

MASTER®

2014/2015



PORTABLE HEATERS

MCS GROUP
www.mcsworld.com



I CHOOSE MASTER PORTABLE HEATERS. WHY?



SAVE MONEY

MASTER heaters are plug and play:
do not need installation



USE THE SAME HEATER IN DIFFERENT PLACES

MASTER heaters are portable



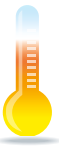
HEAT ONLY WHAT YOU NEED

MASTER heaters can heat
either large or limited areas



HEAT ONLY WHEN YOU NEED

MASTER heaters warm up very quickly



AVOID OVERHEATING AND OVERSPENDING

MASTER heaters can be controlled
by a remote thermostat



CHOOSE YOUR ENERGY

Choose the cheapest or the cleanest energy
you like: gas, oil, electricity



RESPECT THE ENVIRONMENT

The efficient **MASTER** burning process
minimizes pollution



REDUCE YOUR INVESTMENT BUYING ONLY THE POWER YOU NEED

Further **MASTER** heaters can be added
if necessary



PROTECT YOUR INVESTMENT

MASTER heaters last many years and can be
easily repaired with spare parts available for 10 years

INDEX



DIRECT OIL HEATERS		Direct oil heaters are highly efficient devices that provide large volumes of instant heat where it is required. They are best for open or well ventilated areas like factories, warehouses or construction sites. Master direct heaters are known as very efficient and robust as well as safe and easy in use.	POWER RANGE: 10-111 kW	BEST FOR: Agriculture Construction Garage	PAGE: 6-8
INDIRECT OIL HEATERS		Indirect oil heaters are highly efficient devices that provide large volume of 100% clean, dry and fume free warm air. They are best for places with limited ventilation like shops, event's tents, food preparation areas or exhibition halls. They can be used with flexible hoses that make the warm air be spread around easily.	POWER RANGE: 20-81 kW	BEST FOR: Agriculture Construction Industry Warehouse Garage Emergency-Events	PAGE: 9
INDIRECT OIL HEATERS AIRBUS		Indirect airflow heaters Airbus have a wide heat exchanger in stainless steel pipes and an external burner. They offer high efficiency and the possibility of connecting up to 4 hoses per unit.	POWER RANGE: 75-220 kW	BEST FOR: Agriculture Construction Industry Warehouse	PAGE: 10-11
ELECTRIC FAN HEATERS		Electric fan heaters are highly efficient devices widely used in variety of applications. They provide clean, fast and safe heating. Electric heaters are ideal for temporary or emergency heating as they are easy to use and fully portable. Master electric heaters use only certified top quality components, which ensures their reliability and efficiency.	POWER RANGE: 1-40 kW	BEST FOR: Agriculture Construction Industry Warehouse Garage	PAGE: 12-13
GAS HEATERS (PROPANE BUTANE)		Master gas heaters provide large volumes of instant heat. They are very cost effective, robust and efficient. Portable gas heaters are best for well ventilated areas like construction sites, warehouses or factories.	POWER RANGE: 10-103 kW	BEST FOR: Agriculture Construction	PAGE: 14-16
INFRARED HEATERS		Infrared heaters deliver heat fast and exactly to the place where it is required without any air movement. They are suitable for dust-free drying walls or paints, defrosting machinery or pipe lines, heating the working areas This powerful technology allows significant energy saving and can be used in dusty areas or outside.	POWER RANGE: 1-43 kW	BEST FOR: Agriculture Construction Industry Warehouse	PAGE: 17-18
STATIONARY HEATERS		Master indirect stationary heaters create a big airflow of hot air. The installation is very simple: plug and play.	POWER RANGE: 33-134 kW	BEST FOR: Agriculture Industry Warehouse	PAGE: 19-21
ACCESSORIES		The guide to mobile heaters accessories. This additional equipment makes the work with Master heaters more comfortable.			PAGE: 22
CHART		How to choose the best heater for your needs.			PAGE: 23

HEATING SOLUTIONS FOR:

CONSTRUCTION, PRODUCTION AND LOGISTIC, AGRICULTURE, EVENTS, MILITARY, WORKSHOPS, EMERGENCY

APPLICATION							
		DIRECT OIL HEATERS	INDIRECT OIL HEATERS	ELECTRIC FAN HEATERS	GAS HEATERS	INFRARED OIL HEATERS	INFRARED ELECTRIC HEATERS
CONSTRUCTION							
HEATING CONSTRUCTION SITES							
HEATING ROADWORKS							
DRYING BUILDINGS AND PAINT							
PRODUCTION & LOGISTIC							
HEATING SPACES							
SPOT HEATING							
WORKSHOPS & GARAGES							
SPOT HEATING							
HEATING SPACES							

APPLICATION



DIRECT
OIL HEATERS



INDIRECT
OIL HEATERS



ELECTRIC FAN
HEATERS



GAS HEATERS



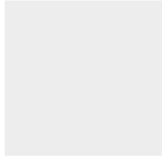
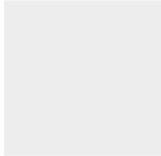
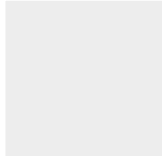
INFRARED
OIL HEATERS



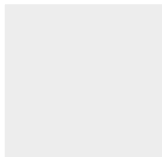
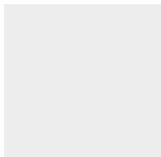
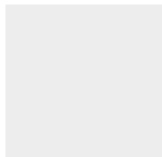
INFRARED ELECTRIC
HEATERS

AGRICULTURE

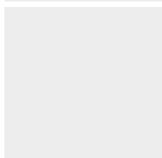
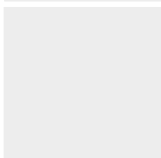
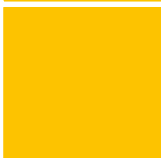
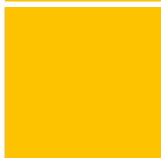
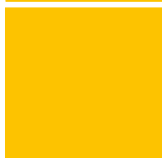
HEATING
LIVESTOCK
FACILITIES



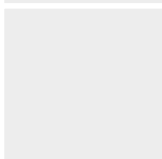
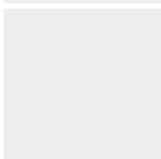
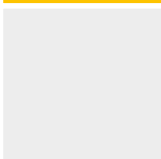
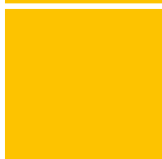
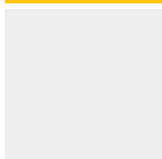
HEATING
GREENHOUSES



HEATING
STORAGE
FACILITIES

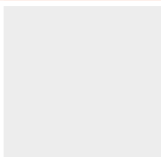
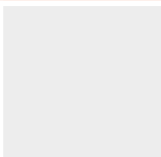
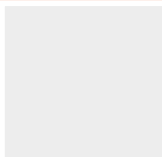
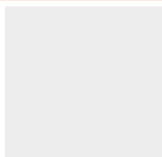


DRYING
CROPS

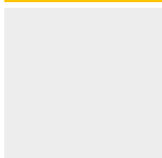
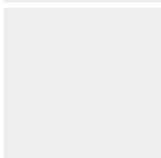
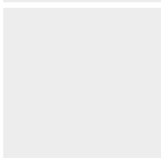
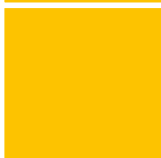
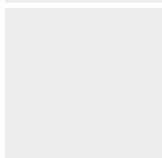


EVENTS & MILITARY

OUTDOOR
HEATING

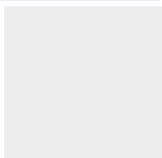
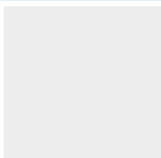
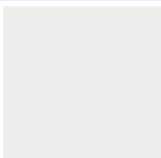
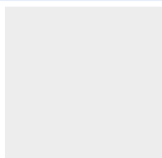


HEATING
TENTS

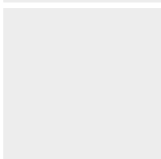
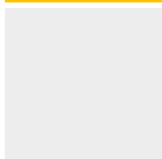
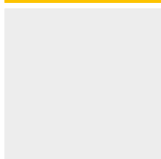
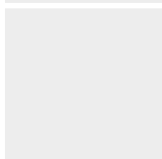


EMERGENCY

SPACE
HEATING



SPOT
HEATING



DIRECT OIL HEATERS

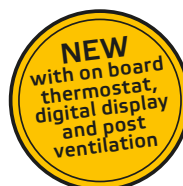
LOW PRESSURE, ELECTRONIC



B 100CEG / B 150CEG



PATENTED



CONTROL PANEL

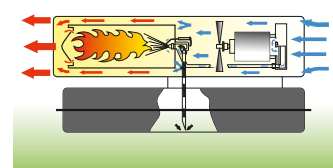


- High air displacement
- Possible connection to an optional room thermostat
- Two oil filters: oil tank filter and suction filter
- Thermally protected motor
- Electronic flame control with photocell
- Stainless steel combustion chamber
- Oil tank with level indicator
- Trolley included
- Easy to move
- Easy maintenance
- Strong and long lasting construction
- On board thermostat
- Digital display
- Post ventilation

OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^\circ\text{C}$



Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		B 100CEG	B 150CEG
Heating power	kW	29	44
	Btu/h	99.300	150.500
	kcal/h	25.000	37.900
Air displacement	m ³ /h	800	900
Fuel autonomy	h	15	10
Thermostat control		on board	on board
Fuel consumption	kg/h	2,3	3,5
Power supply	V/Hz	220-240/50	220-240/50-60
Electric power	kW	0,23	0,28
Rated current	A	1,0	1,2
Tank capacity	l	44	44
Packaging dimension (l x w x h)	mm	1110 x 400 x 450	1110 x 400 x 450
Net / gross weight	kg	25/28	25/28
Pallet	pcs	10	10

DIRECT OIL HEATERS

LOW PRESSURE, ELECTROMECHANIC



B 35CED / B 70CED

B 100CED / B 150CED

B 300CED



PATENTED



PATENTED

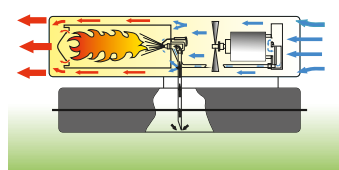


PATENTED

- High air displacement
- Possible connection to an optional room thermostat
- Two oil filters: oil tank filter and suction filter
- Thermally protected motor
- Electronic flame control with photocell
- Stainless steel combustion chamber
- Oil tank with level indicator
- Trolley included for B 100CED and B 150CED and B 300CED
- Easy to move
- Easy maintenance
- Strong and long lasting construction



OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$

Trolley for models
B 35CED, B 70CED
4103.925

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		B 35CED	B 70CED	B 100CED	B 150CED	B 300CED
Heating power	kW	10	20	29	44	44/88
	Btu/h	34.200	68.300	99.300	150.500	150.500-301.000
	kcal/h	8.600	17.200	25.000	37.900	37.900-75.800
Air displacement	m ³ /h	280	400	800	900	900/1.800
Fuel autonomy	h	15	10	15	10	24/12
Thermostat control		optional	optional	optional	optional	optional
Fuel consumption	kg/h	0,8	1,6	2,3	3,5	3,5/7
Power supply	V/Hz	220-240/50-60	220-240/50-60	220-240/50	220-240/50-60	220-240/50-60
Electric power	kW	0,08	0,18	0,23	0,28	0,28/0,56
Rated current	A	0,35	0,8	1,0	1,2	1,2/2,4
Tank capacity	l	15	19	44	44	105
Packaging dimension (l x w x h)	mm	810 x 350 x 450	810 x 350 x 450	1110 x 400 x 450	1110 x 400 x 450	1600 x 750 x 900
Net / gross weight	kg	17/19	17/19	25/28	25/28	53/70
Pallet	pcs	15	15	10	10	1

DIRECT OIL HEATERS HIGH PRESSURE



B 130 / B 180



B 230 / B 360



- Overheat thermostat
- High quality fuel pump
- Post-ventilation thermostat
- Transparent external suction filter
- Possible connection to a fuel pre-heater (except B 130 / B 180)
- High air displacement
- Possible connection to an optional room thermostat
- Two oil filters: oil pump filter and suction filter
- Thermally protected motor
- Electronic flame control with photocell
- Stainless steel combustion chamber
- Oil tank with level indicator
- Trolley included
- Easy maintenance with external pump
- Strong and long lasting construction

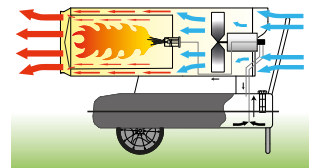
OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$



Fuel pre-heater for models:
B 230, B 360
4031.120



Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		B 130	B 180	B 230	B 360
Heating power	kW	31	48	65	111
	Btu/h	106.000	165.000	222.000	379.000
	kcal/h	26.700	41.200	56.000	95.460
Air displacement	m ³ /h	1.550	1.550	3.000	3.300
Fuel autonomy	h	12	8	10	10
Thermostat control		optional	optional	optional	optional
Fuel consumption	kg/h	2,47	3,8	5,2	8,83
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50-60
Electric power	kW	0,3	0,3	0,8	1,06
Rated current	A	1,5	1,5	2,3	4,6
Tank capacity	l	36	36	65	105
Packaging dimension (l x w x h)	mm	1200 x 400 x 530	1200 x 400 x 530	1200 x 650 x 1000	1600 x 750 x 1180
Net / gross weight	kg	29/33	30/34	57/76	86/100
Pallet	pcs	8	8	1	1

INDIRECT OIL HEATERS HIGH PRESSURE



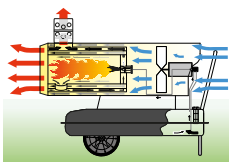
BV 77E



BV 110E / BV 170E / BV 290E



- Possible connection to an optional room thermostat
- Possible connection to a flexible tube
- Possibility of flue gas exhaust
- High air flow
- Overheat thermostat
- Post-ventilation
- Transparent external suction filter (except BV 77E)
- Two oil filters: oil pump filter and suction filter
- Electronic flame control with photocell
- Heat exchanger
- Stainless steel combustion chamber
- Oil tank with level indicator
- Trolley included
- Easy maintenance with external pump
- Strong and long lasting construction



OPTIONAL ACCESSORIES:



Fuel pre-heater for models
BV 110E, BV 170E, BV 290E
4031.120

Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$



Flexible tubes
BV 77E - $\varnothing$ 305 mm - 3 m - **4515.550** or 7,6 m - **4515.553**
BV 110E, BV 170E - $\varnothing$ 407 mm - **4031.401**
BV 290E - $\varnothing$ 610 mm - **4031.038**
In 7,6 m hoses first 2 m (black part) are made of a material resistant to 150 °C
Hose binder included



Adaptor ring kit
BV 77E - $\varnothing$ 294 mm - **4032.950**
BV 110E, BV 170E - $\varnothing$ 400 mm - **4031.909**
BV 290E - $\varnothing$ 600 mm - **4031.910**

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BV 77E	BV 110E	BV 170E	BV 290E
Heating power	kW	20	33	47	81
	Btu/h	68.300	112.800	160.400	276.300
	kcal/h	17.200	28.400	40.400	69.600
Air displacement	m ³ /h	1.550	1.800	1.800	3.300
Fuel autonomy	h	17	19	13	12
Thermostat control		optional	optional	optional	optional
Fuel consumption	kg/h	1,67	2,71	3,9	6,8
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50-60
Electric power	kW	0,3	0,8	0,8	1,06
Rated current	A	1,5	2,3	2,3	4,6
Tank capacity	l	36	65	65	105
Flue tube $\varnothing$	mm	120	150	150	150
Blast opening $\varnothing$	mm	230	340	340	400
Packaging dimension (l x w x h)	mm	1200 x 400 x 530	1200 x 650 x 1000	1330 x 650 x 1000	1600 x 750 x 1180
Net / gross weight	kg	32/36	61/77	65/84	100/124
Pallet	pcs	8	1	1	1

INDIRECT OIL HEATERS AIR-BUS HIGH PRESSURE, AXIAL FAN



BV 310FS



BV 470FS / BV 690FS



- Axial fan
- Achieved pressure 100 Pa
- Possible connection to an optional room thermostat
- Possible connection to 4, 2 or 1 flexible tubes
- Possibility of flue gas exhaust
- Separate oil burner
- Summer-Winter switch for ventilation only
- Fuel pre-heating
- Electronic flame control with photocell
- Fan-Limit thermostat with automatic reset
- Limit thermostat with manual reset
- Two oil filters: oil pump filter and suction filter
- Suction filter with heating option as a standard
- High efficiency heat exchanger
- Stainless steel combustion chamber
- Trolley included



OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$



Fuel line 4m
4031.460
(are required 2 pieces per 1 unit, supply line and return line)



Fuel tank
BV 310 - 85 l - 4514.091
BV 470 - 140 l - 4514.098
BV 690 - 200 l - 4514.099



Top
BV 310 - 4514.084
BV 470 - 4514.085
BV 690 - 4514.086

Explanation:

S - single phase, T - three phase, R - radial fan

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BV 310FS	BV 470FS	BV 690FS	BV 690FT
Heating power	kW	75	134	220	220
	Btu/h	256.000	460.000	751.000	751.000
	kcal/h	64.500	115.000	190.000	190.000
Air displacement	m ³ /h	4.400	8.000	12.500	12.500
Fan		axial	axial	axial	axial
Thermostat control		optional	optional	optional	optional
Fuel consumption	kg/h	6,4	11,3	18,5	18,5
Power supply	V/Hz	230/50	230/50	230/50	400/50
Electric power	kW	1,1	2,03	3,68	3,4
Rated current	A	6,2	8,8	16	5,8
Flue tube Ø	mm	150	200	200	200
Blast opening Ø	mm	450	4x270	4x320	4x320
Packaging dimension (l x w x h)	mm	1500 x 620 x 1080	2090 x 755 x 1230	2210 x 850 x 1380	2200 x 840 x 1470
Net weight	kg	162	224	330	333

INDIRECT OIL HEATERS AIR-BUS HIGH PRESSURE, CENTRIFUGAL FAN



BV 470FSR/FTR / BV 690FTR



1-way outlet
BV 470 - Ø 600 mm - **4514.097**
BV 690 - Ø 700 mm - **4514.093**



2-way outlet
BV 470 - 2 x Ø 400 mm - **4514.096**
BV 690 - 2 x Ø 500 mm - **4514.080**

- High efficiency centrifugal fan
- Achieved pressure 200 Pa
- Possible connection to 15 meter flexible tubes
- Possible connection to an optional room thermostat
- Possible connection to 4, 2 or 1 flexible tubes
- Possibility of flue gas exhaust
- Separate oil burner
- Summer-Winter switch for ventilation only
- Fuel pre-heating
- Electronic flame control with photocell
- Fan-Limit thermostat with automatic reset
- Limit thermostat with manual reset
- Two oil filters: oil pump filter and suction filter
- Suction filter with heating option as a standard
- High efficiency heat exchanger
- Stainless steel combustion chamber
- Trolley included



OPTIONAL ACCESSORIES:



Fuel scoop
4515.932

4-way outlet
BV 310 - 4 x Ø 225 mm - **4514.789**



Flexible 7,6 m tubes
4-way outlet
BV 310 - Ø 230 mm - **4515.557**
BV 470 - Ø 305 mm - **4515.553**
BV 690 - Ø 350 mm - **4515.558**
2-way outlet
BV 470 - Ø 407 mm - **4031.401**
BV 690 - Ø 508 mm - **4515.552**
1-way outlet
BV 310 - Ø 450 mm - **4515.554**
BV 470 - Ø 610 mm - **4031.038**
BV 690 - Ø 710 mm - **4515.556**

First 2 m (black part) are made of a material resistant to 150°C; Hose binder included

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BV 310FSR	BV 470FSR	BV 470FTR	BV 690FTR
Heating power	kW	75	134	134	220
	Btu/h	256.000	460.000	460.000	751.000
	kcal/h	64.500	115.000	115.000	190.000
Air displacement	m³/h	5.500	8.000	8.000	12.500
Fan		radial	radial	radial	radial
Thermostat control		optional	optional	optional	optional
Fuel consumption	kg/h	6,4	11,3	11,3	18,5
Power supply	V/Hz	230/50	230/50	400/50	400/50
Electric power	kW	1,3	3,1	2,9	4,2
Rated current	A	7,1	16,0	5,5	7,6
Flue tube Ø	mm	150	200	200	200
Blast opening Ø	mm	450	4x270	4x270	4x320
Packaging dimension (l x w x h)	mm	1500 x 620 x 1040	2090 x 760 x 1230	2090 x 760 x 1230	2510 x 840 x 1440
Net weight	kg	162	257	257	371

ELECTRIC FAN HEATERS



B 2EPB / 3,3EPB



B 5EPB / B 9EPB / B 15EPB / B 22EPB



- Built-in room thermostat
- No oxygen consumption
- No fumes, no odours, no humidity
- Summer-Winter switch for ventilation only
- Low noise
- Automatic reset (except B 9EPB)
- Motor with thermal protection
- Stainless steel heating elements
- Overheat thermostat
- Adjustable heat
- Strong and long lasting steel construction

OPTIONAL ACCESSORIES:



Extension cord
 B 5EPB, B 9EPB - 5 m - **4511.031**
 B 5EPB, B 9EPB - 10 m - **4511.032**
 B 15EPB, B 22EPB - 5 m - **4511.033**
 B 15EPB, B 22EPB - 10 m - **4511.034**



SPECIFICATIONS		B 2EPB	B 3,3EPB	B 5EPB	B 9EPB	B 15EPB	B 22EPB
Heating power	kW	1/2	1,65/3,3	2,5/5	4,5/9	7,5/15	11/22
	Btu/h	3.400-6.800	5.630-11.260	8.530-17.000	15.350-30.700	25.600-51.200	37.530-75.100
	kcal/h	860-1.720	1.430-2.860	2.150-4.300	3.870-7.740	6.450-12.900	9.460-18.900
Air displacement	m³/h	184	510	510	800	1.700	2.400
Power supply	V/Hz	230/50	230/50	230/50	400/50	400/50	400/50
Plug (male) from heater side		-	-	400V / 16A / 5P	400V / 16A / 5P	400V / 32A / 5P	400V / 32A / 5P
Rated current	A	8,7	14,5	7,2	13	22	32
Switch pos. 1		OFF	OFF	OFF	OFF	OFF	OFF
Switch pos. 2		fan	fan	fan	fan	fan	fan
Switch pos. 3/4	kW	1,0/2,0	1,65/3,3	2,5/5,0	4,5/9,0	7,5/15	11,0/22,0
Thermostat control		included	included	included	included	included	included
Temperature range	°C	5-35	5-35	5-35	5-35	5-35	5-35
Protection		IP24	IP24	IP24	IP24	IP24	IP24
Packaging dimension (l x w x h)	mm	240 x 220 x 260	280 x 270 x 440	370 x 310 x 390	420 x 330 x 430	370 x 480 x 530	380 x 550 x 630
Net / gross weight	kg	3,7/4,2	5,1/5,7	6,4/6,8	9,3/10,3	15/15,9	22/22,8
Pallet	pcs	75	48	40	24	15	12

ELECTRIC FAN HEATERS DUCTABLE



B 18EPR / B 30EPR



RS 30 / RS 40



PATENTED PENDING

- Possible connection to a flexible tube
- Possible connection to an optional room thermostat
- Easy to move thanks to big wheels
- Extension cord as a standard (for EPR series)
- Grip for easy transport (for B 30EPR)
- No oxygen consumption
- No fumes, no odours, no humidity
- Summer-Winter switch for ventilation only
- Low noise
- Manual reset
- Motor with thermal protection
- Stainless steel heating elements
- Overheat thermostat
- Adjustable heat
- Strong and long lasting steel construction



OPTIONAL ACCESSORIES:



Extension cord

B 18EPR - 5 m - **4511.033**
B 18EPR - 10 m - **4511.034**
B 30EPR - 5 m - **4511.035**

B 30EPR - 10 m - **4511.036**
RS 30, RS 40 - 5 m - **4210.171**
RS 30, RS 40 - 10 m - **4210.181**

Adaptor ring kit for RS 30, RS 40
4210.180



Room thermostat TH 5 with 3 m cable
4150.105

Room thermostat TH 5 with 10 m cable
4161.967

Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$

Flexible tubes

B 18EPR - $\varnothing$ 305 mm - 7,6 m - **4515.553**

B 30EPR - $\varnothing$ 407 mm - 7,6 m - **4031.401**

B 30EPR - $\varnothing$ 407 mm - 15 m - **4515.551**

RS 30, RS 40 - $\varnothing$ 508 mm - 7,6 m - **4515.552**

First 2 m (black part) are made of a material resistant to 150°C; Hose binder included

SPECIFICATIONS		B 18EPR	B 30EPR	RS 30	RS 40
Heating power	kW	9/18	15/30	15/30	20/40
	Btu/h	30.700-61.400	51.200-102.400	51.200-102.400	68.200-136.500
	kcal/h	7.740-15.480	12.900-25.800	12.900-25.800	17.200-34.400
Air displacement	m ³ /h	1.700	3.500	3.100	3.100
Power supply	V/Hz	400/50	400/50	380-400/50	380-400/50
Plug (male) from heater side		400V / 32A / 5P	400V / 63A / 5P	400V / 63A / 5P	400V / 63A / 5P
Rated current	A	26	43,5	43	58
Switch pos. 1		OFF	OFF	OFF	fan
Switch pos. 2		fan	fan	fan	13 kW
Switch pos. 3/4	kW	9/18	15/ 30	15/30	26/40
Thermostat control		optional	optional	on board	on board
Temperature range	°C	< 25	< 25	-5 - +35	-5 - +35
Protection		IP24	IP24	IP20	IP20
Packaging dimension (l x w x h)	mm	600 x 400 x 460	1050 x 600 x 820	740 x 630 x 770	870 x 630 x 770
Net / gross weight	kg	27/29,3	53/63	38/42	46/52
Pallet	pcs	16	1	6	6

GAS HEATERS PROPANE/BUTANE

MECHANIC 14,4V



BLP 17M DC



PATENTED



- It works at 14.4V only and therefore offers the highest electrical safety
- It is equipped with DC brushless motors and electronic board for power management which allow very low energy consumption: only 10% of a conventional AC heater
- It allows full portability: it can work with power or with battery
- Compatible with BAT3 Master Battery or with the equivalent Bosch Battery
- It works with lithium battery or with cable
- Manual ignition
- Regulator includes safety valve
- Regulator and gas hose included
- Motor with thermal protection
- Overheat thermostat
- Adjustable heat
- Strong and long lasting construction
- Easy maintenance
- Power adapter for 220V AC or 110V AC included
- Standard set includes: heater, gas hose, gas regulator and power adapter. Also available: heater, gas regulator, power adapter, 3Ah battery and battery charger

OPTIONAL ACCESSORIES:



BAT3
3Ah Master Lithium Battery
4106.312

It allows long autonomy: more than 8 hours completely independent from the net. BAT3 Master battery can be easily removed and recharged. BAT3 Master lithium battery allows more than thousand recharges.



CHA Master battery charger
4106.313

It allows fast battery recharges (in average less than 1 hour). CHA Master battery charger is compatible with 110/240V and 50/60 Hz.

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BLP 17M DC
Heating power	kW	10-16
	Btu/h	34.200-54.800
	kcal/h	8.600-13.800
Pressure	bar	0,7
Ignition		manual
BAT3 battery autonomy	h	8
Thermostat control		no
Air displacement	m ³ /h	300
Fuel consumption	kg/h	1,16
Power supply	V/Hz	110-240/50-60 or battery
Electric power	kW	0,007
Rated current	A	0,6
Packaging dimension (l x w x h)	mm	550 x 230 x 300
Net / gross weight	kg	5/6
Pallet	pcs	49

GAS HEATERS PROPANE/BUTANE

MECHANIC



BLP 17M / BLP 33M / BLP 53M / BLP 73M



PATENTED



- Manual ignition
- Regulator includes safety valve
- Regulator and gas hose included
- Motor with thermal protection
- Overheat thermostat
- Adjustable heat
- Strong and long lasting construction
- Easy maintenance



Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BLP 17M	BLP 33M	BLP 53M	BLP 73M
Heating power	kW	10-16	18-33	36-53	49-73
	Btu/h	34.200-54.800	61.500-112.800	123.000-181.000	167.100-249.300
	kcal/h	8.600-13.800	15.500-28.400	31.000-45.600	42.100-62.800
Pressure	bar	0,7	0,75-1,5	0,75-1,5	0,75-1,5
Ignition		manual	manual	manual	manual
Thermostat control		no	no	no	no
Air displacement	m³/h	300	1.000	1.450	2.300
Fuel consumption	kg/h	1,16	2,4	3,78	5,02
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Electric power	kW	0,053	0,06	0,11	0,218
Rated current	A	0,23	0,26	0,48	0,95
Packaging dimension (l x w x h)	mm	550 x 230 x 300	600 x 250 x 360	680 x 300 x 510	760 x 300 x 510
Net / gross weight	kg	5/6	8/9	12,5/14,3	14,4/16,8
Pallet	pcs	49	30	16	16

GAS HEATERS PROPANE/BUTANE ELECTRONIC



BLP 33ET / BLP 53ET / BLP 73ET



PATENTED



BLP 103ET



- Electronic ignition
- Possible connection to an optional room thermostat
- Double electrovalve
- Air-temp flow sensor
- Regulator includes safety valve
- Regulator and gas hose included
- Motor with thermal protection
- Overheat thermostat
- Adjustable heat
- Strong and long lasting construction
- Easy maintenance
- BLP 103ET trolley included

OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: ± 1,5°C



Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BLP 33ET	BLP 53ET	BLP 73ET	BLP 103ET
Heating power	kW	18-33	36-53	49-73	57-103
	Btu/h	61.500-112.800	123.000-181.000	167.100-249.300	194.500-351.700
	kcal/h	15.500-28.400	31.000-45.600	42.100-62.800	49.000-88.600
Pressure	bar	0,75-1,5	0,75-1,5	0,75-1,5	0,75-2,0
Ignition		electronic	electronic	electronic	electronic
Thermostat control		optional	optional	optional	optional
Air displacement	m ³ /h	1.000	1.450	2.300	3.260
Fuel consumption	kg/h	2,4	3,78	5,02	6,66
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Electric power	kW	0,074	0,126	0,23	0,23
Rated current	A	0,32	0,55	1,00	1,00
Packaging dimension (l x w x h)	mm	600 x 250 x 360	680 x 300 x 510	760 x 300 x 510	940 x 390 x 620
Net / gross weight	kg	8/9	12,5/14,3	14,4/16,8	35/38
Pallet	pcs	36	16	16	6

INFRARED OIL HEATERS



XL 6

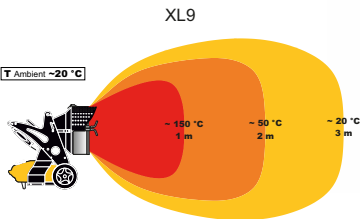


PATENTED

XL 9ER / XL 9SR



PATENTED



- Radiant heating
- No air flow
- Low noise
- Electronic flame control with photocell
- XL9: Possible connection to an optional room thermostat
- XL6: On board room thermostat and digital temperature display
- Post-ventilation
- Standard oil level indicator
- Strong and long lasting construction
- Adjustable direction / Tilting (for XL9)
- Two oil filters: oil pump filter and suction filter

OPTIONAL ACCESSORIES:



Fuel pre-heater for XL 9ER/SR
4031.120

Room thermostat TH 5 with 3 m cable for XL 9ER/SR
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: ± 1,5°C



Trolley for model XL 6
4201.159

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		XL 6	XL 9ER	I	XL 9SR	II
Heating power	kW	17	43	29		43
	Btu/h	58.000	146.900	99.300		146.900
	kcal/h	14.600	37.000	25.000		37.000
Fuel consumption	kg/h	1,35	3,37	2,3		3,37
Fuel autonomy	h	7	14	21		14
Thermostat control		included	optional	optional		
Electric power	kW	0,2	0,14	0,16		
Power supply	V/Hz	220-240/50	220-240/50	220-240/50		
Rated current	A	0,85	0,6	0,7		
Tank capacity	l	11	60	60		
Packaging dimension (l x w x h)	mm	600 x 380 x 580	1200 x 750 x 1130	1200 x 750 x 1130		
Net / gross weight	kg	18/20	69/85	69/85		
Pallet	pcs	16	1	1		

INFRARED ELECTRIC HEATERS



TS 3A



HALL 1500



HALL 3000

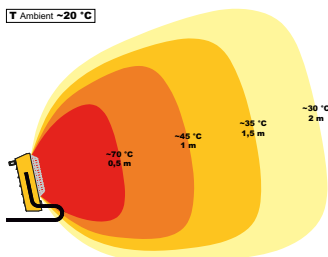


- Radiant heating
- Instant heat
- No oxygen consumption
- No air flow, no dust
- No fumes, no odours, no humidity
- No noise
- 100% efficiency
- Adjustable heat settings (except HALL 1500)



OPTIONAL ACCESSORIES:

T Ambient ~20 °C



Stand for HALL 1500
4012.321

SPECIFICATIONS		TS 3A	HALL 1500	HALL 3000
Heating power	kW	0,8 - 1,6 - 2,4	1,5	15/30
	Btu/h	2.700 - 5.500 - 8.200	5.100	5.100-10.200
	kcal/h	690 - 1.380 - 2.070	1.290	1.290-2.580
Power supply	V/Hz	220-240/50	220-240/50	220-240/50
Rated current	A	10,5	6,5	13,0
Packaging dimension (l x w x h)	mm	440 x 390 x 240	540 x 250 x 320	550 x 340 x 640
Net / gross weight	kg	7,6/8,2	4,8/5,7	12/13
Pallet	pcs	32	36	12

STATIONARY OIL HEATERS SUSPENDED



BS 230 / BS 360



BVS 170E / BVS 290E



- Designed for suspension including frame for lifting
- External fuel tank according to the needs
- Lighter in weight thanks to the lack of fuel tank
- Possible connection to an optional room thermostat
- Possible connection to a flexible tube (for BVS models)
- Possibility of flue gas exhaust (for BVS models)
- High air flow
- Overheat and post-ventilation thermostat
- Transparent external suction filter
- Two oil filters: oil pump filter and suction filter
- Electronic flame control with photocell
- Heat exchanger
- Stainless steel combustion chamber
- Easy maintenance with external pump
- Strong and long lasting construction
- 2 pieces of fuel line (supply and return line) included



OPTIONAL ACCESSORIES:



Fuel pre-heater
4031.120

Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: $\pm 1,5^{\circ}\text{C}$



Flexible tubes
BVS 170E - Ø 407 mm - **4031.401**
BVS 290E - Ø 610 mm - **4031.038**
First 2 m (black part) are made of a material resistant to 150°C
Hose binder included



Adaptor ring kit
BVS 170E - Ø 400 mm - **4031.909**
BVS 290E - Ø 600 mm - **4031.910**

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		DIRECT		INDIRECT	
		BS 230	BS 360	BVS 170E	BVS 290E
Heating power	kW	65,0	111,0	47,0	81,0
	Btu/h	222.000	379.000	160.400	276.300
	kcal/h	56.000	95.460	40.400	69.600
Air displacement	m ³ /h	3.000	3.300	1.800	3.300
Thermostat control		optional	optional	optional	optional
Oil consumption	kg/h	5,20	2,71	3,90	6,80
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Electric power	kW	0,8	1,06	0,8	1,06
Rated current	A	2,3	4,6	2,3	4,6
Flue tube Ø	mm	-	-	150	150
Outlet hose Ø	mm	-	-	340	400
Packaging dimension (l x w x h)	mm	1300 x 650 x 700	1600 x 750 x 800	1330 x 650 x 890	1600 x 750 x 990
Net / gross weight	kg	46/65	72/96	54/73	87/108

STATIONARY SPACE HEATERS



OIL



WOOD



BG 100PD



CT 50P



Oil heater BG 100PD

- Centrifugal fan
- Summer-Winter switch for ventilation only
- Separate oil burner
- Easy maintenance with combustion chamber
- Transparent external suction filter
- Possible connection to an optional room thermostat
- Possible connection to a ventilation system
- Possibility of flue gas exhaust

Solid fuel heater CT 50P

- Wood as a cheap fuel
- Manual ignition system
- Fan can be install on both sides
- Possibility of flue gas exhaust

OPTIONAL ACCESSORIES:



Top for BG 100PD
4517.099



Room thermostat TH 5 with 3 m cable
4150.105
Room thermostat TH 5 with 10 m cable
4161.967
Range: 0-36°C, Accuracy: ± 1,5°C



Fuel line 4m for BG 100PD
4031.460
(are required 2 pieces per 1 unit, supply line and return line)

Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		CT 50P	BG 100PD
Heating power	kW	50	134
	Btu/h	170.000	460.000
	kcal/h	43.000	115.000
Air displacement	m ³ /h	1.200	7.600
Fuel		wood	oil
Electric power	kW	-	3,6
Power supply	V/Hz	230/50	400/50
Rated current	A	0,6	3x5,2
Flue tube Ø	mm	150	200
Packaging dimension (l x w x h)	mm	1315 x 775 x 1190	1650 x 800 x 2057
Net weight	kg	302	250

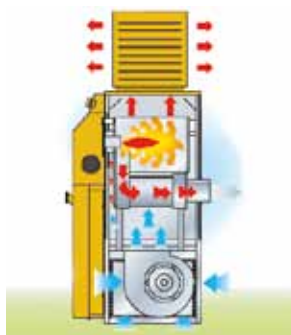
STATIONARY OIL SPACE HEATERS



BF 35 / BF 45 / BF 75 / BF 95 / BF 105



- Large built-in oil tank with filter
- Integrated burner with electronic flame control and photocell cut-off
- Fan limit thermostat with automatic reset
- Summer-winter switch for ventilation only
- Centrifugal fan
- Stainless steel combustion chamber
- Excellent heat insulation with detachable panels
- Wide inspection doors for easy cleaning
- Built in thermostat



Ventilation of the room is necessary to prevent a deficiency in oxygen supply.

SPECIFICATIONS		BF 35	BF 45	BF 75	BF 95	BF 105
Heating power	kW	33,7	46,8	71,1	93,0	104,6
	Btu/h	114.984	159.682	242.593	317.316	356.895
	kcal/h	29.000	40.300	61.200	80.000	90.000
Air displacement	m ³ /h	1.900	2.800	4.500	5.300	6.300
Fuel autonomy	h	15	11	10	11	12
Fuel consumption	kg/h	2,84	3,95	6,00	7,84	8,82
Electric motor power	kW	0,245	0,245	0,590	0,736	0,736
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Chimney Ø	mm	120	120	150	180	200
Tank capacity	l	55	55	75	105	135
Packaging dimension (l x w x h)	mm	1050 x 460 x 1600	1050 x 460 x 1600	1120 x 540 x 1700	1220 x 680 x 1885	1400 x 760 x 2000
Net weight	kg	132	137	173	197	264

ACCESSORIES

PHOTO	ACCESSORIES	CODE	DESCRIPTION	DEVICES
	Fuel pre-heater	4031.120		B 230, B 360, BV 110E, BV 170E, BV 290E, XL 9ER, XL 9SR, BS 230, BS 360, BVS 170E, BVS 290E
	Room thermostat TH 5 with cable	4150.105 4161.967	3 m 10 m	B CEG series, B CED series, B130, B 180, B 230, B 360, BV series, AIR-BUS series, B 18EPR, B 30EPR, RS 30, RS 40, BLP ET series, XL 9ER, XL 9SR, BS 230, BS 360, BVS 170E, BVS 290E
	Trolley	4103.925 4201.159		B 35CED, B 70CED XL 6
	Extension cord	4511.031 4511.033 4511.035 4210.171 4511.032 4511.034 4511.036 4210.181	5 m 5 m 5 m 5 m 10 m 10 m 10 m 10m	B 5EPB, B 9EPB B 15EPB, B 18EPR, B 22EPB B 30EPR RS 30, RS 40 B 5EPB, B 9EPB B 15EPB, B 18EPR, B 22EPB B 30EPR RS 30, RS 40
	Fuel line 4m	4031.460		AIR-BUS series BG 100PD
	Fuel scoop	4515.932		AIR-BUS series
	Fuel tank	4514.091 4514.098 4514.099	85 l 140 l 200 l	AIR-BUS BV 310 AIR-BUS BV 470 AIR-BUS BV 690
	Adaptor ring kit	4032.950 4031.909 4031.910 4210.180	Ø 294 mm Ø 400 mm Ø 600 mm Ø 500 mm	BV 77E BV 110E, BV 170E, BVS 170E BV 290E, BVS 290E RS 30, RS 40
	1-way outlet	4514.097 4514.093	Ø 600 mm Ø 700 mm	AIR-BUS BV 470 AIR-BUS BV 690
	2-way outlet	4514.096 4514.080	2 x Ø 400 mm 2 x Ø 500 mm	AIR-BUS BV 470 AIR-BUS BV 690
	4-way outlet	4514.789	4 x Ø 225 mm	AIR-BUS BV 310
	Top	4514.084 4514.085 4514.086		AIR-BUS BV 310 AIR-BUS BV 470 AIR-BUS BV 690
	Flexible tubes	4515.557 4515.550 4515.553 4515.558 4031.401 4515.551 4515.554 4515.552 4031.038 4515.556	Ø 230 mm – 7,6 m Ø 305 mm – 3 m Ø 305 mm – 7,6 m Ø 350 mm – 7,6 m Ø 407 mm – 7,6 m Ø 407 mm – 15 m Ø 450 mm – 7,6 m Ø 508 mm – 7,6 m Ø 610 mm – 7,6 m Ø 710 mm – 7,6 m	AIR-BUS BV 310 (4-way outlet) BV 77E AIR-BUS: BV 470 (4-way outlet), BV 77E, B 18EPR BV 690 (4-way outlet) BV 110E, BV 170E, BVS 170E, B 30EPR, AIR-BUS: BV 470 (2-way outlet) B 30EPR AIR-BUS BV 310 (1-way outlet) AIR-BUS BV 690 (2-way outlet), RS 30, RS 40 BV 290E, BVS 290E AIR-BUS BV 470 (1-way outlet), AIR-BUS BV 690 (1-way outlet)
	Bag for flexible tubes	4515.592 4515.591 4515.593	Ø 305 mm Ø 407 mm Ø 610 mm	
	BAT3 3Ah Lithium Battery	4106.312		BLP 17M DC
	CHA Battery charger	4106.313		BLP 17M DC
	Manometers	4109.427 4109.435 4201.187	0-0,6 bar 0-16 bar 0-25 bar	B 35CED, B 70CED, B 100CED, B 150CED for the high-pressure oil heaters XL 6
	Stainless steel exhaust-pipe 1m	4013.260 4013.243 4013.245	Ø 120 mm Ø 150 mm Ø 200 mm	BV 77E BV 110E, BV 170E, BV 290E, AIR-BUS BV 310 AIR-BUS BV 470, BV 690
	Stainless steel exhaust elbow 90°	4013.261 4013.247 4013.248	Ø 120 mm Ø 150 mm Ø 200 mm	BV 77E BV 110E, BV 170E, BV 290E, AIR-BUS BV 310 AIR-BUS BV 470, BV 690
	Stainless steel chimney pot	4013.262 4013.249 4013.250	Ø 120 mm Ø 150 mm Ø 200 mm	BV 77E BV 110E, BV 170E, BV 290E, AIR-BUS BV 310 AIR-BUS BV 470, BV 690

HOW TO CHOOSE THE BEST HEATER FOR YOUR NEEDS

ΔT 30 °C

INFRARED HEATING		SUGGESTED HEATED AREA
		
Oil	Electric	m ²
1,5 kw	-	HALL 1500
2,4 kw	-	TS 3A
3,3 kw	-	HALL 3000
20 kw	XL 6	-
43 kw	XL 9	-

This chart will help you choosing the best heater for your needs. The selection can be made in two ways: you can either refer to the power required (kW column) and choose the relevant heaters or refer to the room dimension (m³ column) and choose the correct heater according to level of insulation.

This calculation is intended for a temperature increase of 30 degrees: for lower or higher increases, the result will change in proportion. Example: for a temperature increase of 10 degrees it is required only 1/3 of the power indicated in the chart.

-  K=0,5 Well insulated buildings (houses and offices)
-  K=1,5 Moderately insulated buildings (garages)
-  K=2,5 Poorly insulated buildings (old houses and cellars)
-  K=3,5 Not insulated buildings (wood or corrugated metal buildings, greenhouses)

For a finer calculation you can refer to the following formula:

$$V \times \Delta T \times K / 860 = \text{kW}$$

- V is the volume to be heated in m³
- ΔT is the difference between the existing and desired temperature in C
- K is the dispersion coefficient (from 0,5 to 3,5)

- 1 kW = 860 kcal/h
- 1 kcal/h = 3,97 Btu/h
- 1 kW = 3412 Btu/h
- 1 Btu/h = 0,252 kcal/h

AIRFLOW HEATING				SUGGESTED HEATED VOLUME			
							
Electric	Gas	Direct Oil	Indirect Oil	m ³	m ³	m ³	m ³
							
2 kw	B 2EPB	-	-	82	38	23	16
3,3 kw	B 3,3EPB	-	-	135	63	38	27
5 kw	B 5EPB	-	-	205	96	57	41
9 kw	B 9EPB	-	-	369	172	103	74
10 kw	-	B 35CED	-	410	191	115	82
15 kw	B 15EPB	-	-	614	287	172	123
16 kw	-	BLP 17M BLP 17M DC	-	655	306	183	131
18 kw	B 18EPR	-	-	737	344	206	147
20 kw	-	B 70CED	BV 77E	819	382	229	164
22 kw	B 22EPB	-	-	901	420	252	180
29 kw	-	B 100CED B 100CEG	-	1188	554	333	238
30 kw	B 30EPR RS 30	-	B 130	1229	573	344	246
33 kw	-	BLP 33M/ET	-	1351	631	378	270
40 kw	RS 40	-	-	2393	764	458	327
44 kw	-	B 150CED B 150CEG	-	1802	841	505	360
47 kw	-	-	BV 170 E	1925	898	539	385
48 kw	-	B 180	-	1966	917	550	393
53 kw	-	BLP 53M/ET	-	2170	1013	608	434
65 kw	-	B 230	-	2662	1242	745	532
73 kw	-	BLP 73M/ET	-	2990	1395	837	598
75 kw	-	-	AIR-BUS BV 310	3071	1433	860	614
81 kw	-	-	BV 290E	3317	1548	929	663
90 kw	-	B 300CED	-	5160	1720	1032	737
103 kw	-	BLP 103ET	-	4218	1968	1181	844
111 kw	-	B 360	-	4546	2121	1273	909
134 kw	-	-	AIR-BUS BV 470	5488	2561	1537	1098
220 kw	-	-	AIR-BUS BV 690	9010	4204	2523	1802

MASTER®

HEATERS DEHUMIDIFIERS FANS COOLERS

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