

# COMMERCIAL POWERMAX®

## HIGH PERFORMANCE ELECTRONIC IGNITION HEATER



Commercial PowerMax Heater

When performance is critical, the PowerMax Heater provides peak efficiency and easy maintenance in both indoor and outdoor applications. Seven sizes delivering up to 85% efficiency ratings and meeting all Low NOx requirements. PowerMax Heater is designed for operation to 10,000 foot elevation.

### Featured Highlights

- Reliable operation in natural or propane models
- Fan-assisted and filtered combustion air
- Dual ignition systems for models greater than 750,000 BTU
- Built in mixing system helps reduce condensation possibilities
- Fits through standard doorways
- Gas supply right or left side
- CSA Certified
- **CSD-1 and other options available. Contact factory for part numbers.**

CALIFORNIA PROPOSITION 65 WARNING

⚠ **WARNING:** Cancer and Reproductive Harm.  
 ⚠ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

### Ordering Information

Product	BTUs (000's)	Installation	Gas Type	Pump System	Heat Exchanger	Carton Wt. (Lbs.)
<b>COMMERCIAL POWERMAX NATURAL GAS MODELS</b>						
PM0500NACC3BXN	500	Indoor/Outdoor	Natural	Pump Mounted	Copper	495
PM0750NACC3BXN	750	Indoor/Outdoor	Natural	Pump Mounted	Copper	575
PM1000NACC3BXN	1000	Indoor/Outdoor	Natural	Pump Mounted	Copper	685
PM1250NACC3BXN	1250	Indoor/Outdoor	Natural	Pump Mounted	Copper	730
PM1500NACC3BXN	1500	Indoor/Outdoor	Natural	Pump Mounted	Copper	830
PM1750NACC3BXN	1750	Indoor/Outdoor	Natural	Pump Mounted	Copper	880
PM2000NACC3BXN	2000	Indoor/Outdoor	Natural	Pump Mounted	Copper	1025
PM0500NACC3PXN	500	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	495
PM0750NACC3PXN	750	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	575
PM1000NACC3PXN	1000	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	685
PM1250NACC3PXN	1250	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	730
PM1500NACC3PXN	1500	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	830
PM1750NACC3PXN	1750	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	880
PM2000NACC3PXN	2000	Indoor/Outdoor	Natural	Pump Mounted	CuproNickel	1025
<b>COMMERCIAL POWERMAX PROPANE GAS MODELS</b>						
PM0500PACC3BXN	500	Indoor/Outdoor	Propane	Pump Mounted	Copper	495
PM0750PACC3BXN	750	Indoor/Outdoor	Propane	Pump Mounted	Copper	575
PM1000PACC3BXN	1000	Indoor/Outdoor	Propane	Pump Mounted	Copper	685
PM1250PACC3BXN	1250	Indoor/Outdoor	Propane	Pump Mounted	Copper	730
PM1500PACC3BXN	1500	Indoor/Outdoor	Propane	Pump Mounted	Copper	830
PM1750PACC3BXN	1750	Indoor/Outdoor	Propane	Pump Mounted	Copper	880
PM2000PACC3BXN	2000	Indoor/Outdoor	Propane	Pump Mounted	Copper	1025
PM0500PACC3PXN	500	Indoor/Outdoor	Propane	Pump Mounted	CuproNickel	495
PM0750PACC3PXN	750	Indoor/Outdoor	Propane	Pump Mounted	CuproNickel	575
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PM1750PACC3PXN	1750	Indoor/Outdoor	Propane	Pump Mounted	CuproNickel	880
PM2000PACC3PXN	2000	Indoor/Outdoor	Propane	Pump Mounted	CuproNickel	1025
<b>POWERMAX STACKING SYSTEMS</b>						
Product	Type	Heater Model	Product	Type	Heater Model	
CA000800	Rack	PM500	CA001100	Rack	PM1250	
CA000900	Rack	PM750	CA001200	Rack	PM1500, PM1750	
CA0001000	Rack	PM1000	CA001300	Rack	PM2000	

# POWERMAX® HEATERS (CONT'D)

## HIGH PERFORMANCE ELECTRONIC IGNITION HEATERS

### SIZING CHARTS AND CLEARANCE DATA

#### For Indoor Pools

1. Calculate the surface area of the pool in square feet.
2. Refer to the selection chart.
3. Find the closest square footage in the 10° F (6° C) Temperature Difference table and the heater model that corresponds to it. For normal conditions, we recommend using the 10° F (6° C) Temperature Difference columns; this will provide a temperature increase of approximately 6° F (3° C) per 24-hour period.

#### For Outdoor Pools

1. Determine the difference between the desired pool temperature and the average air temperature during the coldest month in which the pool will be used (see the Temperature Difference table below).
2. Calculate the surface area of the pool.
3. Refer to the selection chart. Listed are the maximum pool surface areas for each heater model with typical temperature differences. Make the appropriate selection from the chart.

#### Temperature Difference

	10° F	6° C	15° F	8° C	20° F	11° C	25° F	14° C	30° F	17° C	35° F	19° C	40° F	22° C	45° F	25° C	50° F	28° C
Surface Area of Pool																		
Model	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.	Sq. Ft.	Sq. M.
500	4,090	370	2,720	250	2,040	180	1,630	150	1,360	120	1,170	100	1,020	90	910	80	810	70
750	6,130	560	4,090	370	3,060	280	2,450	220	2,040	180	1,750	160	1,530	140	1,360	120	1,220	110
1,000	8,180	750	5,450	500	4,090	370	3,270	300	2,720	250	2,340	210	2,040	180	1,820	160	1,630	150
1,250	10,230	950	6,820	630	5,110	470	4,090	370	3,410	310	2,920	270	2,550	230	2,280	210	2,040	180
1,500	12,270	1,130	8,180	750	6,130	560	4,910	450	4,090	370	3,510	320	3,060	280	2,730	250	2,450	220
1,750	14,320	1,330	9,540	880	7,160	660	5,720	530	4,770	440	4,090	370	3,580	330	3,190	290	2,860	260
2,000	16,370	1,520	10,910	1,010	8,180	750	6,540	600	5,450	500	4,680	430	4,090	370	3,650	330	3,270	300

#### Clearances

Appliance Surface	Clearance From Combustible Material	Service Access Clearance
Right Side	1" 2.5 cm	24" 61 cm
Left Side	1" 2.5 cm	24" 61 cm
Front	1" 2.5 cm	36" 91 cm

Appliance Surface	Clearance From Combustible Material	Service Access Clearance
Top	1" 2.5 cm	12" 30 cm
Back*	1" 2.5 cm	12" 30 cm
Vent	Per venting system supplier's instructions	

\*When vent and/or air is connected to the back, 36" (91 cm) is suggested.

SIZE	OUTDOOR VENT TERMINAL	OUTDOOR COMBUSTION AIR TERMINAL
500	20254703	D2007900
750	20254705	D2008000
1000	20254705	D2008000
1250	D2007700	D2008200
1500	D2007700	D2008200
1750	D2007800	D2008200
2000	D2007800	D2008200

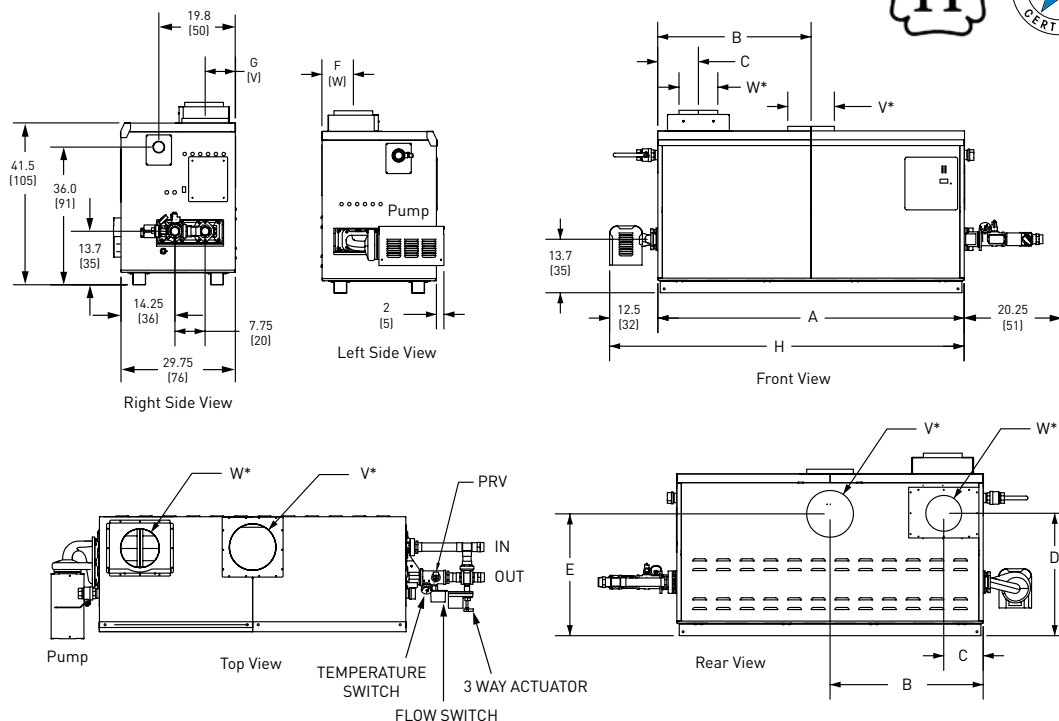
#### Vent Terminals for Outdoor Units

\*Statements of heater/heat pump performance are based on estimates. Actual performance may vary and is not guaranteed. Estimates for heat-up time and temperatures are based on operation in a controlled environment. Real-world operational results may vary due to various factors and variables, including, but not limited to, environmental conditions, geography, elevation, seasonality, weather, wind, sun exposure, humidity, precipitation. Other factors of the pool that may impact heating performance include design and configuration, volume/size, orientation, R-value of construction materials, plumbing length/materials, operating conditions and more. Pentair recommends consulting a pool professional for assistance with heater/heat pump sizing for specific locations and environmental/operational conditions. Estimates are based on average U.S. air temperatures and maintaining a 17,000-gallon pool at an 82°F target water temperature for an uncovered pool operating March—October under moderate wind conditions with an electricity cost of \$0.12/ kWh and natural gas cost of \$1.10 per 100,000 BTU and comparing energy use to a gas heater that is 82% efficiency.

# COMMERCIAL POWERMAX® (CONT'D)

## HIGH PERFORMANCE ELECTRONIC IGNITION HEATER

### Dimensions and Performance



Dimensional Data Dimensions shown in inches, cm.

Size (000's)	A		B		C		D		E		F		G		H		Air Conn. W*		Vent Conn. V*		Horiz. Vent Pipe	
500	33½	85	15¾	40	5¾	15	29¾	76	32¾	83	7¾	20	8¾	22	46	117	6	15	8	15	6	15
750	45½	116	21¾	55	5¾	15	29¾	76	32¾	83	7¾	20	8¾	22	58	147	6	15	10	20	8	15
1000	57½	146	28¾	73	5¾	15	29¾	76	32¾	83	7¾	20	7	18	70	178	8	20	10	25	8	20
1250	68	172	34	86	10¼	26	30¾	78	29½	75	8¾	22	8¾	22	80	203	8	20	12	30	8	20
1500	78½	199	39¾	101	10¼	26	30¾	78	29½	75	8¾	22	8¾	22	91	231	8	20	12	30	8	20
1750	89	226	44½	113	10¼	26	30¾	78	29½	75	8¾	22	8¾	22	101	256	8	20	14	36	8	20
2000	99½	253	49¾	126	10¼	26	30¾	78	29½	75	8¾	22	8¾	22	112	284	12	30	14	36	12	30

\*Air and vent connections may be on top or back of the PowerMax, and are field convertible.

### Sizing Data

Indoor Model	Input <sup>1</sup> BTU/h x1000	Output <sup>1</sup> BTU/h x1000	Gas Conn. Size inches <sup>2</sup>	Heater Water Conn. Size inches <sup>2</sup>	Mixing System Water Conn. Size inches <sup>2</sup>	Shipping Weight	
						lbs.	kg
500	500	425	1¼	2	2	495	225
750	750	638	1¼	2	2	575	261
1000	999	849	1½	2½	2	685	311
1250	1250	1063	2	2½	2	730	331
1500	1500	1275	2	2½	2	830	377
1750	1750	1488	2	2½	2	880	400
2000	1999	1699	2	2½	2	1025	465

NOTES: 1. Input and output must be derated 2% per 1000 feet above sea level when installed above 2000 feet altitude.  
2. Dimensions are nominal.