

# MASTER<sup>®</sup>

2015/2016



## PORTABLE HEATERS

**MCS GROUP**  
[www.mcsworld.com](http://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



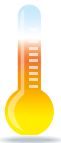
## HEAT ONLY WHAT YOU NEED

**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

# DIRECT OIL HEATERS

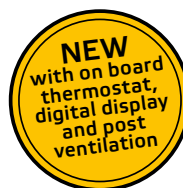
## LOW PRESSURE, ELECTRONIC



B 100CEG / **B 150CEG**



PATENTED



CONTROL PANEL

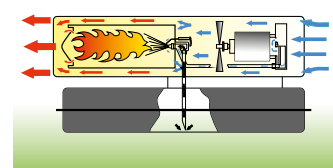


### OPTIONAL ACCESSORIES:

- High air displacement
- Possible connection to an optional room thermostat
- Two oil filters: oil tank filter and suction filter
- Thermally protected motor
- Overheat thermostat
- 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 included
- Digital display
- Post ventilation



Room thermostat TH 5 with cable  
3 m - 4150.105  
10 m - 4161.967  
Range: 0-36°C, Accuracy: ± 1,5°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 <sup>3</sup> /h	800	900
Fuel autonomy	h	16	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
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

# HOW TO CHOOSE THE BEST HEATER FOR YOUR NEEDS





ΔT 30 °C

kW	INFRARED HEATING		SUGGESTED HEATED AREA
	Oil	Electric	m <sup>2</sup>
1,5 kW	-	HALL 1500	4
2,4 kW	-	TS 3A	6
3,3 kW	-	HALL 3000	8
20 kW	XL 6	-	16
43 kW	XL 9	-	25

kW	AIRFLOW HEATING				SUGGESTED HEATED VOLUME			
	Electric	Gas	Direct Oil	Indirect Oil	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
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	-	BV 110E BF 35	1351	631	378	270
40 kW	RS 40	-	-	-	2393	764	458	327
44 kW	-	-	B 150CED B 150CEG	BF 45	1802	841	505	360
47 kW	-	-	-	BV 170E BVS 170E	1925	898	539	385
48 kW	-	-	B 180	CT 50P	1966	917	550	393
53 kW	-	BLP 53M/ET	-	-	2170	1013	608	434
65 kW	-	-	B 230 BS 230	-	2662	1242	745	532
73 kW	-	BLP 73M/ET	-	BF 75	2990	1395	837	598
75 kW	-	-	-	AIR-BUS BV 310	3071	1433	860	614
81 kW	-	-	-	BV 290E BVS 290E	3317	1548	929	663
90 kW	-	-	B 300CED	BF 95	5160	1720	1032	737
103 kW	-	BLP 103ET	-	BF 105	4218	1968	1181	844
111 kW	-	-	B 360 BS 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

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 (m<sup>3</sup> 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 m<sup>3</sup>
- 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