

DUAL FUEL BURNERS GAS/HEAVY OIL

mechanical atomization

tecnopress series

KP60 - PR/MD

KP72 - PR/MD

KP73 - PR/MD

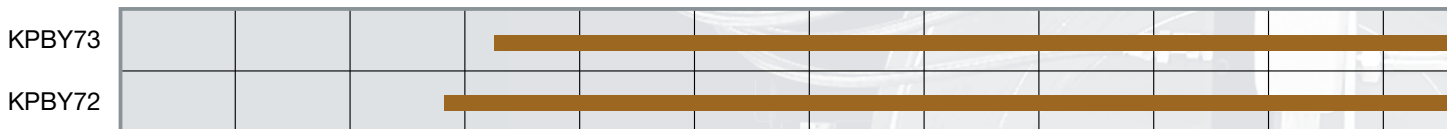
mechanical atomization

tecnopress series

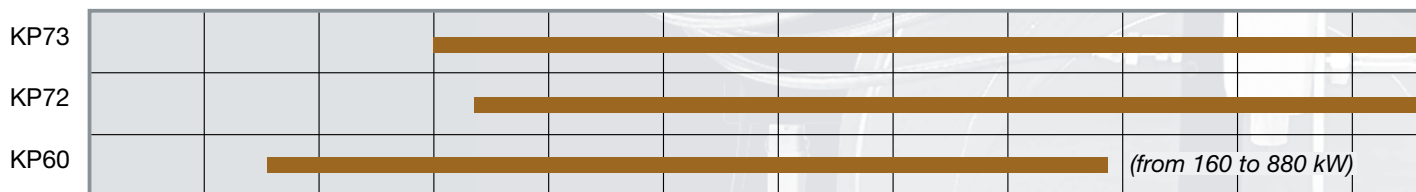
KPBY72 - PR/MD

KPBY73 - PR/MD

Type pneumatic atomization



Type mechanical atomization



SERIE **tecnoPress** **KP60 KP72 KP73**

GAS/HEAVY OIL

MECHANICAL ATOMIZATION
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

The need to meet particular requests, as building burners able to burn either natural gas or heavy oil, has led us to create the KP burner series, suitable for medium and large outputs and for industrial purposes.

The output of this series, from 160 to 2.100 kW, allows many adjustments to satisfy all requests.

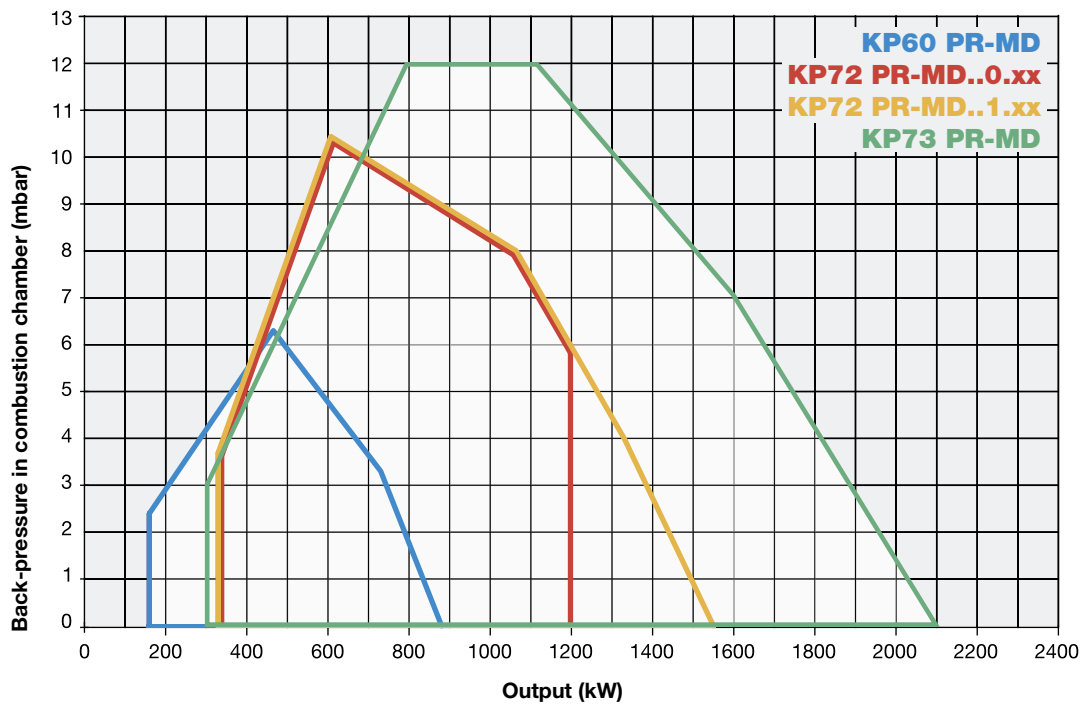
All the burners with progressive or modulating operation, have been built to burn oil whose standard viscosity is 50 cSt at 50°C (7°E at 50°C).

Upon request it is available the version for heavy oil up to 400 cSt at 50°C (50°E at 50°C).

In order to keep the oil fluid, the burner is provided with a pre-heating tank equipped with low thermal load electrical resistance.



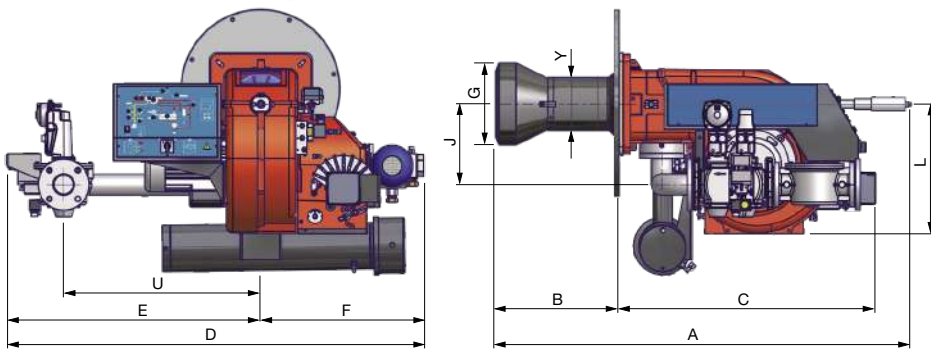
Electronic set up (optional)



TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
KP60	MN.xx.S.xx.A.0.xx	160	880	230/400 V 3N ac	1,1	0,55	4,5	1"¼ - 1"½ - 2" - DN65
KP72	MN.xx.S.xx.A.0.xx	330	1.200	230/400 V 3N ac	2,2	0,55	8,0	1"½ - 2" - DN65 - 80
KP72	MN.xx.S.xx.A.1.xx	330	1.550	230/400 V 3N ac	2,2	0,55	8,0	2" - DN65 - 80
KP73	MN.xx.S.xx.A.1.xx	300	2.100	230/400 V 3N ac	3,0	1,10	12,0	2" - DN65 - 80

For the configuration of the gas train, see page 101.



Type	Packaging dimensions (mm)			
	l	p	h	kg
KP60	1730	1280	1020	176
KP72	1730	1280	1020	280
KP73	1730	1280	1020	280

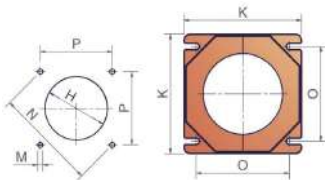
Approximate values

KP60

KP72 - KP73

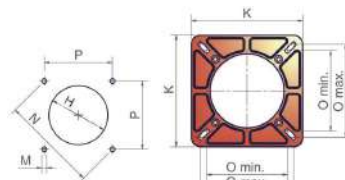
KP60 - KP72 - KP73

Installation with counterflange



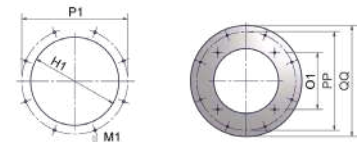
Suggested boiler drilling

Burner flange



Suggested boiler drilling

Burner flange



Suggested boiler drilling

Counterflange

Type	Model	Overall dimensions (mm)											Boiler drilling (mm)						Burner flange (mm)		Counterflange (mm)			
		A	B*	C	D	E	F	G	J	L	U	Y	H•	H1	M	M1	N	P	P1	K	O	O1	PP	QQ
KP60	MN.xx.S.xx.A.0.xx	1116	376	740	1205	685	520	250	250	520	190	280	280	M10	M12	269	190	480	240	190	190	190	440	480
KP72	MN.xx.S.xx.A.0.xx	1325	505	820	1365	825	540	300	265	580	212	340	340	M10	M12	330	233	480	300	216	250	233	440	480
KP73	MN.xx.S.xx.A.0.xx	1289	469	820	1365	825	540	320	265	580	212	340	340	M10	M12	330	233	480	300	216	250	233	440	480

Approximate values

* The dimension B is reduced by 20 mm with counterflange and gasket.

- Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the combustion head inside the boiler.

MECHANICAL ATOMIZATION
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

MECHANICAL OPERATION

Model	Gas train	Operation	KP60		KP72		KP73	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.xx.A.0.32	1"¼	PR (*)	004080543	-	-	-	-	-
MN.PR.S.xx.A.0.40	1"½	PR (*)	004080143	-	008080443	-	-	-
MN.PR.S.xx.A.0.50	2"	PR (*)	004080243	-	008080143	-	-	-
MN.PR.S.xx.A.0.65	DN65	PR (*)	004080343	-	008080243	-	-	-
MN.PR.S.xx.A.0.80	DN80	PR (*)	-	-	008080343	-	-	-
MN.PR.S.xx.A.1.40	1"½	PR (*)	-	-	008080453	-	-	-
MN.PR.S.xx.A.1.50	2"	PR (*)	-	-	008080153	-	008080553	-
MN.PR.S.xx.A.1.65	DN65	PR (*)	-	-	008080253	-	008080653	-
MN.PR.S.xx.A.1.80	DN80	PR (*)	-	-	008080353	-	008080753	-
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.PR.S.xx.A.0.32	1"¼	PR (*)	004190543	-	-	-	-	-
MD.PR.S.xx.A.0.40	1"½	PR (*)	004190143	-	008190443	-	-	-
MD.PR.S.xx.A.0.50	2"	PR (*)	004190243	-	008190143	-	-	-
MD.PR.S.xx.A.0.65	DN65	PR (*)	004190343	-	008190243	-	-	-
MD.PR.S.xx.A.0.80	DN80	PR (*)	-	-	008190343	-	-	-
MD.PR.S.xx.A.1.40	1"½	PR (*)	-	-	008190453	-	-	-
MD.PR.S.xx.A.1.50	2"	PR (*)	-	-	008190153	-	008190553	-
MD.PR.S.xx.A.1.65	DN65	PR (*)	-	-	008190253	-	008190653	-
MD.PR.S.xx.A.1.80	DN80	PR (*)	-	-	008190353	-	008190753	-

(*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

In compliance with:

- GAR Directive 2016/426/EU
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

Model	Gas train	Operation	KP60		KP72		KP73	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.xx.A.1.32.EC	1"¼	PR (*)	00408055C	-	-	-	-	-
MN.PR.S.xx.A.1.40.EC	1"½	PR (*)	00408015C	-	00808045C	-	-	-
MN.PR.S.xx.A.1.50.EC	2"	PR (*)	00408025C	-	00808015C	-	00808055C	-
MN.PR.S.xx.A.1.65.EC	DN65	PR (*)	00408035C	-	00808025C	-	00808065C	-
MN.PR.S.xx.A.1.80.EC	DN80	PR (*)	-	-	00808035C	-	00808075C	-
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.PR.S.xx.A.1.32.EC	1"¼	PR (*)	00419055C	-	-	-	-	-
MD.PR.S.xx.A.1.40.EC	1"½	PR (*)	00419015C	-	00819045C	-	-	-
MD.PR.S.xx.A.1.50.EC	2"	PR (*)	00419025C	-	00819015C	-	00819055C	-
MD.PR.S.xx.A.1.65.EC	DN60	PR (*)	00419035C	-	00819025C	-	00819065C	-
MD.PR.S.xx.A.1.80.EC	DN80	PR (*)	-	-	00819035C	-	00819075C	-

(*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

In compliance with:

- GAR Directive 2016/426/EU
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

Model	Gas train	Operation	KP60		KP72		KP73	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.MD.S.xx.A.1.32.ES	1"¼	MD (**)	00408055S	-	-	-	-	-
MN.MD.S.xx.A.1.40.ES	1"½	MD (**)	00408015S	-	00808045S	-	-	-
MN.MD.S.xx.A.1.50.ES	2"	MD (**)	00408025S	-	00808015S	-	00808055S	-
MN.MD.S.xx.A.1.65.ES	DN65	MD (**)	00408035S	-	00808025S	-	00808065S	-
MN.MD.S.xx.A.1.80.ES	DN80	MD (**)	-	-	00808035S	-	00808075S	-
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.MD.S.xx.A.1.32.ES	1"¼	MD (**)	00419055S	-	-	-	-	-
MD.MD.S.xx.A.1.40.ES	1"½	MD (**)	00419015S	-	00819045S	-	-	-
MD.MD.S.xx.A.1.50.ES	2"	MD (**)	00419025S	-	00819015S	-	00819055S	-
MD.MD.S.xx.A.1.65.ES	DN65	MD (**)	00419035S	-	00819025S	-	00819065S	-
MD.MD.S.xx.A.1.80.ES	DN80	MD (**)	-	-	00819035S	-	00819075S	-

(**) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

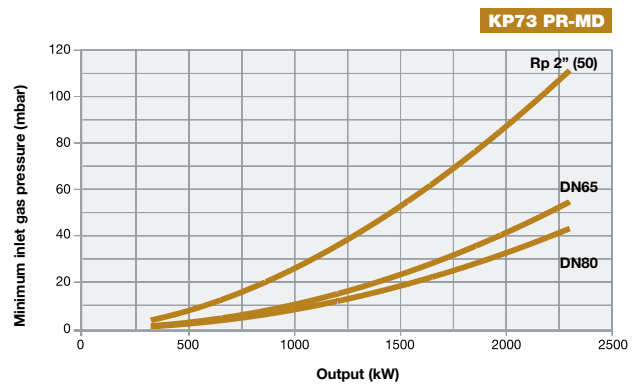
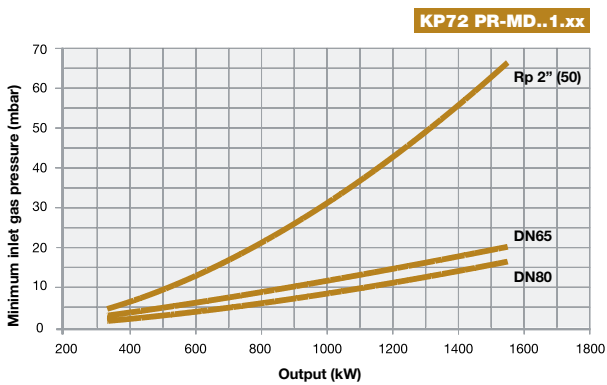
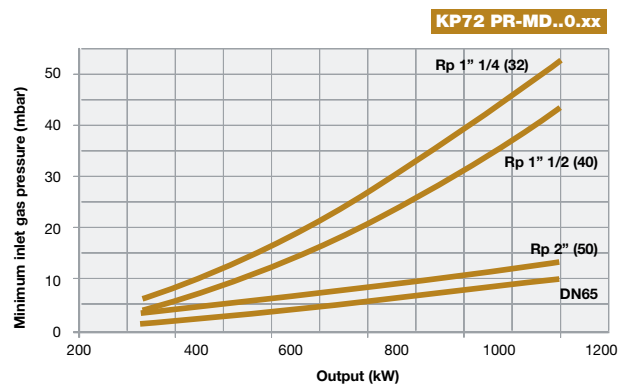
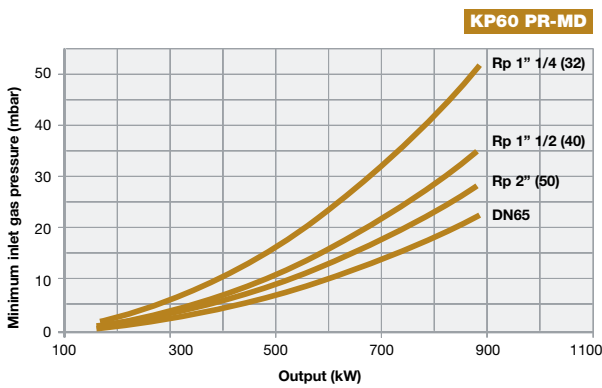
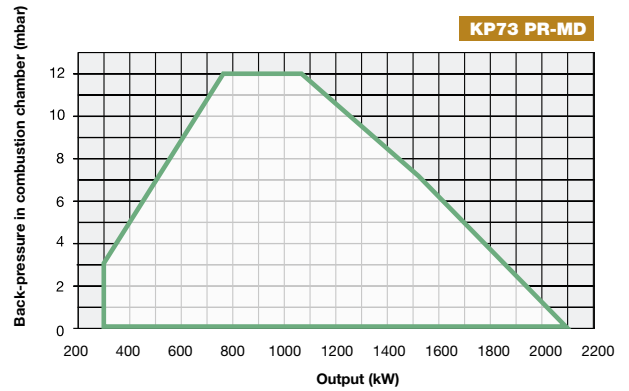
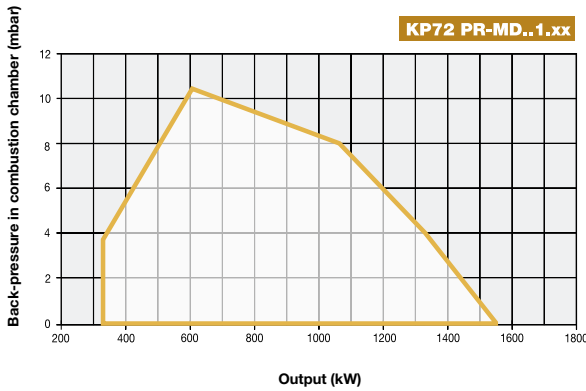
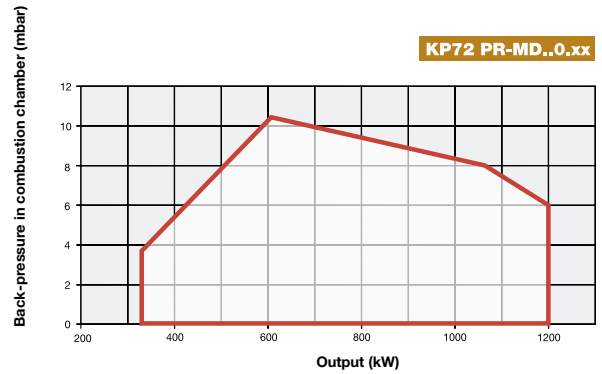
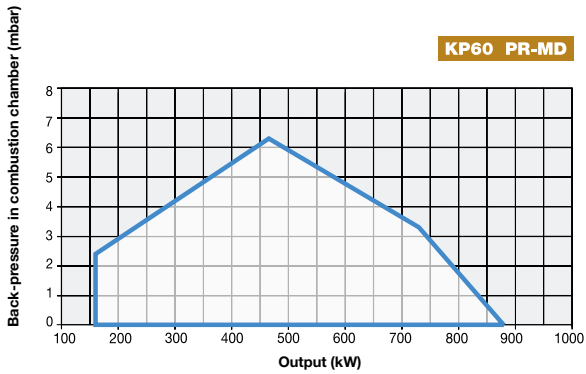
In compliance with:

- GAR Directive 2016/426/EU
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

SERIE **tecnopress** KP60 KP72 KP73

GAS/HEAVY OIL

MECHANICAL ATOMIZATION
with viscosity up to 400 cSt at 50°C (50°E at 50°C)



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

KPBY72 KPBY73 SERIE **tecnopress**

PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

This particular gas/heavy oil burners series has been developed in order to use compressed air or, alternatively, steam as a fluid to atomize the fuel which gives better combustion results when compared to the traditional atomizing systems.

These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and that limits the general wear of the whole atomization system.

All burners are progressive and are completed with an electrical control cabinet, a pump set, to be installed separately by the final user. The nozzle performs an automatic cleaning process at the end of each cycle.

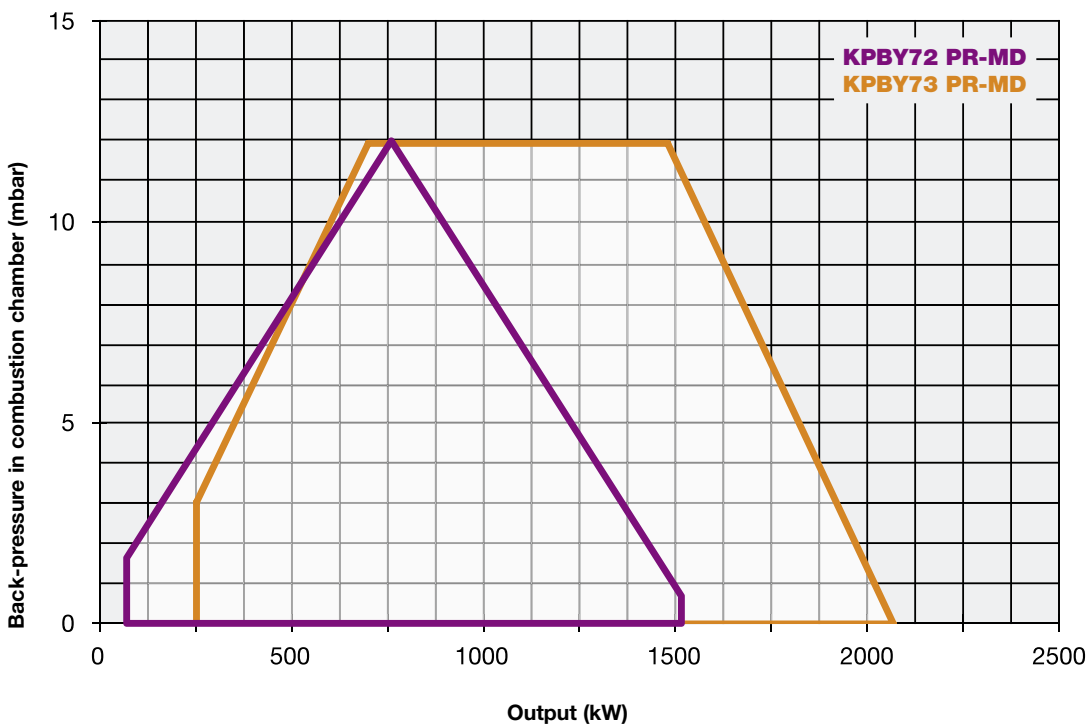
The plant must be provided with compressed air or steam at 6-10 bar.

Burners are ignited through a pilot which can work both with natural gas or LPG and are suitable to be used with fuels up to 4000 cSt at 50°C (530°E at 50°C).

The standard burner is set up to atomize only with compressed air, when steam is requested for atomization, the burner will be modified through a specific kit. Compressed air must, however, always be present at the burner in the following cases:

- cold start ups when no steam is available
- valve opening for automatic nozzle cleaning

These burners are supplied only in the electronic version in order to optimize the adjustment and to maintain a perfect combustion.



SERIE **tecnopress** **KPBY72 KPBY73**

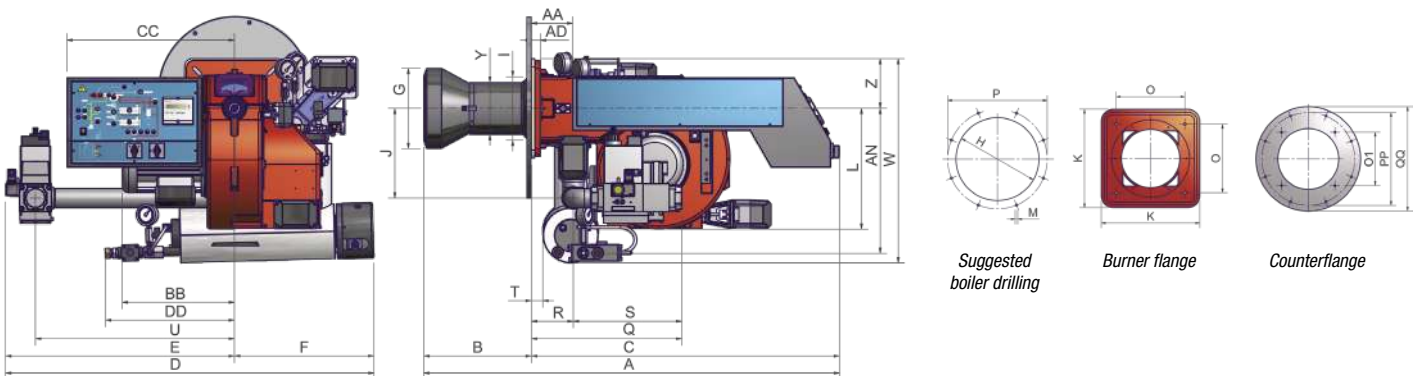
GAS/HEAVY OIL

PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

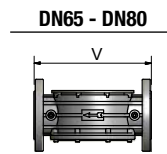
TECHNICAL DETAILS

Type	Model	Potenza kW		Alimentazione elettrica	Motore ventilatore kW	Motore pompa kW	Resistenza olio comb. kW	Attacchi gas
		min.	max.					
KPBY72	MH.xx.S.xx.A.1.xxx	291	1.530	230/400 V 3N ac	2,2	0,75	4,5	2" - DN65 - 80
KPBY73	MH.xx.S.xx.A.1.xxx	320	2.050	230/400 V 3N ac	3,0	0,75	8,0	2" - DN65 - 80

For the configuration of the gas train, see page 101.



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).



Type	Packaging dimensions (mm)			
	l	p	h	kg
KPBY72	1720	1420	1130	370
KPBY73	1720	1420	1130	370

Approximate values

Type	Model	Overall dimensions (mm)																														
		A	AA	AN	B*	BB	C	CC	D	DD	E	F	G	H	J	K	L	M	O	O1	P	R	S	U	V	W	Z	T	Y	PP	QQ	
		min. max																														
KPBY72	MH.xx.x.xx.1.50	1443	150	517	474	373	969	525	1411	470	895	390	320	360	221	300	374	M12	216	250	233	480	150	338	720	-	667	150	43	210	440	480
KPBY72	MH.xx.x.xx.1.65	1443	150	517	474	373	969	525	1400	470	884	390	320	360	456	300	374	M12	216	250	233	480	150	483	678	292	667	150	43	210	440	480
KPBY72	MH.xx.x.xx.1.80	1443	150	517	474	373	969	525	1435	470	919	390	320	360	456	300	374	M12	216	250	233	480	150	535	710	322	667	150	43	210	440	480
KPBY73	MH.xx.x.xx.1.50	1493	150	517	524	373	969	525	1411	470	895	387	320	360	221	300	374	M12	216	250	233	480	150	338	720	-	667	150	43	210	440	480
KPBY73	MH.xx.x.xx.1.65	1493	150	517	524	373	969	525	1400	470	884	387	320	360	456	300	374	M12	216	250	233	480	150	483	678	292	667	150	43	210	440	480
KPBY73	MH.xx.x.xx.1.80	1493	150	517	524	373	969	525	1435	470	919	387	320	360	456	300	374	M12	216	250	233	480	150	535	710	322	667	150	43	210	440	480

* The dimension B is reduced by 20 mm with counterflange and gasket.

Approximate values

ELECTRONIC OPERATION

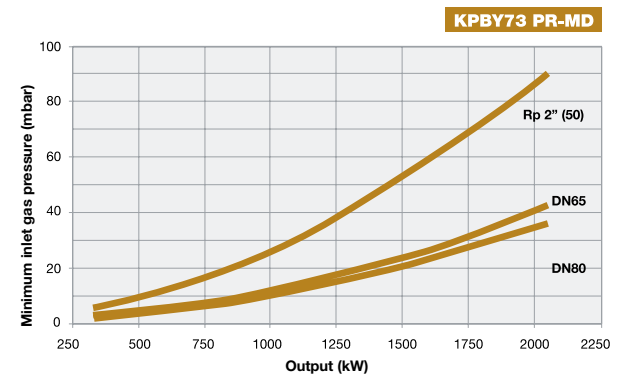
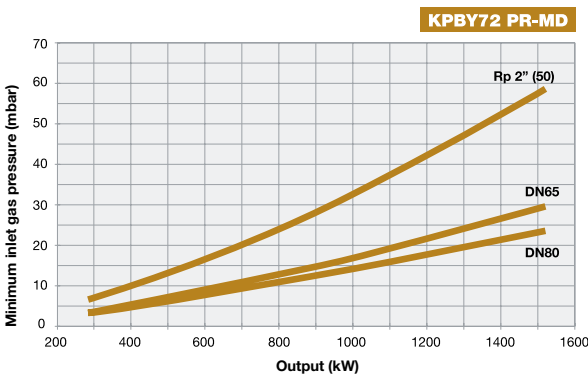
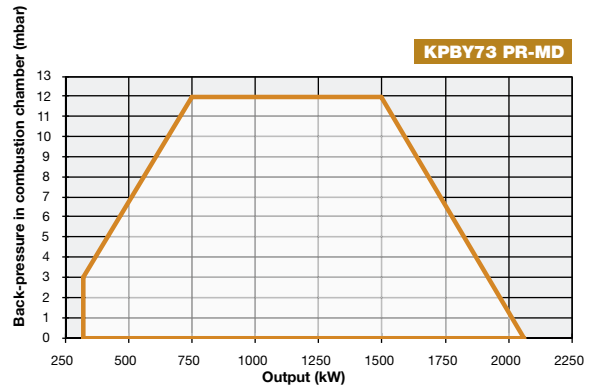
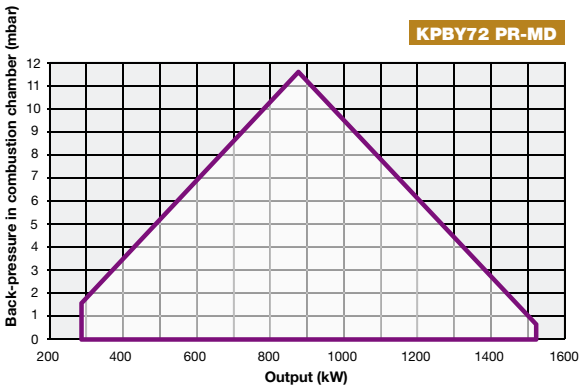
Model	Gas train	Operation	KPBY72		KPBY73	
			Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)						
MH.PR.S.xx.A.1.50.EC	2"	PR	-		-	
MH.PR.S.xx.A.1.65.EC	DN65	PR	-		-	
MH.PR.S.xx.A.1.80.EC	DN80	PR	-		-	

(*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

In compliance with:

- GAR Directive 2016/426/EU
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.