

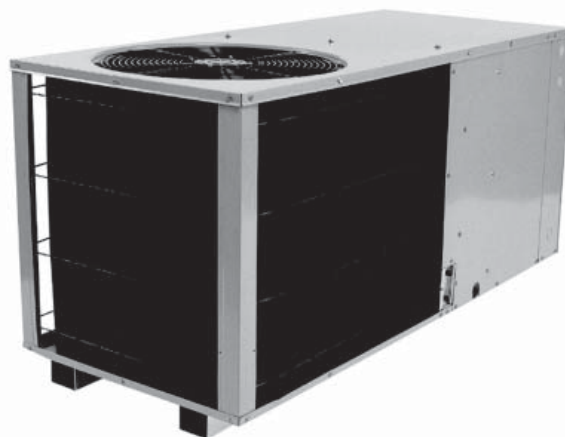
## PH SERIES

9+ SEER

### SELF-CONTAINED PACKAGED HEAT PUMP

NOMINAL COOLING CAPACITY:  
48,000 TO 60,000 BTU/H  
[10.6 kW TO 17.6 kW]

NOMINAL HEATING CAPACITY:  
48,000 TO 60,000 BTU/H  
[10.6 kW TO 17.6 kW]



**4 AND 5 Ton — 50 Hz**



---

*This self-contained outdoor package heat pump allows for side-by-side, ground-level or rooftop application.*

---

#### Standard Features

- Two-speed evaporator blower motor; low speed for normal or low-static applications, high speed for high-static applications
- Quiet-operating top condenser discharge
- Copper tube/aluminum fin coils
- Totally enclosed, permanently lubricated condenser fan motor
- Hermetically sealed compressor with internal relief valve
- Fully charged system
- Bi-flow liquid line filter dryer
- Suction line accumulator
- Check-flowrator expansion device
- Crankcase heater
- High-efficiency performance
- Square-to-round duct converter for mobile home application
- Bottom pan rails elevate the unit above the slab

#### Cabinet Features

- Zinc-coated enamel finish
- Fully insulated air handling compartment
- Convenient access panels

#### Accessories

- Heat Kit from 11.2 to 14.7 kW with plug-in connection
- Room Thermostat (HPT18-60)
- Outdoor Thermostat (OT18-60)
- Thermostat (CHTP18-60HD)

#### Accessories (Field Supplied)

- Roof curb
- Downflow Plenum (includes filter rack)
- Manual fresh air damper (to be used w/ Downflow Plenum)
- Economizer (to be used w/Downflow Plenum)

#### Accessory Heat Kit Features

- Primary limit protection
- Rust-resistant nickel chromium heating elements (See Electrical Data Chart)

# PRODUCT SPECIFICATIONS

## SPECIFICATIONS

	PH048-5	PH060-5
<b>Cooling Capacity</b>		
Total Cooling—BTU/h	48,000	53,000
Sensible Cooling—BTU/h	35,500	38,100
SEER <sup>1</sup>	10.0	9.70
Heating—BTU/h @ 470 °F	47,000	53,000
COP (47°F)	3.20	3.00
Heating—BTU/h @ 170 °F	25,400	28,000
COP (17°F)	2.00	2.00
Decibels	8.40	8.40
<b>Indoor Blower</b>		
Type	DD	DD
Size—D x W	10 x 8	10 x 8
Motor Horsepower	3/4	3/4
<b>Evaporator Coil</b>		
Face Area (Ft <sup>2</sup> )	6.22	6.22
Fin/In. - No. of Rows	14 - 3	14 - 3
<b>Outdoor Fan</b>		
Fan Diameter	22"	22"
Motor Horsepower	1/4	1/4
<b>Condenser Coil</b>		
Face Area (Ft <sup>2</sup> )	16.2	16.2
Fin/In. - No. of Rows	19 - 1	19 - 2
<b>Electrical</b>		
Volts-Phase	380/415-3	380/415-3
Compressor RLA/ LRA	9.6/62.0	10.3/62.0
Blower FLA - Indoor/Outdoor	2.2/0.8	2.2/0.8
Minimum Circuit Ampacity	15.0	15.9
Max. Overcurrent Protection <sup>2</sup>	20	25
Ship Weight (lbs) [kg]	387 [175.7]	423 [192.0]

<sup>1</sup> Per ARI 240 and 270 test standards.

<sup>2</sup> May use fuses or HACR-type circuit breakers of the same size as noted.

## EVAPORATOR BLOWER SPECIFICATIONS

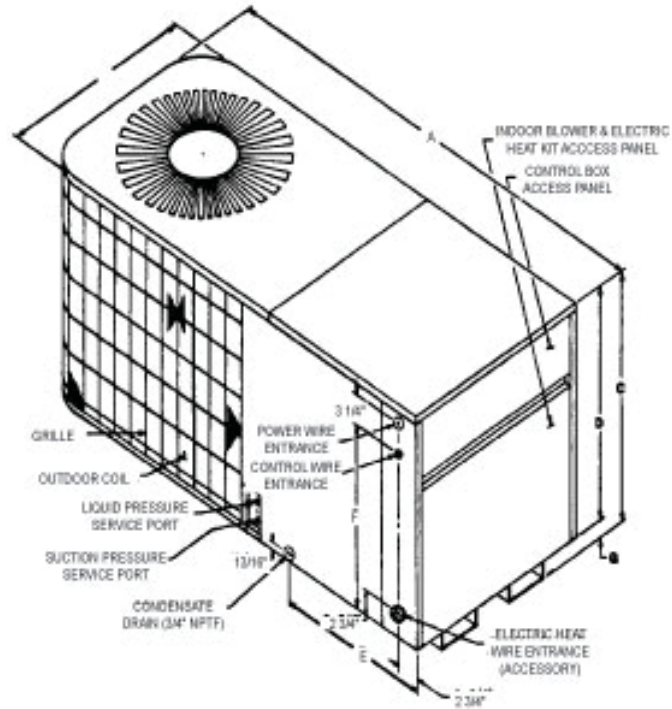
Model	Speed	Volts		E.S.P. (In. of Water)									
				0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
PH048-5 PH060-5	Low	415	CFM Watts	1695	1605	1565	1540	1520	1435	1395			
				590	555	530	515	495	460	440			
		380	CFM Watts	1560	1520	1490	1465	1425	1340	1230			
				570	535	510	490	460	410	370			
	High	415	CFM Watts	1970	1900	1820	1710	1610	1460	1360	1295	1160	1050
				690	650	600	560	510	470	440	410	380	360
		380	CFM Watts	1830	1785	1720	1630	1530	1415	1290	1195	1075	950
				620	580	540	500	460	420	390	340	310	300

Notes:

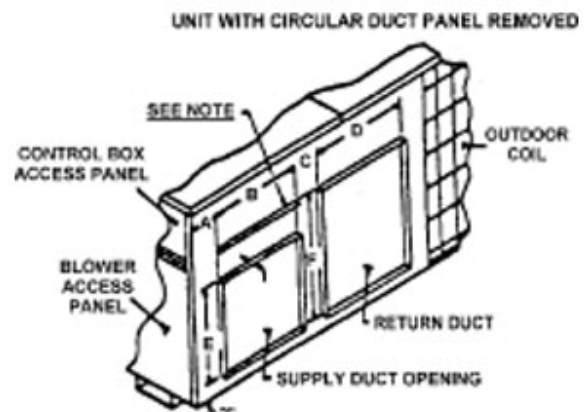
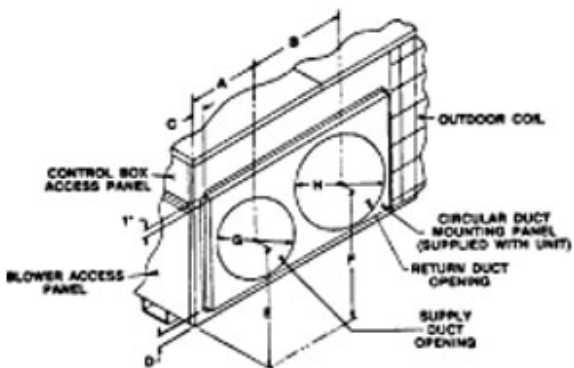
1- Data shown is dry coil. Wet coil pressure drop is approx. 0.1" water.

2- Data shown does not include filter pressure drop.

## DIMENSIONS



Model	A	B	C	D	E	F	G
PH048/060	63"	32"	34 $\frac{3}{8}$ "	32 $\frac{1}{2}$ "	21 $\frac{7}{8}$ "	27 $\frac{5}{16}$ "	1 $\frac{7}{8}$ "

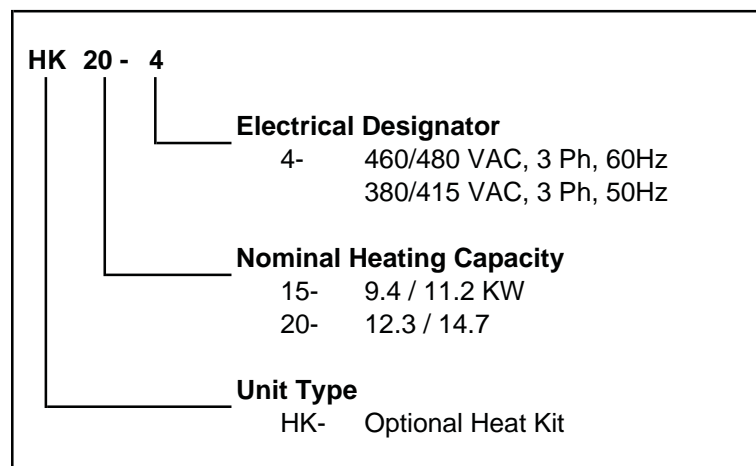


Model	A	B	C	D	E	F	G	H
PH048/060	10 $\frac{11}{16}$ "	19"	2 $\frac{1}{4}$ "	11 $\frac{1}{16}$ "	9 $\frac{7}{8}$ "	10 $\frac{3}{8}$ "	14"	14"

Model	A	B	C	D	E	F
PH048/060	3 $\frac{3}{4}$ "	14"	5"	14"	14"	11 $\frac{1}{16}$ "

# PRODUCT SPECIFICATIONS

## HEAT KIT NOMENCLATURE



## HEAT KIT SELECTION

	PH048-5	PH060-5
HK15-4	X	X
HK20-4	X	X

## kW CORRECTION FACTOR FOR 3-PHASE HEAT KIT

Supply Voltage	415	410	400	390	380
Correction Voltage	1.00	0.98	0.93	0.88	0.84

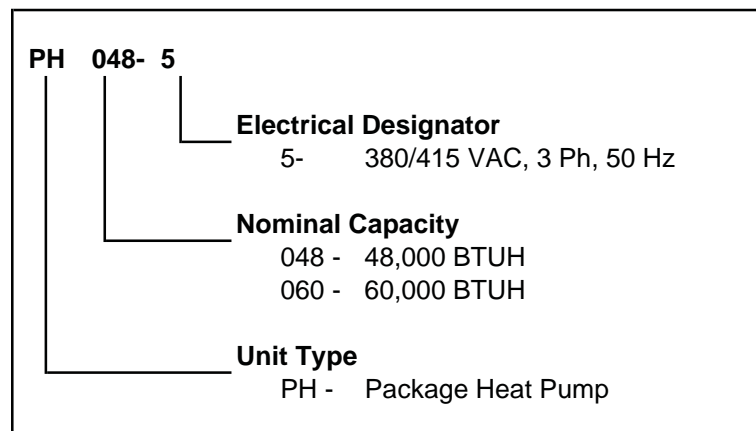
## HEAT KIT ELECTRICAL DATA

Model	Nominal kW	MCA <sup>1</sup>	MOD <sup>2</sup>
HK15 - 4	9.4/11.2	15/16	20/20
HK14 - 4	12.3/14.7	19/21	30/30

<sup>1</sup> Minimum Circuit Ampacity @ 380/415 Volts

<sup>2</sup> Maximum Overcurrent Protection @ 380/415 Volts

## NOMENCLATURE



(All Units Are Direct Drive)

Accessories	
Roof Curb	PCCP42-60
Downflow Plenum w/ Filter Rack	PCP42-60
Manual Fresh Air Damper	PCMD42-60
Economizer - Down Flow	PCE42-60
Room Thermostat	CHT18-60

Chassis Sizes		
Large	PH048	PH060

## Quality Makes the Difference!

All of our systems are designed and manufactured with the same high-quality standards, regardless of size or efficiency. We have designed these units to significantly reduce the most frequent causes of product failure. They are simple to service and forgiving to operate. We use quality materials and components. Finally, every unit is run-tested before it leaves the factory. That's why we know...there's no better quality.

Visit our website at  
[www.goodmanmfg.com](http://www.goodmanmfg.com) for information on:  
Goodman Products • Customer Services • Parts

Goodman Manufacturing Company, L.P.  
2550 North Loop West, Suite 400  
Houston, Texas 77092 USA

Goodman Manufacturing Company, L.P., reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.  
Copyright © 2003 Goodman Manufacturing Company, L.P. • Houston, Texas • Printed in the USA. • Goodman products are made proudly in the USA.