

MASTER[®]

2012/2013



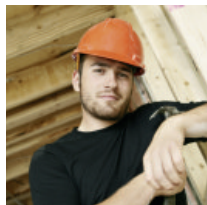
PROFESSIONAL HEATERS

MCS GROUP
www.masterheaters.co.uk



MASTER®

CHOOSING MASTER PORTABLE HEATERS SAVES YOU MONEY AND RESPECTS THE ENVIRONMENT



Save money: Master heaters do not need installation

Use the same heater in different places: Master heaters are portable

Heat what you need: Master heaters can heat either large or limited areas

Heat when you need: Master heaters warm up very quickly

Avoid overheating and overspending: Master heaters can be controlled by a remote thermostat

Choose the most cost effective or the cleanest energy you like: gas, oil, electricity

Respect the environment: Efficient Master burning process minimizes pollution

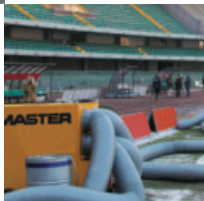
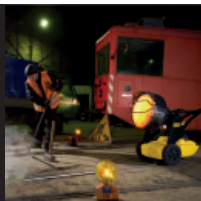
Reduce your investment: Buy only the power you need

Protect your investment: Master heaters last many years and can be easily repaired with spare parts available for 10 years

MASTER CLIMATE SOLUTIONS BRANCHES



OIL GAS ELECTRIC



Direct oil heaters - low pressure	4
Direct oil heaters - high pressure	5
Indirect oil heaters	6 - 7
Indirect oil heaters – AIR BUS	8 - 9
Electric fan heaters	10 - 11
Propane/butane gas heaters	12
Infrared oil heaters	14
Infrared electric heaters	15
Stationary space heaters	16
Stationary oil heaters	17
Regulators and gas hoses	18
How to calculate the heating requirements	19

DIRECT OIL HEATERS LOW PRESSURE

B 35CED / B 70CED



B 100CED / B 150CED



REGISTERED
design



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

OPTIONAL ACCESSORIES:



Trolley
for models
B 35CED,
B 70CED
4103.925



**Room thermostat
TH 5 with 3 m cable**
Range: 0-36°C,
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request

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

SPECIFICATIONS		B 35CED	B 70CED	B 100CED*	B 150CED*
Power	kW	10	20	29	44
	Btu/h	34 200	68 300	99 300	150 500
	kcal/h	8 600	17 200	25 000	37 900
Air displacement	m ³ /h	280	400	800	900
Thermostat control		optional	optional	optional	optional
Fuel consumption	kg/h	0.8	1.6	2.3	3.5
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50
Rated current	A	0.35	0.8	1.0	1.2
Tank capacity	l	15	19	44	44
Packaging dimension (l x w x h)	mm	810 x 350 x 450	810 x 350 x 450	1110 x 400 x 450	1110x 400 x 450
Net / gross weight	kg	17/19	17/19	25/28	25/28
Pallet	pcs	15	15	10	10

*110V available

DIRECT OIL HEATERS HIGH PRESSURE



B 180



B 230 / B 360



- Overheat thermostat
- High quality fuel pump
- Post-ventilation thermostat (except B180)
- Transparent external suction filter (except B180)
- Possible connection to an optional room thermostat
- Possible connection to a fuel pre-heater (except B180)
- Electronic flame control with photocell
- Thermally protected motor
- Stainless steel combustion chamber
- Oil tank with level indicator (except B180)
- Standard trolley
- Strong and long lasting construction
- Easy maintenance with external pump
- High air displacement
- Two oil filters: oil pump filter and suction filter



OPTIONAL ACCESSORIES:



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



Room thermostat
TH 5 with 3 m cable
Range: 0-36°C
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request

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

SPECIFICATIONS		B 180	B 230	B 360
Power	kW	48	65	111
	Btu/h	165 000	222 000	379 000
	kcal/h	41 200	56 000	95 460
Air displacement	m ³ /h	1 550	3 000	3 300
Thermostat control		optional	optional	optional
Fuel consumption	kg/h	3.8	5.2	8.83
Power supply	V/Hz	220-240/50	220-240/50	220-240/50
Rated current	A	1.5	2.3	4.6
Tank capacity	l	36	65	105
Packaging dimension (l x w x h)	mm	1200 x 400 x 530	1200 x 650 x 1000	1600 x 750 x 1180
Net / gross weight	kg	30/34	57/76	86/110
Pallet	pcs	8	1	1

INDIRECT OIL HEATERS



BV 77E



BV 110E / BV 170E / BV 290E



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

OPTIONAL ACCESSORIES:



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



Room thermostat
TH 5 with 3 m cable
Range: 0-36°C,
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request



Adaptor ring kit
BV 77 - Ø 294 mm -
4032.950
BV 110E, BV 170E
- Ø 400 mm -
4031.909
BV 290E - Ø 600 mm -
4031.910



Flexible tubes
BV 77E - Ø 305 mm - **4032.951** (3m)
BV 110E, BV 170E - Ø 407 mm
- **4031.401** (7.6m)
BV 290E - Ø 610 mm - **4031.038**
(7.6m)
In 7.5 m hoses first 2 m (black part)
are made of a material resistant to
150°C

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

SPECIFICATIONS		BV 77E	BV 110E	BV 170E*	BV 290E
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
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
Rated current	A	1.5	2.3	2.3	4.6
Tank capacity	l	36	65	65	105
Flue tube Ø	mm	120	150	150	150
Blast opening Ø	mm	203	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

*110V available

INDIRECT OIL HEATERS



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
- Electronic flame control with photocell
- High air flow
- Overheat and post-ventilation thermostat
- Possible connection to an optional room thermostat
- Possible connection to a flexible tube
- Possibility of flue gas exhaust
- Stainless steel combustion chamber
- Heat exchanger
- Strong and long lasting construction
- Easy maintenance with external pump
- Two oil filters: oil pump filter and suction filter
- Transparent external suction filter
- Required 2 pieces of fuel line per 1 unit (supply and return line)



OPTIONAL ACCESSORIES:



Fuel pre-heater
4031.120



Room thermostat
TH 5 with 3 m cable
Range: 0-36°C,
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request



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



Flexible 7.6 m 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

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

SPECIFICATIONS		BVS 170E	BVS 290E
Power	kW	47	81
	Btu/h	160 400	276 300
	kcal/h	40 400	69 600
Air displacement	m ³ /h	1 800	3 300
Thermostat control		optional	optional
Fuel consumption	kg/h	3.9	6.8
Power supply	V/Hz	220-240/50	220-240/50
Rated current	A	2.3	4.6
Tank capacity	l	without tank	without tank
Flue tube Ø	mm	150	150
Blast opening Ø	mm	340	400
Packaging dimension (l x w x h)	mm	1330 x 650 x 890	1600 x 750 x 990
Net / gross weight	kg	63/76	80/111

INDIRECT OIL HEATERS AIR-BUS

BV 310FS



BV 470FS



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

OPTIONAL ACCESSORIES:



Room thermostat
TH 5 with 3 m cable
Range: 0-36°C,
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request



Fuel line 4m
4031.460
(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

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
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
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 1100	1750 x 760 x 1150	2210 x 850 x 1380	2200 x 840 x 147
Net Weight	kg	162	224	330	333

INDIRECT OIL HEATERS AIR-BUS



BV 690FTR



1-way outlet
BV470 - Ø 600 mm - 4514.097
BV690 - Ø 700 mm - 4514.093



2-way outlet
BV470 - 2 x Ø 400 mm - 4514.096
BV690 - 2 x Ø 400 mm - 4514.094

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



OPTIONAL ACCESSORIES:



Fuel scoop
BV 310, BV 470, BV 690
- 4515.932



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



Flexible 7.6 m tubes
4-way outlet
BV 470, BV 690 - Ø 305 mm - 4515.553
BV 310 - Ø 230 mm - 4515.557
2-way outlet
BV470, BV690 - Ø 407 mm - 4031.401
1-way outlet
BV 310 - Ø 450 mm - 4515.554
BV 470 - Ø 600 mm - 4031.038
BV 690 - Ø 700 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 310 FSR	BV 470 FSR	BV 690 FTR
Power	kW	75	134	220
	Btu/h	256 000	460 000	751 000
	kcal/h	64 500	115 000	190 000
Air displacement	m ³ /h	4 400	8 000	12 500
Fan		radial	radial	radial
Thermostat control		optional	optional	optional
Fuel consumption	kg/h	6.4	11.3	18.5
Power supply	V/Hz	230/50	230/50	400/50
Rated current	A	7.1	13.0	7.6
Flue tube Ø	mm	150	200	200
Blast opening Ø	mm	450	4x270	4x320
Packaging dimension (l x w x h)	mm	1800 x 620 x 1040	2090 x 760 x 1230	2510 x 840 x 1440
Net Weight	kg	162	224	326

ELECTRIC FAN HEATERS



B 3EPB



B 9EPB



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

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

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

SPECIFICATIONS		B 2EPB	B 3EPB*	B 5EPB	B 9EPB	B 15EPB	B 22EPB
Power	kW	1/2	1.55/3.0	2.5/5	4.5/9	7.5/15	11/22
	Btu/h	3 400-6 800	5 100-10 200	8 530-17 000	15 350-30 700	25 600-51 200	37 530-75 100
	kcal/h	860-1 720	1 300-2 550	2 150-4 300	3 870-7 740	6 450-12 900	9 460-18 900
Air displacement	m ³ /h	184	510	510	800	1 700	2 400
Power supply	V/Hz	230/50	230/50	400/50	400/50	400/50	400/50
Rated current	A	8.7	14.5	3 x 7.2	3 x 13	3 x 22	3 x 32
Switch pos. 1		OFF	OFF	OFF	OFF	OFF	OFF
Switch pos. 2		fan	fan	fan	fan	fan	fan
Switch pos. 3	kW	1.0	1.55	2.5	4.5	7.5	11.0
Switch pos. 4	kW	2.0	3.0	5.0	9.0	15.0	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		IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Packaging dimension (l x w x h)	mm	240 x 220 x 260	280 x 270 x 420	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	5.1/5.6	6.4/7	9/10.8	15/15.7	20/22.2
Pallet	pcs	75	48	40	24	15	12

*110V available

ELECTRIC FAN HEATERS



B 18EPR



B 30EPR



- 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
- Manual reset
- Grip for easy transport (for B 30EPR)
- No oxygen consumption
- No fumes, no odours, no humidity
- Low noise
- Motor with thermal protection
- Stainless steel heating elements
- Overheat thermostat
- Adjustable heat
- Strong and long lasting steel construction
- Summer-Winter switch for ventilation only



OPTIONAL ACCESSORIES:



Room thermostat TH 5 with 3 m cable
Range: 0-36°C
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable for special request



Flexible 7.6 m tubes
B 18EPR - Ø 305 mm - **4515.553**
B 30EPR - Ø 407 mm - **4031.401**

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



Extension cord
B 18 - 5 m - **4511.033**
B 18 - 10 m - **4511.034**

SPECIFICATIONS		B 18EPR	B 30EPR
Power	kW	9/18	15/30
	Btu/h	30 700-61 400	51 200-102 400
	kcal/h	7 740-15 480	12 900-25 800
Air displacement	m ³ /h	1 700	3 500
Power supply	V/Hz	400/50	400/50
Rated current	A	3 x 26	3 x 43.5
Switch pos. 1		OFF	OFF
Switch pos. 2		fan	fan
Switch pos. 3	kW	9.0	15.0
Switch pos. 4	kW	18.0	30.0
Thermostat control		optional	optional
Temperature range	°C	< 25	< 25
Protection		IPX4	IPX4
Packaging dimension (l x w x h)	mm	620 x 390 x 430	1020 x 580 x 660
Net / gross weight	kg	27/29.3	51/63
Pallet	pcs	16	1

GAS HEATERS PROPANE/BUTANE

BLP 15M / BLP 33M



BLP 53M / BLP 73M



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

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

SPECIFICATIONS		BLP 10	BLP 15M	BLP 33M*	BLP 53M*	BLP 73M*	BLP 103DV*
Power	kW	10.5	10-16	18-33	36-53	49-73	35-109
	Btu/h	35 700	34 200-54 800	61 500-112 800	123 000-181 000	167 100-249 300	110 400-371 910
	kcal/h	9 000	8 600-13 800	15 500-28 400	31 000-45 600	42 100-62 800	30 100-93 740
Pressure	bar	0.3	0.7	0.75-1.5	0.75-1.5	0.75-1.5	0.5-2.0
Ignition		manual	manual	manual	manual	manual	manual
Thermostat control		no	no	no	no	no	no
Air displacement	m ³ /h	300	300	1 000	1 450	2 300	3 260
Fuel consumption	kg/h	0.764	1.16	2.4	3.78	5.02	7.77
Power supply	V/Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	110-240/50
Rated current	A	0.23	0.23	0.26	0.48	0.95	1.25
Packaging dimension (l x w x h)	mm	400 x 210 x 300	550 x 230 x 300	600 x 250 x 360	680 x 300 x 510	760 x 300 x 510	940 x 390 x 620
Net / gross weight	kg	4/5	5/6	8/9	12.5/14.3	14.4/16.8	35/38
Pallet	pcs	77	49	30	16	16	6

*dual voltage

GAS HEATERS PROPANE/BUTANE

BLP 53E / BLP 73E



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



BLP 103E



OPTIONAL ACCESSORIES:



Room thermostat TH 5
with 3 m cable
Range: 0-36°C
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request

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

SPECIFICATIONS		BLP 33E	BLP 53E	BLP 73E	BLP 103E
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
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



REGISTERED
design

XL 9E

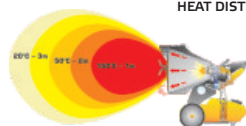


XL 9SR



- Radiant heating
- No air flow
- Low noise
- Electronic flame control with photocell
- Possible connection to an optional room thermostat (except XL 6)
- Post-ventilation
- Combustion chamber made of ceramic fibre
- Standard oil level indicator
- Strong and long lasting construction
- Adjustable direction / Tilting
- Two oil filters: oil pump filter and suction filter

HEAT DISTRIBUTION



OPTIONAL ACCESSORIES:



Fuel pre-heater
for XL 9
4031.120



Room thermostat
TH 5 with 3 m cable
for XL 9
Range: 0-36°C
Accuracy: ± 1.5°C
4150.105
5 or 10 meter cable
for special request



Trolley
for model XL 6
4201.159

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

SPECIFICATIONS		XL 6	XL 9E/XL 9ER*	I XL 9S/XL 9SR* II	
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
Thermostat control		included	optional	optional	
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	12	-	-	

*XL 9E and XL 9S - 110V available

INFRARED ELECTRIC HEATERS



TS 3A



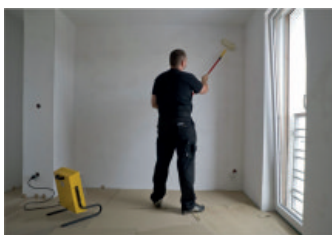
HALL 1500



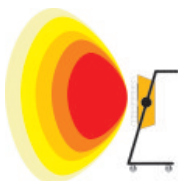
HALL 3000



- 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)



HEAT DISTRIBUTION



OPTIONAL ACCESSORIES:



Stand
for HALL 1500
4012.321

SPECIFICATIONS		TS 3 A	HALL 1500	HALL 3000
Power	kW	0.8 - 1.6 - 2.4	1.5	1.5 - 3
	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 SPACE HEATERS



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

- Cheap fuel
- Manual ignition system
- Possibility to use wood as a solid fuel
- 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
Range: 0-36°C
Accuracy: ± 1.5°C
for BG 100PD
4150.105
5 or 10 meter cable
for special request



Fuel line 4m
for BG 100PD
4031.460
(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
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 consumption	kg/h	15.0	10.2
Power supply	V/Hz	230/50	400/50
Rated current	A	0.6	3 x 5.2
Flue tube Ø	mm	150	200
Packaging dimension (l x w x h)	mm	1315 x 775 x 1190	750 x 1160 x 1920
Net weight	kg	302	259

STATIONARY OIL HEATERS



BF 35 - 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
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 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



Stainless steel exhaust-pipe 1m
 BV 77 - Ø 120 mm - **4013.260**
 BV 110-290, BV 310 - Ø 150
 mm - **4013.243**
 BV470, BV690 - Ø 200 mm
 - **4013.245**



Stainless steel exhaust elbow 90°
 BV 77 - Ø 120 mm - **4013.261**
 BV 110-290, BV 310 - Ø 150 mm
 - **4013.247**
 BV470, BV690 - Ø 200 mm
 - **4013.248**



Stainless steel chimney pot
 BV 77 - Ø 120 mm
 - **4013.262**
 BV 110-290, BV 310
 - Ø 150 mm
 - **4013.249**
 BV470, BV690 - Ø 200 mm
 - **4013.250**



Manometers
 B35, B70, B100, B150
 - 0-0.6 bar - **4109.427**
 for the high-pressure oil heaters
 - 0-16 bar - **4109.435**



Regulator

REGULATORS AND GAS HOSES

Model	Type (bar)	Regulator	Country of destination	Gas hose
BLP 10	0.3	4160.657	DE/AT/DK/NL/PL	4160.656
BLP 10	0.3	4160.679	ES/HR/SI/CZ/HU/FR/CH/BE/SK/YU/BA/RO/BG/LT/LV/EE/BA/RU	4160.656
BLP 10	0.3	4160.667	UK	4160.656
BLP 10	0.3	4160.671	IT/GR	4160.656
BLP 10	0.3	4160.663	NO/FIN/S	4160.656
BLP 15M	0.7	4160.659	DE/AT/DK/NL/PL	4160.656
BLP 15M	0.7	4160.680	ES/HR/SI/CZ/HU/FR/CH/BE/SK/YU/BA/RO/BG/LT/LV/EE/BA/RU	4160.656
BLP 15M	0.7	4160.668	UK	4160.656
BLP 15M	0.7	4160.672	IT/GR	4160.656
BLP 15M	0.7	4160.664	NO/FIN/S	4160.656
BLP 33M/E, BLP 53M/E, BLP 73M/E	0.75 - 1.5	4150.050	DE/AT/DK/NL/PL	4160.661
BLP 33M/E, BLP 53M/E, BLP 73M/E	0.75 - 1.5	4150.052	ES/HR/SI/CZ/HU/FR/CH/BE/SK/YU/BA/RO/BG/LT/LV/EE/BA/RU	4160.661
BLP 33M/E, BLP 53M/E, BLP 73M/E	0.75 - 1.5	4150.051	UK	4160.661
BLP 33M/E, BLP 53M/E, BLP 73M/E	0.75 - 1.5	4150.053	IT/GR	4160.661
BLP 33M/E, BLP 53M/E, BLP 73M/E	0.75 - 1.5	4150.054	NO/FIN/S	4160.661
BLP 103E	0.75 - 2.0	4150.055	DE/AT/DK/NL/PL	4160.656
BLP 103E	0.75 - 2.0	4150.057	ES/HR/SI/CZ/HU/FR/CH/BE/SK/YU/BA/RO/BG/LT/LV/EE/BA/RU	4160.656
BLP 103E, BLP 103DV	0.75 - 2.0	4150.056	UK	4160.656
BLP 103E	0.75 - 2.0	4150.058	IT/GR	4160.656
BLP 103E	0.75 - 2.0	4150.059	NO/FIN/S	4160.656

HOW TO CALCULATE THE HEATING REQUIREMENTS

Formula

$$V \times \Delta T \times K / 860 = kW$$

Before choosing your heater, you need to determine the minimum power required for your application.

Key:

V = Volume to be heated (width x length x height) in m³

ΔT = Difference between the external temperature and the desired internal temperature (in °C)

K = Dispersion coefficient



V = Width 5 m, Length 12 m
Height 3 m,
Volume to be heated = 180 m³



ΔT = External temperature -5°C
Internal temperature required +18°C
temperature ΔT = 23°C



K = This factor is determined by the type of construction and insulation

Example:

Thermal power required

$$180 \times 23 \times 4 / 860 = 19.3 \text{ kW}$$

$$(V \times \Delta T \times K / 860 = kW)$$

1 kW = 860 kcal/h
1 kcal/h = 3.97 Btu/h
1 kW = 3412 Btu/h
1 Btu/h = 0.252 kcal/h

Now you can choose the heater which best suits your application.

K=3.0-4.0 Simple building in wood or in corrugated metal - **Non insulated**

K=2.0-2.9 Simple construction, single brick layer, simple windows, simple roof - **Poorly insulated**

K=1.0-1.9 Standard construction, double brick layer, few windows, standard closed roof - **Moderately insulated**

K=0.6-0.9 Advanced construction, double insulated brick, few double pain windows, thick pavement foundation, well insulated roofing materials - **Well insulated**

APPROXIMATE HEATING REQUIREMENTS

Power			Well insulated buildings K=0.75	Moderately insulated buildings K=1.45	Poorly insulated buildings K=2.45	Non insulated buildings K=3.5
kW	Btu/h	kcal/h				
TEMPERATURE DIFFERENCE (ΔT) 30° C						
5	17 600	4 300	190 m ³	100 m ³	60 m ³	40 m ³
10	34 120	8 600	380 m ³	200 m ³	120 m ³	80 m ³
20	68 240	17 200	760 m ³	400 m ³	240 m ³	260 m ³
30	102 360	25 800	1 150 m ³	590 m ³	350 m ³	250 m ³
40	136 480	34 400	1 500 m ³	790 m ³	470 m ³	330 m ³
50	170 600	43 000	1 900 m ³	990 m ³	580 m ³	410 m ³
60	204 720	51 600	2 300 m ³	1 200 m ³	700 m ³	490 m ³
75	255 900	64 500	2 900 m ³	1 500 m ³	880 m ³	610 m ³
100	341 200	86 000	3 800 m ³	2 000 m ³	1 200 m ³	820 m ³
125	426 500	107 500	4 800 m ³	2 500 m ³	1 500 m ³	1 000 m ³
150	511 800	129 000	5 700 m ³	3 000 m ³	1 750 m ³	1 200 m ³
200	682 400	172 000	7 650 m ³	4 000 m ³	2 300 m ³	1 600 m ³

MASTER®

HEATERS
DEHUMIDIFIERS
FANS
COOLERS

MCS ITALY: Via Tione 12, 37010 Pastrengo (VR), Italy, (0039) 045 6770533

MCS CENTRAL EUROPE: ul. Magazynowa 5a, 62-023 Gądki, Poland, (0048) 61 654 4000

MCS RUSSIA: Kalinina 46/3/3 office 3, 142802 Stupino, Russia, (007) 496 65 373 65

MCS CHINA: Unit 11, No. 198 Changjian Rd, Baoshang Industrial Zone, Shanghai, China, 200949, (0086) 21 - 61486668

For further information, please contact your distributor:



Data, descriptions and pictures are for indication only and absolutely not binding.
The Company reserves the right to modify or improve them without prior notice.



PR00.139