

# elco

## EK EVO

MONOBLOCK BURNERS

340 - 11200 kW



# MAIN CHARACTERISTICS OF THE RANGE

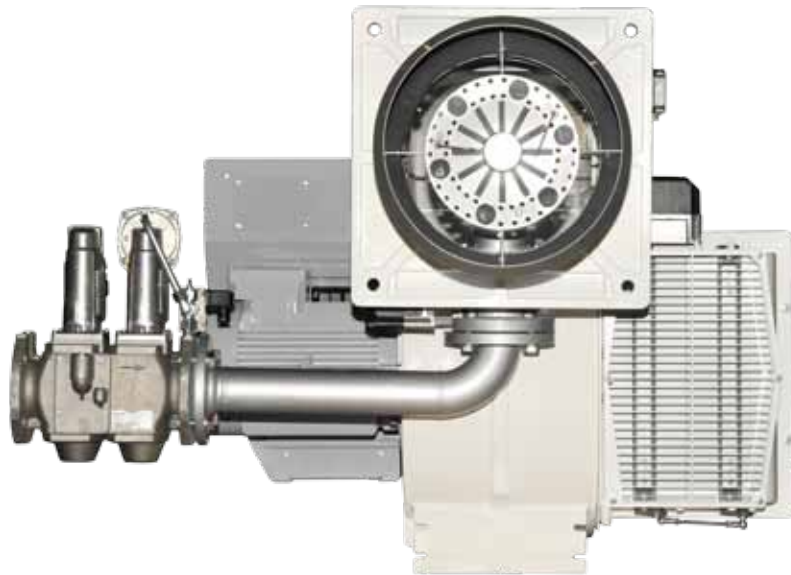
## Design

### Robust and professional

The design of the EKEVO® is the result of a successful synergy between ELCO key features and essential design.

The range EKEVO® introduces a brand new aluminium casting body and confirms the choice of ELCO about light colors and harmony of each shape.

Professionals will appreciate the flexibility of a 180° orientable air inlet, the compact switch box and the easy to clean glossy paint.



## Combustion

### Clean and steady

The standard all-purpose Low NOx Class 2 combustion head ensures a clean combustion with total application adaptability and great flame stability.

The Free Flame technology is a unique combustion process, capable to reach the NOx levels required by the most severe standards for all types of combustion chambers, whether they are 3-pass or reverse pass boilers.

## Flexibility

### A total advantage

The EKEVO® are characterized by their total flexibility of installation; they have been designed to be installed in different ways: up-firing, down-firing, upside-down or side-to-side (twin chamber boilers).

Options and configurations have been foreseen in order to fulfill any application need.



# Communication

## User-friendly and universal

Elcogram: a universal language based on symbols and numerical data. The burner setup and the reading of the available information about the EKEVO® operation are possible through a backlit display with a 5-buttons keyboard.

This user-friendly interface, already appreciated in former ELCO product ranges, assures quick commissioning operations and total functional parameters understanding, as ever before.



# Electronics

## Easy and comprehensive

All EKEVO® models are fully electronically controlled and they are equipped with the exclusive ELCO man-machine interface allowing simple and effective programming operations.

# Maintenance

## Simple and time saving

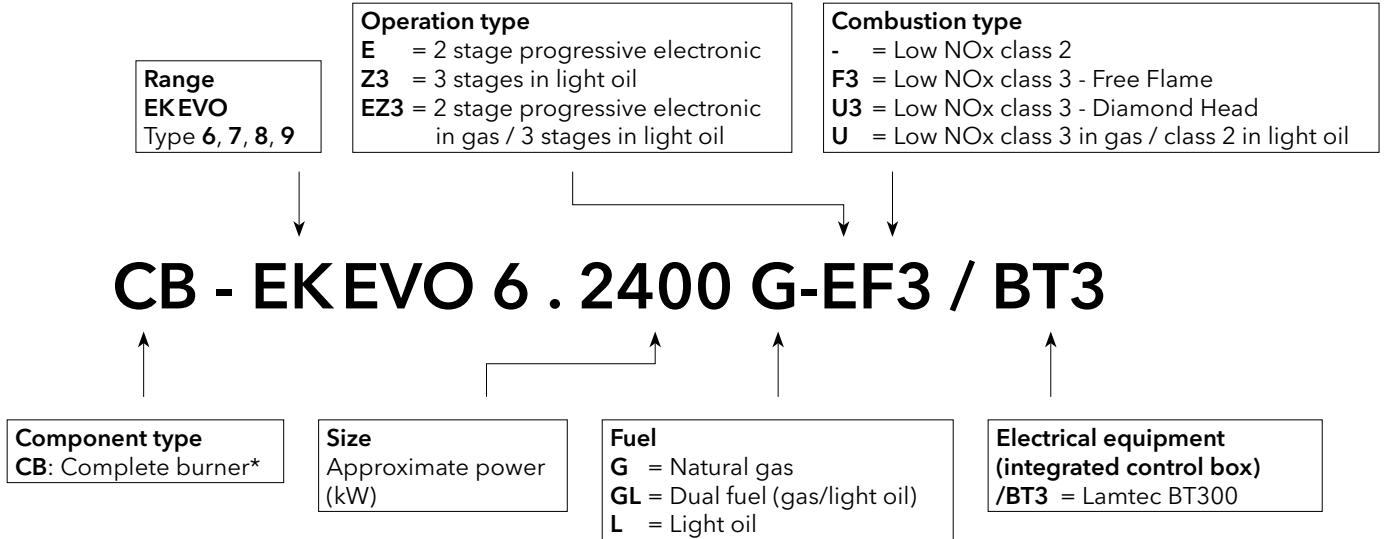
The maintenance of the EKEVO® burners can comfortably be carried out thanks to a wide opening above the housing, allowing easy access to the combustion components up to the fan, and thanks to the choice of the material: aluminium, lightweight to handle and resistant at the same time.

Maintenance operations are possible keeping the original combustion components' setup. Efficient and reliable combustion is granted on the EKEVO® range year after year.

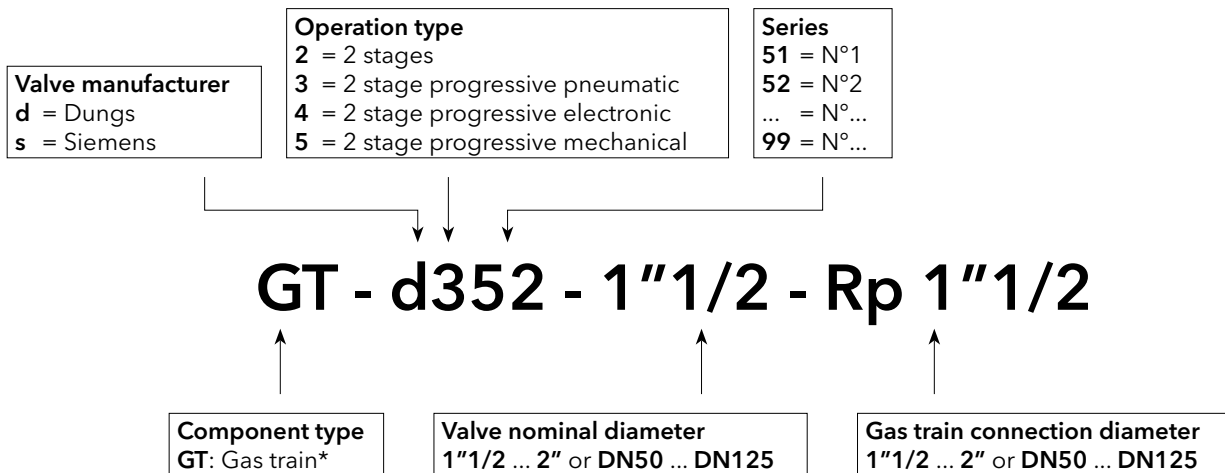


# DESIGNATION OF EK EVO COMPONENTS

## Body



## Gas train



\* for invoice purposes only

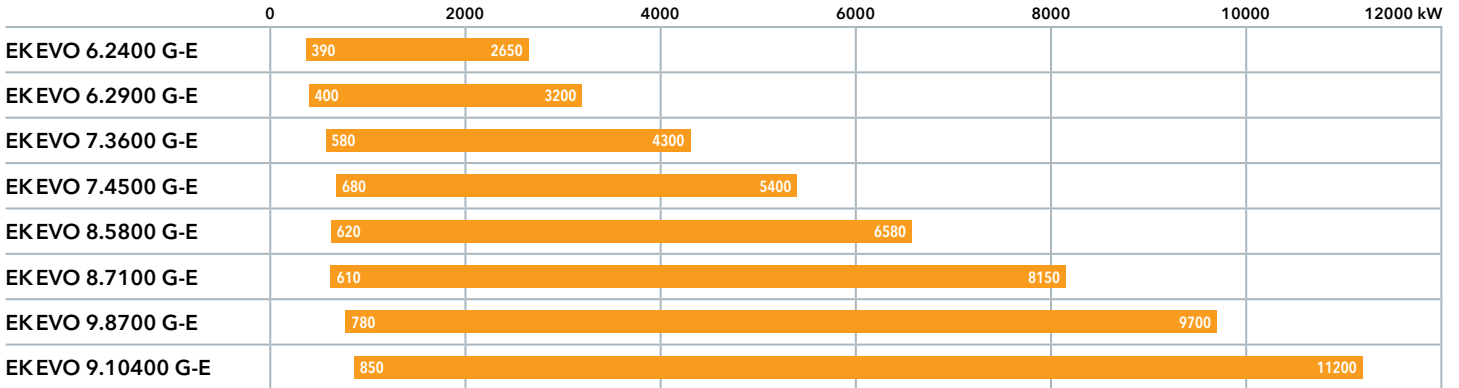
# RANGE OVERVIEW

## EKEVO® 6 ... 9

Low NOx Class 2 (< 120 mg/kWh)



Class 2

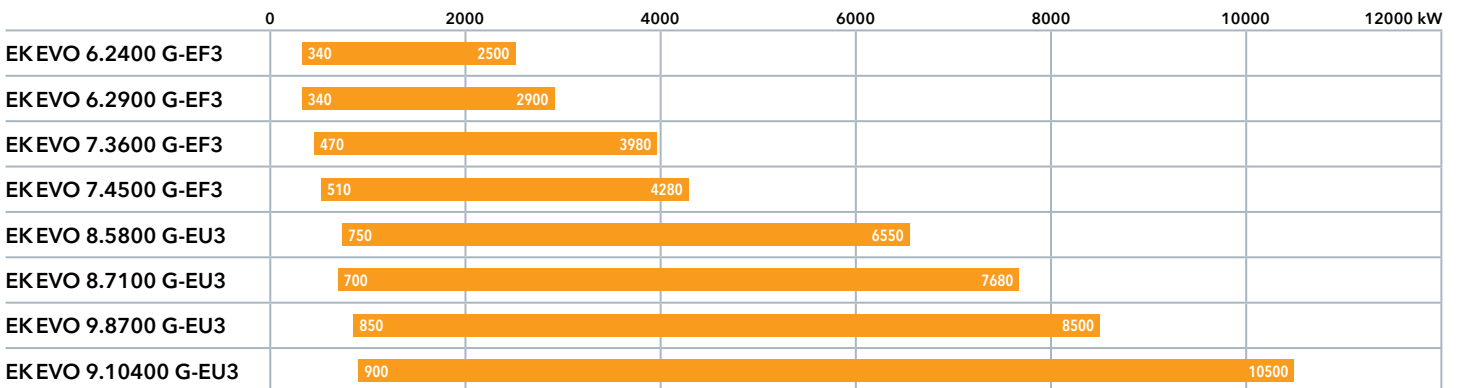


## EKEVO® 6 ... 9

Low NOx Class 3 (< 80 mg/kWh)



Class 3



THE WHOLE PROJECT IMPLIES A COMPLETE MULTI-FUEL HIGH-POWER BURNER RANGE UP TO 11 MW

## Main options

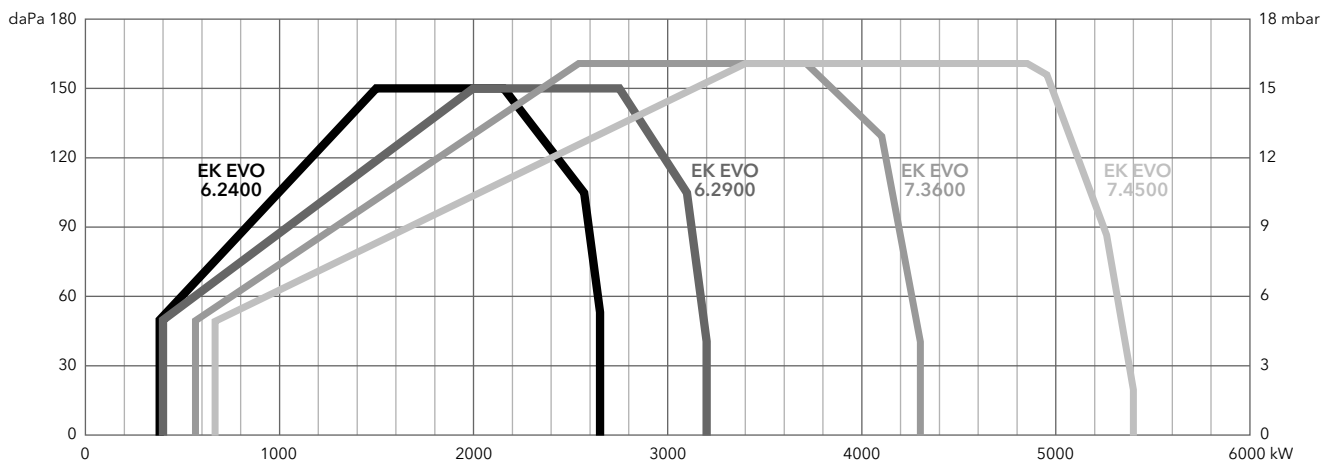
- Load controller with probe
- Variatron (fan speed controller)
- O<sub>2</sub>/CO control
- Profibus interface
- External air channel connection

# WORKING FIELDS AND TECHNICAL CHARACTERISTICS

## EKEVO® 6 - 7 G-E

Low NOx Class 2 (< 120 mg/kWh)

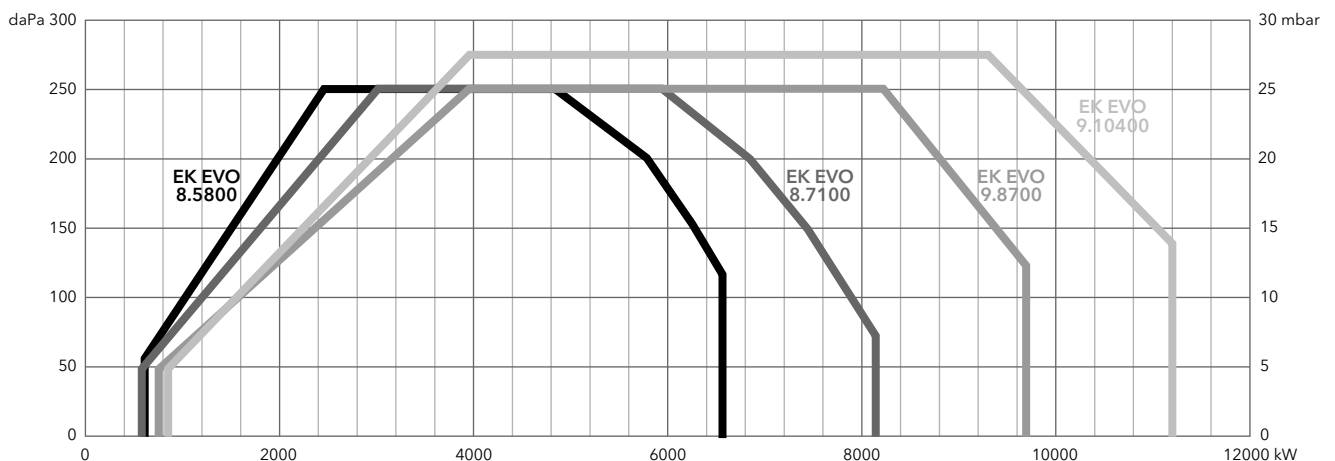
	EKEVO 6.2400 G-E	EKEVO 6.2900 G-E	EKEVO 7.3600 G-E	EKEVO 7.4500 G-E
Burner output [kW]	390 – 2650	400 – 3200	580 – 4300	680 – 5400
Gas pressure [mbar]	50 ... 500	50 ... 500	50 ... 500	50 ... 500
Fan motor	400 V - 50 Hz - 3 kW	400 V - 50 Hz - 4 kW	400 V - 50 Hz - 5,5 kW	400 V - 50 Hz - 7,5 kW
Auxiliary voltage	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz
Power supply	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz



## EKEVO® 8 - 9 G-E

Low NOx Class 2 (< 120 mg/kWh)

	EKEVO 8.5800 G-E	EKEVO 8.7100 G-E	EKEVO 9.8700 G-E	EKEVO 9.10400 G-E
Burner output [kW]	620 – 6580	610 – 8150	780 – 9700	850 – 11200
Gas pressure [mbar]	70 ... 500	70 ... 500	80 ... 500	80 ... 500
Fan motor	400 V - 50 Hz - 11 kW	400 V - 50 Hz - 15 kW	400 V - 50 Hz - 18,5 kW	400 V - 50 Hz - 22 kW
Auxiliary voltage	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz
Power supply	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz

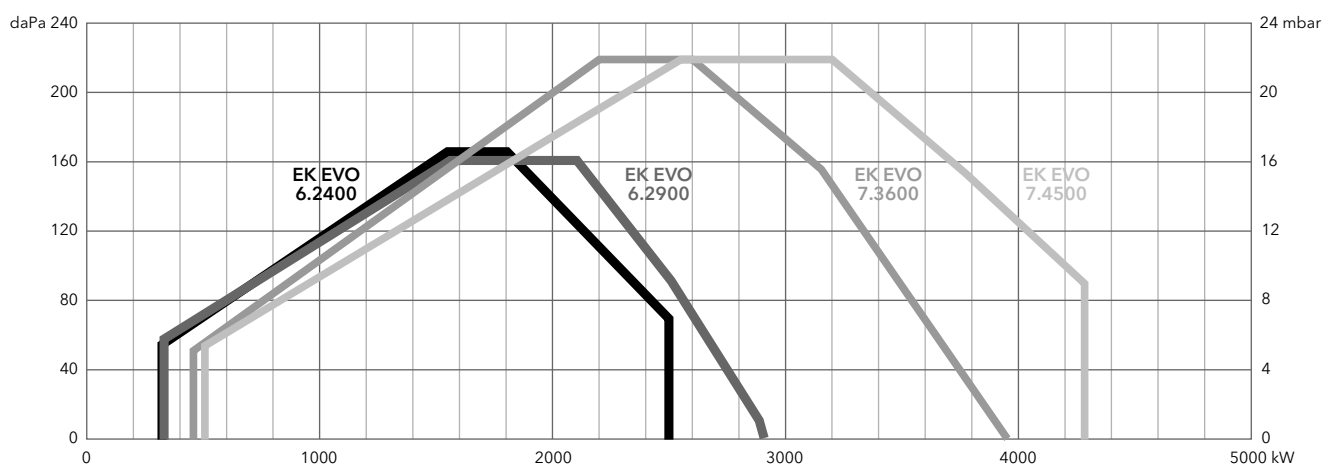


# WORKING FIELDS AND TECHNICAL CHARACTERISTICS

## EKEVO® 6 - 7 G-EF3

Low NOx Class 3 (< 80 mg/kWh)

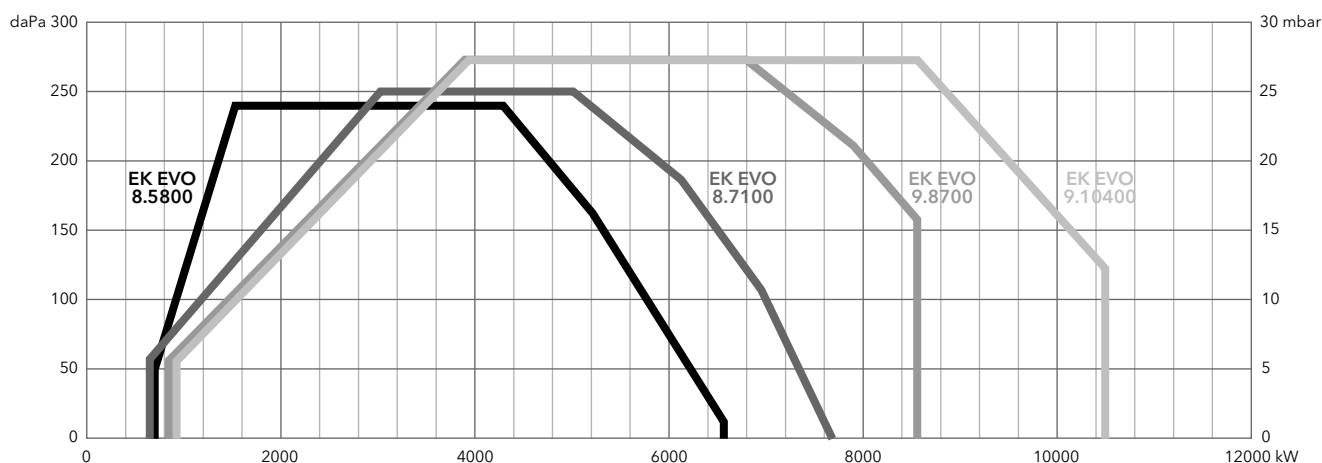
	EKEVO 6.2400 G-EF3	EKEVO 6.2900 G-EF3	EKEVO 7.3600 G-EF3	EKEVO 7.4500 G-EF3
Burner output [kW]	340 - 2500	340 - 2900	470 - 3980	510 - 4280
Gas pressure [mbar]	50 ... 500	50 ... 500	50 ... 500	50 ... 500
Fan motor	400 V - 50 Hz - 3 kW	400 V - 50 Hz - 4 kW	400 V - 50 Hz - 7,5 kW	400 V - 50 Hz - 7,5 kW
Auxiliary voltage	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz
Power supply	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz



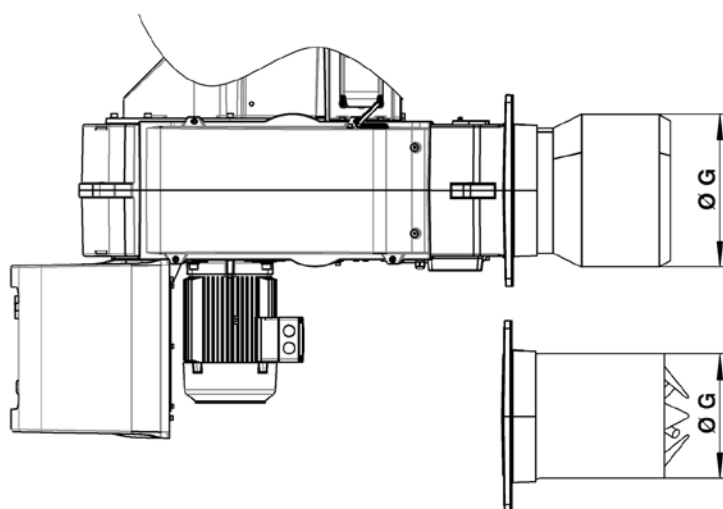
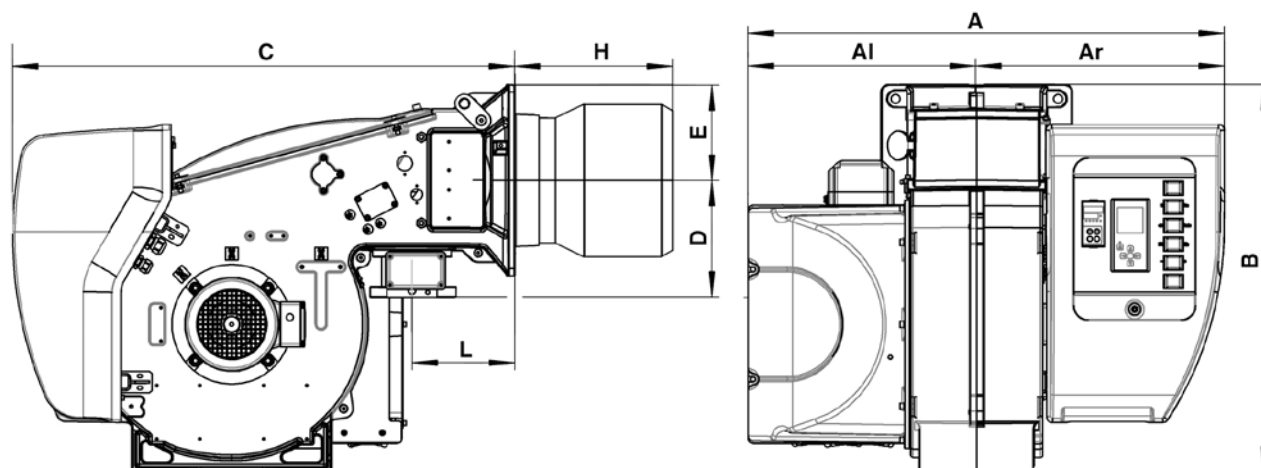
## EKEVO® 8 - 9 G-EU3

Low NOx Class 3 (< 80 mg/kWh)

	EKEVO 8.5800 G-EU3	EKEVO 8.7100 G-EU3	EKEVO 9.8700 G-EU3	EKEVO 9.10400 G-EU3
Burner output [kW]	750 - 6550	700 - 7680	850 - 8500	900 - 10500
Gas pressure [mbar]	70 ... 500	70 ... 500	80 ... 500	80 ... 500
Fan motor	400 V - 50 Hz - 11 kW	400 V - 50 Hz - 15 kW	400 V - 50 Hz - 18,5 kW	400 V - 50 Hz - 22 kW
Auxiliary voltage	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz	1NPE AC 230 V - 50 Hz
Power supply	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz	3NPE AC 400 V - 50 Hz



# OVERALL DIMENSIONS

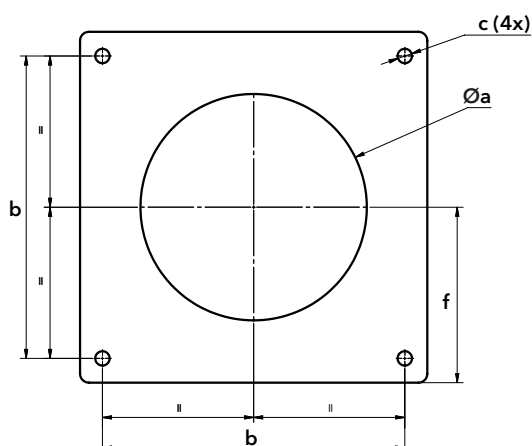


Class 2

Class 3

	A	Al	Ar	B	C	D	E	ØG	H			L
									KN	KM	KL	
EKEVO 6 G-E	1035	479	556	812	1048	245	200	320	330	450	570	215
EKEVO 6 G-EF3	1035	479	556	812	1048	245	200	264	400	520	640	215
EKEVO 7 G-E	1093	506	587	941	1122	276	235	370	375	505	635	225
EKEVO 7 G-EF3	1093	506	587	941	1122	276	235	325	420	550	680	225

## Connecting flange

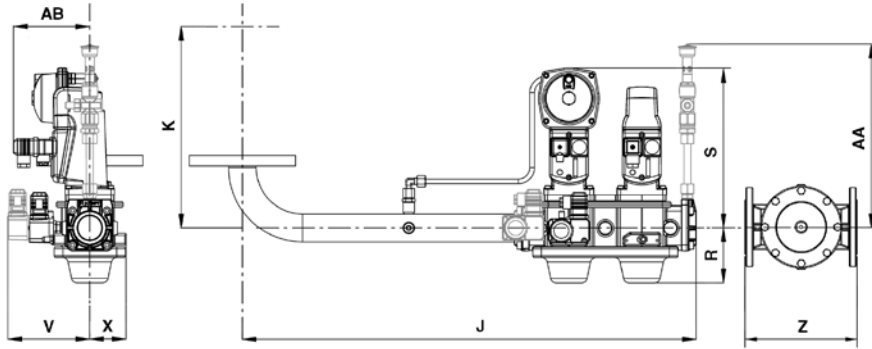


	Øa	b	c	f
EKEVO 6 G-E	330-340	340	M16	200
EKEVO 6 G-EF3	300-340	340	M16	200
EKEVO 7 G-E	380-400	400	M16	235
EKEVO 7 G-EF3	360-400	400	M16	235



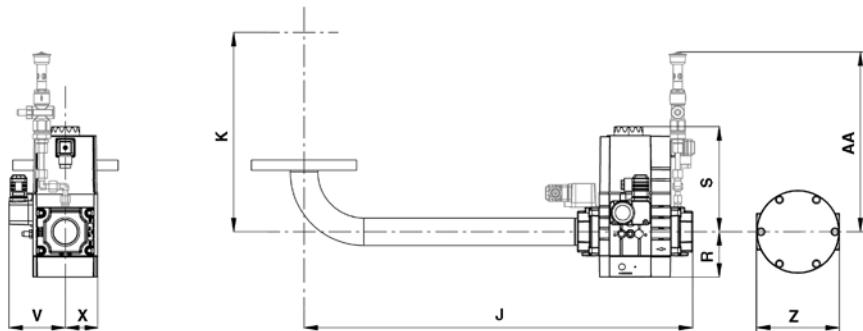
# GAS TRAINS AND FILTERS

Siemens



	±5 mm									
	J	K		R	S	V	V <sub>1</sub> *	X	AA*	AB
EK EVO 6		EK EVO 7								
s1"1/2	795	375	405	100	285	105	145	65	320	135
s2"	805	405	365	105	285	105	145	100	325	140
s65	795	355	385	120	305	125	125	110	365	135
s80	815	375	405	135	315	125	125	110	375	135
s100	855	375	405	145	335	145	145	125	385	135
s125	905	375	405	180	350	160	160	140	400	135

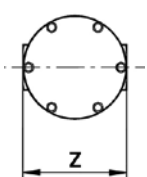
Dungs



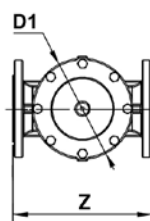
	±5 mm							
	J	K		R	S	V	X	AA*
EK EVO 6		EK EVO 7						
d1"1/4	625	375	405	65	175	100	60	320
d1"1/2	685	375	405	80	190	100	60	320
d2"	760	405	435	100	330	125	115	385
d65	795	355	385	185	250	110	100	385
d80	815	375	405	210	295	155	110	275
d100	875	375	405	250	330	165	115	275

\*: equipment for continuous operation (PED option)

## Filters

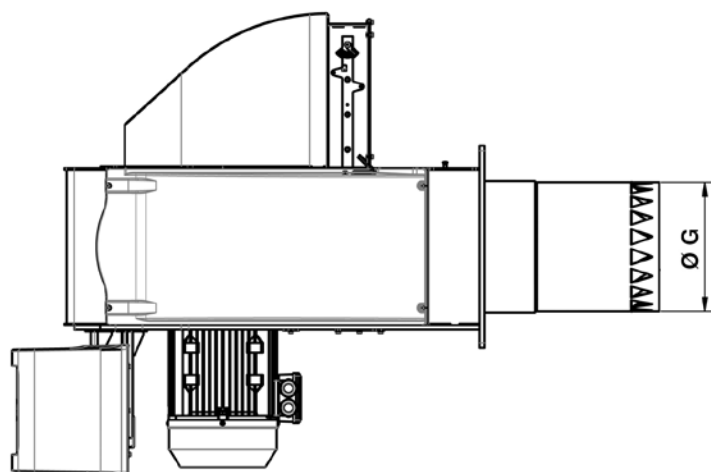
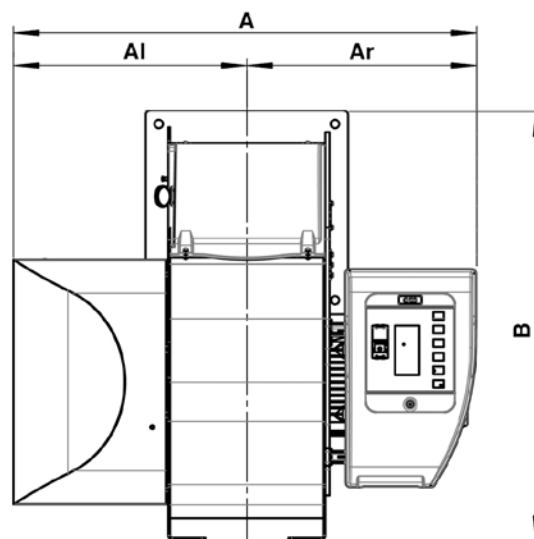
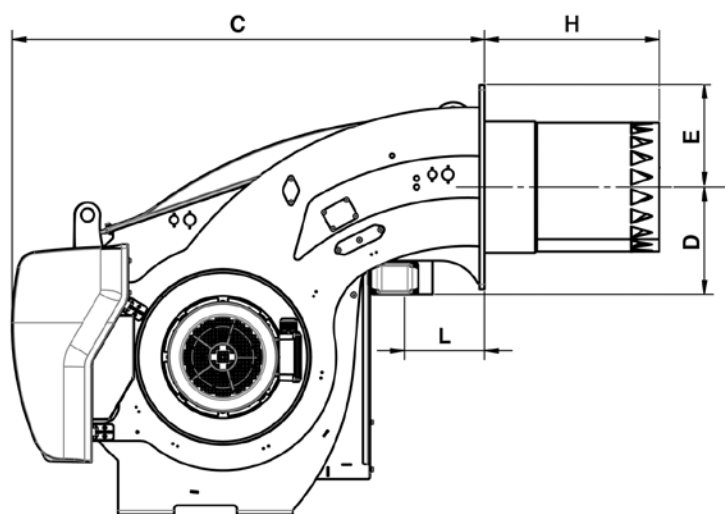


	Z
Rp1"1/2	157
Rp2"	155



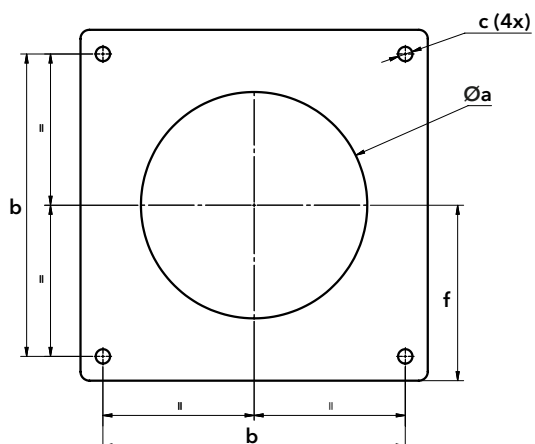
	ØD1	Z
DN40	155	223
DN50	155	210
DN65	190	245
DN80	208	285
DN100	263	340
DN125	315	400
DN150	356	450

# OVERALL DIMENSIONS



	A	Al	Ar	B	C	D	E	ØG	H			L
									KN	KM	KL	
EKEVO 8	1325	669	656	1226	1354	307	293	369	500	640	780	230
EKEVO 9	1325	669	656	1291	1354	332	288	432	550	700	850	230

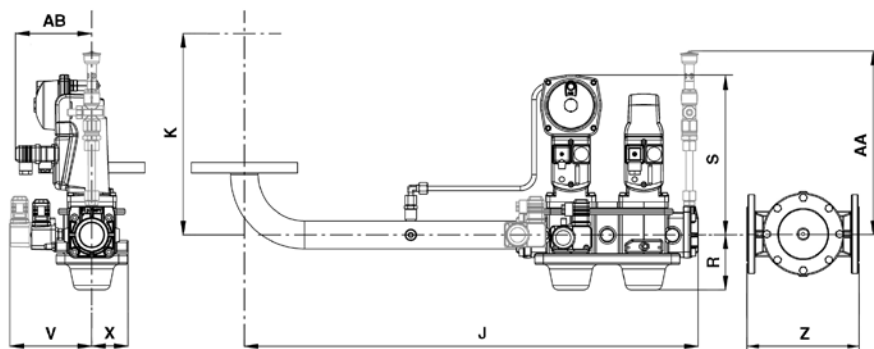
## Connecting flange



	Øa	b	c	f
EKEVO 8	390-410	505	M20	293
EKEVO 9	460-480	505	M20	293

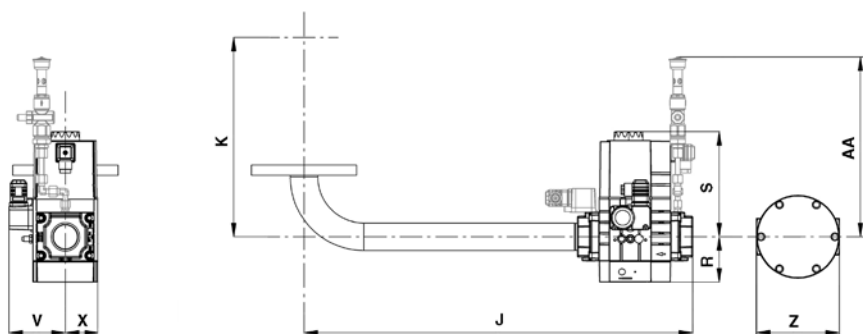
# GAS TRAINS AND FILTERS

Siemens



	±5 mm									
	J	K		R	S	V	V <sub>1</sub> *	X	AA*	AB
EK EVO 8		EK EVO 9								
s1"1/2	795	598	623	100	285	105	145	65	320	135
s2"	805	598	623	105	285	105	145	100	325	140
s65	795	598	623	120	305	125	125	110	365	135
s80	815	598	623	135	315	125	125	110	375	135
s100	855	598	623	145	335	145	145	125	385	135
s125	905	598	623	180	350	160	160	140	400	135

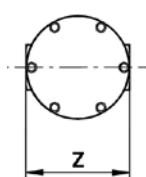
Dungs



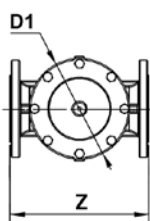
	±5 mm							
	J	K		R	S	V	X	AA*
EK EVO 8		EK EVO 9						
d1"1/4	625	598	623	65	175	100	60	320
d1"1/2	685	598	623	80	190	100	60	320
d2"	760	598	623	100	330	125	115	385
d65	795	598	623	185	250	110	100	385
d80	815	598	623	210	295	155	110	275
d100	875	598	623	250	330	165	115	275

\*: equipment for continuous operation (PED option)

## Filters



	Z
Rp1"1/2	157
Rp2"	155



	ØD1	Z
DN40	155	223
DN50	155	210
DN65	190	245
DN80	208	285
DN100	263	340
DN125	315	400
DN150	356	450

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