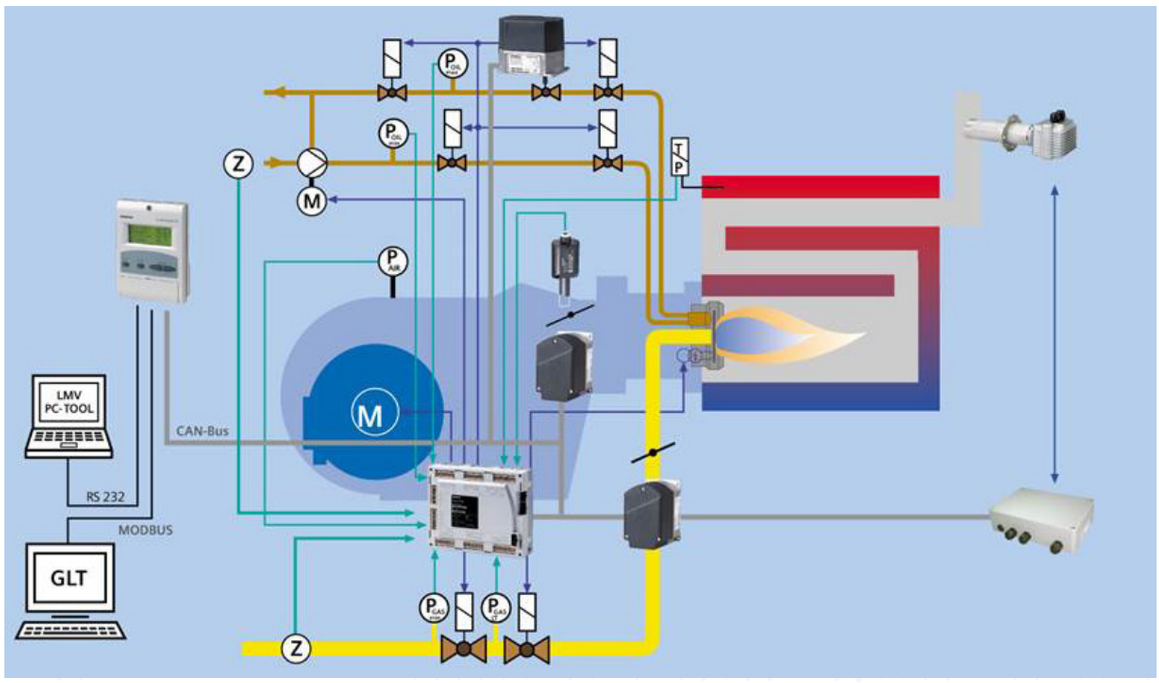
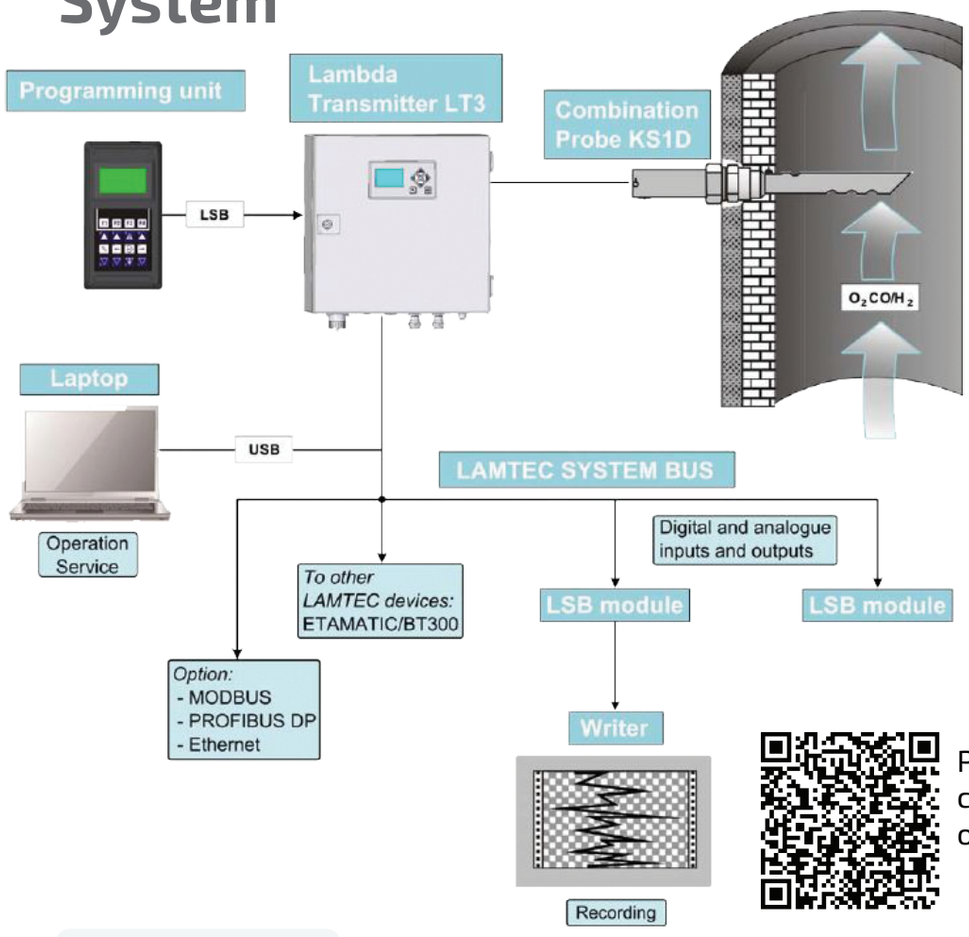
SPECIFICATIONS

- Allows controlling maximum 3 air, fuel actuators depending on the application
- Gas emission improved with precise air-fuel adjustment
- Energy saving
- Automatic improvement against combustion failures caused by varying barometric conditions with CO/O2 sensor connectivity
- Fan motor inverter connection
- Profibus/Modbus interface connection
- User-friendly menu with easy adjustment and the ability to view error histories.


Field bus (optional) Profibus, CAN-Bus, Interbus-S, Modbus
LAMTEC - SYSTEM - BUS
Etamatic
LAMBDA TRANSMITTER LT1
20,9%
ENTER
LS 2 / KS 1
CO/H2-Moni-
toring (Option)
LS 1
O2-Measurement LT 1 / LT 2
Flame Scanner
Boiler-
temperature/
-pressure
Continuous
Signal
2530
FU
Revolution Pickup
Gas
Air
Oil
Solenoid Valve Energize Gas
Solenoid Valve Energize Oil


LMV
PC-TOOL
CAN-Bus
RS 232
MODBUS
GLT

O2-CO Combustion Management System



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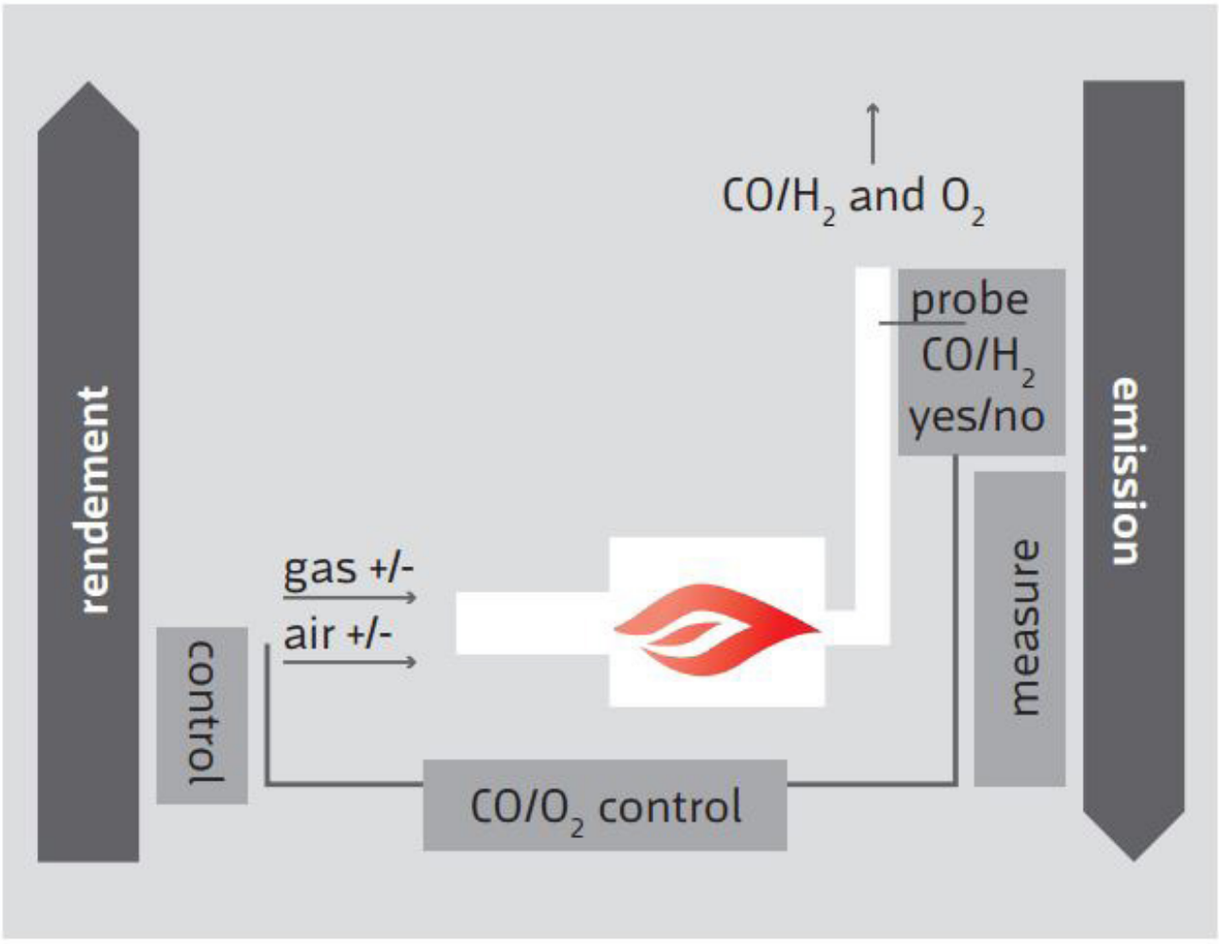
SPECIFICATIONS

- Micro-processor based combustion management system is a complicated system that optimizes the most suitable air/fuel ratio with oxygen and/or carbon monoxide trim controlled, closed control logic mechanism.
- O2-CO combustion management system aims at maximum combustion efficiency and minimum emission values. With the aid of flue-mount flue gas sensor and transmitters, it measures the O2 and CO amounts, and optimizes the combustion by taking into account the permitted emission values according to the boiler's heat demand.
- Advantages of the O2-CO combustion method system;
  - Optimized combustion not affected by seasonally changing barometric conditions,
  - Automatically controlled combustion with a combustion curve that is optimized in all operating conditions,
  - Provides more fuel savings with high combustion efficiency.

O2-CO COMBUSTION MANAGEMENT SYSTEM



Fan Speed Control

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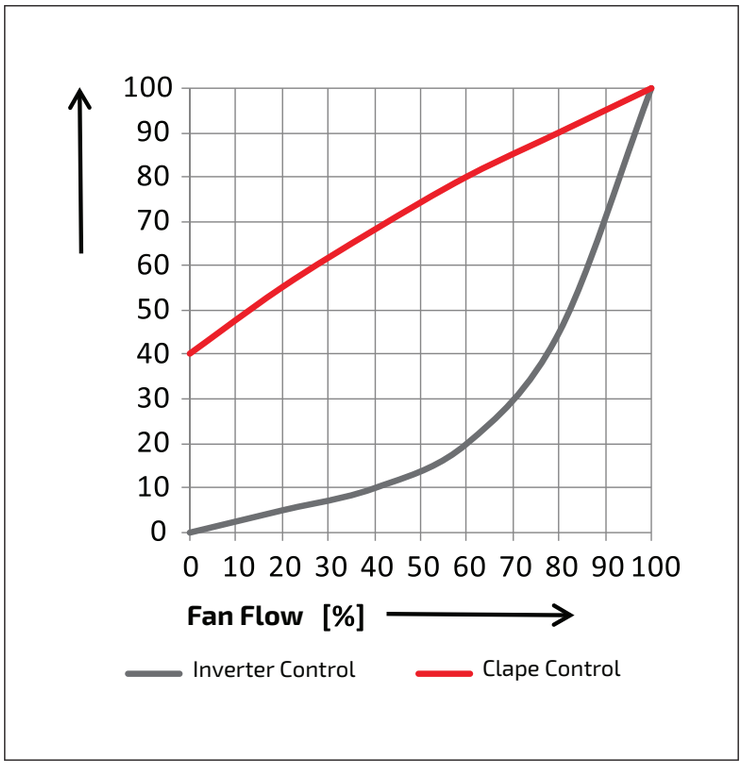
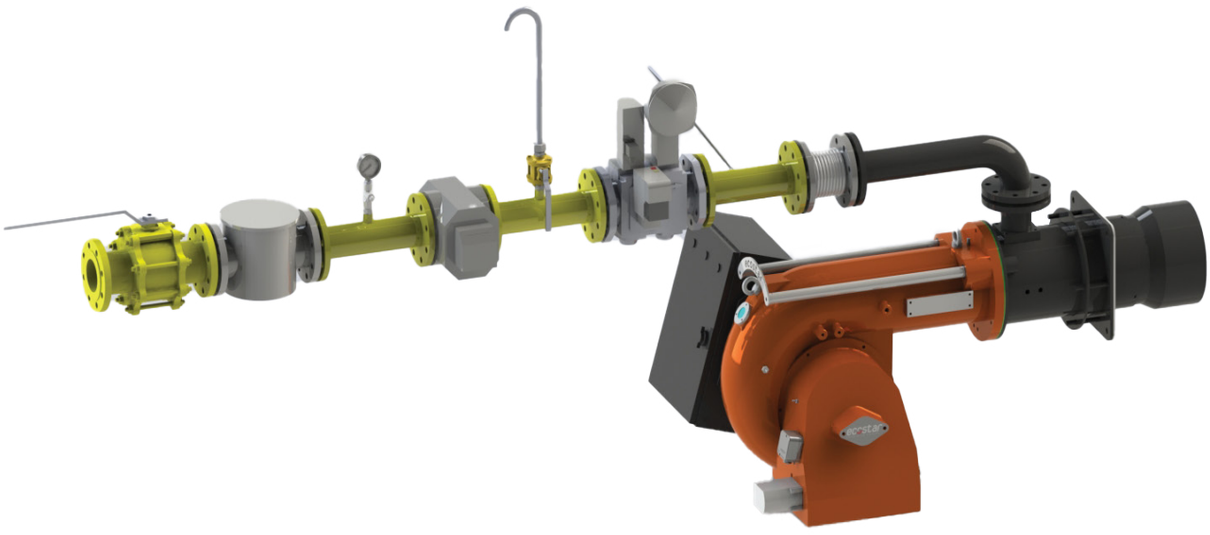
SPECIFICATIONS

- The inverter installed to the combustion air fan motor of the burner generates air as required by controlling the power supply frequency of the fan motor, and provides savings in energy costs. The frequency controlled systems pay for themselves within a few years.
- Advantages of the speed-controlled systems;
- Electric power savings,
- Extension of motor life with adjustable acceleration and deceleration,
- Low noise operation.

Back Pressure Diagrams



Gas Line



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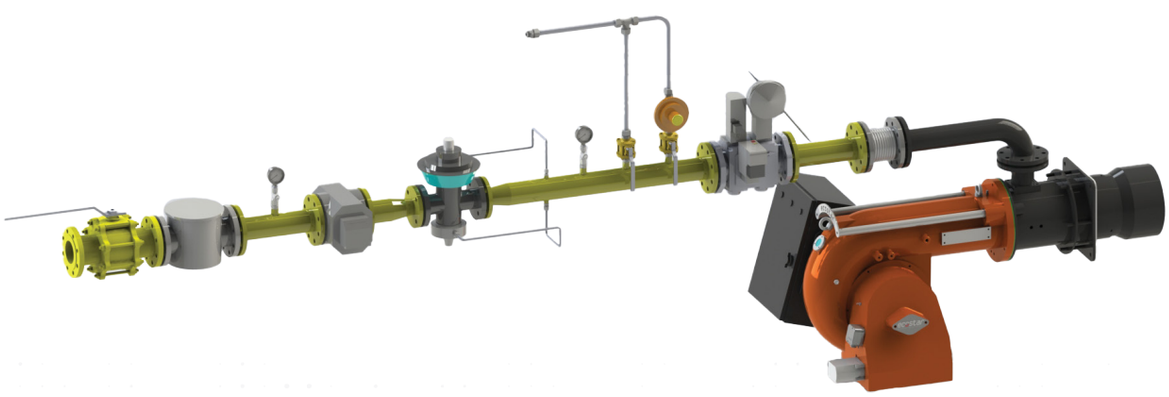
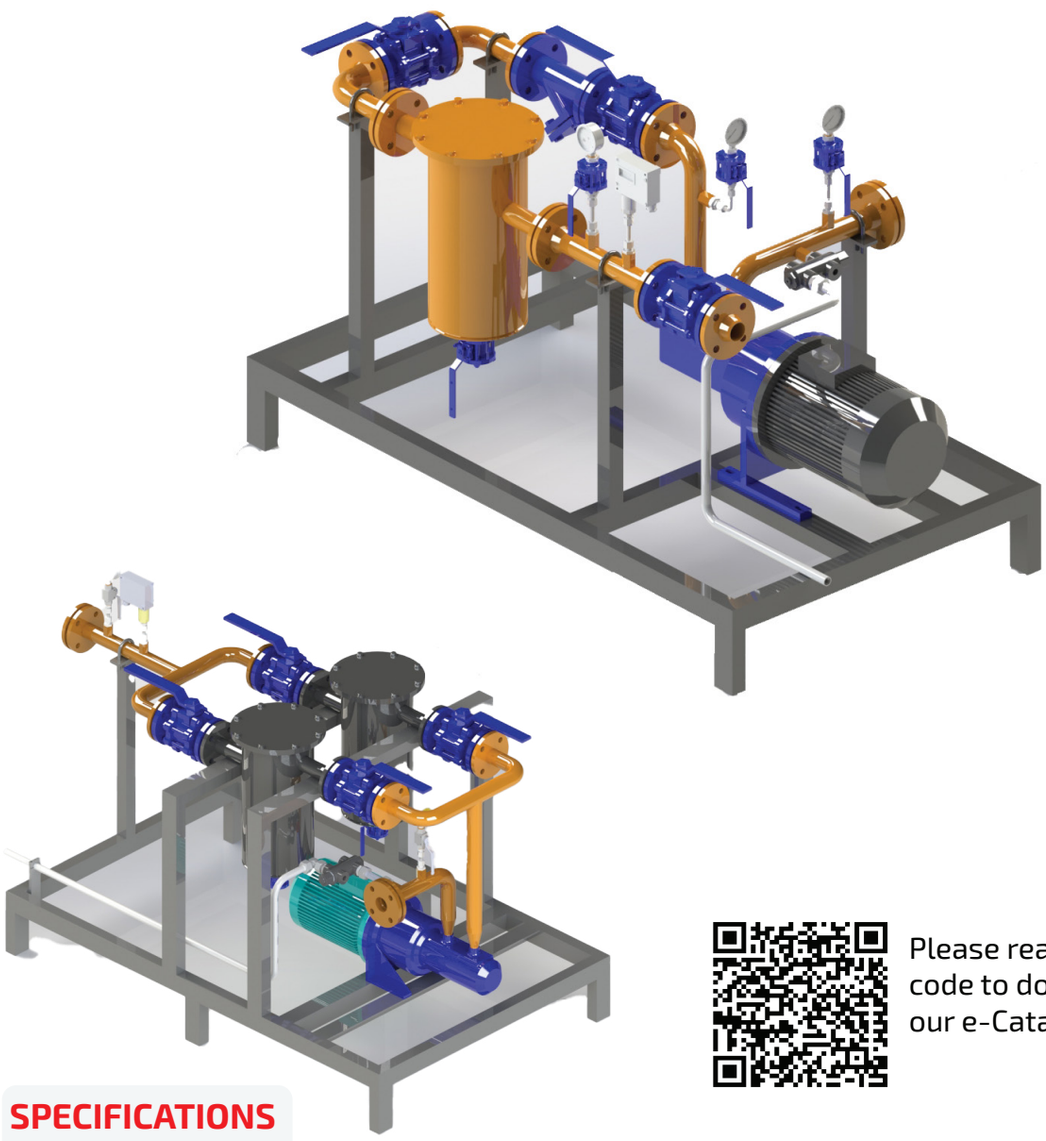
SPECIFICATIONS

- The gas line must be selected according to the operating conditions, burner capacity, and the operating pressure. It can be supplied as a disassembled gas line with optional accessories such as counter, gas leak device, etc. or as an assembled gas line.
- Flanged and threaded connections may differ depending on the capacity and gas pressure.



Light Oil Station



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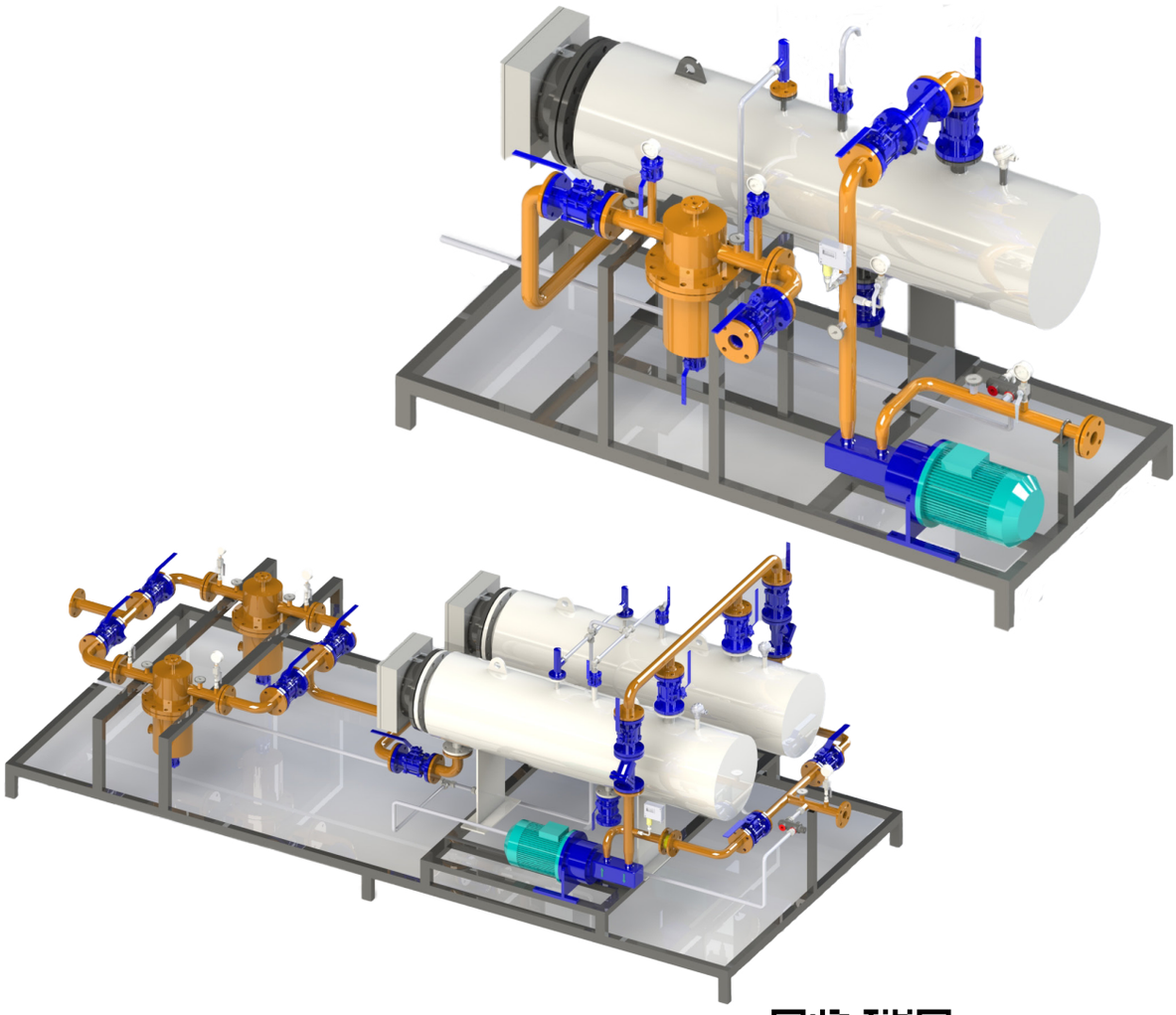
SPECIFICATIONS

- Optionally, there may be single or spare filter-pump systems. The systems with spares provide maintenance and operation advantages.
- Please contact our sales department for specially designed fuel stations suitable for process needs.

Heavy Oil station



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SPECIFICATIONS

- Optionally, there may be single or spare filter-pump-heat exchanger systems. The systems with spares provide maintenance and operation advantages.
- Please contact our sales department for specially designed fuel stations suitable for process needs.

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COMBUSTION SYSTEMS

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COMBUSTION SYSTEMS

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Head Office;
Esentepe mah. Milangaz Cad.
No: 75 Kat: 3 Monumento Plaza
Kartal / İstanbul / Türkiye

Phone: +90 216 442 9300(pbx)
Fax: +90 216 370 45 03
E-mail: info@ecostar.com.tr

Factory;
Türkgücü OSB Bülent Ecevit Bulvarı No: 11
Çorlu / Tekirdağ / Türkiye
Phone: +90 282 685 44 80/81

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