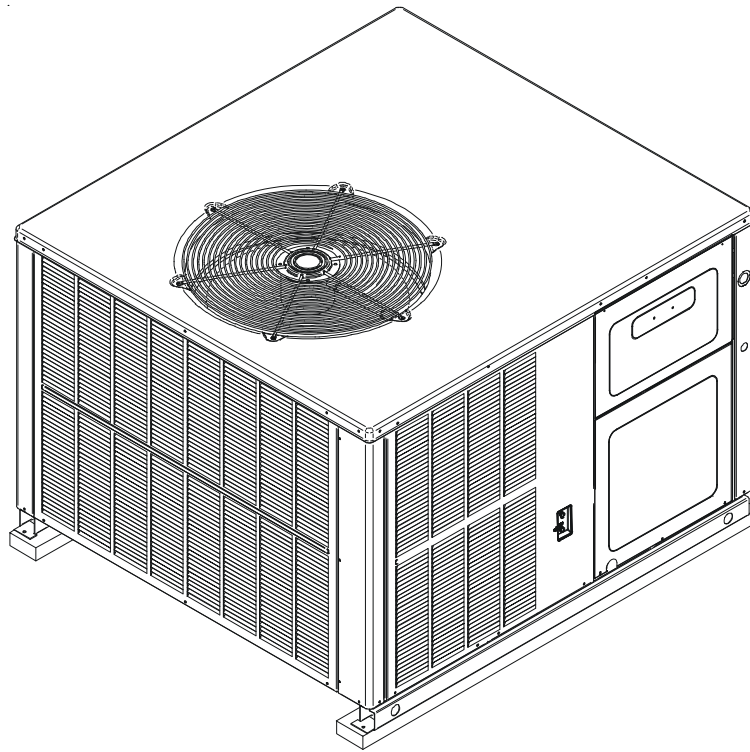


TECHNICAL MANUAL

***PH 15 SEER Multi Position Package Heat Pump Units with R410A**

- Refer to Service Manual RS6300008 for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.
- Models listed on page 3.
- Select Models qualify for the 2009 and 2010 Federal Tax Credits for Energy Efficiency**



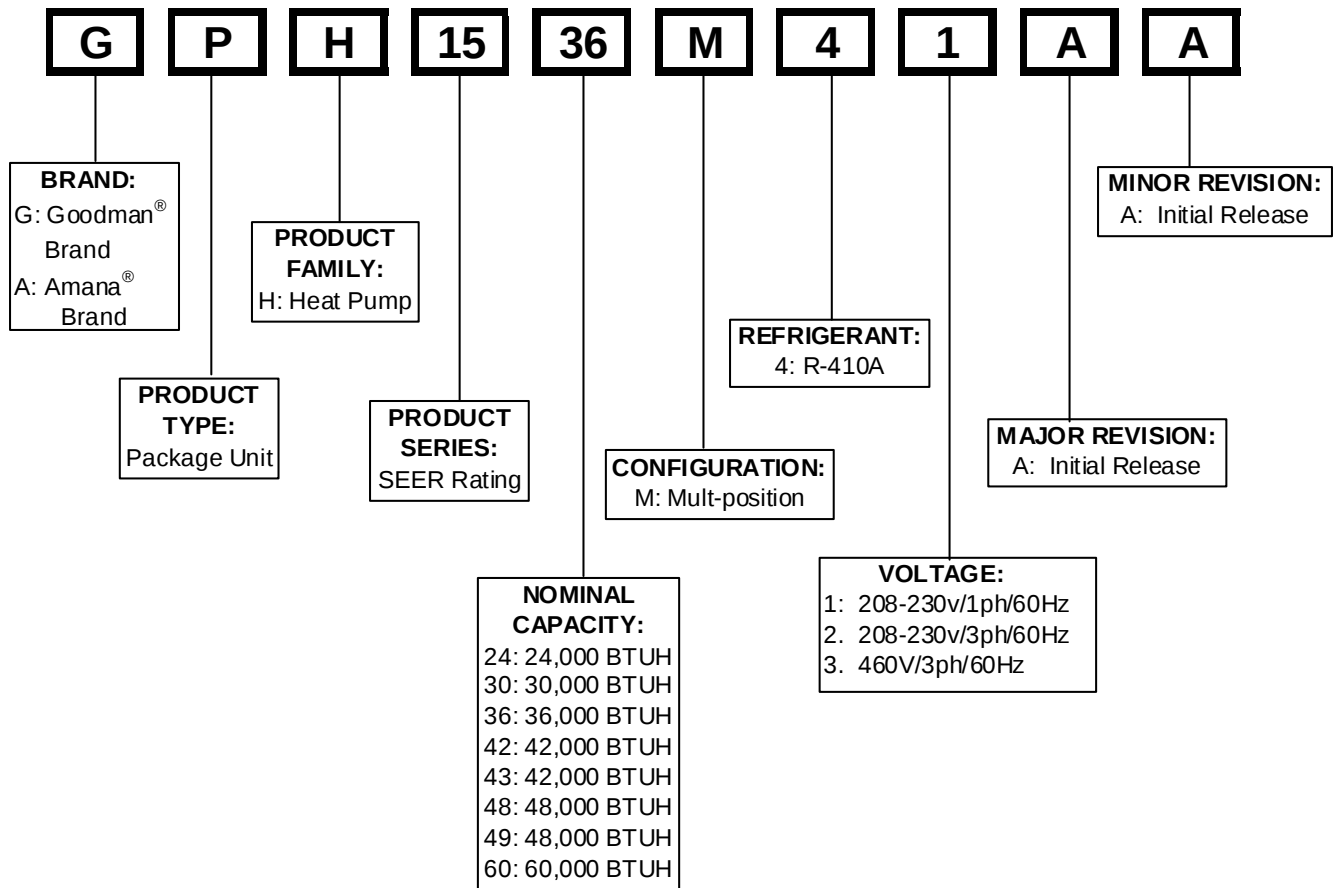
***Note that these tax credits are subject to specific requirements set forth in the American Recovery and Reinvestment Act of 2009 and in the Internal Revenue Code. Goodman recommends that consumers consult a tax professional if they have questions about the applicability of these credits.*

This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6332006r13
November 2010

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.



WARNING

HIGH VOLTAGE!

Disconnect ALL power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.



WARNING

Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.

WARNING

Installation and repair of this unit should be performed ONLY by individuals meeting (at a minimum) the requirements of an "entry level technician" as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

PH1524M41

PH1530M41

PH1536M41

PH1542M41

PH1543M41

PH1548M41

PH1549M41

PH1560M41

**The models listed below qualify
for the 2009 and 2010 Federal Tax Credits
for Energy Efficiency****

PH1524M41

PH1543M41

PH1530M41

PH1549M41

PH1536M41

***Note that these tax credits are subject to specific requirements set forth in the American Recovery and Reinvestment Act of 2009 and in the Internal Revenue Code. Goodman recommends that consumers consult a tax professional if they have questions about the applicability of these credits.*



WARNING

The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.



WARNING

Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.



WARNING

To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

PRODUCT DESIGN

*PH15 models

*PH15 (M Series) Package Units are designed for outdoor installations only in either residential or light commercial applications and are available in 2, 2.5, 3, 3.5, 4 & 5 ton sizes. They are designed for 208/230 volt single phase applications.

The connecting ductwork (Supply and Return) can only be connected for horizontal airflow.

A return air filter must be installed behind the return air grille(s) or provision must be made for a filter in an accessible location within the return air duct. The minimum filter area should not be less than those sizes listed in the Specification Section. Under no circumstances should the unit be operated without return air filters.

A 3/4" pipe is provided for removal of condensate water from the indoor coil. In order to provide proper condensate flow, a drain trap is supplied and shipped loose inside the unit for field installation. (Do not reduce the drain line size).

Refrigerant flow control is achieved by use of TXV.

Some heat pump models also have a suction line accumulator installed between the reversing valve and the compressor. The object of the accumulator is to:

1. Provide a liquid refrigerant storage vessel during prolonged system off cycles.
2. Store excess liquid refrigerant not needed by the system while running.
3. Return oil and saturated vapor to the compressor at a controlled rate.
4. Retain stored excess refrigerant during a sudden system pressure fluctuation such as seen in defrost cycles.

Refrigerant flow control is achieved by use of TXV. These models use the FastTest Access Fitting System, with a saddle that is either soldered to the suction and liquid lines or is fastened with a locking nut to the access fitting box (core) and then screwed into the saddle. **Do not remove the core from the saddle until the refrigerant charge has been removed. Failure to do so could result in property damage or personal injury.**

The single phase units use permanent split capacitor (PSC) design compressors. Starting components are not required for these units. A low microfarad run capacitor assists the compressor to start and remains in the circuit during operation.

GPH15 models

The outdoor fan motors are single phase capacitor type motors. **GPH15 M** series units have EEM indoor blower motors that are energized by a 24V signal from the thermostat and are constant torque motors with very low power consumption. The EEM motors feature an integral control module.

APH15 models

The outdoor fan motors are single phase capacitor type motors on the **APH15** models. **APH15** units have ECM indoor blower motors that are energized by a low voltage signal from the interface board. ECM motors are constant CFM motors with very low power consumption. **APH15** models are equipped with compressor sound blankets.

*PH15 models

Air for condensing (cooling cycle) or evaporation (heating cycle) is drawn through the outdoor coil by a propeller fan, and is discharged vertically out the top of the unit. The outdoor coil is designed for .0 static. No additional restriction (ductwork) shall be applied.

Conditioned air is drawn through the filter(s), field installed, across the coil and back into the conditioned space by the indoor blower.

Package Heat Pump indoor sections are designed to accept optional components such as auxiliary electric heaters and circuit breakers. Provisions for these components have been made at time of manufacture.

*PH15 series package units use the Compliant Scroll compressor; there are a number of design characteristics which are different from the traditional reciprocating compressor.

- Due to their design Scroll compressors are inherently more tolerant of liquid refrigerant. **NOTE:** Even though the compressor section of a Scroll compressor is more tolerant of liquid refrigerant, continued flood back or flooded start conditions may wash oil from the bearing surfaces causing premature bearing failure.

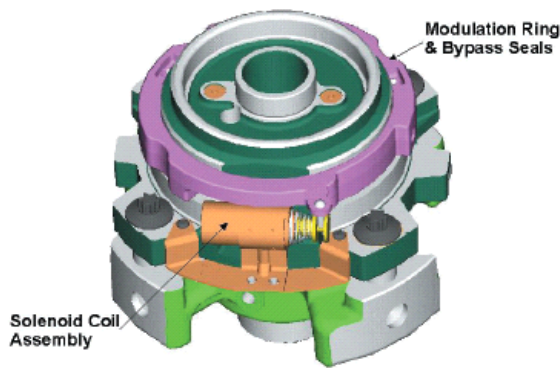
- These Scroll compressors use "POE" or polyolester oil which is NOT compatible with mineral oil based lubricants like 3GS. "POE" oil must be used if additional oil is required.

- Compliant scroll compressors perform "quiet" shutdowns that allow the compressor to restart immediately without the need for a time delay. This compressor will restart even if the system has not equalized.

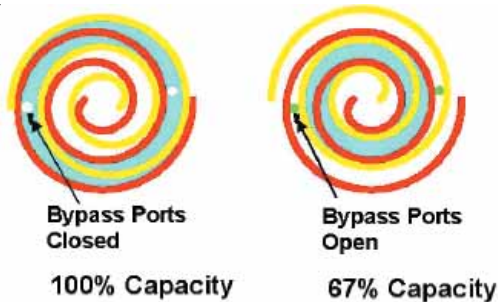
- Operating pressures and amp draws may differ from standard reciprocating compressors. This information may be found in the "Cooling Performance Data" section.

PH15**M41 42, 48-60 model package units use a 2 stage scroll compressor. The basic scroll design has been modified with the addition of an internal unloading mechanism that opens a by-pass port in the first compression pocket, effectively reducing the displacement of the scroll. The opening and closing of the by-pass port is controlled by an internal electrically operated solenoid.

PRODUCT DESIGN

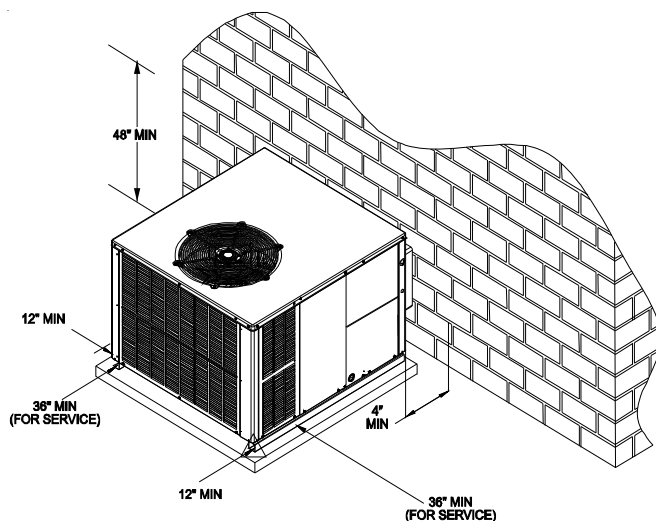


The ZPS modulated scroll uses a single step of unloading to go from full capacity to approximately 67% capacity. A single speed, high efficiency motor continues to run while the scroll modulates between the two capacity steps.



Location and Clearances

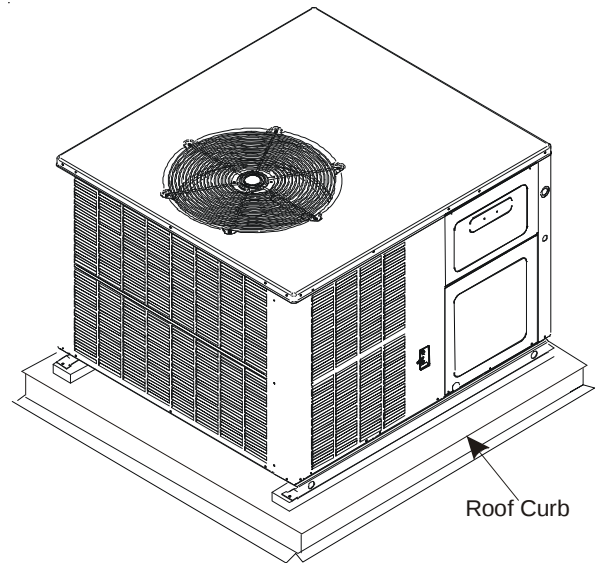
NOTE: To ensure proper condensate drainage, unit must be installed in a level position.



Outside Slab Installation -Multi-positional (M)

NOTE: Roof overhang should be no more than 36" and provisions made to deflect the warm discharge air out from the overhang.

Minimum clearances are required to avoid air recirculation and keep the unit operating at peak efficiency.



Rooftop Installation - -Multi-positional (M)

NOTE: To ensure proper condensate drainage, unit must be installed in a level position.

In installations where the unit is installed above ground level and not serviceable from the ground (Example: roof top installations) the installer must provide service platform for service person with rails or guards in accordance with local codes or ordinances, or, in their absence, with the latest edition of the Uniform Mechanical Code Section 305.

NOTE: Unit can also use roof curb (and platform for leveling, where necessary) to utilize bottom discharge.

WARNING

TO PREVENT POSSIBLE PROPERTY DAMAGE, THE UNIT SHOULD REMAIN IN AN UPRIGHT POSITION DURING ALL RIGGING AND MOVING OPERATIONS. TO FACILITATE LIFTING AND MOVING IF A CRANE IS USED, PLACE THE UNIT IN AN ADEQUATE CABLE SLING.

IMPORTANT: If using bottom discharge with roof curb, ductwork should be attached to the curb prior to installing the unit.

Refer to Roof curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.

PRODUCT DESIGN

PH15[24-60]M41

HKR ELECTRICAL DATA

Model and Heat Kit Usage	Circuit #1		Circuit #2		Actual kW & BTU at 240V
	Minimum Circuit Ampacity at 208 / 240V	Maximum Overcurrent Protection (amps) at 208 / 240V	Minimum Circuit Ampacity at 208 / 240V	Maximum Overcurrent Protection (amps) at 208 / 240V	
PH1524M41 / *A					
HKR05A, CA	24 / 27	30 / 30	----	----	4.75 / 16,200
HKR08A, CA	33 / 28	40 / 40	----	----	7.00 / 23,800
HKR10A, CA	45 / 51	60 / 60	----	----	9.50 / 32,400
PH1530M41 / *A					
HKR05A, CA	24 / 27	30 / 30	--	--	4.75 / 16,200
HKR08A, CA	34 / 39	40 / 40	--	--	7.0 / 23,800
HKR10A, CA	45 / 52	60 / 60	--	--	9.5 / 32,400
HKR15A, CA	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
PH1536M41 / *A					
HKR05A, CA	24 / 27	30 / 30	----	----	4.75 / 16,200
HKR08A, CA	34 / 39	40 / 40	----	----	7.00 / 23,800
HKR10A, CA	45 / 52	60 / 60	----	----	9.50 / 32,400
HKR15A, CA	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
PH1542M41 / *A					
HKR05A, CA	24 / 27	30 / 30	--	--	4.75 / 16,200
HKR08A, CA	34 / 39	40 / 40	--	--	7.0 / 23,800
HKR10A, CA	45 / 52	60 / 60	--	--	9.5 / 32,400
HKR15A, CA	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
PH1543M41 / *A					
HKR05A, CA	24 / 27	30 / 30	--	--	4.75 / 16,200
HKR08A, CA	34 / 39	40 / 40	--	--	7.0 / 23,800
HKR10A, CA	45 / 52	60 / 60	--	--	9.5 / 32,400
HKR15A, CA	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
PH1548M41 / *A					
HKR05A, CA	25 / 28	30 / 30	----	----	4.75 / 16,200
HKR08A, CA	34 / 40	40 / 40	----	----	7.00 / 23,800
HKR10A, CA	46 / 53	60 / 60	----	----	9.50 / 32,400
HKR15A, CA	46 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20A, CA	46 / 52	60 / 60	43 / 49	60 / 60	19.50 / 66,500
PH1549M41 / *A					
HKR05A, CA	25 / 28	30 / 30	----	----	4.75 / 16,200
HKR08A, CA	34 / 40	40 / 40	----	----	7.00 / 23,800
HKR10A, CA	46 / 53	60 / 60	----	----	9.50 / 32,400
HKR15A, CA	46 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20A, CA	46 / 52	60 / 60	43 / 49	60 / 60	19.50 / 66,500
PH1560M41 / *A					
HKR05A, CA	26 / 30	30 / 30	----	----	4.75 / 16,200
HKR08A, CA	36 / 40	40 / 40	----	----	7.00 / 23,800
HKR10A, CA	48 / 54	60 / 60	----	----	9.50 / 32,400
HKR15A, CA	48 / 54	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20A, CA	48 / 54	60 / 60	43 / 49	60 / 60	19.50 / 66,500

IMPORTANT NOTE: A separate power supply is required for the HKR heater kit.

Heating kW Correction Factor

Supply Voltage	240	230	220	210	208
Correction Factor	1.0	0.93	0.85	0.78	0.76

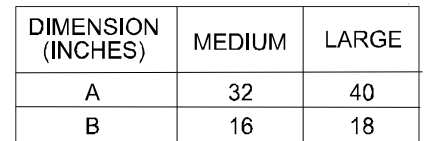
Multiply rated kW by correction factor to get actual kW



WARNING

All wires and overcurrent protection devices are sized for use with electric heaters only and without refrigeration. If heaters are not installed with above wire size, overheating and fire could occur. See PACKAGE UNIT SPECIFICATIONS section for minimum circuit ampacity and maximum overcurrent protection during refrigeration cycle.

PH15[24-60]M41



- *PH1543M41*
PH1548M41
PH1549M41
PH1560M41



PACKAGE HEAT PUMP SPECIFICATIONS GPH15[24-42]M41*

		GPH1524M41*	GPH1530M41*	GPH1536M41*	GPH1542M41*
COOLING	COOLING CAPACITY, BTUH	24,000	29,000	35,400	41,000
CAPACITY	SEER / EER	15.0 / 11.3	15.0 / 12.0	15.0 / 12.0	15.0 / 11.0
HEATING	BTU/h (47°)	23,400	27,400	35,500	40,000
RATING	35°/33°F	18,300	18,600	28,400	26,000
	BTU/h (17°)	12,500	15,200	18,600	20,000
	HSPF	8.0	8.0	8.0	8.0
UNIT	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
ELECTRICAL	AMPS	9.5	19.7	13.7	22.3
SPECIFICATION	MIN CIRCUIT AMPACITY	21.6	23.2	26.5	26.5
	MAX OVERCURRENT PROTECTION	30	35	40	40
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	12.8	14.1	16.7	16.7
	LOCKED ROTOR AMPS	58	73	79	96
CONDENSER	HORSEPOWER	1/4	1/4	1/4	1/4
FAN MOTOR	RPM	850	850	850	850
	FULL LOAD AMPS	1.5	1.5	1.5	1.5
	LOCKED ROTOR AMPS	3.0	3.0	3.0	3.0
CONDENSER FAN	BLADE DIAMETER (INCHES)	22	22	22	22
	NUMBER OF BLADES	3	3	3	3
CONDENSER	FACE AREA (SQ. FT.)	17.2	17.2	17.2	17.2
COIL	NUMBER OF ROWS	1	1	2	2
	FINS PER INCH	22	22	16	16
EVAPORATOR	HORSEPOWER - NUMBER OF SPEEDS	1/2 - 5	1/2 - 5	1/2 - 5	1/2 - 5
BLOWER	FULL LOAD AMPS	4.1	4.1	4.1	4.1
MOTOR	LOCKED ROTOR AMPS	---	---	---	---
	MOTOR SPEED TAP - COOLING EEM	T2	T2	T2	T1 (Low) T2 (High)
	RPM	1,050	1,050	1,050	1,075
EVAPORATOR	DIAMETER X WIDTH (INCHES)	10 x 9	10 x 9	10 x 9	10 x 9
BLOWER	RATED SCFM COOLING	860	1,000	1,200	1,250
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5	0.5
EVAPORATOR	FACE AREA (SQ. FT.)	4.5	4.5	4.5	4.5
COIL	NUMBER OF ROWS	3	3	4	4
	FINS PER INCH	14	14	14	14
GENERAL	FILTER SIZE *	20 x 20 x 1	25 x 25 x 1	25 x 25 x 1	25 x 25 x 1
INFORMATION	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"	3/4"
	EXPANSION DEVICE	TXV	TXV	TXV	TXV
	REFRIGERANT CHARGE R410A (OZS.)	113	128	174	193
	POWER SUPPLY				
	CONDUIT KNOCKOUT SIZE (INCHES)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE				
	CONDUIT KNOCKOUT SIZE (INCHES)	1/2	1/2	1/2	1/2
	LO PRESSURE SWITCH				
	OPENS / CLOSES PSIG	50 / 95	50 / 95	50 / 95	50 / 95
	HI PRESSURE SWITCH - OPENS PSIG	610	610	610	610
	SHIPPING WEIGHT (LBS.)	376	385	438	460
	OPERATING WEIGHT (LBS.)	354	363	416	438

⁽¹⁾ Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

PACKAGE HEAT PUMP SPECIFICATIONS GPH15[43-60]M41*

		GPH1543M41*	GPH1548M41*	GPH1549M41*	GPH1560M41*
COOLING CAPACITY	COOLING CAPACITY, BTUH	40,000	46,700	46,000	55,500
	SEER / EER	15.0 / 12.0	15.0 / 11.3	15.0 / 12.0	14.0 / 10.3
HEATING RATING	BTU/h (47°)	39,000	45,600	45,500	56,000
	35°/33°F	27,800	37,400	32,000	45,700
	BTU/h (17°)	22,000	24,600	25,000	31,200
	HSPF	8.0	8.0	8.0	8.0
UNT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	AMPS	22.2	17.5	25.5	23.8
	MIN CIRCUIT AMPACITY	26.7	34.8	30.8	42.1
	MAX OVERCURRENT PROTECTION	40	50	50	60
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	17.9	21.2	21.2	25.6
	LOCKED ROTOR AMPS	112	96	96	118
CONDENSER FAN MOTOR	HORSEPOWER	1/4	1/3	1/4	1/3
	RPM	1075	1075	1075	1075
	FULL LOAD AMPS	1.4	2.4	1.4	2.4
	LOCKED ROTOR AMPS	2.9	5.2	2.9	5.2
CONDENSER FAN	BLADE DIAMETER (INCHES)	22	22	22	22
	NUMBER OF BLADES	3	4	3	4
CONDENSER COIL	FACE AREA (SQ. FT.)	21.2	21.2	21.2	21.2
	NUMBER OF ROWS	2	2	2	2
	FINS PER INCH	16	16	16	18
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NUMBER OF SPEEDS	3/4 - 5	3/4 - 5	3/4 - 5	1 - 5
	FULL LOAD AMPS	2.9	5.8	2.9	7.6
	LOCKED ROTOR AMPS	---	---	---	---
	MOTOR SPEED TAP - COOLING EEM	T1 (Low) T2 (High)	T1 (Low) T2 (High)	T1 (Low) T2 (High)	T1 (Low) T2 (High)
	RPM	1,050	1,050	1,050	1,050
EVAPORATOR BLOWER	DIAMETER X WIDTH (INCHES)	10 x 9	10 x 9	10 x 9	10 x 9
	RATED SCFM COOLING	1,250	1,700	1,350	1,800
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5	0.5
EVAPORATOR COIL	FACE AREA (SQ. FT.)	6.2	6.2	6.2	6.2
	NUMBER OF ROWS	4	4	4	4
	FINS PER INCH	14	14	14	14
GENERAL INFORMATION	FILTER SIZE *	(2) 20 x 20 x 1	(2) 20 x 20 x 1	(2) 20 x 20 x 1	(2) 20 x 25 x 1
	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"	3/4"
	EXPANSION DEVICE	TXV	TXV	TXV	TXV
	REFRIGERANT CHARGE R410A (OZS.)	233	214	214	207
	POWER SUPPLY CONDUIT KNOCKOUT SIZE (INCHES)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE CONDUIT KNOCKOUT SIZE (INCHES)	1/2	1/2	1/2	1/2
	LO PRESSURE SWITCH OPENS / CLOSSES PSIG	50 / 95	50 / 95	50 / 95	50 / 95
	HI PRESSURE SWITCH - OPENS PSIG	610	610	610	610
	SHIPPING WEIGHT (LBS.)	492	492	492	523
	OPERATING WEIGHT (LBS.)	469	469	469	500

(1) Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

(2) Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

PACKAGE HEAT PUMP SPECIFICATIONS APH15[24-42]M41*

		APH1524M41*	APH1530M41*	APH1536M41*	APH1542M41*
COOLING CAPACITY	COOLING CAPACITY, BTUH	24,000	29,000	35,400	41,000
	SEER / EER	15.0 / 12.0	15.0 / 12.0	15.0 / 12.0	15.0 / 11.0
HEATING RATING	BTU/h (47°)	23,400	27,400	35,500	40,000
	35°/33°F	18,300	18,600	28,400	26,000
	BTU/h (17°)	12,500	15,200	18,600	20,000
	HSPF	8.0	8.0	8.0	8.0
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	AMPS	18.6	19.9	22.5	22.3
	MIN CIRCUIT AMPACITY	21.6	23.4	26.5	26.7
	MAX OVERCURRENT PROTECTION	30	35	40	40
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	12.8	14.1	16.7	16.7
	LOCKED ROTOR AMPS	58	73	79	96
CONDENSER FAN MOTOR	HORSEPOWER	1/4	1/4	1/4	1/4
	RPM	850	850	850	850
	FULL LOAD AMPS	1.5	1.5	1.5	1.5
	LOCKED ROTOR AMPS	3.0	3.0	3.0	3.0
CONDENSER FAN	BLADE DIAMETER (INCHES)	22	22	22	22
	NUMBER OF BLADES	3	3	3	3
CONDENSER COIL	FACE AREA (SQ. FT.)	17.2	17.2	17.2	17.2
	NUMBER OF ROWS	1	1	2	2
	FINS PER INCH	22	22	16	16
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NUMBER OF SPEEDS	1/2 - VAR.	1/2 - VAR.	1/2 - VAR.	1/2 - VAR.
	FULL LOAD AMPS	4.3	4.3	4.3	4.3
	LOCKED ROTOR AMPS	---	---	---	---
	MOTOR SPEED TAP - COOLING - ECM	B	B	B	B
	RPM	1,050	1,050	1,050	1,050
EVAPORATOR BLOWER	DIAMETER X WIDTH (INCHES)	10 x 9	10 x 9	10 x 9	10 x 9
	RATED SCFM COOLING	860	1,000	1,200	1,250
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5	0.5
EVAPORATOR COIL	FACE AREA (SQ. FT.)	4.5	4.5	4.5	4.5
	NUMBER OF ROWS	3	3	4	4
	FINS PER INCH	14	14	14	14
GENERAL INFORMATION	FILTER SIZE *	20 x 20 x 1	25 x 25 x 1	25 x 25 x 1	25 x 25 x 1
	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"	3/4"
	EXPANSION DEVICE	TXV	TXV	TXV	TXV
	REFRIGERANT CHARGE R410A (OZS.)	113	128	174	193
	POWER SUPPLY				
	CONDUIT KNOCKOUT SIZE (INCHES)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE				
	CONDUIT KNOCKOUT SIZE (INCHES)	1/2	1/2	1/2	1/2
	LO PRESSURE SWITCH -	50 / 95	50 / 95	50 / 95	50 / 95
	OPENS / CLOSES PSIG				
	HI PRESSURE SWITCH - OPENS PSIG	610	610	610	610
	SHIPPING WEIGHT (LBS.)	376	385	438	460
	OPERATING WEIGHT (LBS.)	354	363	416	438

⁽¹⁾ Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

PACKAGE HEAT PUMP SPECIFICATIONS APH15[43-60]M41*

		APH1543M41*	APH1548M41*	APH1549M41*	APH1560M41*
COOLING CAPACITY	COOLING CAPACITY, BTUH	40,000	46,600	46,000	55,600
	SEER / EER	15.0 / 12.0	15.0 / 11.3	15.0 / 12.0	14.0 / 10.3
HEATING RATING	BTU/h (47°)	39,000	45,600	45,500	56,000
	35°/33°F	27,800	37,400	32,000	45,700
	BTU/h (17°)	22,000	24,600	25,000	31,200
	HSPF	8.0	8.0	8.0	8.0
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	AMPS	25.1	29.4	28.4	35
	MIN CIRCUIT AMPACITY	26.7	34.8	30.8	42.1
	MAX OVERCURRENT PROTECTION	40	50	50	60
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	17.9	21.2	21.2	25.6
	LOCKED ROTOR AMPS	112	96	96	118
CONDENSER FAN MOTOR	HORSEPOWER	1/3	1/3	1/3	1/3
	RPM	1075	1075	1075	1075
	FULL LOAD AMPS	1.4	2.4	1.4	2.4
	LOCKED ROTOR AMPS	2.9	5.2	2.9	5.2
CONDENSER FAN	BLADE DIAMETER (INCHES)	22	22	22	22
	NUMBER OF BLADES	3	4	3	4
CONDENSER COIL	FACE AREA (SQ. FT.)	21.2	21.2	21.2	21.2
	NUMBER OF ROWS	2	2	2	2
	FINS PER INCH	16	16	16	18
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NUMBER OF SPEEDS	3/4 - VAR.	3/4 - VAR.	3/4 - VAR.	1 - VAR.
	FULL LOAD AMPS	2.9	5.8	2.9	7.6
	LOCKED ROTOR AMPS	---	---	---	---
	MOTOR SPEED TAP - COOLING - ECM	B	B	B	B
	RPM	1,050	1,050	1,350	1,050
EVAPORATOR BLOWER	DIAMETER X WIDTH (INCHES)	10 x 9	10 x 9	10 x 9	10 x 9
	RATED SCFM COOLING	1,250	1,700	1,350	1,800
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5	0.5
EVAPORATOR COIL	FACE AREA (SQ. FT.)	6.2	6.2	6.2	6.2
	NUMBER OF ROWS	4	4	4	4
	FINS PER INCH	14	14	14	14
GENERAL INFORMATION	FILTER SIZE *	(2) 20 x 20 x 1	(2) 20 x 20 x 1	(2) 20 x 20 x 1	(2) 20 x 25 x 1
	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"	3/4"
	EXPANSION DEVICE	TXV	TXV	TXV	TXV
	REFRIGERANT CHARGE R410A (OZS.)	233	214	214	207
	POWER SUPPLY CONDUIT KNOCKOUT SIZE (INCHES)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE CONDUIT KNOCKOUT SIZE (INCHES)	1/2	1/2	1/2	1/2
	LO PRESSURE SWITCH - OPENS / CLOSES PSIG	50 / 95	50 / 95	50 / 95	50 / 95
	HI PRESSURE SWITCH - OPENS PSIG	610	610	610	610
	SHIPPING WEIGHT (LBS.)	492	492	492	523
	OPERATING WEIGHT (LBS.)	469	469	469	500

⁽¹⁾ Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

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IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

ACCESSORIES

PH15[24-60]M41

ACCESSORIES - GPC/GPH****M MODELS	
Part Number	Description
OT18-60A	Outdoor Thermostat Kit w/Lockout Stat
OT/EHR18-60	Emergency Heat Relay Kit
HKR	Electric Heat Kit
PGC101/102/103	Roof Curb
PEHH101/102	Horizontal Economizer For Heat Pump, Small and Medium Chassis
PEHH103	Horizontal Economizer For Heat Pump, Large Chassis
PEHC101/102	Horizontal Economizer For A/C, Small and Medium Chassis
PEHC103	Horizontal Economizer For A/C, Large Chassis
PGMDD101/102	Manual 25% Fresh Air Damper Downflow Application, Small and Medium Chassis
PGMDD103	Manual 25% Fresh Air Damper Downflow Application, Large Chassis
PGMDH102	Manual 25% Fresh Air Damper Horizontal Application, Medium Chassis
PGMDH103	Manual 25% Fresh Air Damper Horizontal Application, Large Chassis
PGMDMD101/102	Motorized 25% Fresh Air Damper Downflow Application, Small and Medium Chassis
PGMDMD103	Motorized 25% Fresh Air Downflow Application, Large Chassis
PGMDMH102	Motorized 25% Fresh Air Damper Horizontal Application, Medium Chassis
PGMDMH103	Motorized 25% Fresh Air Damper Horizontal Application, Large Chassis
GPC13MED102	Downflow Economizer For A/C, Medium Chassis
GPC13MED103	Downflow Economizer For A/C, Large Chassis
GPH13MED102	Downflow Economizer For Heat Pump, Medium Chassis
GPH13MED103	Downflow Economizer For Heat Pump, Large Chassis
GPH13MFR102	Internal Filter Rack, Medium Chassis
GPH13MFR103	Internal Filter Rack, Large Chassis
GPGHFR101-103	External Horizontal Filter Rack for Goodman/Amana Gas/Electric and Multi-position Package Units All Chassis
SQRPG101/102	Square to Round Adapter w/ 16" Round Downflow Application, Medium Chassis
SQRPG103	Square to Round Adapter w/ 18" Round Downflow Application, Large Chassis
SQRPGH101/102	Square to Round Adapter w/ 16" Round Horizontal Application, Medium Chassis
SQRPGH103	Square to Round Adapter w/ 18" Round Horizontal Application, Large Chassis
CDK36	Flush Mount Concentric Duct Kit
CDK36515	Flush Mount Concentric Duct Kit w/ Filter
CDK36530	Step Down Concentric Duct Kit
CDK36535	Step Down Concentric Duct Kit w/ Filter
CDK4872	Flush Mount Concentric Duct Kit
CDK4872515	Flush Mount Concentric Duct Kit w/ Filter
CDK4872530	Step Down Concentric Duct Kit
CDK4872535	Step Down Concentric Duct Kit w/ Filter

BLOWER PERFORMANCE DATA

GPH15[24-60]M41*

Dry Coil Data

Model	Speed	Volts	E.S.P. (In. of H ₂ O)								
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	
GPH1524M41*	T1 (G)	230	CFM	882	808	727	649	545	---	---	---
			WATTS	82	86	92	102	108	---	---	---
	T2 / T3 (W2)	230	CFM	933	873	810	733	637	584	---	---
			WATTS	93	103	109	120	126	135	---	---
	T4 / T5 (Y)	230	CFM	1058	1012	945	896	816	723	672	---
			WATTS	124	136	142	153	168	172	179	---
GPH1530M41*	T1 (G)	230	CFM	893	824	752	665	575	---	---	---
			WATTS	87	95	101	111	115	---	---	---
	T2 / T3 (W2)	230	CFM	1132	1070	1011	959	889	827	733	669
			WATTS	153	162	168	179	184	195	206	208
	T4 / T5 (Y)	230	CFM	1287	1236	1165	1123	1066	1012	958	857
			WATTS	211	217	228	239	244	255	265	272
GPH1536M41*	T1 (G)	230	CFM	852	764	711	592	545	---	---	---
			WATTS	80	82	86	95	99	---	---	---
	T2 / T3 (W2)	230	CFM	1232	1190	1131	1082	1023	966	889	819
			WATTS	202	214	221	229	235	246	258	264
	T4 / T5 (Y)	230	CFM	1267	1213	1162	1120	1058	1009	932	841
			WATTS	218	226	236	245	247	260	272	275
GPH1542M41*	T1 (G)	230	CFM	893	830	741	619	557	-	-	-
			Watts	89	99	104	117	131	-	-	-
	T2 / T3 (W2)	230	CFM	1393	1339	1297	1230	1180	1116	1056	901
			Watts	271	280	292	300	310	320	324	329
	T4 / T5 (Y)	230	CFM	1511	1464	1422	1355	1313	1184	1064	983
			Watts	345	354	364	381	390	392	375	360
GPH1543M41*	T1 (G)	230	CFM	1199	1138	1085	1017	957	889	820	755
			Watts	162	173	185	193	211	219	232	245
	T2 (Y) / T3 (W2)	230	CFM	1359	1322	1262	1214	1165	1119	1080	1039
			Watts	200	214	218	233	243	254	267	283
	T4 / T5 (HS)	230	CFM	1598	1559	1525	1483	1441	1398	1353	1314
			Watts	332	343	360	365	384	385	404	414
GPH1548M41*	T1 (G)	230	CFM	1199	1138	1085	1017	957	889	820	755
			WATTS	162	173	185	193	211	219	232	245
	T2 / T3 (W2)	230	CFM	1799	1745	1698	1658	1610	1560	1522	1450
			WATTS	480	493	508	521	531	545	550	547
	T4 / T5 (Y)	230	CFM	1921	1865	1818	1780	1719	1667	1579	1483
			WATTS	582	585	602	625	627	621	595	569
GPH1549M41*	T1 (G)	230	CFM	1199	1138	1085	1017	957	889	820	755
			Watts	162	173	185	193	211	219	232	245
	T2 (Y)	230	CFM	1418	1383	1349	1312	1275	1228	1178	1141
			Watts	242	258	273	282	299	308	320	338
	T3 (W2)	230	CFM	1799	1745	1698	1658	1610	1560	1522	1450
			Watts	480	493	508	521	531	545	550	547
	T4 (YHS)	230	CFM	1799	1745	1698	1658	1610	1560	1522	1450
			Watts	480	493	508	521	531	545	550	547
	T5 (W2HS)	230	CFM	1921	1865	1818	1780	1719	1667	1579	1483
			Watts	582	585	602	625	627	621	595	569
GPH1560M41*	T1 (G)	230	CFM	1390	1325	1282	1223	1180	1134	1066	1011
			WATTS	231	240	253	262	277	292	300	316
	T2 / T3 (W2)	230	CFM	1900	1843	1801	1762	1723	1672	1577	1482
			WATTS	543	559	569	583	600	603	577	554
	T4 / T5 (Y)	230	CFM	2094	2039	1981	1907	1819	1731	1628	1497
			WATTS	724	727	720	701	671	653	611	569

NOTES:

- Data shown is Dry Coil. Wet Coil Pressure Drop is approximate. 0.1" H₂O, for 2 row indoor coil; 0.2" H₂O, for 3 row indoor coil; and 0.3" H₂O, for 4 row indoor coil.
- Data shown does not include filter pressure drop, approx. 0.08" H₂O.
- ALL MODELS SHOULD RUN NO LESS THAN 350 CFM / TON.
- Reduce airflow by 2% for 208V operation.

BLOWER PERFORMANCE DATA

APH15[24-60]M41*

Evaporator Blower Specifications with ECM Motors

APH1524M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	630	D	Minus	630
D	Normal	700	D	Normal	700
D	Plus	770	D	Plus	770
C	Minus	743	C	Minus	743
C	Normal	825	C	Normal	825
C	Plus	908	C	Plus	908
B	Minus	855	B	Minus	855
B	Normal	950	B	Normal	950
B	Plus	1,045	B	Plus	1,045
A	Minus	945	A	Minus	945
A	Normal	1,050	A	Normal	1,050
A	Plus	1,155	A	Plus	1,155

* @ 0.1 - 0.5 ESP

APH1530M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	720	D	Minus	720
D	Normal	800	D	Normal	800
D	Plus	880	D	Plus	880
C	Minus	900	C	Minus	900
C	Normal	1,000	C	Normal	1,000
C	Plus	1,100	C	Plus	1,100
B	Minus	990	B	Minus	990
B	Normal	1,100	B	Normal	1,100
B	Plus	1,210	B	Plus	1,210
A	Minus	1,125	A	Minus	1,125
A	Normal	1,250	A	Normal	1,250
A	Plus	1,375	A	Plus	1,375

* @ 0.1 - 0.5 ESP

APH1536M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	720	D	Minus	720
D	Normal	800	D	Normal	800
D	Plus	880	D	Plus	880
C	Minus	900	C	Minus	900
C	Normal	1,000	C	Normal	1,000
C	Plus	1,100	C	Plus	1,100
B	Minus	990	B	Minus	990
B	Normal	1,100	B	Normal	1,100
B	Plus	1,210	B	Plus	1,210
A	Minus	1,125	A	Minus	1,125
A	Normal	1,250	A	Normal	1,250
A	Plus	1,375	A	Plus	1,375

* @ 0.1 - 0.5 ESP

APH1542M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	780	D	Minus	780
D	Normal	873	D	Normal	873
D	Plus	984	D	Plus	984
C	Minus	985	C	Minus	985
C	Normal	1,111	C	Normal	1,111
C	Plus	1,259	C	Plus	1,259
B	Minus	1,093	B	Minus	1,093
B	Normal	1,235	B	Normal	1,235
B	Plus	1,377	B	Plus	1,377
A	Minus	1,203	A	Minus	1,203
A	Normal	1,352	A	Normal	1,352
A	Plus	1,523	A	Plus	1,523

* @ 0.1 - 0.5 ESP

APH1548M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	1,103	D	Minus	1,103
D	Normal	1,225	D	Normal	1,225
D	Plus	1,348	D	Plus	1,348
C	Minus	1,260	C	Minus	1,260
C	Normal	1,400	C	Normal	1,400
C	Plus	1,540	C	Plus	1,540
B	Minus	1,530	B	Minus	1,530
B	Normal	1,700	B	Normal	1,700
B	Plus	1,870	B	Plus	1,870
A	Minus	1,620	A	Minus	1,620
A	Normal	1,800	A	Normal	1,800
A	Plus	1,980	A	Plus	1,980

* @ 0.1 - 0.5 ESP

APH1560M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	1,260	D	Minus	1,260
D	Normal	1,400	D	Normal	1,400
D	Plus	1,540	D	Plus	1,540
C	Minus	1,440	C	Minus	1,440
C	Normal	1,600	C	Normal	1,600
C	Plus	1,760	C	Plus	1,760
B	Minus	1,620	B	Minus	1,620
B	Normal	1,800	B	Normal	1,800
B	Plus	1,980	B	Plus	1,980
A	Minus	1,800	A	Minus	1,800
A	Normal	2,000	A	Normal	2,000
A	Plus	2,200	A	Plus	2,200

* @ 0.1 - 0.5 ESP

APH1543M41 APH1549M41					
Cooling/HP Speed	Adjust Tap	CFM*	Electric Heat	Adjust Tap	CFM*
D	Minus	1,103	D	Minus	1,103
D	Normal	1,225	D	Normal	1,225
D	Plus***	1,348	D	Plus	1,348
C	Minus**	1,260	C	Minus**	1,260
C	Normal	1,400	C	Normal	1,400
C	Plus	1,540	C	Plus	1,540
B	Minus	1,530	B	Minus	1,530
B	Normal	1,700	B	Normal	1,700
B	Plus	1,870	B	Plus	1,870
A	Minus	1,620	A	Minus	1,620
A	Normal	1,800	A	Normal	1,800
A	Plus	1,980	A	Plus***	1,980

* @ 0.1 - 0.5 ESP

** DENOTES FACTORY SETTING FOR APH1543M41

*** DENOTES FACTORY SETTING FOR APH1549M41

BLOWER PERFORMANCE DATA

APH15[24-60]M41*

Dipswitch Settings

Model	Speed Tap	Switch 1	Switch 2	Electric Heat CFM
APH1524	A	OFF	OFF	1050 ^(F)
	B	ON	OFF	950
	C	OFF	ON	825
	D	ON	ON	700
APH1530	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1,100
	C	OFF	ON	1,000
	D	ON	ON	800
APH1536	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1100
	C	OFF	ON	1000
	D	ON	ON	800
APH1542	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1,100
	C	OFF	ON	1,000
	D	ON	ON	800
APH1543 APH1548 APH1549	A	OFF	OFF	1800 ^(F)
	B	ON	OFF	1700
	C	OFF	ON	1400 ^{(F)*}
	D	ON	ON	1225
APH1560	A	OFF	OFF	2000 ^(F)
	B	ON	OFF	1800
	C	OFF	ON	1600
	D	ON	ON	1400

(F) Factory Setting

(F)* APH1543

Model	Speed Tap	Switch 5	Switch 6	Cooling/HP CFM
APH1524	A	OFF	OFF	1050 ^(F)
	B	ON	OFF	950
	C	OFF	ON	825
	D	ON	ON	700
APH1530	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1,100
	C	OFF	ON	1,000
	D	ON	ON	800
APH1536	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1100
	C	OFF	ON	1000
	D	ON	ON	800
APH1542	A	OFF	OFF	1250 ^(F)
	B	ON	OFF	1,100
	C	OFF	ON	1,000
	D	ON	ON	800
APH1543 APH1548 APH1549	A	OFF	OFF	1800 ^(F)
	B	ON	OFF	1700
	C	OFF	ON	1400 ^{(F)*}
	D	ON	ON	1225 ^{(F)**}
APH1560	A	OFF	OFF	2000 ^(F)
	B	ON	OFF	1800
	C	OFF	ON	1600
	D	ON	ON	1400

(F) Factory Setting

(F)* APH1543

(F)** APH1549

Important: Disconnect power to unit before moving jumper to prevent damage to TAP board
APH1542, 48-60: low-stage cool will be 70% of high-stage cool.

DIP Switch Settings for Single & Two-Stage Thermostats

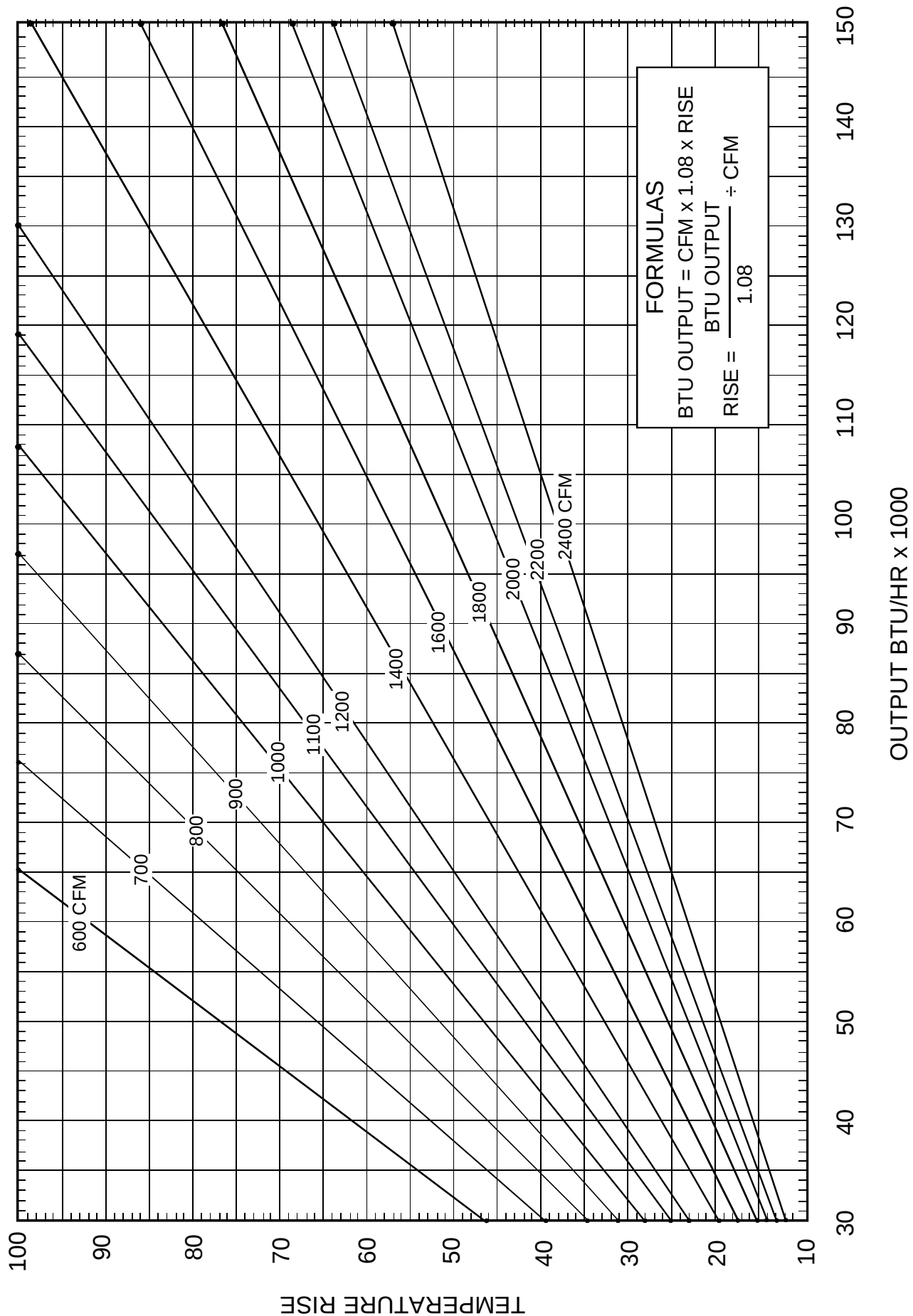
MODEL	SWITCH 3	SWITCH 4	THERMOSTAT
APH15**	N/A	ON	Single Stage
	N/A	OFF	Two-Stage

Adjustments Through Dip Switch Combinations 7-8

CFM	SWITCH 7	SWITCH 8
+10%	On	Off
Normal	Off	Off
-10%	Off	On

BLOWER PERFORMANCE DATA

BTU OUTPUT vs TEMPERATURE RISE CHART



COOLING PERFORMANCE DATA

PH1524M41

MODEL: *PH1524M41*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 10±2 °F @ the liquid access fitting connection AHR1 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

Outdoor Ambient Temperature																														
65					75					85					95					105					115					
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	
70	970	MBh	23.5	24.4	26.7	-	23.0	23.8	26.1	-	22.4	23.2	25.5	-	21.9	22.7	24.8	-	20.8	21.5	23.6	-	19.3	20.0	21.9	-	19.3	20.0	21.9	-
		S/T	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.88	0.73	0.51	-	0.88	0.74	0.51	-	0.88	0.74	0.51	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	18	15	12	-	17	15	11	-	16	14	11	-	16	14	11	-
		KW	1.60	1.63	1.68	-	1.72	1.76	1.81	-	1.82	1.86	1.92	-	1.91	1.96	2.02	-	1.99	2.04	2.10	-	2.06	2.10	2.17	-	2.06	2.10	2.17	-
		AMPS	7.5	7.7	7.9	-	8.0	8.2	8.4	-	8.5	8.7	8.9	-	9.0	9.2	9.4	-	9.5	9.7	9.9	-	9.9	10.1	10.4	-	9.9	10.1	10.4	-
	HI PR	216	232	245	-	242	261	275	-	275	296	313	-	314	337	356	-	353	380	401	-	390	419	443	-	390	419	443	-	
	LO PR	106	113	124	-	112	120	131	-	117	124	136	-	123	131	143	-	129	137	149	-	133	142	155	-	133	142	155	-	
	MBh	22.8	23.7	25.9	-	22.3	23.1	25.3	-	21.8	22.6	24.7	-	21.2	22.0	24.1	-	20.2	20.9	22.9	-	18.7	19.4	21.2	-	18.7	19.4	21.2	-	
	S/T	0.73	0.61	0.43	-	0.76	0.64	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.84	0.70	0.48	-	0.84	0.70	0.49	-	0.84	0.70	0.49	-	
	Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-	
860	KW	1.59	1.62	1.67	-	1.71	1.74	1.80	-	1.81	1.85	1.90	-	1.90	1.94	2.00	-	1.98	2.02	2.08	-	2.04	2.09	2.15	-	2.04	2.09	2.15	-	
	AMPS	7.5	7.6	7.8	-	8.0	8.1	8.3	-	8.5	8.6	8.9	-	8.9	9.1	9.4	-	9.4	9.6	9.8	-	9.8	10.0	10.3	-	9.8	10.0	10.3	-	
	HI PR	214	230	243	-	240	258	272	-	273	293	310	-	310	334	353	-	349	376	397	-	386	415	439	-	386	415	439	-	
	LO PR	105	112	122	-	111	118	129	-	116	123	134	-	122	129	141	-	127	135	148	-	132	140	153	-	132	140	153	-	
	MBh	21.1	21.8	23.9	-	20.6	21.3	23.4	-	20.1	20.8	22.8	-	19.6	20.3	22.3	-	18.6	19.3	21.1	-	17.3	17.9	19.6	-	17.3	17.9	19.6	-	
750	S/T	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	
	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-	
	KW	1.55	1.59	1.63	-	1.67	1.70	1.75	-	1.77	1.80	1.86	-	1.85	1.89	1.95	-	1.93	1.97	2.03	-	1.99	2.04	2.10	-	1.99	2.04	2.10	-	
	AMPS	7.3	7.5	7.7	-	7.8	7.9	8.1	-	8.3	8.5	8.7	-	8.7	8.9	9.1	-	9.2	9.4	9.6	-	9.6	9.8	10.1	-	9.6	9.8	10.1	-	
	HI PR	207	223	235	-	232	250	264	-	264	285	300	-	301	324	342	-	339	365	385	-	374	403	425	-	374	403	425	-	
LO PR	102	109	119	-	108	115	125	-	112	119	130	-	118	125	137	-	124	131	143	-	128	136	148	-	128	136	148	-		

75	970	MBh	23.9	24.6	26.7	28.6	23.4	24.1	26.0	27.9	22.8	23.5	25.4	27.3	22.2	22.9	24.8	26.6	21.1	21.8	23.6	25.3	19.6	20.2	21.8	23.4
		S/T	0.88	0.78	0.59	0.38	0.91	0.81	0.61	0.40	0.93	0.83	0.63	0.41	0.96	0.86	0.65	0.42	1.00	0.89	0.67	0.43	1.00	0.90	0.68	0.44
		Delta T	20	18	15	10	20	19	15	10	20	19	15	10	20	19	15	11	20	18	15	10	19	17	14	10
		KW	1.62	1.65	1.70	1.75	1.73	1.77	1.82	1.88	1.84	1.88	1.94	2.00	1.93	1.97	2.03	2.10	2.01	2.05	2.12	2.19	2.08	2.12	2.19	2.26
		AMPS	7.6	7.7	7.9	8.2	8.1	8.2	8.4	8.7	8.6	8.8	9.0	9.3	9.1	9.3	9.5	9.8	9.5	9.7	10.0	10.3	10.0	10.2	10.5	10.8
860	970	MBh	21.8	23.5	24.8	25.8	24.5	26.3	27.8	29.0	27.8	29.9	31.6	33.0	31.7	34.1	36.0	37.5	35.6	38.3	40.5	42.2	39.4	42.4	44.7	46.7
		S/T	0.84	0.75	0.57	0.36	0.87	0.77	0.59	0.38	0.89	0.79	0.60	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.96	0.86	0.65	0.42
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
		KW	1.60	1.64	1.68	1.74	1.72	1.76	1.81	1.87	1.82	1.86	1.92	1.98	1.92	1.96	2.02	2.08	1.99	2.04	2.10	2.17	2.06	2.10	2.17	2.24
		AMPS	7.5	7.7	7.9	8.1	8.0	8.2	8.4	8.6	8.5	8.7	8.9	9.2	9.0	9.2	9.4	9.7	9.5	9.7	9.9	10.2	9.9	10.1	10.4	10.7
750	970	MBh	21.6	23.2	24.5	25.6	24.2	26.1	27.5	28.7	27.5	29.6	31.3	32.6	31.4	33.8	35.6	37.2	35.3	38.0	40.1	41.8	39.0	42.0	44.3	46.2
		S/T	0.84	0.75	0.57	0.36	0.87	0.77	0.59	0.38	0.89	0.79	0.60	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.96	0.86	0.65	0.42
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
		KW	1.60	1.64	1.68	1.74	1.72	1.76	1.81	1.87	1.82	1.86	1.92	1.98	1.92	1.96	2.02	2.08	1.99	2.04	2.10	2.17	2.06	2.10	2.17	2.24
		AMPS	7.5	7.7	7.9	8.1	8.0	8.2	8.4	8.6	8.5	8.7	8.9	9.2	9.0	9.2	9.4	9.7	9.5	9.7	9.9	10.2	9.9	10.1	10.4	10.7

* Entering Indoor Dry Bulb Temperature NOTE: Shaded area is ACCA (TVA) conditions
High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power
AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

MODEL: *PH1524M41*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 10±2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

		65						75						85						95						105						115					
		Outdoor Ambient Temperature																																			
		Entering Indoor Wet Bulb Temperature																																			
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71				
	MBh	24.3	24.9	26.6	28.4	23.8	24.3	26.0	27.7	23.2	23.7	25.3	27.1	22.6	23.1	24.7	26.4	21.5	22.0	23.5	25.1	19.9	20.4	21.8	23.3	19.9	20.4	21.8	23.3	19.9	20.4	21.8	23.3				
	S/T	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.96	0.78	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.63				
	Delta T	22	21	18	15	23	21	19	15	22	22	19	15	21	22	19	15	20	21	19	15	19	19	15	14	19	19	15	14	19	19	15	14				
	KW	1.59	1.63	1.68	1.73	1.71	1.75	1.80	1.86	1.82	1.86	1.92	1.98	1.91	1.95	2.02	2.08	1.99	2.03	2.10	2.17	2.06	2.10	2.17	2.25	2.06	2.10	2.17	2.25	2.06	2.10	2.17	2.25				
	AMPS	7.7	7.8	8.0	8.2	8.1	8.3	8.5	8.7	8.7	8.8	9.1	9.3	9.1	9.3	9.6	9.9	9.6	9.8	10.1	10.4	10.1	10.3	10.6	10.9	10.1	10.3	10.6	10.9	10.1	10.3	10.6	10.9				
	HI PR	220	237	250	261	247	266	281	293	281	302	319	333	320	344	364	379	360	387	409	427	398	428	452	471	398	428	452	471	398	428	452	471				
	LO PR	109	116	126	134	115	122	133	142	119	127	138	147	125	133	145	155	131	140	152	162	136	144	158	168	136	144	158	168	136	144	158	168				
	MBh	23.6	24.1	25.8	27.6	23.1	23.6	25.2	26.9	22.5	23.0	24.6	26.3	22.0	22.5	24.0	25.7	20.9	21.3	22.8	24.4	19.3	19.8	21.1	22.6	19.3	19.8	21.1	22.6	19.3	19.8	21.1	22.6				
	S/T	0.92	0.86	0.70	0.52	0.95	0.89	0.72	0.54	0.97	0.91	0.74	0.56	1.00	0.94	0.77	0.57	1.00	0.98	0.80	0.60	1.00	0.99	0.80	0.60	1.00	0.99	0.80	0.60	1.00	0.99	0.80	0.60				
	Delta T	23	22	19	15	23	22	20	16	23	22	20	16	24	23	20	16	22	22	19	16	21	21	18	14	21	21	18	14	21	21	18	14				
	KW	1.58	1.61	1.66	1.72	1.70	1.74	1.79	1.85	1.80	1.84	1.90	1.96	1.90	1.94	2.00	2.07	1.98	2.02	2.08	2.15	2.04	2.09	2.16	2.23	2.04	2.09	2.16	2.23	2.04	2.09	2.16	2.23				
	AMPS	7.6	7.7	7.9	8.2	8.1	8.2	8.4	8.7	8.6	8.8	9.0	9.3	9.1	9.3	9.5	9.8	9.5	9.7	10.0	10.3	10.0	10.2	10.5	10.8	10.0	10.2	10.5	10.8	10.0	10.2	10.5	10.8				
	HI PR	218	235	248	258	245	263	278	290	278	299	316	330	317	341	360	375	356	384	405	422	394	424	447	467	394	424	447	467	394	424	447	467				
	LO PR	107	114	125	133	114	121	132	140	118	126	137	146	124	132	144	153	130	138	151	161	134	143	156	166	134	143	156	166	134	143	156	166				
	MBh	21.8	22.3	23.8	25.5	21.3	21.8	23.3	24.9	20.8	21.3	22.7	24.3	20.3	20.7	22.2	23.7	19.3	19.7	21.0	22.5	17.9	18.2	19.5	20.8	17.9	18.2	19.5	20.8	17.9	18.2	19.5	20.8				
	S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77	0.57	1.01	0.95	0.77	0.58	1.01	0.95	0.77	0.58	1.01	0.95	0.77	0.58				
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	18	15	22	21	18	15	22	21	18	15				
	KW	1.54	1.58	1.62	1.67	1.66	1.69	1.75	1.80	1.76	1.80	1.86	1.92	1.85	1.89	1.95	2.01	1.93	1.97	2.03	2.10	1.99	2.04	2.10	2.17	1.99	2.04	2.10	2.17	1.99	2.04	2.10	2.17				
	AMPS	7.4	7.6	7.8	8.0	7.9	8.0	8.2	8.5	8.4	8.6	8.8	9.1	8.9	9.0	9.3	9.6	9.3	9.5	9.8	10.1	9.8	10.0	10.2	10.6	9.8	10.0	10.2	10.6	9.8	10.0	10.2	10.6				
	HI PR	211	228	240	251	237	255	270	281	270	290	307	320	307	331	349	364	346	372	393	410	382	411	434	453	382	411	434	453	382	411	434	453				
	LO PR	104	111	121	129	110	117	128	136	114	122	133	142	120	128	140	149	126	134	146	156	130	139	151	161	130	139	151	161	130	139	151	161				
	MBh	24.0	24.5	25.7	27.4	23.5	23.9	25.1	26.8	22.9	23.4	24.5	26.1	22.4	22.8	23.9	25.5	21.2	21.7	22.7	24.2	19.7	20.1	21.0	22.4	19.7	20.1	21.0	22.4	19.7	20.1	21.0	22.4				
	S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	1.00	1.00	0.96	0.78	1.00	1.00	0.96	0.78				
	Delta T	25	24	23	20	25	25	23	20	25	25	23	20	24	24	23	20	23	23	23	20	21	21	22	19	21	21	22	19	21	21	22	19				

COOLING PERFORMANCE DATA

PH1530M41

MODEL: *PH1530M41**

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 10±2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB* Airflow			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
70	1125	MBh	28.4	29.5	32.3	-	27.8	28.8	31.5	-	27.1	28.1	30.8	-	26.4	27.4	30.0	-	25.1	26.0	28.5	-	23.3	24.1	26.4	-
		S/T	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.88	0.73	0.51	-	0.88	0.74	0.51	-
		Delta T	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-
		KW	1.88	1.92	1.99	-	2.03	2.07	2.14	-	2.16	2.21	2.28	-	2.27	2.32	2.40	-	2.37	2.42	2.50	-	2.45	2.51	2.59	-
		AMPS	8.1	8.2	8.5	-	8.6	8.8	9.1	-	9.3	9.5	9.8	-	9.9	10.1	10.4	-	10.5	10.7	11.0	-	11.0	11.3	11.6	-
		HI PR	229	246	260	-	257	276	292	-	292	314	332	-	333	358	378	-	374	403	425	-	414	445	470	-
	1000	LO PR	109	116	127	-	116	123	134	-	120	128	139	-	126	134	146	-	132	141	154	-	137	145	159	-
		MBh	27.6	28.6	31.3	-	26.9	27.9	30.6	-	26.3	27.3	29.9	-	25.7	26.6	29.1	-	24.4	25.3	27.7	-	22.6	23.4	25.6	-
		S/T	0.73	0.61	0.43	-	0.76	0.64	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.84	0.70	0.48	-	0.84	0.70	0.49	-
		Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	15	12	-
875	KW	1.87	1.91	1.97	-	2.01	2.06	2.12	-	2.14	2.19	2.26	-	2.25	2.30	2.38	-	2.35	2.40	2.48	-	2.43	2.49	2.57	-	
	AMPS	8.0	8.2	8.4	-	8.6	8.7	9.0	-	9.2	9.4	9.7	-	9.8	10.0	10.3	-	10.4	10.6	10.9	-	10.9	11.2	11.5	-	
	HI PR	227	244	258	-	254	274	289	-	289	311	329	-	329	355	374	-	371	399	421	-	409	441	465	-	
	LO PR	108	115	126	-	114	122	133	-	119	126	138	-	125	133	145	-	131	139	152	-	135	144	157	-	
	MBh	25.5	26.4	28.9	-	24.9	25.8	28.2	-	24.3	25.2	27.6	-	23.7	24.6	26.9	-	22.5	23.3	25.6	-	20.8	21.6	23.7	-	
	S/T	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.81	0.68	0.47	-	
875	Delta T	19	16	12	-	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	18	15	12	-	
	KW	1.82	1.86	1.92	-	1.96	2.01	2.07	-	2.09	2.13	2.20	-	2.20	2.25	2.32	-	2.29	2.34	2.42	-	2.37	2.42	2.50	-	
	AMPS	7.8	8.0	8.2	-	8.4	8.5	8.8	-	9.0	9.2	9.5	-	9.6	9.8	10.1	-	10.1	10.3	10.7	-	10.7	10.9	11.2	-	
	HI PR	220	237	250	-	247	265	280	-	281	302	319	-	320	344	363	-	359	387	409	-	397	427	451	-	
875	LO PR	105	112	122	-	111	118	129	-	115	123	134	-	121	129	141	-	127	135	147	-	131	140	153	-	

75	1125	MBh	28.9	29.8	32.2	34.6	28.2	29.1	31.5	33.8	27.6	28.4	30.7	33.0	26.9	27.7	30.0	32.2	25.5	26.3	28.5	30.5	23.7	24.4	26.4	28.3		
		S/T	0.88	0.78	0.59	0.38	0.91	0.81	0.61	0.40	0.93	0.83	0.63	0.41	0.96	0.86	0.65	0.42	1.00	0.89	0.67	0.43	1.00	0.90	0.68	0.44		
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10		
		KW	1.90	1.94	2.00	2.07	2.05	2.09	2.16	2.23	2.18	2.22	2.30	2.37	2.29	2.34	2.42	2.50	2.39	2.44	2.52	2.61	2.47	2.53	2.61	2.70		
		AMPS	8.1	8.3	8.5	8.8	8.7	8.9	9.2	9.5	9.4	9.6	9.9	10.2	10.0	10.2	10.5	10.9	10.6	10.8	11.1	11.5	11.1	11.4	11.7	12.2		
		LOPR	231	249	263	274	259	279	295	308	295	318	335	350	336	362	382	398	378	407	430	448	418	450	475	495		
75	1000	LOPR	110	118	128	137	117	124	136	144	121	129	141	150	127	136	148	158	134	142	155	165	138	147	160	171		
		MBh	28.1	28.9	31.3	33.6	27.4	28.2	30.5	32.8	26.8	27.5	29.8	32.0	26.1	26.9	29.1	31.2	24.8	25.5	27.6	29.7	23.0	23.6	25.6	27.5		
		S/T	0.84	0.75	0.57	0.36	0.87	0.77	0.59	0.38	0.89	0.79	0.60	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.96	0.86	0.65	0.42		
		Delta T	22	20	16	11	22	20	16	11	22	20	16	11	22	20	17	11	22	20	16	11	20	19	15	11		
		KW	1.88	1.92	1.99	2.05	2.03	2.07	2.14	2.21	2.16	2.21	2.28	2.35	2.27	2.32	2.40	2.48	2.37	2.42	2.50	2.59	2.45	2.51	2.59	2.68		
		AMPS	8.1	8.2	8.5	8.7	8.6	8.8	9.1	9.4	9.3	9.5	9.8	10.1	9.9	10.1	10.4	10.8	10.5	10.7	11.0	11.4	11.0	11.3	11.6	12.0		
875	875	HI PR	229	246	260	271	257	276	292	305	292	314	332	346	333	358	378	394	374	403	425	444	414	445	470	490		
		LOPR	109	116	127	135	116	123	134	143	120	128	139	149	126	134	147	156	132	141	154	164	137	145	159	169		
		MBh	25.9	26.7	28.9	31.0	25.3	26.0	28.2	30.3	24.7	25.4	27.5	29.5	24.1	24.8	26.8	28.8	22.9	23.6	25.5	27.4	21.2	21.8	23.6	25.4		
		S/T	0.81	0.72	0.55	0.35	0.83	0.75	0.56	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.92	0.82	0.62	0.40	0.92	0.83	0.63	0.40		
		Delta T	22	20	17	11	22	20	17	12	22	20	17	12	22	21	17	12	22	20	17	11	21	19	16	11		
		KW	1.84	1.88	1.94	2.00	1.98	2.02	2.09	2.16	2.11	2.15	2.22	2.30	2.22	2.26	2.34	2.42	2.31	2.36	2.44	2.52	2.39	2.44	2.53	2.61		
875	875	AMPS	7.9	8.0	8.3	8.5	8.4	8.6	8.9	9.2	9.1	9.3	9.5	9.9	9.6	9.8	10.1	10.5	10.2	10.4	10.7	11.1	10.8	11.0	11.3	11.7		
		HI PR	222	239	252	263	249	268	283	295	283	305	322	336	323	347	367	383	363	391	413	430	401	432	456	476		
		LOPR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	159	133	141	154	164		

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions

High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

Design Subcooling, 10±2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB* Airflow			Outdoor Ambient Temperature															Indoor Wet Bulb Temperature														
			65					75					85					95					105					115				
			59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75
80	1125	MBh	29.4	30.1	32.1	34.3	28.7	29.4	31.4	33.5	28.0	28.7	30.6	32.7	27.4	28.0	29.9	31.9	26.0	26.6	28.4	30.3	24.1	24.6	26.3	28.1	22.0	22.5	24.2	26.0	27.8	
		S/T	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.96	0.78	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.84	0.63	0.90	0.85	0.70	0.55	0.40	
		Delta T	23	22	19	15	23	22	19	16	23	22	19	16	22	23	20	16	21	22	19	15	20	20	18	14	18	17	15	13	11	
		KW	1.91	1.96	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.39	2.31	2.36	2.44	2.52	2.41	2.46	2.55	2.63	2.49	2.55	2.64	2.73	2.49	2.54	2.62	2.70	2.78	
		AMPS	8.2	8.4	8.6	8.9	8.8	9.0	9.2	9.5	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.2	11.5	11.8	12.3	10.9	11.2	11.9	12.4	12.9	
	1000	MBh	28.6	29.2	31.2	33.3	27.9	28.5	30.5	32.6	27.2	27.8	29.7	31.8	26.6	27.1	29.0	31.0	25.2	25.8	27.6	29.5	23.4	23.9	25.5	27.3	21.0	21.5	23.2	25.0	26.8	
		S/T	0.92	0.86	0.70	0.52	0.95	0.89	0.72	0.54	0.97	0.91	0.74	0.56	1.00	0.94	0.77	0.57	1.00	0.98	0.80	0.60	1.00	0.99	0.80	0.60	0.90	0.85	0.70	0.55	0.40	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	20	16	23	23	20	16	21	22	19	15	20	19	17	15	13	
		KW	1.90	1.94	2.00	2.07	2.05	2.09	2.16	2.23	2.18	2.22	2.30	2.37	2.29	2.34	2.42	2.50	2.39	2.44	2.52	2.61	2.47	2.53	2.61	2.70	2.47	2.52	2.60	2.68	2.76	
		AMPS	8.1	8.3	8.5	8.8	8.7	8.9	9.2	9.5	9.4	9.6	9.9	10.2	10.0	10.2	10.5	10.9	10.6	10.8	11.1	11.5	11.1	11.4	11.7	12.2	10.8	11.1	11.8	12.3	12.8	
85	1125	MBh	29.1	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.6	27.0	27.6	28.9	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1	20.0	20.5	22.2	24.0	25.8	
		S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	0.90	0.85	0.70	0.55	0.40	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	20	16	23	23	20	16	21	22	19	15	20	19	17	15	13	
		KW	1.91	1.96	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.39	2.31	2.36	2.44	2.52	2.41	2.46	2.55	2.63	2.49	2.55	2.64	2.73	2.49	2.54	2.62	2.70	2.78	
		AMPS	8.2	8.4	8.6	8.9	8.8	9.0	9.2	9.5	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.2	11.5	11.8	12.3	11.0	11.3	12.0	12.5	13.0	
	1000	MBh	29.1	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.6	27.0	27.6	28.9	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1	20.0	20.5	22.2	24.0	25.8	
		S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	0.90	0.85	0.70	0.55	0.40	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	20	16	23	23	20	16	21	22	19	15	20	19	17	15	13	
		KW	1.91	1.96	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.39	2.31	2.36	2.44	2.52	2.41	2.46	2.55	2.63	2.49	2.55	2.64	2.73	2.49	2.54	2.62	2.70	2.78	
		AMPS	8.2	8.4	8.6	8.9	8.8	9.0	9.2	9.5	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.2	11.5	11.8	12.3	11.0	11.3	12.0	12.5	13.0	
875	MBh	26.4	26.9	28.8	30.8	25.7	26.3	28.1	30.0	25.1	25.7	27.4	29.3	24.5	25.1	26.8	28.6	23.3	23.8	25.4	27.2	21.6	22.0	23.6	25.2	19.0	19.5	21.2	23.0	24.8		
	S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77	0.57	1.01	0.95	0.77	0.58	0.89	0.84	0.70	0.55	0.40		
	Delta T	24	23	20	16	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	16	23	22	19	15	20	19	17	15	13		
	KW	1.85	1.89	1.95	2.02	2.00	2.04	2.11	2.17	2.12	2.17	2.24	2.31	2.23	2.28	2.36	2.44	2.33	2.38	2.46	2.54	2.41	2.46	2.55	2.63	2.39	2.44	2.52	2.60	2.68		
	AMPS	7.9	8.1	8.3	8.6	8.5	8.7	8.9	9.2	9.1	9.3	9.6	10.0	9.7	9.9	10.2	10.6	10.3	10.5	10.8	11.2	10.8	11.1	11.4	11.8	10.5	10.8	11.5	12.0	12.5		
80	1125	MBh	29.1	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.6	27.0	27.6	28.9	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1	20.0	20.5	22.2	24.0	25.8	
		S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	0.90	0.85	0.70	0.55	0.40	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	20	16	23	23	20	16	21	22	19	15	20	19	17	15	13	
		KW	1.91	1.96	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.39	2.31	2.36	2.44	2.52	2.41	2.46	2.55	2.63	2.49	2.55	2.64	2.73	2.49	2.54	2.62	2.70	2.78	
		AMPS	8.2	8.4	8.6	8.9	8.8	9.0	9.2	9.5	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.2	11.5	11.8	12.3	11.0	11.3	12.0	12.5	13.0	
1000	MBh	29.1	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.6	27.0	27.6	28.9	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1	20.0	20.5	22.2	24.0	25.8		
	S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	0.90	0.85	0.70	0.55	0.40		
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	20	16	23	23	20	16	21	22	19	15	20	19	17	15	13		
	KW	1.91	1.96	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.39	2.31	2.36	2.44	2.52	2.41	2.46	2.55	2.63	2.49	2.55	2.64	2.73	2.49	2.54	2.62	2.70	2.78		
	AMPS	8.2	8.4	8.6	8.9	8.8	9.0	9.2	9.5	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.2	11.5	11.8	12.3	11.0	11.3	12.0	12.5	13.0		
85	1125	MBh	26.4	26.9	28.8	30.8	25.7	26.3	28.1	30.0	25.1	25.7	27.4	29.3	24.5	25.1	26.8	28.6	23.3	23.8	25.4	27.2	21.6	22.0	23.6	25.2	19.0	19.5	21.2	23.0	24.8	
		S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77	0.57	1.01	0.95	0.77	0.58	0.89	0.84	0.70	0.55	0.40	
		Delta T	24	23	20	16	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	16	23	22	19	15	20	19	17	15	13	
		KW	1.85	1.89	1.95	2.02	2.00	2.04	2.11	2.17	2.12	2.17	2.24	2.31	2.23	2.28	2.36	2.44	2.33	2.38	2.46	2.54	2.41	2.46	2.55	2.63	2.39	2.44	2.52	2.60	2.68	
		AMPS	7.9	8.1	8.3	8.6	8.5	8.7	8.9	9.2	9.1	9.3	9.6	10.0	9.7	9.9	10.2	10.6	10.3	10.5	10.8	11.2	10.8	11.1	11.4	11.8	10.5	10.8	11.5	12.0	12.5	
1000	MBh	26.4	26.9	28.8	30.8	25.7	26.3	28.1	30.0	25.1	25.7	27.4	29.3	24.5	25.1	26.8	28.6	23.3	23.8	25.4	27.2	21.6	22.0	23.6	25.2	19.0	19.5	21.2	23.0	24.8		
	S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77	0.57	1.01	0.95	0.77	0.58	0.89	0.84	0.70	0.55	0.40		
	Delta T	24	23	20	16	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	16	23	22	19	15	20	19	17	15	13		
	KW	1.85	1.89	1.95	2.02	2.00	2.04	2.11	2.17	2.12	2.17	2.24	2.31	2.23	2.28	2.36	2.44	2.33	2.38	2.46	2.54	2.41	2.46	2.55	2.63	2.39	2.44	2.52	2.60	2.68		
	AMPS	7.9	8.1	8.3	8.6	8.5	8.7	8.9	9.2	9.1	9.3	9.6	10.0	9.7	9.9	10.2	10.6	10.3	10.5	10.8	11.2	10.8	11.1	11.4	11.8	10.5	10.8	11.5	12.0	12.5		
85	1125	MBh	29.1	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.6	27.0	27.6	28.9	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1	20.0					

COOLING PERFORMANCE DATA

PH1536M41

MODEL: *PH1536M41*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 10±2 °F @ the liquid access fitting connection AHR195 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

Outdoor Ambient Temperature																																			
65						75						85						95						105						115					
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71						
70	1350	MBh	34.6	35.9	39.3	-	33.8	35.1	38.4	-	33.0	34.2	37.5	-	32.2	33.4	36.6	-	30.6	31.7	34.8	-	28.4	29.4	32.2	-	28.4	29.4	32.2	-					
		S/T	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.84	0.70	0.48	-	0.87	0.73	0.50	-	0.88	0.73	0.51	-	0.88	0.73	0.51	-					
		Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-					
		KW	2.26	2.31	2.38	-	2.44	2.49	2.57	-	2.59	2.65	2.73	-	2.72	2.78	2.88	-	2.84	2.90	3.00	-	2.94	3.00	3.10	-	2.94	3.00	3.10	-					
		AMPS	10.8	11.0	11.3	-	11.5	11.7	12.0	-	12.3	12.5	12.9	-	13.0	13.2	13.6	-	13.7	13.9	14.3	-	14.3	14.6	15.0	-	14.3	14.6	15.0	-					
		HI PR	228	245	259	-	256	275	290	-	291	313	330	-	331	356	376	-	372	401	423	-	411	443	468	-	411	443	468	-					
70	1200	LO PR	107	114	125	-	114	121	132	-	118	126	137	-	124	132	144	-	130	138	151	-	134	143	156	-	134	143	156	-					
		MBh	33.6	34.9	38.2	-	32.9	34.1	37.3	-	32.1	33.2	36.4	-	31.3	32.4	35.5	-	29.7	30.8	33.8	-	27.5	28.5	31.3	-	27.5	28.5	31.3	-					
		S/T	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.84	0.70	0.48	-	0.84	0.70	0.48	-					
		Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	17	13	-	19	16	12	-	18	15	12	-	18	15	12	-					
		KW	2.25	2.29	2.36	-	2.42	2.47	2.55	-	2.57	2.62	2.71	-	2.70	2.76	2.85	-	2.82	2.88	2.97	-	2.91	2.98	3.08	-	2.91	2.98	3.08	-					
		AMPS	10.7	10.9	11.2	-	11.4	11.6	11.9	-	12.2	12.4	12.8	-	12.9	13.1	13.5	-	13.5	13.8	14.2	-	14.2	14.5	14.9	-	14.2	14.5	14.9	-					
70	1050	HI PR	225	243	256	-	253	272	287	-	288	310	327	-	328	353	372	-	369	397	419	-	407	438	463	-	407	438	463	-					
		LO PR	106	113	124	-	112	120	131	-	117	124	136	-	123	131	142	-	129	137	149	-	133	141	154	-	133	141	154	-					
		MBh	31.1	32.2	35.3	-	30.3	31.4	34.4	-	29.6	30.7	33.6	-	28.9	29.9	32.8	-	27.4	28.4	31.2	-	25.4	26.3	28.9	-	25.4	26.3	28.9	-					
		S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-	0.81	0.67	0.47	-					
		Delta T	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	18	16	12	-	18	16	12	-					
		KW	2.19	2.24	2.31	-	2.36	2.41	2.49	-	2.51	2.56	2.64	-	2.64	2.69	2.78	-	2.75	2.81	2.90	-	2.84	2.90	3.00	-	2.84	2.90	3.00	-					
70	1050	AMPS	10.5	10.7	11.0	-	11.2	11.4	11.7	-	11.9	12.2	12.5	-	12.6	12.8	13.2	-	13.2	13.5	13.9	-	13.9	14.2	14.6	-	13.9	14.2	14.6	-					
		HI PR	219	235	249	-	245	264	279	-	279	300	317	-	318	342	361	-	358	385	406	-	395	425	449	-	395	425	449	-					
		LO PR	103	110	120	-	109	116	127	-	113	121	132	-	119	127	138	-	125	133	145	-	129	137	150	-	129	137	150	-					
		MBh	35.2	36.3	39.3	42.1	34.4	35.4	38.4	41.2	33.6	34.6	37.4	40.2	32.8	33.7	36.5	39.2	31.1	32.1	34.7	37.2	28.8	29.7	32.1	34.5	28.8	29.7	32.1	34.5					
		S/T	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.99	0.88	0.67	0.43	1.00	0.89	0.67	0.43	1.00	0.89	0.67	0.43					
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	20	16	11	21	19	16	11	20	18	15	10	20	18	15	10					
70	1200	KW	2.28	2.33	2.40	2.48	2.46	2.51	2.59	2.67	2.61	2.67	2.75	2.85	2.75	2.81	2.90	3.00	2.86	2.93	3.02	3.13	2.96	3.03	3.13	3.24	2.96	3.03	3.13	3.24					
		AMPS	10.9	11.1	11.4	11.7	11.6	11.8	12.1	12.5	12.4	12.6	13.0	13.4	13.1	13.3	13.7	14.1	13.8	14.0	14.4	14.9	14.4	14.7	15.2	15.6	14.4	14.7	15.2	15.6					
		HI PR	230	248	261	273	258	278	293	306	294	316	334	348	334	360	380	396	376	405	427	446	416	447	472	493	416	447	472	493					
		LO PR	109	115	126	134	115	122	133	142	119	127	138	147	125	133	145	155	131	140	152	162	136	144	158	168	136	144	158	168					
		MBh	34.2	35.2	38.1	40.9	33.4	34.4	37.2	40.0	32.6	33.6	36.4	39.0	31.8	32.8	35.5	38.1	30.2	31.1	33.7	36.2	28.0	28.8	31.2	33.5	28.0	28.8	31.2	33.5					
		S/T	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.91	0.81	0.61	0.40	0.94	0.84	0.64	0.41	0.95	0.85	0.64	0.41	0.95	0.85	0.64	0.41					
75	1050	Delta T	22	20	16	11	22	21	17	12	22	21	17	12	23	21	17	12	22	20	17	12	21	19	16	11	21	19	16	11					
		KW	2.21	2.26	2.33	2.40	2.38	2.43	2.51	2.59	2.53	2.58	2.66	2.75	2.66	2.72	2.80	2.90	2.77	2.83	2.92	3.02	2.86	2.93	3.02	3.13	2.86	2.93	3.02	3.13					
		AMPS	10.6	10.8	11.1	11.4	11.2	11.5	11.8	12.1	12.0	12.2	12.6	13.0	12.7	12.9	13.3	13.7	13.3	13.6	14.0	14.4	14.0	14.3	14.7	15.2	14.0	14.3	14.7	15.2					
		HI PR	221	238	251	262	248	267	282	294	282	303	320	334	321	346	365	381	361	389	411	428	399	430	454	473	399	430	454	473					
		LO PR	104	111	121	129	110	117	128	136	114	122	133	142	120	128	140	149	126	134	146	156	130	139	151	161	130	139	151	161					
		MBh	31.6	32.5	35.2	37.8	30.8	31.8	34.4	36.9	30.1	31.0	33.6	36.0	29.4	30.2	32.7	35.1	27.9	28.7	31.1	33.4	25.8	26.6	28.8	30.9	25.8	26.6	28.8	30.9					

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions

High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

Design Subcooling, $10 \pm 2^\circ\text{F}$ @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat $15\text{--}18^\circ\text{F}$ @ the compressor suction access fitting connection.

IDB*		Outdoor Ambient Temperature																													
		65					75					85					95					105					115				
		Entering Indoor Wet Bulb Temperature																													
Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71							
1350	MBh	35.9	36.6	39.2	41.9	35.0	35.8	38.2	40.9	34.2	34.9	37.3	39.9	33.4	34.1	36.4	38.9	31.7	32.4	34.6	37.0	29.4	30.0	32.1	34.3						
	S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62						
	Delta T	23	22	19	15	24	23	20	16	23	23	20	16	23	23	20	16	22	22	19	16	20	20	18	15						
	KW	2.30	2.35	2.42	2.50	2.48	2.53	2.61	2.70	2.63	2.69	2.78	2.87	2.77	2.83	2.92	3.02	2.89	2.95	3.05	3.15	2.99	3.05	3.16	3.26						
	HIPR	11.0	11.2	11.5	11.8	11.7	11.9	12.2	12.6	12.5	12.7	13.1	13.5	13.2	13.4	13.8	14.2	13.9	14.2	14.5	15.0	14.6	14.9	15.3	15.8						
	AMPS	232	250	264	275	261	281	296	309	297	319	337	351	338	363	384	400	380	409	432	450	420	452	477	498						
	LO PR	110	117	127	136	116	123	135	143	120	128	140	149	126	135	147	156	133	141	154	164	137	146	159	170						
1200	MBh	34.8	35.6	38.0	40.6	34.0	34.8	37.1	39.7	33.2	33.9	36.2	38.7	32.4	33.1	35.4	37.8	30.8	31.4	33.6	35.9	28.5	29.1	31.1	33.3						
	S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.96	0.90	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.59						
	Delta T	24	23	20	16	25	23	20	16	25	24	20	16	25	24	21	16	24	23	20	16	22	22	19	15						
	KW	2.28	2.33	2.40	2.48	2.46	2.51	2.59	2.67	2.61	2.67	2.75	2.85	2.75	2.81	2.90	3.00	2.86	2.93	3.02	3.13	2.96	3.03	3.13	3.24						
	AMPS	10.9	11.1	11.4	11.7	11.6	11.8	12.1	12.5	12.4	12.6	13.0	13.4	13.1	13.3	13.7	14.1	13.8	14.0	14.4	14.9	14.4	14.7	15.2	15.6						
	HIPR	230	248	261	273	258	278	293	306	294	316	334	348	334	360	380	396	376	405	428	446	416	447	472	493						
	LO PR	109	115	126	134	115	122	133	142	119	127	138	147	125	133	145	155	131	140	152	162	136	144	158	168						
1050	MBh	32.1	32.8	35.1	37.5	31.4	32.1	34.3	36.6	30.6	31.3	33.5	35.8	29.9	30.5	32.6	34.9	28.4	29.0	31.0	33.1	26.3	26.9	28.7	30.7						
	S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.94	0.77	0.57						
	Delta T	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	16	23	22	19	15						
	KW	2.23	2.27	2.35	2.42	2.40	2.45	2.53	2.61	2.55	2.60	2.69	2.77	2.68	2.74	2.83	2.92	2.79	2.85	2.95	3.05	2.89	2.95	3.05	3.15						
	AMPS	10.7	10.9	11.1	11.5	11.3	11.5	11.8	12.2	12.1	12.3	12.7	13.1	12.8	13.0	13.4	13.8	13.4	13.7	14.1	14.5	14.1	14.4	14.8	15.3						
	HIPR	223	240	254	265	250	269	285	297	285	306	324	338	324	349	369	384	365	393	415	433	403	434	458	478						
	LO PR	105	112	122	130	111	118	129	138	116	123	134	143	121	129	141	150	127	135	148	157	132	140	153	163						

1350	MBh	36.5	37.2	39.0	41.6	35.6	36.3	38.1	40.6	34.8	35.5	37.1	39.6	33.9	34.6	36.2	38.7	32.2	32.9	34.4	36.7	29.9	30.4	31.9	34.0
	S/T	1.00	0.96	0.87	0.70	1.00	1.00	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	1.00	0.81
	Delta T	25	24	23	20	24	25	23	20	24	24	23	20	23	24	24	20	22	22	23	20	20	21	22	19
	KW	2.32	2.37	2.44	2.52	2.50	2.55	2.63	2.72	2.65	2.71	2.80	2.89	2.79	2.85	2.95	3.05	2.91	2.98	3.07	3.18	3.01	3.08	3.18	3.29
	AMPS	11.0	11.3	11.5	11.9	11.7	12.0	12.3	12.7	12.6	12.8	13.2	13.6	13.3	13.5	13.9	14.4	14.0	14.3	14.7	15.1	14.7	15.0	15.4	15.9
	HI PR	235	253	267	278	263	283	299	312	300	322	340	355	341	367	388	404	384	413	436	455	424	456	482	503
	LO PR	111	118	129	137	117	124	136	145	122	129	141	150	128	136	148	158	134	142	155	166	138	147	161	171
	MBh	35.4	36.1	37.8	40.4	34.6	35.3	36.9	39.4	33.8	34.4	36.1	38.5	33.0	33.6	35.2	37.5	31.3	31.9	33.4	35.7	29.0	29.6	31.0	33.0
	S/T	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.98	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.95	0.77
	Delta T	26	25	24	21	26	26	24	21	26	26	24	21	25	26	25	21	24	24	24	21	22	23	23	20
1200	KW	2.30	2.35	2.42	2.50	2.48	2.53	2.61	2.70	2.63	2.69	2.78	2.87	2.77	2.83	2.92	3.02	2.89	2.95	3.05	3.15	2.99	3.05	3.16	3.26
	AMPS	11.0	11.2	11.5	11.8	11.7	11.9	12.2	12.6	12.5	12.7	13.1	13.5	13.2	13.4	13.8	14.2	13.9	14.2	14.5	15.0	14.6	14.9	15.3	15.8
	HI PR	232	250	264	275	261	281	296	309	297	319	337	351	338	363	384	400	380	409	432	450	420	452	477	498
	LO PR	110	117	127	136	116	123	135	143	120	128	140	149	126	135	147	156	133	141	154	164	137	146	159	170
	MBh	32.7	33.3	34.9	37.2	31.9	32.6	34.1	36.4	31.2	31.8	33.3	35.5	30.4	31.0	32.5	34.6	28.9	29.5	30.9	32.9	26.8	27.3	28.6	30.5
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.74
	Delta T	26	26	24	21	27	26	25	21	27	26	25	21	27	26	25	22	25	26	25	21	23	24	23	20
	KW	2.25	2.29	2.36	2.44	2.42	2.47	2.55	2.63	2.57	2.62	2.71	2.80	2.70	2.76	2.85	2.95	2.81	2.88	2.97	3.07	2.91	2.98	3.08	3.18
	AMPS	10.7	10.9	11.2	11.5	11.4	11.6	11.9	12.3	12.2	12.4	12.8	13.2	12.9	13.1	13.5	13.9	13.5	13.8	14.2	14.7	14.2	14.5	14.9	15.4
	HI PR	225	243	256	267	253	272	287	300	288	310	327	341	328	353	372	388	369	397	419	437	407	438	463	483
LO PR	106	113	124	132	112	120	130	139	117	124	136	144	123	130	142	152	129	137	149	159	133	141	154	164	
1050	MBh	32.7	33.3	34.9	37.2	31.9	32.6	34.1	36.4	31.2	31.8	33.3	35.5	30.4	31.0	32.5	34.6	28.9	29.5	30.9	32.9	26.8	27.3	28.6	30.5
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.74
	Delta T	26	26	24	21	27	26	25	21	27	26	25	21	27	26	25	22	25	26	25	21	23	24	23	20
	KW	2.25	2.29	2.36	2.44	2.42	2.47	2.55	2.63	2.57	2.62	2.71	2.80	2.70	2.76	2.85	2.95	2.81	2.88	2.97	3.07	2.91	2.98	3.08	3.18
	AMPS	10.7	10.9	11.2	11.5	11.4	11.6	11.9	12.3	12.2	12.4	12.8	13.2	12.9	13.1	13.5	13.9	13.5	13.8	14.2	14.7	14.2	14.5	14.9	15.4
	HI PR	225	243	256	267	253	272	287	300	288	310	327	341	328	353	372	388	369	397	419	437	407	438	463	483
	LO PR	106	113	124	132	112	120	130	139	117	124	136	144	123	130	142	152	129	137	149	159	133	141	154	164

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* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

LOW STAGE - *PH1542M41*

EXPANDED PERFORMANCE DATA

LOW STAGE
COOLING OPERATION

MODEL: *PH1542M41*

Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

		Outdoor Ambient Temperature										105										115																			
		65										75										85										95									
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71								
	MBh	26.9	27.9	30.6	-	26.3	27.3	29.9	-	25.7	26.6	29.2	-	25.1	26.0	28.5	-	23.8	24.7	27.0	-	22.1	22.9	25.1	-	22.1	22.9	25.1	-	22.1	22.9	25.1	-								
	S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-								
	Delta T	18	16	12	-	18	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-	17	15	11	-								
	KW	1.80	1.84	1.90	-	1.94	1.99	2.06	-	2.07	2.12	2.19	-	2.19	2.24	2.31	-	2.28	2.33	2.41	-	2.36	2.42	2.50	-	2.36	2.42	2.50	-	2.36	2.42	2.50	-								
	AMPS	7.7	7.9	8.1	-	8.3	8.5	8.7	-	9.0	9.2	9.5	-	9.6	9.8	10.1	-	10.1	10.4	10.7	-	10.7	11.0	11.3	-	10.7	11.0	11.3	-	10.7	11.0	11.3	-								
	HI PR	218	235	248	-	245	263	278	-	278	300	316	-	317	341	360	-	357	384	405	-	394	424	448	-	394	424	448	-	394	424	448	-								
	LO PR	107	114	124	-	113	120	131	-	118	125	137	-	124	131	144	-	130	138	150	-	134	143	156	-	134	143	156	-	134	143	156	-								
	MBh	26.2	27.1	29.7	-	25.6	26.5	29.0	-	24.9	25.9	28.3	-	24.3	25.2	27.6	-	23.1	24.0	26.3	-	21.4	22.2	24.3	-	21.4	22.2	24.3	-	21.4	22.2	24.3	-								
	S/T	0.67	0.56	0.39	-	0.70	0.58	0.40	-	0.71	0.60	0.41	-	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.77	0.64	0.45	-	0.77	0.64	0.45	-	0.77	0.64	0.45	-								
	Delta T	19	16	12	-	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	18	15	12	-	18	15	12	-	18	15	12	-								
70	KW	1.79	1.82	1.88	-	1.93	1.97	2.04	-	2.06	2.10	2.17	-	2.17	2.22	2.29	-	2.26	2.31	2.39	-	2.34	2.40	2.48	-	2.34	2.40	2.48	-	2.34	2.40	2.48	-								
	AMPS	7.7	7.8	8.1	-	8.2	8.4	8.7	-	8.9	9.1	9.4	-	9.5	9.7	10.0	-	10.0	10.3	10.6	-	10.6	10.9	11.2	-	10.6	10.9	11.2	-	10.6	10.9	11.2	-								
	HI PR	216	232	245	-	242	261	275	-	276	297	313	-	314	338	357	-	353	380	401	-	390	420	443	-	390	420	443	-	390	420	443	-								
	LO PR	106	113	123	-	112	119	130	-	116	124	135	-	122	130	142	-	128	136	149	-	133	141	154	-	133	141	154	-	133	141	154	-								
	MBh	24.1	25.0	27.4	-	23.6	24.4	26.8	-	23.0	23.9	26.1	-	22.5	23.3	25.5	-	21.3	22.1	24.2	-	19.8	20.5	22.4	-	19.8	20.5	22.4	-	19.8	20.5	22.4	-								
	S/T	0.65	0.54	0.37	-	0.67	0.56	0.39	-	0.69	0.57	0.40	-	0.71	0.59	0.41	-	0.74	0.62	0.43	-	0.74	0.62	0.43	-	0.74	0.62	0.43	-	0.74	0.62	0.43	-								
	Delta T	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-	18	16	12	-	18	16	12	-								
	KW	1.74	1.78	1.84	-	1.88	1.92	1.99	-	2.00	2.05	2.12	-	2.11	2.16	2.23	-	2.20	2.25	2.33	-	2.28	2.34	2.42	-	2.28	2.34	2.42	-	2.28	2.34	2.42	-								
	AMPS	7.5	7.6	7.9	-	8.0	8.2	8.5	-	8.7	8.9	9.1	-	9.2	9.4	9.7	-	9.8	10.0	10.3	-	10.3	10.6	10.9	-	10.3	10.6	10.9	-	10.3	10.6	10.9	-								
	HI PR	209	225	238	-	235	253	267	-	267	288	304	-	304	328	346	-	343	369	389	-	378	407	430	-	378	407	430	-	378	407	430	-								
745	LO PR	103	109	120	-	109	116	126	-	113	120	131	-	119	126	138	-	124	132	144	-	129	137	149	-	129	137	149	-	129	137	149	-								

	955										850										745									
	MBh	27.4	28.2	30.5	32.8	26.8	27.6	29.8	32.0	26.1	26.9	29.1	31.3	25.5	26.2	28.4	30.5	24.2	24.9	27.0	29.0	22.4	23.1	25.0	26.8					
	S/T	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	0.79	0.59	0.38	0.91	0.82	0.62	0.40	0.92	0.82	0.62	0.40					
	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10					
	KW	1.82	1.86	1.92	1.98	1.96	2.01	2.07	2.14	2.09	2.14	2.21	2.29	2.20	2.26	2.33	2.41	2.30	2.36	2.44	2.52	2.39	2.44	2.53	2.61					
	AMPS	7.8	8.0	8.2	8.5	8.4	8.6	8.8	9.1	9.0	9.3	9.5	9.9	9.6	9.9	10.2	10.5	10.2	10.5	10.8	11.2	10.8	11.1	11.4	11.8					
	HI PR	220	237	250	261	247	266	281	293	281	303	320	333	320	345	364	380	360	388	409	427	398	428	452	472					
	LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167					
	MBh	26.6	27.4	29.7	31.8	26.0	26.8	29.0	31.1	25.4	26.1	28.3	30.3	24.8	25.5	27.6	29.6	23.5	24.2	26.2	28.1	21.8	22.4	24.3	26.1					
	S/T	0.76	0.68	0.52	0.33	0.79	0.71	0.54	0.34	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.36	0.87	0.78	0.59	0.38	0.88	0.78	0.59	0.38					
	Delta T	22	20	17	11	22	20	17	12	22	20	17	12	22	21	17	12	22	20	17	12	21	19	16	11					
	KW	1.80	1.84	1.90	1.96	1.95	1.99	2.06	2.13	2.07	2.12	2.19	2.27	2.19	2.24	2.31	2.39	2.28	2.33	2.42	2.50	2.36	2.42	2.50	2.59					
	AMPS	7.7	7.9	8.1	8.4	8.3	8.5	8.8	9.1	9.0	9.2	9.5	9.8	9.6	9.8	10.1	10.4	10.1	10.4	10.7	11.1	10.7	11.0	11.3	11.7					
	HI PR	218	235	248	259	245	263	278	290	278	300	316	330	317	341	360	376	357	384	405	423	394	424	448	467					
	LO PR	107	114	124	133	113	120	131	140	118	125	137	146	124	131	144	153	130	138	150	160	134	143	156	166					
	MBh	24.6	25.3	27.4	29.4	24.0	24.7	26.7	28.7	23.4	24.1	26.1	28.0	22.8	23.5	25.5	27.3	21.7	22.3	24.2	26.0	20.1	20.7	22.4	24.0					
	S/T	0.74	0.66	0.50	0.32	0.76	0.68	0.52	0.33	0.78	0.70	0.53	0.34	0.81	0.72	0.55	0.35	0.84	0.75	0.57	0.36	0.84	0.76	0.57	0.37					
	Delta T	22	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	22	21	17	12	21	19	16	11					
	KW	1.76	1.79	1.85	1.91	1.90	1.94	2.00	2.07	2.02	2.07	2.14	2.21	2.13	2.18	2.25	2.33	2.22	2.27	2.35	2.43	2.30	2.36	2.44	2.52					
	AMPS	7.5	7.7	7.9	8.2	8.1	8.3	8.5	8.8	8.7	8.9	9.2	9.5	9.3	9.5	9.8	10.2	9.9	10.1	10.4	10.8	10.4	10.7	11.0	11.4					
	HI PR	212	228	240	251	237	256	270	281	270	291	307	320	308	331	350	365	346	372	393	410	382	411	434	453					
	LO PR	104	111	121	129	110	117	128	136	114	121	133	141	120	128	139	148	126	134	146	155	130	138	151	161					

LOW STAGE COOLING OPERATION

COOLING OPERATION

Outdoor Ambient Temperature

85	955	MBh	28.4	28.9	30.3	32.3	27.7	28.3	29.6	31.6	27.1	27.6	28.9	30.8	26.4	26.9	28.2	30.1	25.1	25.6	26.8	28.6	23.2	23.7	24.8	26.5	
		S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.75	
		Delta T	25	25	23	20	25	25	24	20	25	25	24	20	25	25	25	24	21	24	25	24	20	22	23	22	19
		KW	1.85	1.89	1.95	2.02	2.00	2.04	2.11	2.18	2.13	2.18	2.25	2.33	2.24	2.30	2.37	2.46	2.34	2.40	2.48	2.57	2.43	2.48	2.57	2.66	
		AMPS	7.9	8.1	8.3	8.6	8.5	8.7	9.0	9.3	9.2	9.4	9.7	10.1	9.8	10.0	10.3	10.7	10.4	10.6	11.0	11.4	11.0	11.2	11.6	12.0	12.0
		HI PR	225	242	255	266	252	271	287	299	287	309	326	340	327	352	371	387	368	386	418	436	406	437	462	481	
	LO PR	110	117	128	137	117	124	135	144	121	129	141	150	127	135	148	158	133	142	155	165	138	147	160	171		
	850	MBh	27.6	28.1	29.4	31.4	26.9	27.4	28.7	30.7	26.3	26.8	28.0	29.9	25.6	26.1	27.4	29.2	24.3	24.8	26.0	27.7	22.6	23.0	24.1	25.7	
		S/T	0.88	0.85	0.76	0.62	0.91	0.88	0.79	0.64	0.93	0.90	0.81	0.66	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.71	1.00	0.97	0.88	0.71	
		Delta T	26	26	24	21	26	26	25	21	27	26	25	21	27	26	25	21	26	26	24	21	24	24	23	20	20
		KW	1.83	1.87	1.93	2.00	1.98	2.02	2.09	2.16	2.11	2.16	2.23	2.31	2.22	2.28	2.35	2.44	2.32	2.38	2.46	2.54	2.41	2.46	2.55	2.64	
		AMPS	7.9	8.0	8.3	8.6	8.4	8.6	8.9	9.2	9.1	9.3	9.6	10.0	9.7	9.9	10.3	10.6	10.3	10.6	10.9	11.3	10.9	11.2	11.5	11.9	11.9
HI PR		223	240	253	264	250	269	284	296	284	306	323	337	324	348	368	383	364	392	414	431	411	402	433	457	477	
LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169			
745	MBh	25.4	25.9	27.1	29.0	24.8	25.3	26.5	28.3	24.2	24.7	25.9	27.6	23.7	24.1	25.3	26.9	22.5	22.9	24.0	25.6	20.8	21.2	22.2	23.7		
	S/T	0.85	0.82	0.74	0.60	0.88	0.85	0.76	0.62	0.90	0.87	0.78	0.64	0.93	0.90	0.81	0.66	0.96	0.93	0.84	0.68	0.97	0.94	0.85	0.69		
	Delta T	27	26	25	21	27	26	25	22	27	26	25	22	27	27	25	22	27	26	25	22	25	25	23	20	20	
	KW	1.78	1.82	1.88	1.95	1.93	1.97	2.04	2.11	2.05	2.10	2.17	2.25	2.17	2.22	2.29	2.37	2.26	2.31	2.39	2.48	2.34	2.40	2.48	2.57		
	AMPS	7.7	7.8	8.1	8.3	8.2	8.4	8.7	9.0	8.9	9.1	9.4	9.7	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.9	11.2	11.6	11.6	
	HI PR	216	232	245	256	242	261	275	287	276	297	313	327	314	338	357	372	353	380	401	418	390	420	443	462	462	
LO PR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	159	133	141	154	164	164		

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1542M41*

EXPANDED PERFORMANCE DATA

HIGH STAGE
COOLING OPERATION

MODEL: *PH1542M41*

IDB* Airflow			Outdoor Ambient Temperature																															
			65				75				85				95				105				115											
			Entering Indoor Wet Bulb Temperature																															
70	1405	MBh	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71				
		S/T	40.2	41.6	45.6	-	39.2	40.7	44.6	-	38.3	39.7	43.5	-	37.4	38.7	42.4	-	35.5	36.8	40.3	-	32.9	34.1	37.3	-	0.82	0.68	0.47	-	0.82	0.69	0.48	-
		Delta T	19	16	12	-	19	17	13	-	19	17	13	-	19	17	13	-	19	16	12	-	18	15	12	-	18	15	12	-	18	15	12	-
		KW	2.82	2.88	2.97	-	3.04	3.11	3.21	-	3.24	3.31	3.43	-	3.42	3.49	3.61	-	3.57	3.65	3.77	-	3.69	3.78	3.91	-	15.4	15.8	16.3	-	16.3	16.7	17.2	-
		AMPS	11.8	12.1	12.4	-	12.7	13.0	13.3	-	13.7	14.0	14.4	-	14.6	14.9	15.4	-	15.4	15.8	16.3	-	16.3	16.7	17.2	-	396	426	450	-	437	471	497	-
	1250	HI PR	242	261	275	-	272	292	309	-	309	332	351	-	352	379	400	-	396	426	450	-	437	471	497	-	127	135	147	-	131	140	152	-
		LO PR	105	112	122	-	111	118	129	-	115	123	134	-	121	129	141	-	127	135	147	-	131	140	152	-	34.5	35.7	39.1	-	31.9	33.1	36.3	-
		MBh	39.0	40.4	44.3	-	38.1	39.5	43.3	-	37.2	38.5	42.2	-	36.3	37.6	41.2	-	0.78	0.65	0.45	-	0.79	0.66	0.45	-	0.78	0.65	0.45	-	0.79	0.66	0.45	-
		S/T	0.68	0.57	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.78	0.65	0.45	-	0.79	0.66	0.45	-	0.78	0.65	0.45	-	0.79	0.66	0.45	-
		Delta T	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-	20	17	13	-	18	16	12	-
1095	KW	2.79	2.86	2.95	-	3.02	3.08	3.19	-	3.21	3.29	3.40	-	3.39	3.46	3.58	-	3.53	3.62	3.74	-	3.66	3.75	3.88	-	15.3	15.7	16.2	-	16.2	16.5	17.1	-	
	AMPS	11.7	12.0	12.3	-	12.6	12.8	13.2	-	13.6	13.9	14.3	-	14.4	14.8	15.2	-	15.3	15.7	16.2	-	16.2	16.5	17.1	-	392	422	445	-	433	466	492	-	
	HI PR	240	258	272	-	269	289	306	-	306	329	348	-	348	375	396	-	392	422	445	-	433	466	492	-	126	134	146	-	130	138	151	-	
	LO PR	104	111	121	-	110	117	127	-	114	121	132	-	120	127	139	-	126	134	146	-	130	138	151	-	31.8	33.0	36.1	-	29.5	30.5	33.5	-	
	MBh	36.0	37.3	40.9	-	35.2	36.4	39.9	-	34.3	35.6	39.0	-	33.5	34.7	38.0	-	31.8	33.0	36.1	-	29.5	30.5	33.5	-	0.76	0.63	0.43	-	0.76	0.63	0.44	-	

EXPANDED PERFORMANCE DATA

MODEL: *PH1542M41*

HIGH STAGE
COOLING OPERATION

Outdoor Ambient Temperature																																			
65						75						85						95						105						115					
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71						
1405	MBh	41.6	42.5	45.4	48.5	40.6	41.5	44.3	47.4	39.6	40.5	43.3	46.3	38.7	39.5	42.2	45.1	36.7	37.6	40.1	42.9	34.0	34.8	37.2	39.7	34.0	34.8	37.2	39.7						
	S/T	0.89	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.95	0.89	0.73	0.54	1.00	0.92	0.75	0.56	1.00	0.96	0.78	0.58	1.00	0.96	0.78	0.59	1.00	0.96	0.78	0.59						
	Delta T	24	23	20	16	25	24	21	16	25	24	21	16	25	24	21	17	24	23	20	16	22	22	19	15	22	22	19	15						
	KW	2.86	2.93	3.02	3.13	3.09	3.16	3.27	3.38	3.30	3.37	3.49	3.61	3.48	3.56	3.68	3.80	3.63	3.71	3.84	3.97	3.76	3.85	3.98	4.12	3.76	3.85	3.98	4.12						
	AMPS	12.0	12.3	12.6	13.1	12.9	13.2	13.6	14.1	13.9	14.2	14.7	15.2	14.8	15.2	15.6	16.2	15.7	16.1	16.6	17.2	16.6	17.0	17.5	18.2	16.6	17.0	17.5	18.2						
	HI PR	24.7	26.6	28.1	293	277	298	315	329	315	339	358	374	359	386	408	426	404	435	459	479	446	480	507	529	446	480	507	529						
	LO PR	107	114	124	132	113	120	131	140	118	125	137	145	123	131	143	153	129	138	150	160	134	142	155	166	134	142	155	166						
1250	MBh	40.4	41.3	44.1	47.1	39.4	40.3	43.1	46.0	38.5	39.3	42.0	44.9	37.6	38.4	41.0	43.8	35.7	36.5	39.0	41.6	33.0	33.8	36.1	38.6	33.0	33.8	36.1	38.6						
	S/T	0.85	0.80	0.65	0.49	0.88	0.83	0.68	0.50	0.91	0.85	0.69	0.52	0.94	0.88	0.71	0.53	0.97	0.91	0.74	0.55	0.98	0.92	0.75	0.56	0.98	0.92	0.75	0.56						
	Delta T	25	24	21	17	26	25	21	17	26	25	21	17	26	25	22	17	25	24	21	17	24	23	20	16	24	23	20	16						
	KW	2.84	2.90	3.00	3.10	3.07	3.14	3.24	3.35	3.27	3.34	3.46	3.57	3.45	3.53	3.65	3.77	3.60	3.68	3.81	3.94	3.73	3.81	3.94	4.08	3.73	3.81	3.94	4.08						
	AMPS	11.9	12.2	12.5	13.0	12.8	13.1	13.5	13.9	13.8	14.1	14.6	15.1	14.7	15.0	15.5	16.1	15.6	15.9	16.4	17.0	16.5	16.8	17.4	18.0	16.5	16.8	17.4	18.0						
	HI PR	24.5	26.3	27.8	290	274	295	312	325	312	336	355	370	356	383	404	421	400	430	455	474	442	476	502	524	442	476	502	524						
	LO PR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	158	133	141	154	164	133	141	154	164						
1095	MBh	37.3	38.1	40.7	43.5	36.4	37.2	39.7	42.5	35.5	36.3	38.8	41.5	34.7	35.4	37.8	40.5	32.9	33.6	36.0	38.4	30.5	31.2	33.3	35.6	30.5	31.2	33.3	35.6						
	S/T	0.82	0.77	0.63	0.47	0.85	0.80	0.65	0.49	0.87	0.82	0.67	0.50	0.90	0.85	0.69	0.51	0.94	0.88	0.72	0.53	0.94	0.89	0.72	0.54	0.94	0.89	0.72	0.54						
	Delta T	26	25	21	17	26	25	22	17	26	25	22	17	26	25	22	17	26	25	22	17	24	23	20	16	24	23	20	16						
	KW	2.77	2.83	2.92	3.02	2.99	3.06	3.16	3.27	3.19	3.26	3.37	3.48	3.36	3.43	3.55	3.67	3.50	3.58	3.71	3.83	3.63	3.71	3.84	3.97	3.63	3.71	3.84	3.97						
	AMPS	11.6	11.8	12.2	12.6	12.5	12.7	13.1	13.6	13.5	13.8	14.2	14.7	14.3	14.6	15.1	15.6	15.2	15.5	16.0	16.6	16.0	16.4	16.9	17.5	16.0	16.4	16.9	17.5						
	HI PR	23.7	25.5	27.0	281	266	286	303	316	303	326	344	359	345	371	392	409	388	417	441	460	429	461	487	508	429	461	487	508						
	LO PR	103	109	119	127	109	116	126	134	113	120	131	140	119	126	138	147	124	132	144	154	129	137	149	159	129	137	149	159						

COOLING PERFORMANCE DATA

PH1543M41

MODEL: *PH1543M41** EXPANDED PERFORMANCE DATA COOLING OPERATION

Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection

IDB* Airflow			Outdoor Ambient Temperature																													
			65					75					85					95					105					115				
			Entering Indoor Wet Bulb Temperature																													
1400	MBh	39.2	40.7	44.5	-	38.3	39.7	43.5	-	37.4	38.8	42.5	-	36.5	37.8	41.4	-	34.7	35.9	39.4	-	32.1	33.3	36.5	-							
	S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-							
	Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-							
	KW	2.51	2.57	2.65	-	2.71	2.77	2.85	-	2.88	2.94	3.04	-	3.03	3.10	3.20	-	3.16	3.23	3.33	-	3.27	3.34	3.45	-							
	AMPS	11.9	12.2	12.5	-	12.8	13.0	13.4	-	13.7	14.0	14.4	-	14.5	14.8	15.3	-	15.3	15.7	16.1	-	16.1	16.5	17.0	-							
	HI PR	228	245	259	-	256	275	291	-	291	313	331	-	331	357	377	-	373	401	424	-	412	443	468	-							
1250	LO PR	107	114	124	-	113	120	131	-	118	125	136	-	123	131	143	-	129	138	150	-	134	142	155	-							
	MBh	38.1	39.5	43.2	-	37.2	38.5	42.2	-	36.3	37.6	41.2	-	35.4	36.7	40.2	-	33.7	34.9	38.2	-	31.2	32.3	35.4	-							
	S/T	0.67	0.56	0.39	-	0.69	0.58	0.40	-	0.71	0.59	0.41	-	0.74	0.61	0.43	-	0.76	0.64	0.44	-	0.77	0.64	0.45	-							
	Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	17	13	-	19	16	12	-	18	15	12	-							
	KW	2.49	2.55	2.63	-	2.69	2.74	2.83	-	2.85	2.92	3.01	-	3.00	3.07	3.17	-	3.13	3.20	3.31	-	3.24	3.31	3.42	-							
	AMPS	11.8	12.1	12.4	-	12.7	12.9	13.3	-	13.6	13.9	14.3	-	14.4	14.7	15.1	-	15.2	15.5	16.0	-	16.0	16.4	16.9	-							
1200	HI PR	226	243	257	-	253	273	288	-	288	310	327	-	328	353	373	-	369	397	419	-	408	439	463	-							
	LO PR	106	113	123	-	112	119	130	-	116	124	135	-	122	130	142	-	128	136	149	-	132	141	154	-							
	MBh	37.7	39.1	42.8	-	36.8	38.2	41.8	-	35.9	37.3	40.8	-	35.1	36.3	39.8	-	33.3	34.5	37.8	-	30.9	32.0	35.0	-							
	S/T	0.66	0.55	0.38	-	0.69	0.57	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.76	0.64	0.44	-							
	Delta T	19	17	13	-	19	17	13	-	19	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-							
	KW	2.47	2.52	2.60	-	2.66	2.71	2.80	-	2.82	2.89	2.98	-	2.97	3.04	3.14	-	3.10	3.17	3.27	-	3.20	3.28	3.38	-							
1200	AMPS	11.7	12.0	12.3	-	12.5	12.8	13.1	-	13.5	13.7	14.1	-	14.3	14.6	15.0	-	15.1	15.4	15.8	-	15.8	16.2	16.7	-							
	HI PR	223	240	253	-	250	269	284	-	284	306	323	-	324	348	368	-	364	392	414	-	403	433	457	-							
	LO PR	105	111	121	-	110	118	128	-	115	122	133	-	121	128	140	-	126	134	147	-	131	139	152	-							

* Entering Indoor Dry Bulb Temperature NOTE: Shaded area is ACCA (TVA) conditions

High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB*		Airflow	Outdoor Ambient Temperature																														105															115														
			65															75															85															95														
			Entering Indoor Wet Bulb Temperature																																																											
			59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																												
80	1400	MBh	40.6	41.5	44.3	47.4	39.7	40.5	43.3	46.3	38.7	39.6	42.3	45.2	37.8	38.6	41.2	44.1	35.9	36.7	39.2	41.9	33.2	34.0	36.3	38.8	33.2	34.0	36.3	38.8	33.2	34.0	36.3	38.8																												
		S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.94	0.76	0.57	1.00	0.94	0.77	0.57	1.00	0.94	0.77	0.57	1.00	0.94	0.77	0.57																												
		Delta T	23	22	19	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16																												
		KW	2.56	2.61	2.69	2.78	2.75	2.81	2.90	3.00	2.93	2.99	3.09	3.19	3.08	3.15	3.25	3.36	3.21	3.28	3.39	3.51	3.32	3.40	3.51	3.63	3.32	3.40	3.51	3.63	3.32	3.40	3.51	3.63																												
		AMPS	12.1	12.4	12.7	13.1	13.0	13.2	13.6	14.0	13.9	14.2	14.6	15.1	14.8	15.1	15.5	16.0	15.6	15.9	16.4	17.0	16.4	16.8	17.3	17.9	16.4	16.8	17.3	17.9	16.4	16.8	17.3	17.9																												
		HI PR	233	250	264	276	261	281	297	309	297	319	337	352	328	364	384	401	380	409	432	451	420	452	478	498	420	452	478	498	420	452	478	498																												
		LO PR	109	116	127	135	115	123	134	143	120	128	139	148	126	134	146	156	132	140	153	163	137	145	159	169	137	145	159	169	137	145	159	169																												
80	1250	MBh	39.4	40.3	43.0	46.0	38.5	39.3	42.0	44.9	37.6	38.4	41.0	43.9	36.7	37.5	40.0	42.8	34.8	35.6	38.0	40.6	32.3	33.0	35.2	37.7	32.3	33.0	35.2	37.7	32.3	33.0	35.2	37.7																												
		S/T	0.84	0.78	0.64	0.48	0.87	0.81	0.66	0.49	0.89	0.83	0.68	0.51	0.92	0.86	0.70	0.52	0.95	0.89	0.73	0.54	0.96	0.90	0.73	0.55	0.96	0.90	0.73	0.55	0.96	0.90	0.73	0.55																												
		Delta T	24	23	20	16	25	23	20	16	25	24	20	16	25	24	21	16	24	23	20	16	23	22	19	15	23	22	19	15	23	22	19	15																												
		KW	2.54	2.59	2.67	2.76	2.73	2.79	2.88	2.97	2.90	2.97	3.06	3.16	3.05	3.12	3.23	3.33	3.18	3.25	3.36	3.48	3.30	3.37	3.48	3.60	3.30	3.37	3.48	3.60	3.30	3.37	3.48	3.60																												
		AMPS	12.0	12.3	12.6	13.0	12.9	13.1	13.5	13.9	13.8	14.1	14.5	15.0	14.6	15.0	15.4	15.9	15.5	15.8	16.3	16.8	16.3	16.6	17.1	17.7	16.3	16.6	17.1	17.7	16.3	16.6	17.1	17.7																												
		HI PR	230	248	262	273	258	278	294	306	294	316	334	348	335	360	380	397	377	405	428	446	416	448	473	493	416	448	473	493	416	448	473	493																												
		LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167	135	144	157	167	135	144	157	167																												
80	1200	MBh	39.0	39.9	42.6	45.5	38.1	38.9	41.6	44.5	37.2	38.0	40.6	43.4	36.3	37.1	39.6	42.4	34.5	35.2	37.6	40.2	31.9	32.6	34.9	37.3	31.9	32.6	34.9	37.3	31.9	32.6	34.9	37.3																												
		S/T	0.83	0.78	0.63	0.47	0.86	0.80	0.65	0.49	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.95	0.89	0.72	0.54	0.95	0.89	0.72	0.54	0.95	0.89	0.72	0.54																												
		Delta T	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	23	22	19	15	23	22	19	15	23	22	19	15																												
		KW	2.51	2.56	2.64	2.73	2.70	2.76	2.85	2.94	2.87	2.93	3.03	3.13	3.02	3.09	3.19	3.30	3.15	3.22	3.33	3.44	3.26	3.33	3.44	3.56	3.26	3.33	3.44	3.56	3.26	3.33	3.44	3.56																												
		AMPS	11.9	12.1	12.5	12.9	12.7	13.0	13.4	13.8	13.7	14.0	14.4	14.8	14.5	14.8	15.2	15.7	15.3	15.6	16.1	16.6	16.1	16.5	17.0	17.5	16.1	16.5	17.0	17.5	16.1	16.5	17.0	17.5																												
		HI PR	227	245	258	269	255	275	290	302	290	312	330	344	330	356	376	392	372	400	422	441	411	442	467	487	411	442	467	487	411	442	467	487																												
		LO PR	107	114	124	132	113	120	131	139	117	125	136	145	123	131	143	152	129	137	150	160	133	142	155	165	133	142	155	165	133	142	155	165																												

1400	MBh	41.3	42.1	44.1	47.0	40.3	41.1	43.1	45.9	39.4	40.1	42.0	44.9	38.4	39.2	41.0	43.8	36.5	37.2	39.0	41.6	33.8	34.5	36.1	38.5
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.75
	Delta T	25	25	23	20	25	25	23	20	25	25	23	20	25	25	24	20	24	24	23	20	22	23	22	19
	KW	2.58	2.63	2.71	2.80	2.77	2.83	2.93	3.02	2.95	3.02	3.11	3.22	3.11	3.17	3.28	3.39	3.24	3.31	3.42	3.54	3.35	3.43	3.54	3.66
	AMPS	12.2	12.5	12.8	13.2	13.1	13.3	13.7	14.2	14.0	14.3	14.7	15.2	14.9	15.2	15.6	16.2	15.7	16.1	16.5	17.1	16.6	16.9	17.4	18.0
	HI PR	235	253	267	278	264	284	300	312	300	323	341	355	342	368	388	405	384	413	437	455	425	457	482	503
	LO PR	110	117	128	136	117	124	135	144	121	129	141	150	127	135	148	157	133	142	155	165	138	147	160	171
	MBh	40.1	40.9	42.8	45.7	39.2	39.9	41.8	44.6	38.2	39.0	40.8	43.5	37.3	38.0	39.8	42.5	35.4	36.1	37.8	40.4	32.8	33.5	35.0	37.4
	S/T	0.88	0.85	0.76	0.62	0.91	0.88	0.79	0.64	0.93	0.90	0.81	0.66	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	0.97	0.88	0.71
	Delta T	26	25	24	21	26	26	24	21	26	26	24	21	26	26	25	21	26	26	24	21	24	24	23	20
	KW	2.56	2.61	2.69	2.78	2.75	2.81	2.90	3.00	2.93	2.99	3.09	3.19	3.08	3.15	3.25	3.36	3.21	3.28	3.39	3.51	3.32	3.40	3.51	3.63
	AMPS	12.1	12.4	12.7	13.1	13.0	13.2	13.6	14.0	13.9	14.2	14.6	15.1	14.8	15.1	15.5	16.0	15.6	15.9	16.4	17.0	16.4	16.8	17.3	17.9
HI PR	233	250	264	276	261	281	297	309	297	319	337	352	338	364	384	401	380	409	432	451	420	452	478	498	
LO PR	109	116	127	135	115	123	134	143	120	128	139	148	126	134	146	156	132	140	153	163	137	145	159	169	
MBh	39.7	40.5	42.4	45.2	38.8	39.5	41.4	44.2	37.9	38.6	40.4	43.1	36.9	37.6	39.4	42.1	35.1	35.8	37.5	40.0	32.5	33.1	34.7	37.0	
S/T	0.87	0.84	0.76	0.61	0.90	0.87	0.78	0.63	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.96	0.87	0.70	
Delta T	26	26	25	21	27	26	25	21	27	26	25	22	27	26	25	22	27	26	25	21	25	24	23	20	
KW	2.53	2.58	2.66	2.75	2.72	2.78	2.87	2.97	2.90	2.96	3.05	3.16	3.05	3.11	3.22	3.32	3.18	3.25	3.35	3.47	3.29	3.36	3.47	3.59	
AMPS	12.0	12.2	12.6	13.0	12.8	13.1	13.5	13.9	13.8	14.1	14.5	15.0	14.6	14.9	15.4	15.9	15.4	15.8	16.2	16.8	16.2	16.6	17.1	17.7	
HI PR	230	247	261	272	258	277	293	305	293	315	333	347	334	359	379	396	375	404	427	445	415	446	471	492	
LO PR	108	115	125	133	114	121	132	141	118	126	137	146	124	132	144	154	130	139	151	161	135	143	157	167	

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Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

LOW STAGE - *PH1548M41*

MODEL: *PH1548M41* EXPANDED PERFORMANCE DATA LOW STAGE COOLING OPERATION

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB* Airflow		Outdoor Ambient Temperature																																			
		65						75						85						95						105						115					
		Entering Indoor Wet Bulb Temperature																																			
1350	MBh	33.4	34.6	37.9	-	32.6	33.8	37.0	-	31.8	33.0	36.1	-	31.0	32.2	35.2	-	29.5	30.6	33.5	-	27.3	28.3	31.0	-												
	S/T	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.84	0.70	0.48	-	0.87	0.73	0.50	-	0.88	0.73	0.51	-												
	Delta T	17	15	11	-	18	15	12	-	18	15	12	-	18	15	12	-	17	15	11	-	16	14	11	-												
	KW	2.16	2.21	2.27	-	2.32	2.37	2.44	-	2.46	2.51	2.59	-	2.58	2.64	2.72	-	2.69	2.74	2.83	-	2.78	2.84	2.93	-												
	AMPS	9.3	9.5	9.7	-	9.9	10.1	10.4	-	10.6	10.8	11.2	-	11.2	11.5	11.8	-	11.9	12.1	12.5	-	12.5	12.7	13.1	-												
	HI PR	217	233	247	-	243	262	277	-	277	298	315	-	315	339	358	-	355	382	403	-	392	422	445	-												
1200	LO PR	113	120	131	-	119	127	139	-	124	132	144	-	130	139	151	-	137	145	159	-	141	150	164	-												
	MBh	32.4	33.6	36.8	-	31.6	32.8	35.9	-	30.9	32.0	35.1	-	30.1	31.2	34.2	-	28.6	29.7	32.5	-	26.5	27.5	30.1	-												
	S/T	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.84	0.70	0.48	-												
	Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-												
	KW	2.15	2.19	2.26	-	2.30	2.35	2.42	-	2.44	2.49	2.57	-	2.56	2.62	2.70	-	2.67	2.72	2.81	-	2.75	2.81	2.90	-												
	AMPS	9.2	9.4	9.7	-	9.9	10.0	10.3	-	10.6	10.8	11.1	-	11.2	11.4	11.7	-	11.8	12.0	12.4	-	12.4	12.6	13.0	-												
1050	HI PR	215	231	244	-	241	259	274	-	274	295	311	-	312	336	355	-	351	378	399	-	388	418	441	-												
	LO PR	112	119	130	-	118	126	137	-	123	131	143	-	129	137	150	-	135	144	157	-	140	149	163	-												
	MBh	29.9	31.0	34.0	-	29.2	30.3	33.2	-	28.5	29.5	32.4	-	27.8	28.8	31.6	-	26.4	27.4	30.0	-	24.5	25.4	27.8	-												
	S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-												
	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-												
	KW	2.10	2.14	2.20	-	2.25	2.30	2.37	-	2.38	2.43	2.51	-	2.50	2.55	2.63	-	2.60	2.66	2.74	-	2.69	2.74	2.83	-												
70	AMPS	9.0	9.2	9.5	-	9.6	9.8	10.1	-	10.3	10.5	10.8	-	10.9	11.1	11.4	-	11.5	11.7	12.1	-	12.1	12.3	12.7	-												
	HI PR	208	224	237	-	234	252	266	-	266	286	302	-	303	326	344	-	341	367	387	-	376	405	428	-												
	LO PR	109	116	126	-	115	122	133	-	119	127	138	-	125	133	145	-	131	140	152	-	136	144	158	-												
	MBh	33.9	34.9	37.8	40.6	33.1	34.1	36.9	39.6	32.4	33.3	36.1	38.7	31.6	32.5	35.2	37.8	30.0	30.9	33.4	35.9	27.8	28.6	31.0	33.2												
	S/T	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.99	0.88	0.67	0.43	1.00	0.89	0.67	0.43												
	Delta T	20	18	15	10	20	19	15	11	20	19	15	11	20	19	15	11	20	19	15	11	19	17	14	10												

EXPANDED PERFORMANCE DATA

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB*		Outdoor Ambient Temperature																																																																							
		65												75												85												95												105												115											
		Entering Indoor Wet Bulb Temperature																																																																							
Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																																									
80	1350	MBh	34.5	35.3	37.7	40.3	33.7	34.5	36.8	39.4	32.9	33.6	35.9	38.4	32.1	32.8	35.1	37.5	30.5	31.2	33.3	35.6	28.3	28.9	30.9	33.0	30.9	31.2	33.3	35.6	28.3	28.9	30.9	33.0																																							
		S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62																																							
		Delta T	22	21	19	15	23	22	19	15	22	22	19	15	22	22	19	15	21	21	19	15	19	20	18	14	14	19	20	18	14	14	19	20	18	14																																					
		KW	2.20	2.24	2.31	2.38	2.36	2.41	2.48	2.56	2.50	2.55	2.63	2.71	2.62	2.68	2.76	2.85	2.73	2.79	2.88	2.97	2.82	2.88	2.98	3.07	2.82	2.88	2.98	3.07	2.82	2.88	2.98	3.07																																							
		AMPS	9.5	9.6	9.9	10.2	10.1	10.3	10.6	10.9	10.8	11.0	11.3	11.7	11.4	11.7	12.0	12.4	12.0	12.3	12.7	13.1	12.7	12.9	13.3	13.8	12.7	12.9	13.3	13.8	12.7	12.9	13.3	13.8																																							
	1200	HI PR	221	238	252	262	248	267	282	294	282	304	321	335	322	346	366	381	362	390	411	429	400	430	454	474	400	430	454	474	400	430	454	474																																							
		LO PR	115	123	134	143	122	130	142	151	127	135	147	157	133	142	155	165	139	148	162	172	144	153	168	178	144	153	168	178	144	153	168	178																																							
		MBh	33.5	34.3	36.6	39.1	32.7	33.5	35.8	38.2	32.0	32.7	34.9	37.3	31.2	31.9	34.1	36.4	29.6	30.3	32.3	34.6	27.4	28.0	30.0	32.0	27.4	28.0	30.0	32.0	27.4	28.0	30.0	32.0																																							
		S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.96	0.90	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.59	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.59																																							
		Delta T	23	22	19	16	24	23	20	16	24	23	20	16	24	23	20	16	23	22	20	16	21	21	18	15	21	21	18	15	21	21	18	15																																							
1050	1200	KW	2.18	2.22	2.29	2.36	2.34	2.39	2.46	2.54	2.48	2.53	2.61	2.69	2.60	2.66	2.74	2.83	2.71	2.77	2.85	2.95	2.80	2.86	2.95	3.05	2.80	2.86	2.95	3.05	2.80	2.86	2.95	3.05																																							
		AMPS	9.4	9.6	9.8	10.1	10.0	10.2	10.5	10.8	10.7	10.9	11.2	11.6	11.3	11.6	11.9	12.3	12.0	12.2	12.6	13.0	12.6	12.8	13.2	13.6	12.6	12.8	13.2	13.6	12.6	12.8	13.2	13.6																																							
		HI PR	219	236	249	260	246	265	279	291	280	301	318	332	319	343	362	378	358	386	407	425	396	426	450	469	396	426	450	469	396	426	450	469																																							
		LO PR	114	122	133	141	121	128	140	149	125	133	146	155	132	140	153	163	138	147	160	171	143	152	166	177	143	152	166	177	143	152	166	177																																							
		MBh	30.9	31.6	33.8	36.1	30.2	30.9	33.0	35.3	29.5	30.2	32.2	34.4	28.8	29.4	31.4	33.6	27.3	27.9	29.9	31.9	25.3	25.9	27.7	29.6	25.3	25.9	27.7	29.6	25.3	25.9	27.7	29.6																																							
	1050	S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.94	0.77	0.57	1.00	0.94	0.77	0.57	1.00	0.94	0.77	0.57																																							
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	19	15	22	21	19	15	22	21	19	15																																							
		KW	2.13	2.17	2.24	2.31	2.28	2.33	2.40	2.48	2.42	2.47	2.55	2.63	2.54	2.59	2.68	2.76	2.64	2.70	2.78	2.87	2.73	2.79	2.88	2.97	2.73	2.79	2.88	2.97	2.73	2.79	2.88	2.97																																							
		AMPS	9.2	9.4	9.6	9.9	9.8	10.0	10.2	10.6	10.5	10.7	11.0	11.3	11.1	11.3	11.6	12.0	11.7	11.9	12.3	12.7	12.3	12.5	12.9	13.3	12.3	12.5	12.9	13.3	12.3	12.5	12.9	13.3																																							
		HI PR	213	229	242	252	239	257	271	283	271	292	308	322	309	333	351	366	348	374	395	412	384	413	436	455	384	413	436	455	384	413	436	455																																							
LO PR	111	118	129	137	117	125	136	145	122	129	141	150	128	136	148	158	134	142	156	166	139	147	161	171	139	147	161	171	139	147	161	171																																									

LOW STAGE - *PH1548M41*

1350	MBh	35.1	35.8	37.5	40.0	34.3	35.0	36.6	39.1	33.5	34.2	35.8	38.2	32.7	33.3	34.9	37.2	31.1	31.7	33.2	35.4	28.8	29.3	30.7	32.8
	S/T	1.00	0.96	0.87	0.70	1.00	1.00	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	1.00	0.81
	Delta T	24	23	22	19	23	24	22	19	23	23	22	19	22	23	23	20	21	22	22	19	20	20	21	18
	KW	2.21	2.26	2.33	2.40	2.38	2.42	2.50	2.58	2.52	2.57	2.65	2.74	2.64	2.70	2.79	2.88	2.75	2.81	2.90	3.00	2.84	2.91	3.00	3.10
	AMPS	9.5	9.7	10.0	10.3	10.2	10.4	10.6	11.0	10.9	11.1	11.4	11.8	11.5	11.8	12.1	12.5	12.1	12.4	12.8	13.2	12.8	13.0	13.4	13.9
	HI PR	224	241	254	265	251	270	285	297	285	307	324	338	325	350	369	385	366	393	415	433	404	435	459	479
	LO PR	117	124	135	144	123	131	143	152	128	136	149	158	134	143	156	166	141	150	164	174	146	155	169	180
	MBh	34.1	34.8	36.4	38.9	33.3	34.0	35.6	38.0	32.5	33.2	34.7	37.0	31.7	32.3	33.9	36.1	30.1	30.7	32.2	34.3	27.9	28.5	29.8	31.8
	S/T	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.98	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.95	0.77
	Delta T	25	24	23	20	25	25	23	20	25	25	23	20	24	24	25	24	20	23	24	23	20	21	22	22
1200	KW	2.20	2.24	2.31	2.38	2.36	2.41	2.48	2.56	2.50	2.55	2.63	2.71	2.62	2.68	2.76	2.85	2.73	2.79	2.88	2.97	2.82	2.88	2.98	3.07
	AMPS	9.5	9.6	9.9	10.2	10.1	10.3	10.6	10.9	10.8	11.0	11.3	11.7	11.4	11.7	12.0	12.4	12.0	12.3	12.7	13.1	12.7	12.9	13.3	13.8
	HI PR	221	238	252	262	248	267	282	294	282	304	321	335	322	346	366	381	362	390	411	429	400	430	454	474
	LO PR	115	123	134	143	122	130	142	151	127	135	147	157	133	142	155	165	139	148	162	172	144	153	168	178
	MBh	31.5	32.1	33.6	35.9	30.8	31.4	32.8	35.0	30.0	30.6	32.1	34.2	29.3	29.9	31.3	33.4	27.8	28.4	29.7	31.7	25.8	26.3	27.5	29.4
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.74
	Delta T	25	25	24	20	26	25	24	21	26	25	24	21	26	25	24	21	24	25	24	20	23	23	22	19
	KW	2.15	2.19	2.25	2.32	2.30	2.35	2.42	2.50	2.44	2.49	2.57	2.65	2.56	2.62	2.70	2.78	2.66	2.72	2.81	2.90	2.75	2.81	2.90	3.00
	AMPS	9.2	9.4	9.7	10.0	9.8	10.0	10.3	10.6	10.6	10.8	11.1	11.4	11.2	11.4	11.7	12.1	11.8	12.0	12.4	12.8	12.4	12.6	13.0	13.4
	HI PR	215	231	244	254	241	259	274	286	274	295	311	325	312	336	355	370	351	378	399	416	388	417	441	460
1050	LO PR	112	119	130	138	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	162	173

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

HIGH STAGE - *PH1548M41*

HIGH STAGE

COOLING OPERATION

1900	MBh	45.8	47.2	51.1	54.8	44.7	46.1	49.9	53.5	43.7	45.0	48.7	52.2	42.6	43.9	47.5	51.0	40.5	41.7	45.1	48.4	37.5	38.6	41.8	44.9
	ST	0.88	0.78	0.59	0.38	0.91	0.81	0.61	0.40	0.93	0.83	0.63	0.41	0.96	0.86	0.65	0.42	1.00	0.89	0.67	0.43	1.00	0.90	0.68	0.44
	Delta T	19	18	15	10	20	18	15	10	20	18	15	10	20	18	15	10	20	18	15	10	18	17	14	10
	KW	3.27	3.34	3.44	3.54	3.51	3.58	3.68	3.80	3.71	3.79	3.90	4.02	3.89	3.97	4.10	4.22	4.05	4.13	4.26	4.39	4.18	4.27	4.40	4.54
	AMPS	13.8	14.0	14.4	14.9	14.7	15.0	15.4	15.9	15.7	16.0	16.5	17.0	16.6	17.0	17.5	18.0	17.5	17.9	18.4	19.0	18.4	18.8	19.4	20.0
	HiPR	234	252	266	277	263	283	299	311	2.99	322	340	354	340	366	387	403	383	412	435	454	423	455	481	501
	LOPR	111	118	129	138	117	125	136	145	1.22	130	142	151	128	136	149	159	134	143	156	166	139	148	161	172
	MBh	45.1	46.5	50.3	54.0	44.1	45.4	49.1	52.7	43.0	44.3	48.0	51.5	42.0	43.2	46.8	50.2	39.9	41.1	44.5	47.7	36.9	38.0	41.2	44.2
	ST	0.84	0.75	0.57	0.37	0.87	0.78	0.59	0.38	0.89	0.80	0.60	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.65	0.42	0.96	0.86	0.65	0.42
	Delta T	20	19	15	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
1700	KW	3.26	3.32	3.42	3.52	3.49	3.56	3.66	3.78	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.11	4.24	4.37	4.16	4.24	4.38	4.52
	AMPS	13.7	14.0	14.3	14.8	14.6	14.9	15.3	15.8	15.6	16.0	16.4	16.9	16.5	16.9	17.4	17.9	17.4	17.8	18.3	18.9	18.3	18.7	19.3	19.9
	HiPR	233	250	264	276	261	281	296	309	2.97	319	337	352	338	364	384	401	380	409	432	451	420	452	477	498
	LOPR	110	117	128	137	117	124	135	144	1.21	129	141	150	127	135	148	158	133	142	155	165	138	147	160	171
	MBh	42.9	44.1	47.8	51.3	41.9	43.1	46.7	50.1	40.9	42.1	45.6	48.9	39.9	41.1	44.5	47.7	37.9	39.0	42.2	45.3	35.1	36.1	39.1	42.0
1500	ST	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	0.79	0.60	0.38	0.91	0.82	0.62	0.40	0.92	0.82	0.62	0.40
	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10
	KW	3.21	3.27	3.37	3.47	3.44	3.50	3.61	3.72	3.64	3.71	3.82	3.94	3.81	3.89	4.01	4.13	3.96	4.04	4.17	4.30	4.09	4.18	4.31	4.44
	AMPS	13.5	13.8	14.1	14.6	14.4	14.7	15.1	15.5	15.4	15.7	16.2	16.7	16.3	16.6	17.1	17.6	17.2	17.5	18.0	18.6	18.0	18.4	18.9	19.6
	HiPR	228	245	259	270	256	275	291	303	2.91	313	330	345	331	356	376	393	373	401	423	442	412	443	468	488
LOPR	108	115	126	134	114	122	133	141	1.19	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167	

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

EXPANDED PERFORMANCE DATA

HIGH STAGE

MODEL: *PH1548M41*

COOLING OPERATION

IDB*		Outdoor Ambient Temperature																													
		65					75					85					95					105					115				
		Entering Indoor Wet Bulb Temperature																													
Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71							
1900	MBh	46.6	47.6	50.9	54.4	45.5	46.5	49.7	53.1	44.5	45.4	48.5	51.9	43.4	44.3	47.3	50.6	41.2	42.1	45.0	48.1	38.2	39.0	41.7	44.5						
	S/T	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.96	0.78	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.84	0.63						
	Delta T	22	21	18	14	22	21	18	15	22	21	18	15	21	21	18	15	20	20	18	15	18	19	17	14						
	KW	3.30	3.36	3.46	3.56	3.53	3.60	3.71	3.82	3.74	3.82	3.93	4.05	3.92	4.00	4.13	4.26	4.08	4.16	4.29	4.43	4.21	4.30	4.44	4.58						
	AMPS	13.9	14.1	14.5	15.0	14.8	15.1	15.5	16.0	15.8	16.2	16.6	17.2	16.8	17.1	17.6	18.2	17.7	18.0	18.6	19.2	18.6	19.0	19.5	20.2						
	HI PR	236	254	269	280	265	286	302	315	302	325	343	358	344	370	391	407	387	416	439	458	427	460	486	506						
	LO PR	112	119	130	139	119	126	138	147	123	131	143	153	130	138	150	160	136	144	158	168	140	149	163	174						
1700	MBh	45.9	46.9	50.1	53.6	44.9	45.8	49.0	52.4	43.8	44.8	47.8	51.1	42.7	43.7	46.7	49.9	40.6	41.5	44.3	47.4	37.6	38.4	41.1	43.9						
	S/T	0.92	0.86	0.70	0.52	0.95	0.89	0.73	0.54	0.98	0.92	0.75	0.56	1.00	0.95	0.77	0.58	1.00	0.98	0.80	0.60	1.00	0.99	0.81	0.60						
	Delta T	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	16	22	22	19	15	20	21	18	14						
	KW	3.28	3.35	3.44	3.55	3.51	3.58	3.69	3.80	3.72	3.80	3.91	4.03	3.90	3.98	4.11	4.23	4.06	4.14	4.27	4.41	4.19	4.28	4.41	4.55						
	AMPS	13.8	14.1	14.5	14.9	14.7	15.0	15.4	15.9	15.8	16.1	16.5	17.1	16.7	17.0	17.5	18.1	17.6	17.9	18.5	19.1	18.5	18.9	19.4	20.1						
	HI PR	235	253	267	278	264	284	299	312	300	323	341	355	341	367	388	405	384	413	436	455	424	457	482	503						
	LO PR	112	119	130	138	118	125	137	146	122	130	142	151	129	137	149	159	135	143	157	167	139	148	162	172						
1500	MBh	43.6	44.6	47.6	50.9	42.6	43.6	46.5	49.7	41.6	42.5	45.4	48.6	40.6	41.5	44.3	47.4	38.6	39.4	42.1	45.0	35.7	36.5	39.0	41.7						
	S/T	0.88	0.83	0.67	0.50	0.91	0.86	0.70	0.52	0.94	0.88	0.71	0.53	0.97	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.01	0.95	0.77	0.58						
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	18	15						
	KW	3.23	3.30	3.39	3.49	3.46	3.53	3.64	3.75	3.66	3.74	3.85	3.97	3.84	3.92	4.04	4.17	3.99	4.08	4.20	4.33	4.12	4.21	4.34	4.48						
	AMPS	13.6	13.9	14.2	14.7	14.5	14.8	15.2	15.7	15.5	15.8	16.3	16.8	16.4	16.8	17.2	17.8	17.3	17.7	18.2	18.8	18.2	18.6	19.1	19.7						
	HI PR	230	248	262	273	258	278	293	306	294	316	334	348	335	360	380	396	376	405	428	446	416	447	473	493						
	LO PR	109	116	127	135	115	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169						

85	1900	MBh	47.4	48.4	50.6	54.0	46.3	47.2	49.5	52.8	45.2	46.1	48.3	51.5	44.1	45.0	47.1	50.3	41.9	42.7	44.8	47.7
		S/T	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.93	0.76	1.00	1.00	0.96	0.78	1.00	1.00	1.00	0.81
		Delta T	23	23	21	19	22	23	22	19	22	22	22	19	21	22	22	19	20	21	22	19
		KW	3.32	3.39	3.49	3.59	3.56	3.63	3.74	3.85	3.77	3.85	3.96	4.09	3.95	4.04	4.16	4.29	4.11	4.20	4.33	4.47
		AMPS	14.0	14.3	14.6	15.1	14.9	15.2	15.6	16.1	16.0	16.3	16.8	17.3	16.9	17.2	17.7	18.3	17.8	18.2	18.7	19.3
		HI PR	239	257	271	283	268	288	305	318	305	328	346	361	347	374	395	411	391	420	444	463
		LO PR	113	121	132	140	120	127	139	148	125	133	145	154	131	139	152	162	137	146	159	170
85	1700	MBh	46.7	47.6	49.9	53.2	45.7	46.5	48.7	52.0	44.6	45.4	47.6	50.8	43.5	44.3	46.4	49.5	41.3	42.1	44.1	47.0
		S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.71	1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.96	0.78
		Delta T	24	24	23	20	25	24	23	20	24	24	23	20	24	24	23	20	22	23	23	20
		KW	3.31	3.37	3.47	3.57	3.54	3.61	3.72	3.83	3.75	3.83	3.94	4.06	3.93	4.01	4.14	4.27	4.09	4.17	4.30	4.44
		AMPS	13.9	14.2	14.6	15.0	14.8	15.1	15.5	16.0	15.9	16.2	16.7	17.2	16.8	17.2	17.6	18.2	17.7	18.1	18.6	19.2
		HI PR	237	255	270	281	266	286	302	315	303	326	344	359	345	371	392	409	388	417	441	460
		LO PR	113	120	131	139	119	127	138	147	124	132	144	153	130	138	151	161	136	145	158	168
85	1500	MBh	44.4	45.3	47.4	50.6	43.4	44.2	46.3	49.4	42.3	43.2	45.2	48.2	41.3	42.1	44.1	47.0	39.2	40.0	41.9	44.7
		S/T	0.92	0.89	0.80	0.65	0.96	0.92	0.83	0.68	0.98	0.95	0.85	0.69	1.00	0.98	0.88	0.72	1.00	1.00	0.92	0.74
		Delta T	25	25	23	20	25	25	24	20	25	25	24	20	25	25	24	21	24	25	24	20
		KW	3.26	3.32	3.42	3.52	3.49	3.56	3.66	3.77	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.11	4.24	4.37
		AMPS	13.7	14.0	14.3	14.8	14.6	14.9	15.3	15.8	15.6	16.0	16.4	16.9	16.5	16.9	17.4	17.9	17.4	17.8	18.3	18.9
		HI PR	232	250	264	276	261	281	296	309	297	319	337	352	338	364	384	400	380	409	432	451
		LO PR	110	117	128	137	117	124	135	144	121	129	141	150	127	135	148	157	133	142	155	165

* Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

NOTE: Shaded area is AHRl Rating Conditions

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1548M41*

LOW STAGE - *PH1549M41*

EXPANDED PERFORMANCE DATA

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB*		Outdoor Ambient Temperature																																															
		65								75								85								95								105								115							
		Entering Indoor Wet Bulb Temperature																																															
Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																					
1350	MBh	33.4	34.6	37.9	-	32.6	33.8	37.0	-	31.8	33.0	36.1	-	31.0	32.2	35.2	-	29.5	30.6	33.5	-	27.3	28.3	31.0	-	27.3	28.3	31.0	-																				
	S/T	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.84	0.70	0.48	-	0.87	0.73	0.50	-	0.88	0.73	0.51	-	0.88	0.73	0.51	-																				
	Delta T	17	15	11	-	18	15	12	-	18	15	12	-	18	15	12	-	17	15	11	-	16	14	11	-	16	14	11	-																				
	KW	2.16	2.21	2.27	-	2.32	2.37	2.44	-	2.46	2.51	2.59	-	2.58	2.64	2.72	-	2.69	2.74	2.83	-	2.78	2.84	2.93	-	2.78	2.84	2.93	-																				
	AMPS	9.3	9.5	9.7	-	9.9	10.1	10.4	-	10.6	10.8	11.2	-	11.2	11.5	11.8	-	11.9	12.1	12.5	-	12.5	12.7	13.1	-	12.5	12.7	13.1	-																				
1200	HI PR	217	233	247	-	243	262	277	-	277	298	315	-	315	339	358	-	355	382	403	-	392	422	445	-	392	422	445	-																				
	LO PR	113	120	131	-	119	127	139	-	124	132	144	-	130	139	151	-	137	145	159	-	141	150	164	-	141	150	164	-																				
	MBh	32.4	33.6	36.8	-	31.6	32.8	35.9	-	30.9	32.0	35.1	-	30.1	31.2	34.2	-	28.6	29.7	32.5	-	26.5	27.5	30.1	-	26.5	27.5	30.1	-																				
	S/T	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.84	0.70	0.48	-	0.84	0.70	0.48	-																				
	Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-																				
1050	KW	2.15	2.19	2.26	-	2.30	2.35	2.42	-	2.44	2.49	2.57	-	2.56	2.62	2.70	-	2.67	2.72	2.81	-	2.75	2.81	2.90	-	2.75	2.81	2.90	-																				
	AMPS	9.2	9.4	9.7	-	9.9	10.0	10.3	-	10.6	10.8	11.1	-	11.2	11.4	11.7	-	11.8	12.0	12.4	-	12.4	12.6	13.0	-	12.4	12.6	13.0	-																				
	HI PR	215	231	244	-	241	259	274	-	274	295	311	-	312	336	355	-	351	378	399	-	388	418	441	-	388	418	441	-																				
	LO PR	112	119	130	-	118	126	137	-	123	131	143	-	129	137	150	-	135	144	157	-	140	149	163	-	140	149	163	-																				
	MBh	29.9	31.0	34.0	-	29.2	30.3	33.2	-	28.5	29.5	32.4	-	27.8	28.8	31.6	-	26.4	27.4	30.0	-	24.5	25.4	27.8	-	24.5	25.4	27.8	-																				
1050	S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-	0.81	0.67	0.47	-																				
	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-																				
	KW	2.10	2.14	2.20	-	2.25	2.30	2.37	-	2.38	2.43	2.51	-	2.50	2.55	2.63	-	2.60	2.66	2.74	-	2.69	2.74	2.83	-	2.69	2.74	2.83	-																				
	AMPS	9.0	9.2	9.5	-	9.6	9.8	10.1	-	10.3	10.5	10.8	-	10.9	11.1	11.4	-	11.5	11.7	12.1	-	12.1	12.3	12.7	-	12.1	12.3	12.7	-																				
	HI PR	208	224	237	-	234	252	266	-	266	286	302	-	303	326	344	-	341	367	387	-	376	405	428	-	376	405	428	-																				
1050	LO PR	109	116	126	-	115	122	133	-	119	127	138	-	125	133	145	-	131	140	152	-	136	144	158	-	136	144	158	-																				

1350	MBh	33.9	34.9	37.8	40.6	33.1	34.1	36.9	39.6	32.4	33.3	36.1	38.7	31.6	32.5	35.2	37.8	30.0	30.9	33.4	35.9	27.8	28.6	31.0	33.2
	S/T	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.99	0.88	0.67	0.43	1.00	0.89	0.67	0.43
	Delta T	20	18	15	10	20	19	15	11	20	19	15	11	20	19	15	11	20	19	15	11	19	17	14	10
	KW	2.18	2.22	2.29	2.36	2.34	2.39	2.46	2.54	2.48	2.53	2.61	2.69	2.60	2.66	2.74	2.83	2.71	2.77	2.85	2.95	2.80	2.86	2.95	3.05
	AMPS	9.4	9.6	9.8	10.1	10.0	10.2	10.5	10.8	10.7	10.9	11.2	11.6	11.3	11.6	11.9	12.3	12.0	12.2	12.6	13.0	12.6	12.8	13.2	13.6
	HI PR	21.9	23.6	24.9	26.0	24.6	26.5	27.9	29.1	28.0	30.1	31.8	33.1	31.9	34.3	36.2	37.8	35.8	38.6	40.7	42.5	39.6	42.6	45.0	46.9
	LO PR	11.4	12.1	13.3	14.1	12.1	12.8	14.0	14.9	1.25	1.33	1.46	1.55	1.32	1.40	1.53	1.63	1.38	1.47	1.60	1.71	1.43	1.52	1.66	1.77
	MBh	32.9	33.9	36.7	39.4	32.2	33.1	35.9	38.5	31.4	32.3	35.0	37.6	30.6	31.6	34.2	36.7	29.1	30.0	32.4	34.8	27.0	27.8	30.1	32.3
	S/T	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.91	0.81	0.61	0.40	0.94	0.84	0.64	0.41	0.95	0.85	0.64	0.41
	Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	20	16	11	21	19	16	11	20	18	15	10
	KW	2.16	2.21	2.27	2.34	2.32	2.37	2.44	2.52	2.46	2.51	2.59	2.67	2.58	2.64	2.72	2.81	2.69	2.74	2.83	2.92	2.78	2.84	2.93	3.02
	1200	AMPS	9.3	9.5	9.7	10.0	9.9	10.1	10.4	10.7	10.6	10.9	11.2	11.5	11.2	11.5	11.8	12.2	11.9	12.1	12.5	12.9	12.5	12.7	13.1
HI PR		21.7	23.3	24.7	25.7	24.3	26.2	27.7	28.9	2.77	2.98	3.15	3.28	3.15	3.39	3.58	3.74	3.55	3.82	4.03	4.21	3.92	4.22	4.45	4.65
LO PR		11.3	12.0	13.1	14.0	11.9	12.7	13.9	1.48	1.24	1.32	1.44	1.54	1.30	1.39	1.51	1.61	1.37	1.45	1.59	1.69	1.41	1.50	1.64	1.75
MBh		30.4	31.3	33.9	36.4	29.7	30.6	33.1	35.5	29.0	29.9	32.3	34.7	28.3	29.1	31.5	33.8	26.9	27.7	29.9	32.1	24.9	25.6	27.7	29.8
S/T		0.80	0.71	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.57	0.37	0.88	0.78	0.59	0.38	0.91	0.81	0.62	0.40	0.92	0.82	0.62	0.40
Delta T		21	20	16	11	22	20	16	11	22	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10
1050	KW	2.11	2.16	2.22	2.29	2.27	2.31	2.38	2.46	2.40	2.45	2.53	2.61	2.52	2.57	2.65	2.74	2.62	2.68	2.76	2.85	2.71	2.77	2.86	2.95
	AMPS	9.1	9.3	9.5	9.8	9.7	9.9	10.2	10.5	10.4	10.6	10.9	11.2	11.0	11.2	11.5	11.9	11.6	11.8	12.2	12.6	12.2	12.4	12.8	13.2
	HI PR	21.0	22.6	23.9	24.9	23.6	25.4	26.8	28.0	2.69	2.89	3.05	3.18	3.06	3.29	3.48	3.63	3.44	3.70	3.91	4.08	3.80	4.09	4.32	4.51
	LO PR	11.0	11.7	12.7	13.6	11.6	12.3	13.5	1.43	1.20	1.28	1.40	1.49	1.27	1.35	1.47	1.56	1.33	1.41	1.54	1.64	1.37	1.46	1.59	1.70

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions

KW = Total system power

AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

		65					75					85					95					105					115				
		Outdoor Ambient Temperature																													
		Entering Indoor Wet Bulb Temperature																													
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71		
80	1350	MBh	34.5	35.3	37.7	40.3	33.7	34.5	36.8	39.4	32.9	33.6	35.9	38.4	32.1	32.8	35.1	37.5	30.5	31.2	33.3	35.6	28.3	28.9	30.9	33.0	28.3	28.9	30.9	33.0	
		S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	
		Delta T	22	21	19	15	23	22	19	15	22	22	19	15	22	22	19	15	21	21	19	15	19	20	18	14	19	20	18	14	
		KW	2.20	2.24	2.31	2.38	2.36	2.41	2.48	2.56	2.50	2.55	2.63	2.71	2.62	2.68	2.76	2.85	2.73	2.79	2.88	2.97	2.82	2.88	2.98	3.07	2.82	2.88	2.98	3.07	
		AMPS	9.5	9.6	9.9	10.2	10.1	10.3	10.6	10.9	10.8	11.0	11.3	11.7	11.4	11.7	12.0	12.4	12.0	12.3	12.7	13.1	12.7	12.9	13.3	13.8	12.7	12.9	13.3	13.8	
	1200	HIPR	22.1	238	252	262	248	267	282	294	282	304	321	335	322	346	366	381	362	390	411	429	400	430	454	474	400	430	454	474	
		LO PR	11.5	123	134	143	122	130	142	151	127	135	147	157	133	142	155	165	139	148	162	172	144	153	168	178	144	153	168	178	
		MBh	33.5	34.3	36.6	39.1	32.7	33.5	35.8	38.2	32.0	32.7	34.9	37.3	31.2	31.9	34.1	36.4	29.6	30.3	32.3	34.6	27.4	28.0	30.0	32.0	27.4	28.0	30.0	32.0	
		S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.96	0.90	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.59	1.00	0.98	0.80	0.59	
		Delta T	23	22	19	16	24	23	20	16	24	23	20	16	24	23	20	16	23	22	20	16	21	21	18	15	21	21	18	15	
1050	1200	KW	2.18	2.22	2.29	2.36	2.34	2.39	2.46	2.54	2.48	2.53	2.61	2.69	2.60	2.66	2.74	2.83	2.71	2.77	2.85	2.95	2.80	2.86	2.95	3.05	2.80	2.86	2.95	3.05	
		AMPS	9.4	9.6	9.8	10.1	10.0	10.2	10.5	10.8	10.7	10.9	11.2	11.6	11.3	11.6	11.9	12.3	12.0	12.2	12.6	13.0	12.6	12.8	13.2	13.6	12.6	12.8	13.2	13.6	
		HIPR	21.9	236	249	260	246	265	279	291	280	301	318	332	319	343	362	378	358	386	407	425	396	426	450	469	396	426	450	469	
		LO PR	11.4	122	133	141	121	128	140	149	125	133	146	155	132	140	153	163	138	147	160	171	143	152	166	177	143	152	166	177	
		MBh	30.9	31.6	33.8	36.1	30.2	30.9	33.0	35.3	29.5	30.2	32.2	34.4	28.8	29.4	31.4	33.6	27.3	27.9	29.9	31.9	25.3	25.9	27.7	29.6	25.3	25.9	27.7	29.6	
	1050	S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	0.94	0.77	0.57	1.00	0.94	0.77	0.57	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	19	15	22	21	19	15	
		KW	2.13	2.17	2.24	2.31	2.28	2.33	2.40	2.48	2.42	2.47	2.55	2.63	2.54	2.59	2.68	2.76	2.64	2.70	2.78	2.87	2.73	2.79	2.88	2.97	2.73	2.79	2.88	2.97	
		AMPS	9.2	9.4	9.6	9.9	9.8	10.0	10.2	10.6	10.5	10.7	11.0	11.3	11.1	11.3	11.6	12.0	11.7	11.9	12.3	12.7	12.3	12.5	12.9	13.3	12.3	12.5	12.9	13.3	
		HIPR	21.3	229	242	252	239	257	271	283	271	292	308	322	309	333	351	366	348	374	395	412	384	413	436	455	384	413	436	455	
		LO PR	11.1	118	129	137	117	125	136	145	122	129	141	150	128	136	148	158	134	142	156	166	139	147	161	171	139	147	161	171	

1350	MBh	35.1	35.8	37.5	40.0	34.3	35.0	36.6	39.1	33.5	34.2	35.8	38.2	32.7	33.3	34.9	37.2	31.1	31.7	33.2	35.4	28.8	29.3	30.7	32.8
	S/T	1.00	0.96	0.87	0.70	1.00	1.00	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	1.00	0.81
	Delta T	24	23	22	19	23	24	22	19	23	23	22	19	22	23	23	20	21	22	22	19	20	20	21	18
	KW	2.21	2.26	2.33	2.40	2.38	2.42	2.50	2.58	2.52	2.57	2.65	2.74	2.64	2.70	2.79	2.88	2.75	2.81	2.90	3.00	2.84	2.91	3.00	3.10
	AMPS	9.5	9.7	10.0	10.3	10.2	10.4	10.6	11.0	10.9	11.1	11.4	11.8	11.5	11.8	12.1	12.5	12.1	12.4	12.8	13.2	12.8	13.0	13.4	13.9
	HIPR	22.4	241	254	265	251	270	285	297	285	307	324	338	325	350	369	385	366	393	415	433	404	435	459	479
	LO PR	11.7	124	135	144	123	131	143	152	128	136	149	158	134	143	156	166	141	150	164	174	146	155	169	180
	MBh	34.1	34.8	36.4	38.9	33.3	34.0	35.6	38.0	32.5	33.2	34.7	37.0	31.7	32.3	33.9	36.1	30.1	30.7	32.2	34.3	27.9	28.5	29.8	31.8
	S/T	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.98	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.95	0.77
	Delta T	25	24	23	20	25	25	23	20	25	25	23	20	24	25	24	20	23	24	23	20	21	22	22	19
1200	KW	2.20	2.24	2.31	2.38	2.36	2.41	2.48	2.56	2.50	2.55	2.63	2.71	2.62	2.68	2.76	2.85	2.73	2.79	2.88	2.97	2.82	2.88	2.98	3.07
	AMPS	9.5	9.6	9.9	10.2	10.1	10.3	10.6	10.9	10.8	11.0	11.3	11.7	11.4	11.7	12.0	12.4	12.0	12.3	12.7	13.1	12.7	12.9	13.3	13.8
	HIPR	22.1	238	252	262	248	267	282	294	282	304	321	335	322	346	366	381	362	390	411	429	400	430	454	474
	LO PR	11.5	123	134	143	122	130	142	151	127	135	147	157	133	142	155	165	139	148	162	172	144	153	168	178
	MBh	31.5	32.1	33.6	35.9	30.8	31.4	32.8	35.0	30.0	30.6	32.1	34.2	29.3	29.9	31.3	33.4	27.8	28.4	29.7	31.7	25.8	26.3	27.5	29.4
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.74
	Delta T	25	25	24	20	26	25	24	21	26	25	24	21	26	25	24	21	24	25	24	20	23	23	22	19
	KW	2.15	2.19	2.25	2.32	2.30	2.35	2.42	2.50	2.44	2.49	2.57	2.65	2.56	2.62	2.70	2.78	2.66	2.72	2.81	2.90	2.75	2.81	2.90	3.00
	AMPS	9.2	9.4	9.7	10.0	9.8	10.0	10.3	10.6	10.6	10.8	11.1	11.4	11.2	11.4	11.7	12.1	11.8	12.0	12.4	12.8	12.4	12.6	13.0	13.4
	HIPR	21.5	231	244	254	241	259	274	286	274	295	311	325	312	336	355	370	351	378	399	416	388	417	441	460
	LO PR	11.2	119	130	138	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	162	173

* Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

NOTE: Shaded area is AHR1 Rating Conditions

KW = Total system power
AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

LOW STAGE - *PH1549M41*

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1549M41*

MODEL: *PH1549M41** EXPANDED PERFORMANCE DATA HIGH STAGE COOLING OPERATION

Design Subcooling, 5-7 °F @ the liquid access fitting connection / AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB*		Airflow	Outdoor Ambient Temperature																																															
			65								75								85								95								105								115							
			Entering Indoor							Wet Bulb							Temperature																																	
70	1517	MBh	44.8	46.4	50.9	-	43.8	45.4	49.7	-	42.7	44.3	48.5	-	41.7	43.2	47.3	-	39.6	41.0	45.0	-	36.7	38.0	41.7	-	36.7	38.0	41.7	-	36.7	38.0	41.7	-																
		S/T	0.68	0.57	0.39	-	0.71	0.59	0.41	-	0.72	0.60	0.42	-	0.75	0.62	0.43	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-																
		Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-																
		KW	3.05	3.12	3.22	-	3.29	3.36	3.47	-	3.50	3.58	3.69	-	3.68	3.77	3.89	-	3.84	3.93	4.06	-	3.98	4.07	4.20	-	3.98	4.07	4.20	-	3.98	4.07	4.20	-																
		AMPS	13.3	13.5	13.9	-	14.2	14.5	14.9	-	15.2	15.6	16.0	-	16.2	16.5	17.0	-	17.1	17.4	18.0	-	18.0	18.4	18.9	-	18.0	18.4	18.9	-	18.0	18.4	18.9	-																
		HI PR	227	244	258	-	254	274	289	-	289	311	329	-	330	355	374	-	371	399	421	-	410	441	465	-	410	441	465	-	410	441	465	-																
70	1345	LO PR	107	114	124	-	113	120	131	-	118	125	137	-	124	131	144	-	130	138	150	-	134	143	156	-	134	143	156	-	134	143	156	-																
		MBh	43.5	45.1	49.4	-	42.5	44.0	48.3	-	41.5	43.0	47.1	-	40.5	41.9	46.0	-	38.4	39.8	43.7	-	35.6	36.9	40.4	-	35.6	36.9	40.4	-	35.6	36.9	40.4	-																
		S/T	0.65	0.54	0.38	-	0.67	0.56	0.39	-	0.69	0.58	0.40	-	0.71	0.60	0.41	-	0.74	0.62	0.43	-	0.75	0.62	0.43	-	0.75	0.62	0.43	-	0.75	0.62	0.43	-																
		Delta T	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-	18	16	12	-	18	16	12	-																
		KW	3.03	3.09	3.19	-	3.26	3.33	3.44	-	3.47	3.55	3.66	-	3.65	3.73	3.86	-	3.81	3.89	4.02	-	3.94	4.03	4.17	-	3.94	4.03	4.17	-	3.94	4.03	4.17	-																
		AMPS	13.2	13.4	13.8	-	14.1	14.4	14.8	-	15.1	15.4	15.9	-	16.0	16.4	16.9	-	16.9	17.3	17.8	-	17.8	18.2	18.8	-	17.8	18.2	18.8	-	17.8	18.2	18.8	-																
70	1183	HI PR	224	242	255	-	252	271	286	-	286	308	326	-	326	351	371	-	367	395	417	-	406	436	461	-	406	436	461	-	406	436	461	-																
		LO PR	106	113	123	-	112	119	130	-	116	124	135	-	122	130	142	-	128	136	149	-	133	141	154	-	133	141	154	-	133	141	154	-																
		MBh	40.2	41.6	45.6	-	39.2	40.7	44.5	-	38.3	39.7	43.5	-	37.4	38.7	42.4	-	35.5	36.8	40.3	-	32.9	34.1	37.3	-	32.9	34.1	37.3	-	32.9	34.1	37.3	-																
		S/T	0.63	0.52	0.36	-	0.65	0.54	0.38	-	0.67	0.56	0.39	-	0.69	0.57	0.40	-	0.71	0.60	0.41	-	0.72	0.60	0.42	-	0.72	0.60	0.42	-	0.72	0.60	0.42	-																
		Delta T	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-	18	16	12	-	18	16	12	-																
		KW	2.96	3.02	3.11	-	3.18	3.25	3.36	-	3.38	3.46	3.57	-	3.56	3.64	3.76	-	3.71	3.79	3.92	-	3.84	3.93	4.06	-	3.84	3.93	4.06	-	3.84	3.93	4.06	-																
75	1517	AMPS	12.9	13.1	13.5	-	13.7	14.0	14.4	-	14.8	15.1	15.5	-	15.6	16.0	16.4	-	16.5	16.9	17.4	-	17.4	17.8	18.3	-	17.4	17.8	18.3	-	17.4	17.8	18.3	-																
		HI PR	218	234	247	-	244	263	278	-	278	299	316	-	316	341	360	-	356	383	405	-	393	423	447	-	393	423	447	-	393	423	447	-																
		LO PR	103	109	120	-	109	116	126	-	113	120	131	-	119	126	138	-	124	132	144	-	129	137	149	-	129	137	149	-	129	137	149	-																
		MBh	45.6	46.9	50.8	54.5	44.5	45.8	49.6	53.2	43.5	44.7	48.4	52.0	42.4	43.6	47.2	50.7	40.3	41.5	44.9	48.2	37.3	38.4	41.6	44.6	37.3	38.4	41.6	44.6	37.3	38.4	41.6	44.6																
		S/T	0.74	0.66	0.50	0.32	0.77	0.68	0.52	0.33	0.79	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.37	0.85	0.76	0.57	0.37	0.85	0.76	0.57	0.37	0.85	0.76	0.57	0.37																
		Delta T	22	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	22	21	17	12	21	19	16	11	22	21	17	12	22	21	17	12	21	19	16	11												
75	1345	KW	3.05	3.12	3.22	3.32	3.29	3.36	3.47	3.58	3.50	3.58	3.69	3.82	3.68	3.77	3.89	4.02	3.84	3.93	4.06	4.20	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35												
		AMPS	13.3	13.5	13.9	14.4	14.2	14.5	14.9	15.4	15.2	15.6	16.0	16.6	16.2	16.5	17.0	17.6	17.1	17.5	18.0	18.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6												
		HI PR	227	244	258	269	254	274	289	302	289	311	329	343	330	355	375	391	371	399	421	439	410	441	466	486	410	441	466	486	410	441	466	486	410	441	466	486												
		LO PR	107	114	124	133	113	120	131	140	118	125	137	146	124	131	144	153	130	138	150	160	134	143	156	166	134	143	156	166	134	143	156	166	134	143	156	166												
		MBh	44.2	45.6	49.3	52.9	43.2	44.5	48.2	51.7	42.2	43.4	47.0	50.5	41.2	42.4	45.9	49.2	39.1	40.3	43.6	46.8	36.2	37.3	40.4	43.3	36.2	37.3	40.4	43.3	36.2	37.3	40.4	43.3	36.2	37.3	40.4	43.3												
		S/T	0.74	0.66	0.50	0.32	0.77	0.68	0.52	0.33	0.79	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.37	0.85	0.76	0.57	0.37	0.85	0.76	0.57	0.37	0.85	0.76	0.57	0.37	0.85	0.76	0.57	0.37												
75	1183	Delta T	22	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	22	21	17	12	21	19	16	11	22	21	17	12	22	21	17	12	21	19	16	11												
		KW	3.05	3.12	3.22	3.32	3.29	3.36	3.47	3.58	3.50	3.58	3.69	3.82	3.68	3.77	3.89	4.02	3.84	3.93	4.06	4.20	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35	3.98	4.07	4.20	4.35												
		AMPS	13.3	13.5	13.9	14.4	14.2	14.5	14.9	15.4	15.2	15.6	16.0	16.6	16.2	16.5	17.0	17.6	17.1	17.5	18.0	18.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6	18.0	18.4	18.9	19.6												
		HI PR	227	244	258	269	254	274	289	302	289	311	329	343	330	355	375	391	371	399	421	439	410	441	466	486	410	441	466	486	410	441	466	486	410	441	466	486												
		LO PR	107	114	124	133	113	120	131	140	118	125	137	146	124	131	144	153	130	138	150	160	134	143	156	166	134	143	156	166	134	143	156	166	134	143	156	166												

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB*		Airflow		Outdoor Ambient Temperature																				Indoor Wet Bulb Temperature																																							
				65										75										85										95										105										115									
				59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																				
1517	MBh	46.4	47.4	50.6	54.1	45.3	46.3	49.5	52.9	44.2	45.2	48.3	51.6	43.1	44.1	47.1	50.4	41.0	41.9	44.7	47.8	38.0	38.8	41.4	44.3	38.0	38.8	41.4	44.3	38.0	38.8	41.4	44.3	38.0	38.8	41.4	44.3	38.0	38.8	41.4	44.3																						
	S/T	0.85	0.80	0.65	0.48	0.88	0.83	0.67	0.50	0.90	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.97	0.91	0.74	0.55	1.00	0.92	0.74	0.56	1.00	0.92	0.74	0.56	1.00	0.92	0.74	0.56	1.00	0.92	0.74	0.56	1.00	0.92	0.74	0.56																						
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15																						
	KW	3.10	3.17	3.27	3.38	3.34	3.42	3.53	3.65	3.56	3.64	3.76	3.88	3.75	3.83	3.96	4.09	3.91	3.99	4.13	4.27	4.04	4.14	4.28	4.42	4.04	4.14	4.28	4.42	4.04	4.14	4.28	4.42	4.04	4.14	4.28	4.42	4.04	4.14	4.28	4.42																						
	AMPS	13.5	13.8	14.1	14.6	14.4	14.7	15.1	15.6	15.5	15.8	16.3	16.8	16.4	16.8	17.3	17.9	17.4	17.7	18.3	18.9	18.3	18.7	19.3	19.9	18.3	18.7	19.3	19.9	18.3	18.7	19.3	19.9	18.3	18.7	19.3	19.9	18.3	18.7	19.3	19.9																						
	HI PR	231	249	263	274	260	279	295	308	295	318	335	350	336	362	382	399	378	407	430	448	418	450	475	495	418	450	475	495	418	450	475	495	418	450	475	495	418	450	475	495																						
1345	LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169	137	145	159	169	137	145	159	169	137	145	159	169	137	145	159	169																						
	MBh	45.0	46.0	49.2	52.6	44.0	44.9	48.0	51.3	42.9	43.9	46.9	50.1	41.9	42.8	45.7	48.9	39.8	40.7	43.4	46.4	36.9	37.7	40.2	43.0	36.9	37.7	40.2	43.0	36.9	37.7	40.2	43.0	36.9	37.7	40.2	43.0	36.9	37.7	40.2	43.0																						
	S/T	0.81	0.76	0.62	0.46	0.84	0.79	0.64	0.48	0.86	0.81	0.66	0.49	0.89	0.83	0.68	0.51	0.92	0.87	0.70	0.53	0.93	0.87	0.71	0.53	0.93	0.87	0.71	0.53	0.93	0.87	0.71	0.53	0.93	0.87	0.71	0.53	0.93	0.87	0.71	0.53																						
	Delta T	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	23	22	20	16	23	22	20	16	23	22	20	16	23	22	20	16	23	22	20	16																						
	KW	3.08	3.14	3.24	3.35	3.32	3.39	3.50	3.61	3.53	3.61	3.72	3.85	3.71	3.80	3.92	4.06	3.87	3.96	4.09	4.23	4.01	4.10	4.24	4.38	4.01	4.10	4.24	4.38	4.01	4.10	4.24	4.38	4.01	4.10	4.24	4.38	4.01	4.10	4.24	4.38																						
	AMPS	13.4	13.7	14.0	14.5	14.3	14.6	15.0	15.5	15.4	15.7	16.2	16.7	16.3	16.6	17.1	17.7	17.2	17.6	18.1	18.7	18.1	18.5	19.1	19.7	18.1	18.5	19.1	19.7	18.1	18.5	19.1	19.7	18.1	18.5	19.1	19.7	18.1	18.5	19.1	19.7																						
1183	HI PR	229	246	260	271	257	277	292	305	292	315	332	346	333	358	378	395	375	403	426	444	414	445	470	490	414	445	470	490	414	445	470	490	414	445	470	490	414	445	470	490																						
	LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167	135	144	157	167	135	144	157	167	135	144	157	167	135	144	157	167																						
	MBh	41.6	42.5	45.4	48.5	40.6	41.5	44.3	47.4	39.6	40.5	43.3	46.2	38.7	39.5	42.2	45.1	36.7	37.5	40.1	42.9	34.0	34.8	37.1	39.7	34.0	34.8	37.1	39.7	34.0	34.8	37.1	39.7	34.0	34.8	37.1	39.7	34.0	34.8	37.1	39.7																						
	S/T	0.78	0.73	0.60	0.45	0.81	0.76	0.62	0.46	0.83	0.78	0.63	0.47	0.86	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.90	0.84	0.68	0.51	0.90	0.84	0.68	0.51	0.90	0.84	0.68	0.51	0.90	0.84	0.68	0.51	0.90	0.84	0.68	0.51																						
	Delta T	25	24	21	17	26	24	21	17	26	25	21	17	26	25	21	17	25	24	21	17	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16																						
	KW	3.00	3.07	3.16	3.27	3.24	3.31	3.41	3.52	3.44	3.52	3.63	3.75	3.62	3.70	3.82	3.95	3.78	3.86	3.99	4.12	3.91	4.00	4.13	4.27	3.91	4.00	4.13	4.27	3.91	4.00	4.13	4.27	3.91	4.00	4.13	4.27	3.91	4.00	4.13	4.27																						
80	AMPS	13.1	13.3	13.7	14.1	14.0	14.3	14.7	15.1	15.0	15.3	15.8	16.3	15.9	16.2	16.7	17.3	16.8	17.2	17.7	18.3	17.7	18.1	18.6	19.2	17.7	18.1	18.6	19.2	17.7	18.1	18.6	19.2	17.7	18.1	18.6	19.2	17.7	18.1	18.6	19.2																						
	HI PR	222	239	252	263	249	268	283	295	284	305	322	336	323	348	367	383	363	391	413	431	401	432	456	476	401	432	456	476	401	432	456	476	401	432	456	476	401	432	456	476																						
	LO PR	105	112	122	130	111	118	129	137	115	123	134	143	121	129	141	150	127	135	147	157	131	140	152	162	131	140	152	162	131	140	152	162	131	140	152	162	131	140	152	162																						
	MBh	47.2	48.1	50.4	53.7	46.1	47.0	49.2	52.5	45.0	45.9	48.0	51.2	43.9	44.7	46.9	50.0	41.7	42.5	44.5	47.5	38.6	39.4	41.2	44.0	38.6	39.4	41.2	44.0	38.6	39.4	41.2	44.0	38.6	39.4	41.2	44.0	38.6	39.4	41.2	44.0																						
	S/T	0.89	0.86	0.78	0.63	0.92	0.89	0.80	0.65	0.95	0.91	0.82	0.67	0.98	0.94	0.85	0.69	1.00	0.98	0.88	0.72	1.00	0.99	0.89	0.72	1.00	0.99	0.89	0.72	1.00	0.99	0.89	0.72	1.00	0.99	0.89	0.72	1.00	0.99	0.89	0.72																						
	Delta T	27	26	25	22	27	27	25	22	27	27	25	22	27	27	26	22	27	27	25	22	25	25	23	20	27	26	25	23	20	27	26	25	23	20	27	26	25	23	20																							

* Entering Indoor Dry Bulb Temperature
High and low pressures are measured at the liquid and suction access fittings.
NOTE: Shaded area is AHRI Rating Conditions
KW = Total system power
AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1549M41*

COOLING PERFORMANCE DATA

LOW STAGE - *PH1560M41*

MODEL: *PH1560M41* EXPANDED PERFORMANCE DATA LOW STAGE COOLING OPERATION

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

		Outdoor Ambient Temperature																													
		65					75					85					95					105					115				
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71		
70	1519	MBh	39.6	41.1	45.0	-	38.7	40.1	43.9	-	37.8	39.2	42.9	-	36.9	38.2	41.9	-	35.0	36.3	39.8	-	32.4	33.6	36.8	-	32.4	33.6	36.8	-	
		S/T	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.47	-	0.83	0.70	0.48	-	0.84	0.70	0.49	-	0.84	0.70	0.49	-	
		Delta T	18	15	12	-	18	15	12	-	18	15	12	-	18	16	12	-	18	15	12	-	17	14	11	-	17	14	11	-	
		KW	2.79	2.85	2.93	-	3.00	3.06	3.16	-	3.18	3.25	3.35	-	3.34	3.42	3.53	-	3.48	3.56	3.67	-	3.60	3.68	3.80	-	3.60	3.68	3.80	-	
		AMPS	12.3	12.5	12.9	-	13.1	13.4	13.8	-	14.1	14.4	14.9	-	15.0	15.3	15.8	-	15.8	16.2	16.7	-	16.7	17.1	17.6	-	16.7	17.1	17.6	-	
	1350	HI PR	222	239	252	-	249	268	283	-	283	305	322	-	322	347	366	-	363	390	412	-	401	431	455	-	401	431	455	-	
		LO PR	109	116	127	-	116	123	134	-	120	128	139	-	126	134	146	-	132	141	154	-	137	145	159	-	137	145	159	-	
		MBh	38.5	39.9	43.7	-	37.6	38.9	42.7	-	36.7	38.0	41.6	-	35.8	37.1	40.6	-	34.0	35.2	38.6	-	31.5	32.6	35.8	-	31.5	32.6	35.8	-	
		S/T	0.70	0.58	0.40	-	0.72	0.61	0.42	-	0.74	0.62	0.43	-	0.77	0.64	0.44	-	0.80	0.66	0.46	-	0.80	0.67	0.46	-	0.80	0.67	0.46	-	
		Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-	
1181	KW	2.77	2.82	2.91	-	2.97	3.04	3.13	-	3.16	3.22	3.33	-	3.32	3.39	3.50	-	3.45	3.53	3.64	-	3.57	3.65	3.77	-	3.57	3.65	3.77	-		
	AMPS	12.2	12.5	12.8	-	13.0	13.3	13.7	-	14.0	14.3	14.7	-	14.9	15.2	15.6	-	15.7	16.1	16.5	-	16.5	16.9	17.4	-	16.5	16.9	17.4	-		
	HI PR	220	236	250	-	246	265	280	-	280	302	318	-	319	343	363	-	359	386	408	-	397	427	451	-	397	427	451	-		
	LO PR	108	115	126	-	114	122	133	-	119	126	138	-	125	133	145	-	131	139	152	-	135	144	157	-	135	144	157	-		
	MBh	35.5	36.8	40.3	-	34.7	35.9	39.4	-	33.9	35.1	38.4	-	33.0	34.2	37.5	-	31.4	32.5	35.6	-	29.1	30.1	33.0	-	29.1	30.1	33.0	-		

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

Design Subcooling, 5-7 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.

IDB* Airflow			Outdoor Ambient Temperature																	Entering Indoor Wet Bulb Temperature																								
			65							75							85							95							105							115						
			59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71										
80	1519	MBh	41.0	41.9	44.8	47.9	40.1	40.9	43.7	46.7	39.1	40.0	42.7	45.6	38.1	39.0	41.6	44.5	36.2	37.0	39.6	42.3	33.6	34.3	36.6	39.2	33.6	34.3	36.6	39.2	33.6	34.3	36.6	39.2										
		S/T	0.91	0.86	0.70	0.52	0.95	0.89	0.72	0.54	1.00	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.00	1.00	0.79	0.59	1.00	1.00	0.80	0.60	1.00	1.00	0.80	0.60	1.00	1.00	0.80	0.60										
		Delta T	23	22	19	15	23	22	19	15	24	22	19	15	23	22	19	15	22	22	19	15	20	21	18	14	20	21	18	14	20	21	18	14										
		KW	2.83	2.89	2.98	3.07	3.05	3.11	3.21	3.31	3.23	3.30	3.41	3.52	3.40	3.47	3.59	3.70	3.54	3.62	3.74	3.86	3.66	3.74	3.87	3.99	3.66	3.74	3.87	3.99	3.66	3.74	3.87	3.99										
		AMPS	12.5	12.7	13.1	13.5	13.4	13.6	14.0	14.5	14.4	14.7	15.1	15.6	15.2	15.6	16.0	16.6	16.1	16.5	17.0	17.5	17.0	17.3	17.9	18.5	17.0	17.3	17.9	18.5	17.0	17.3	17.9	18.5										
	1350	HI PR	226	244	257	268	254	273	289	301	289	311	328	342	329	354	374	390	370	398	421	439	409	440	465	485	409	440	465	485	409	440	465	485										
		LO PR	112	119	130	138	118	125	137	146	123	130	142	152	129	137	149	159	135	143	157	167	140	148	162	173	140	148	162	173	140	148	162	173										
		MBh	39.8	40.7	43.5	46.5	38.9	39.7	42.5	45.4	38.0	38.8	41.4	44.3	37.0	37.8	40.4	43.2	35.2	36.0	38.4	41.1	32.6	33.3	35.6	38.0	32.6	33.3	35.6	38.0	32.6	33.3	35.6	38.0										
		S/T	0.87	0.82	0.67	0.50	0.90	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	0.99	0.93	0.76	0.57	1.00	0.94	0.76	0.57	1.00	0.94	0.76	0.57	1.00	0.94	0.76	0.57										
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	19	15	22	21	19	15	22	21	19	15										
85	1350	KW	2.81	2.87	2.96	3.05	3.02	3.09	3.18	3.28	3.21	3.28	3.38	3.49	3.37	3.45	3.56	3.67	3.51	3.59	3.70	3.83	3.63	3.71	3.83	3.96	3.63	3.71	3.83	3.96	3.63	3.71	3.83	3.96										
		AMPS	12.4	12.6	13.0	13.4	13.3	13.5	13.9	14.4	14.3	14.6	15.0	15.5	15.1	15.4	15.9	16.4	16.0	16.3	16.8	17.4	16.8	17.2	17.7	18.3	16.8	17.2	17.7	18.3	16.8	17.2	17.7	18.3										
		HI PR	224	241	255	266	251	271	286	298	286	308	325	339	326	350	370	386	366	394	416	434	405	436	460	480	405	436	460	480	405	436	460	480										
		LO PR	110	118	128	137	117	124	136	144	121	129	141	150	127	136	148	158	134	142	155	165	138	147	160	171	138	147	160	171	138	147	160	171										
		MBh	36.7	37.5	40.1	42.9	35.9	36.7	39.2	41.9	35.0	35.8	38.2	40.9	34.2	34.9	37.3	39.9	32.5	33.2	35.5	37.9	30.1	30.7	32.8	35.1	30.1	30.7	32.8	35.1	30.1	30.7	32.8	35.1										
	1181	S/T	0.84	0.79	0.64	0.48	0.87	0.82	0.67	0.50	0.89	0.84	0.68	0.51	0.92	0.86	0.70	0.53	0.96	0.90	0.73	0.55	0.97	0.91	0.74	0.55	0.97	0.91	0.74	0.55	0.97	0.91	0.74	0.55										
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	25	24	20	16	24	23	20	16	23	22	19	15	23	22	19	15	23	22	19	15										
		KW	2.75	2.80	2.89	2.98	2.95	3.01	3.11	3.20	3.13	3.20	3.30	3.40	3.29	3.36	3.47	3.58	3.43	3.50	3.61	3.73	3.54	3.62	3.74	3.86	3.54	3.62	3.74	3.86	3.54	3.62	3.74	3.86										
		AMPS	12.1	12.4	12.7	13.1	12.9	13.2	13.6	14.0	13.9	14.2	14.6	15.1	14.7	15.1	15.5	16.0	15.6	15.9	16.4	17.0	16.4	16.8	17.3	17.9	16.4	16.8	17.3	17.9	16.4	16.8	17.3	17.9										
		HI PR	217	234	247	258	244	262	277	289	277	298	315	329	316	340	359	374	355	382	404	421	393	423	446	465	393	423	446	465	393	423	446	465										
90	1519	LO PR	107	114	124	133	113	120	132	140	118	125	137	146	124	132	144	153	130	138	150	160	134	143	156	166	134	143	156	166	134	143	156	166										
		MBh	41.7	42.5	44.5	47.5	40.8	41.5	43.5	46.4	39.8	40.6	42.5	45.3	38.8	39.6	41.4	44.2	36.9	37.6	39.4	42.0	34.2	34.8	36.5	38.9	34.2	34.8	36.5	38.9	34.2	34.8	36.5	38.9										
		S/T	0.96	0.92	0.83	0.68	0.99	0.96	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78	1.00	1.00	0.96	0.78	1.00	1.00	0.96	0.78										
		Delta T	24	24	22	19	24	24	23	20	24	24	23	20	23	24	23	20	22	23	23	20	21	21	21	18	21	21	21	18	21	21	18	21										
		KW	2.85	2.91	3.00	3.10	3.07	3.13	3.23	3.34	3.26	3.33	3.44	3.55	3.43	3.50	3.61	3.73	3.57	3.65	3.77	3.89	3.69	3.77	3.90	4.03	3.69	3.77	3.90	4.03	3.69	3.77	3.90	4.03										
	1350	AMPS	12.6	12.8	13.2	13.6	13.5	13.7	14.1	14.6	14.5	14.8	15.2	15.7	15.4	15.7	16.2	16.7	16.2	16.6	17.1	17.7	17.1	17.5	18.0	18.6	17.1	17.5	18.0	18.6	17.1	17.5	18.0	18.6										
		HI PR	229	246	260	271	256	276	291	304	292	314	331	346	332	358	378	394	374	402	425	443	413	444	469	489	413	444	469	489	413	444	469	489										
		LO PR	113	120	131	139	119	127	138	147	124	132	144	153	130	138	151	161	136	145	158	169	141	150	164	174	141	150	164	174	141	150	164	174										
		MBh	40.5	41.3	43.2	46.1	39.6	40.3	42.2	45.1	38.6	39.4	41.2	44.0	37.7	38.4	40.2	42.9	35.8	36.5	38.2	40.8	33.2	33.8	35.4	37.8	33.2	33.8	35.4	37.8	33.2	33.8	35.4	37.8										
		S/T	0.91	0.88	0.80	0.65	0.95	0.91	0.82	0.67	0.97	0.94	0.85	0.69	1.00	0.97	0.87	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.91	0.74	1.00	1.00	0.91	0.74	1.00	1.00	0.91	0.74										
1181	1350	Delta T	26	25	24	21	26	26	24	21	26	26	24	21	26	2																												

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1560M41*

EXPANDED PERFORMANCE DATA

MODEL: *PH1560M41*

HIGH STAGE

COOLING OPERATION

		Outdoor Ambient Temperature																																																																																			
		65														75														85														95														105														115													
		Entering Indoor Wet Bulb Temperature																																																																																			
IDB*	Airflow	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																																																				
70	2025	MBh	54.4	56.4	61.8	-	53.2	55.1	60.4	-	51.9	53.8	58.9	-	50.6	52.5	57.5	-	48.1	49.9	54.6	-	44.6	46.2	50.6	-	44.6	46.2	50.6	-	44.6	46.2	50.6	-																																																			
		S/T	0.71	0.60	0.41	-	0.74	0.62	0.43	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.82	0.68	0.47	-	0.82	0.68	0.47	-	0.82	0.68	0.47	-																																																			
		Delta T	18	15	12	-	18	15	12	-	18	15	12	-	18	16	12	-	18	15	12	-	17	14	11	-	17	14	11	-	17	14	11	-																																																			
		KW	4.22	4.31	4.44	-	4.54	4.63	4.78	-	4.82	4.92	5.08	-	5.06	5.17	5.34	-	5.27	5.39	5.56	-	5.45	5.57	5.75	-	5.45	5.57	5.75	-	5.45	5.57	5.75	-																																																			
		AMPS	18.4	18.8	19.3	-	19.7	20.1	20.7	-	21.1	21.6	22.2	-	22.4	22.9	23.6	-	23.7	24.2	25.0	-	25.0	25.5	26.3	-	25.0	25.5	26.3	-	25.0	25.5	26.3	-																																																			
		HIPR	240	258	273	-	269	290	306	-	306	330	348	-	349	375	396	-	392	422	446	-	434	467	493	-	434	467	493	-	434	467	493	-																																																			
	LOPR	106	112	123	-	112	119	130	-	116	124	135	-	122	130	142	-	128	136	148	-	132	141	154	-	132	141	154	-	132	141	154	-																																																				
	1800	MBh	52.8	54.8	60.0	-	51.6	53.5	58.6	-	50.4	52.2	57.2	-	49.2	50.9	55.8	-	46.7	48.4	53.0	-	43.3	44.8	49.1	-	43.3	44.8	49.1	-	43.3	44.8	49.1	-																																																			
		S/T	0.68	0.57	0.39	-	0.70	0.59	0.41	-	0.72	0.60	0.42	-	0.75	0.62	0.43	-	0.77	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-																																																			
		Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-	17	15	11	-	17	15	11	-																																																			
KW		4.19	4.28	4.41	-	4.50	4.60	4.74	-	4.78	4.88	5.03	-	5.02	5.13	5.29	-	5.23	5.34	5.52	-	5.41	5.53	5.71	-	5.41	5.53	5.71	-	5.41	5.53	5.71	-																																																				
157.5	AMPS	18.2	18.6	19.1	-	19.5	19.9	20.5	-	21.0	21.4	22.1	-	22.2	22.7	23.4	-	23.5	24.0	24.8	-	24.8	25.3	26.1	-	24.8	25.3	26.1	-	24.8	25.3	26.1	-																																																				
	HIPR	238	256	270	-	267	287	303	-	303	326	345	-	345	372	392	-	388	418	441	-	429	462	488	-	429	462	488	-	429	462	488	-																																																				
	LOPR	105	111	122	-	111	118	128	-	115	122	134	-	121	128	140	-	127	135	147	-	131	139	152	-	131	139	152	-	131	139	152	-																																																				
	MBh	48.8	50.5	55.4	-	47.6	49.4	54.1	-	46.5	48.2	52.8	-	45.4	47.0	51.5	-	43.1	44.7	48.9	-	39.9	41.4	45.3	-	39.9	41.4	45.3	-	39.9	41.4	45.3	-																																																				
	S/T	0.66	0.55	0.38	-	0.68	0.57	0.39	-	0.70	0.58	0.40	-	0.72	0.60	0.42	-	0.75	0.62	0.43	-	0.75	0.63	0.44	-	0.75	0.63	0.44	-	0.75	0.63	0.44	-																																																				
	Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	16	13	-	19	16	12	-	18	15	12	-	18	15	12	-	18	15	12	-																																																				

75	2025	MBh	55.3	57.0	61.7	66.2	54.1	55.7	60.2	64.7	52.8	54.3	58.8	63.1	51.5	53.0	57.4	61.6	48.9	50.4	54.5	58.5	45.3	46.6	50.5	54.2
		S/T	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.37	0.86	0.77	0.58	0.38	0.89	0.80	0.60	0.39	0.92	0.83	0.62	0.40	0.93	0.83	0.63	0.41
		Delta T	20	19	15	11	21	19	16	11	21	19	16	11	21	19	16	11	20	19	15	11	19	18	14	10
		KW	4.26	4.34	4.48	4.62	4.57	4.67	4.82	4.97	4.86	4.96	5.12	5.28	5.10	5.21	5.38	5.56	5.32	5.43	5.61	5.79	5.50	5.62	5.80	6.00
		AMPS	18.5	18.9	19.4	20.1	19.8	20.2	20.8	21.5	21.3	21.8	22.4	23.2	22.6	23.1	23.8	24.6	23.9	24.4	25.2	26.0	25.2	25.8	26.5	27.5
		HI PR	242	261	275	287	272	293	309	322	309	333	352	367	352	379	400	418	396	427	450	470	438	471	498	519
	1800	LO PR	107	114	124	132	113	120	131	140	117	125	136	145	123	131	143	152	129	137	150	160	134	142	155	165
		MBh	53.7	55.3	59.9	64.3	52.5	54.0	58.5	62.8	51.2	52.8	57.1	61.3	50.0	51.5	55.7	59.8	47.5	48.9	52.9	56.8	44.0	45.3	49.0	52.6
		S/T	0.77	0.69	0.52	0.34	0.80	0.72	0.54	0.35	0.82	0.73	0.56	0.36	0.85	0.76	0.57	0.37	0.88	0.79	0.60	0.38	0.89	0.79	0.60	0.39
		Delta T	21	20	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10
		KW	4.22	4.31	4.44	4.58	4.54	4.63	4.78	4.93	4.82	4.92	5.08	5.24	5.06	5.17	5.34	5.51	5.27	5.39	5.56	5.75	5.45	5.57	5.75	5.95
		AMPS	18.4	18.8	19.3	19.9	19.7	20.1	20.7	21.3	21.1	21.6	22.2	23.0	22.4	22.9	23.6	24.4	23.7	24.2	25.0	25.8	25.0	25.5	26.3	27.2
1575	HI PR	240	258	273	284	269	290	306	319	306	330	348	363	349	375	396	413	392	422	446	465	434	467	493	514	
	LO PR	106	113	123	131	112	119	130	138	116	124	135	144	122	130	142	151	128	136	148	158	132	141	154	164	
	MBh	49.6	51.1	55.3	59.3	48.4	49.9	54.0	57.9	47.3	48.7	52.7	56.6	46.1	47.5	51.4	55.2	43.8	45.1	48.8	52.4	40.6	41.8	45.2	48.6	
	S/T	0.75	0.67	0.50	0.32	0.77	0.69	0.52	0.34	0.79	0.71	0.54	0.35	0.82	0.73	0.55	0.36	0.85	0.76	0.57	0.37	0.86	0.77	0.58	0.37	
	Delta T	22	20	16	11	22	20	16	11	22	20	16	11	22	20	17	11	22	20	16	11	20	19	15	11	
	KW	4.13	4.21	4.34	4.47	4.43	4.52	4.66	4.81	4.70	4.80	4.95	5.11	4.94	5.05	5.21	5.38	5.14	5.25	5.42	5.60	5.32	5.43	5.61	5.80	
1575	AMPS	18.0	18.3	18.8	19.4	19.2	19.6	20.2	20.8	20.6	21.1	21.7	22.4	21.9	22.4	23.0	23.8	23.1	23.6	24.3	25.2	24.4	24.9	25.6	26.5	
	HI PR	233	251	265	276	261	281	297	310	297	320	338	352	338	364	385	401	381	410	433	451	421	453	478	498	
	LO PR	103	109	119	127	108	115	126	134	113	120	131	139	118	126	137	146	124	132	144	153	128	136	149	159	

COOLING PERFORMANCE DATA

HIGH STAGE - *PH1560M41*

MODEL: *PH1560M41* EXPANDED PERFORMANCE DATA HIGH STAGE COOLING OPERATION

		Outdoor Ambient Temperature																													
		65					75					85					95					105					115				
IDB*	Airflow	59	63	67	71	71	59	63	67	71	71	59	63	67	71	71	59	63	67	71	71	59	63	67	71	71	59	63	67	71	
80	2025	MBh	56.3	57.6	61.5	65.7	55.0	56.2	60.1	64.2	53.7	54.9	58.6	62.7	52.4	53.5	57.2	61.2	61.2	58.1	46.1	47.1	50.3	53.8							
		S/T	0.89	0.83	0.68	0.51	0.92	0.86	0.70	0.53	0.94	0.89	0.72	0.54	1.00	0.91	0.74	0.56	1.00	0.95	0.77	0.58									
		Delta T	23	22	19	15	23	22	19	15	23	22	19	15	24	22	19	15	23	22	19	15	21	20	18	14					
		KW	4.29	4.38	4.51	4.65	4.61	4.71	4.86	5.01	4.90	5.00	5.16	5.33	5.15	5.26	5.43	5.61	5.84	5.54	5.67	5.85	6.05								
		AMPS	18.7	19.1	19.6	20.2	20.0	20.4	21.0	21.7	21.5	22.0	22.6	23.4	22.8	23.3	24.0	24.8	24.1	24.6	25.4	26.3	25.4	26.0	26.8	27.7					
	HI PR	245	263	278	290	275	296	312	326	312	336	355	370	356	383	404	422	400	431	455	475	442	476	503	524						
	LO PR	108	115	125	133	114	121	132	141	118	126	138	147	124	132	145	154	130	139	151	161	135	144	157	167						
	MBh	54.7	55.9	59.7	63.8	53.4	54.6	58.3	62.3	52.1	53.3	56.9	60.9	50.9	52.0	55.5	59.4	48.3	49.4	52.8	56.4	44.8	45.7	48.9	52.2						
	S/T	0.85	0.80	0.65	0.48	0.88	0.82	0.67	0.50	0.90	0.85	0.69	0.51	0.93	0.87	0.71	0.53	0.97	0.91	0.74	0.55	0.97	0.91	0.74	0.56						
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	19	15						
1800	KW	4.26	4.34	4.48	4.62	4.57	4.67	4.82	4.97	4.86	4.96	5.12	5.28	5.10	5.22	5.38	5.56	5.32	5.43	5.61	5.79	5.50	5.62	5.80	6.00						
	AMPS	18.5	18.9	19.4	20.1	19.8	20.2	20.8	21.5	21.3	21.8	22.4	23.2	22.6	23.1	23.8	24.6	23.9	24.4	25.2	26.0	25.2	25.8	26.5	27.5						
	HI PR	242	261	275	287	272	293	309	322	309	333	352	367	352	379	400	418	396	427	450	470	438	471	498	519						
	LO PR	107	114	124	132	113	120	131	140	117	125	136	145	123	131	143	152	129	137	150	160	134	142	155	165						
	MBh	50.5	51.6	55.1	58.9	49.3	50.4	53.8	57.5	48.1	49.2	52.5	56.2	47.0	48.0	51.3	54.8	44.6	45.6	48.7	52.1	41.3	42.2	45.1	48.2						
1575	S/T	0.82	0.77	0.62	0.47	0.85	0.79	0.65	0.48	0.87	0.81	0.66	0.50	0.90	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.94	0.88	0.72	0.54						
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	25	24	20	16	24	23	20	16	23	22	19	15						
	KW	4.16	4.24	4.37	4.51	4.47	4.56	4.70	4.85	4.74	4.84	4.99	5.15	4.98	5.09	5.25	5.42	5.19	5.30	5.47	5.65	5.36	5.48	5.66	5.85						
	AMPS	18.1	18.5	19.0	19.6	19.4	19.8	20.3	21.0	20.8	21.2	21.9	22.6	22.1	22.5	23.2	24.0	23.3	23.8	24.5	25.4	24.6	25.1	25.9	26.8						
	HI PR	235	253	267	279	264	284	300	313	300	323	341	356	342	368	388	405	385	414	437	456	425	457	483	504						
LO PR	104	110	120	128	109	116	127	135	114	121	132	141	120	127	139	148	125	133	145	155	130	138	150	160							

HEATING PERFORMANCE DATA

PH15[24-42]M41

EXPANDED PERFORMANCE DATA

MODEL: ***PH1524M41***

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	29.4	27.8	26.2	24.5	23.4	22.7	21.1	19.4	15.6	14.4	13.2	12.5	12.0	10.8	9.6	8.4	7.1	5.8
Delta T	31.7	30.0	28.2	26.4	25.2	24.4	22.7	20.9	16.8	15.5	14.3	13.5	13.0	11.6	10.3	9.0	7.7	6.3
KW	2.08	2.04	2.00	1.96	1.94	1.92	1.88	1.84	1.81	1.77	1.73	1.71	1.69	1.65	1.61	1.57	1.53	1.49
AMPS	10.8	10.2	9.6	9.2	8.9	8.8	8.4	8.0	7.8	7.5	7.2	7.1	7.0	6.8	6.4	6.2	5.8	5.4
COP	4.14	4.00	3.84	3.66	3.54	3.46	3.28	3.09	2.52	2.38	2.24	2.15	2.09	1.92	1.74	1.56	1.36	1.15
EER	14.2	13.7	13.1	12.5	12.1	11.8	11.2	10.6	8.6	8.1	7.7	7.3	7.1	6.6	6.0	5.3	4.7	3.9
HI PR	388	372	358	342	334	328	315	302	290	277	266	259	255	245	235	226	218	210
LO PR	145	134	126	115	109	105	96	86	77	69	61	57	55	46	40	34	29	23

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1530M41****

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5	-10
MBh	34.4	32.6	30.7	28.7	27.4	26.6	24.7	22.7	18.8	17.4	16.0	15.1	14.5	13.0	11.6	10.1	8.6	7.1
Delta T	31.9	30.2	28.4	26.6	25.4	24.6	22.8	21.1	17.4	16.1	14.8	14.0	13.5	12.1	10.7	9.3	8.0	6.5
KW	2.31	2.27	2.22	2.18	2.15	2.13	2.09	2.04	2.08	2.03	1.98	1.95	1.93	1.89	1.84	1.79	1.74	1.69
AMPS	11.4	10.7	10.0	9.5	9.2	9.0	8.5	8.2	7.8	7.5	7.2	7.1	7.0	6.7	6.3	6.0	5.6	5.1
COP	4.36	4.21	4.04	3.86	3.73	3.65	3.46	3.26	2.65	2.51	2.36	2.26	2.20	2.03	1.84	1.65	1.45	1.22
EER	14.9	14.4	13.8	13.2	12.8	12.5	11.8	11.2	9.1	8.6	8.1	7.7	7.5	6.9	6.3	5.6	4.9	4.2
HI PR	383	368	353	338	330	324	311	299	286	273	262	256	251	242	233	223	215	208
LO PR	138	128	120	110	104	100	92	82	74	66	58	54	52	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1536M41***

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	44.6	42.2	39.8	37.2	35.5	34.4	32.0	29.5	23.2	21.4	19.7	18.6	17.9	16.1	14.3	12.4	10.6	8.7
Delta T	34.4	32.6	30.7	28.7	27.4	26.5	24.7	22.7	17.9	16.5	15.2	14.4	13.8	12.4	11.0	9.6	8.2	6.7
KW	3.24	3.18	3.11	3.05	3.01	2.98	2.92	2.85	2.43	2.37	2.32	2.29	2.26	2.21	2.15	2.10	2.04	1.99
AMPS	17.4	16.2	15.3	14.5	14.1	13.9	13.2	12.6	12.2	11.7	11.3	11.1	10.9	10.5	9.9	9.5	8.9	8.3
COP	4.03	3.89	3.74	3.57	3.45	3.38	3.21	3.02	2.80	2.64	2.49	2.38	2.32	2.13	1.94	1.73	1.52	1.28
EER	13.8	13.3	12.8	12.2	11.8	11.5	11.0	10.3	9.6	9.0	8.5	8.1	7.9	7.3	6.6	5.9	5.2	4.4
HI PR	454	435	418	400	390	383	368	353	338	323	310	303	297	286	275	264	254	245
LO PR	137	127	119	109	103	99	91	81	73	65	57	53	52	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1542M41***

LOW STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5	-10
MBh	33.3	31.5	29.7	27.7	26.5	25.7	23.9	22.0	16.2	15.0	13.8	13.0	12.5	11.2	10.0	8.7	7.4	6.1
Delta T	36.3	34.4	32.3	30.2	28.9	28.0	26.0	24.0	17.6	16.3	15.0	14.2	13.6	12.2	10.8	9.5	8.1	6.6
KW	2.48	2.43	2.38	2.33	2.30	2.28	2.23	2.18	2.19	2.13	2.08	2.05	2.03	1.97	1.92	1.87	1.82	1.76
AMPS	12.5	11.6	10.9	10.3	9.9	9.7	9.2	8.8	8.4	8.1	7.7	7.5	7.4	7.1	6.6	6.3	5.8	5.3
COP	3.92	3.79	3.65	3.49	3.37	3.30	3.13	2.96	2.17	2.05	1.94	1.86	1.81	1.67	1.52	1.36	1.19	1.01
EER	13.4	13.0	12.5	11.9	11.5	11.3	10.7	10.1	7.4	7.0	6.6	6.3	6.2	5.7	5.2	4.6	4.1	3.4
HI PR	395	379	364	348	340	334	321	308	295	282	270	264	259	249	240	230	222	214
LO PR	143	133	125	114	108	104	96	85	77	69	60	56	54	46	39	33	29	23

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1542M41***

HIGH STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5	-10
MBh	50.3	47.6	44.8	41.9	40.0	38.8	36.0	33.2	24.9	23.0	21.2	20.0	19.3	17.3	15.3	13.4	11.4	9.3
Delta T	37.2	35.3	33.2	31.0	29.6	28.7	26.7	24.6	18.5	17.0	15.7	14.8	14.3	12.8	11.3	9.9	8.4	6.9
KW	3.42	3.35	3.28	3.21	3.17	3.14	3.07	3.00	2.89	2.82	2.75	2.71	2.68	2.61	2.55	2.48	2.41	2.35
AMPS	16.8	15.6	14.7	13.9	13.4	13.2	12.5	11.9	11.4	10.9	10.5	10.2	10.1	9.7	9.1	8.6	8.0	7.3
COP	4.31	4.16	4.00	3.82	3.70	3.61	3.43	3.24	2.53	2.39	2.25	2.16	2.10	1.93	1.76	1.58	1.38	1.16
EER	14.7	14.2	13.7	13.1	12.6	12.3	11.7	11.1	8.6	8.2	7.7	7.4	7.2	6.6	6.0	5.4	4.7	4.0
HI PR	402	385	371	354	346	339	326	313	300	286	275	268	264	254	244	234	226	218
LO PR	135	126	118	108	102	98	90	80	73	65	57	53	51	43	37	31	27	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

See Performance Test information on page 43



WARNING

All wires and overcurrent protection devices are sized for use with electric heaters only and without refrigeration. If heaters are not installed with above wire size, overheating and fire could occur. See PACKAGE UNIT SPECIFICATIONS section for minimum circuit ampacity and maximum overcurrent protection during refrigeration cycle.

HEATING PERFORMANCE DATA

PH15[43-49]M41

EXPANDED PERFORMANCE DATA

MODEL: ***PH1543M41****

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	-10	
MBh	50.2	47.5	44.7	41.8	39.9	38.7	35.9	33.1	23.2	21.4	19.7	18.6	17.9	16.1	14.3	12.4	10.6	8.7
Delta T	38.7	36.6	34.5	32.2	30.8	29.8	27.7	25.6	17.9	16.5	15.2	14.4	13.8	12.4	11.0	9.6	8.2	6.7
KW	3.45	3.38	3.31	3.24	3.20	3.17	3.10	3.03	2.43	2.37	2.32	2.29	2.26	2.21	2.15	2.10	2.04	1.99
AMPS	18.5	17.3	16.3	15.5	15.0	14.8	14.0	13.4	12.9	12.5	12.0	11.7	11.6	11.1	10.5	10.0	9.4	8.7
COP	4.25	4.11	3.95	3.77	3.65	3.57	3.39	3.20	2.80	2.64	2.49	2.38	2.32	2.13	1.94	1.73	1.52	1.28
EER	14.5	14.0	13.5	12.9	12.5	12.2	11.6	10.9	9.6	9.0	8.5	8.1	7.9	7.3	6.6	5.9	5.2	4.4
HI PR	413	395	380	364	355	348	335	321	308	294	282	275	271	260	250	240	231	223
LO PR	143	133	125	114	108	104	96	85	77	69	60	56	54	46	39	33	29	23

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1548M41****

LOW STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	40.0	37.8	35.6	33.3	31.8	30.8	28.6	26.4	21.8	20.1	18.5	17.5	16.9	15.1	13.4	11.7	10.0	8.2
Delta T	30.8	29.2	27.5	25.7	24.5	23.8	22.1	20.4	16.8	15.5	14.3	13.5	13.0	11.7	10.3	9.0	7.7	6.3
KW	3.04	2.98	2.92	2.86	2.83	2.80	2.74	2.69	2.81	2.74	2.68	2.64	2.62	2.55	2.49	2.43	2.36	2.30
AMPS	11.5	10.8	10.2	9.7	9.4	9.3	8.8	8.5	8.2	7.9	7.6	7.5	7.4	7.1	6.8	6.5	6.1	5.7
COP	3.85	3.72	3.57	3.41	3.29	3.22	3.05	2.88	2.27	2.15	2.02	1.94	1.88	1.73	1.58	1.41	1.24	1.04
EER	13.1	12.7	12.2	11.6	11.2	11.0	10.4	9.8	7.8	7.3	6.9	6.6	6.4	5.9	5.4	4.8	4.2	3.6
HI PR	395	379	364	348	340	334	321	308	295	282	270	264	259	249	240	230	222	214
LO PR	139	129	121	111	105	101	93	83	75	67	59	54	52	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1548M41***

HIGH STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	-10	
MBh	57.4	54.3	51.1	47.8	45.7	44.2	41.1	37.9	30.7	28.3	26.1	24.6	23.7	21.3	18.8	16.4	14.0	11.5
Delta T	31.3	29.6	27.8	26.0	24.9	24.1	22.4	20.6	16.7	15.4	14.2	13.4	12.9	11.6	10.3	9.0	7.6	6.3
KW	4.20	4.12	4.04	3.96	3.92	3.88	3.81	3.73	3.66	3.58	3.50	3.45	3.42	3.34	3.26	3.19	3.11	3.03
AMPS	20.6	19.2	18.2	17.2	16.7	16.4	15.6	15.0	14.4	13.9	13.3	13.1	12.9	12.4	11.7	11.2	10.5	9.7
COP	4.00	3.86	3.70	3.53	3.41	3.34	3.16	2.98	2.45	2.32	2.18	2.09	2.03	1.86	1.69	1.51	1.32	1.11
EER	13.7	13.2	12.7	12.1	11.7	11.4	10.8	10.2	8.4	7.9	7.4	7.1	6.9	6.4	5.8	5.2	4.5	3.8
HI PR	411	394	379	363	354	347	334	320	307	293	282	275	270	260	250	239	231	223
LO PR	131	122	114	105	99	95	88	78	70	63	55	51	50	42	36	30	27	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1549M41***

LOW STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	40.0	37.8	35.6	33.3	31.8	30.8	28.6	26.4	21.8	20.1	18.5	17.5	16.9	15.1	13.4	11.7	10.0	8.2
Delta T	30.8	29.2	27.5	25.7	24.5	23.8	22.1	20.4	16.8	15.5	14.3	13.5	13.0	11.7	10.3	9.0	7.7	6.3
KW	3.04	2.98	2.92	2.86	2.83	2.80	2.74	2.69	2.81	2.74	2.68	2.64	2.62	2.55	2.49	2.43	2.36	2.30
AMPS	11.5	10.8	10.2	9.7	9.4	9.3	8.8	8.5	8.2	7.9	7.6	7.5	7.4	7.1	6.8	6.5	6.1	5.7
COP	3.85	3.72	3.57	3.41	3.29	3.22	3.05	2.88	2.27	2.15	2.02	1.94	1.88	1.73	1.58	1.41	1.24	1.04
EER	13.1	12.7	12.2	11.6	11.2	11.0	10.4	9.8	7.8	7.3	6.9	6.6	6.4	5.9	5.4	4.8	4.2	3.6
HI PR	395	379	364	348	340	334	321	308	295	282	270	264	259	249	240	230	222	214
LO PR	139	129	121	111	105	101	93	83	75	67	59	54	52	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1549M41***

HIGH STAGE HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5	-10
MBh	57.9	54.8	51.6	48.2	46.0	44.6	41.4	38.2	31.9	29.4	27.1	25.6	24.6	22.1	19.6	17.1	14.6	11.9
Delta T	39.8	37.7	35.5	33.2	31.7	30.7	28.5	26.3	21.9	20.2	18.6	17.6	17.0	15.2	13.5	11.8	10.0	8.2
KW	3.99	3.91	3.83	3.75	3.70	3.66	3.59	3.51	3.53	3.44	3.36	3.31	3.28	3.20	3.12	3.03	2.95	2.87
AMPS	20.2	18.8	17.7	16.8	16.3	16.0	15.2	14.5	14.0	13.4	12.9	12.6	12.5	11.9	11.2	10.7	10.0	9.2
COP	4.25	4.11	3.95	3.77	3.64	3.56	3.38	3.19	2.64	2.50	2.36	2.26	2.20	2.02	1.84	1.65	1.45	1.22
EER	14.5	14.0	13.5	12.9	12.4	12.2	11.6	10.9	9.0	8.5	8.1	7.7	7.5	6.9	6.3	5.6	4.9	4.2
HI PR	395	379	364	348	340	334	321	308	295	282	270	264	259	249	240	230	222	214
LO PR	143	133	125	114	108	104	96	85	77	69	60	56	54	46	39	33	29	23

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

See Performance Test information on page 43



WARNING

All wires and overcurrent protection devices are sized for use with electric heaters only and without refrigeration. If heaters are not installed with above wire size, overheating and fire could occur. See PACKAGE UNIT SPECIFICATIONS section for minimum circuit ampacity and maximum overcurrent protection during refrigeration cycle.

HEATING PERFORMANCE DATA

PH1560M41

EXPANDED PERFORMANCE DATA

MODEL: ***PH1560M41***

LOW STAGE

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	50.1	47.4	44.6	41.7	39.8	38.6	35.8	33.1	26.6	24.5	22.6	21.3	20.5	18.4	16.3	14.2	12.2	10.0
Delta T	34.3	32.5	30.6	28.6	27.3	26.5	24.6	22.7	18.2	16.8	15.5	14.6	14.1	12.6	11.2	9.8	8.3	6.8
KW	3.76	3.68	3.61	3.53	3.49	3.46	3.39	3.31	3.44	3.36	3.28	3.24	3.21	3.13	3.05	2.97	2.89	2.81
AMPS	19.6	18.2	17.2	16.2	15.7	15.4	14.6	14.0	13.4	12.9	12.4	12.1	12.0	11.4	10.8	10.2	9.6	8.8
COP	3.90	3.76	3.62	3.45	3.34	3.26	3.09	2.92	2.26	2.13	2.01	1.93	1.87	1.72	1.57	1.40	1.23	1.04
EER	13.3	12.9	12.4	11.8	11.4	11.2	10.6	10.0	7.7	7.3	6.9	6.6	6.4	5.9	5.4	4.8	4.2	3.5
HI PR	391	375	361	345	337	330	318	305	292	279	268	261	257	247	237	228	220	212
LO PR	139	129	121	111	105	101	93	83	75	67	59	54	53	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: ***PH1560M41***

HIGH STAGE

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	70.4	66.6	62.7	58.6	56.0	54.3	50.4	46.5	38.9	35.9	33.0	31.2	30.0	27.0	23.9	20.8	17.8	14.6
Delta T	36.2	34.3	32.3	30.2	28.8	27.9	25.9	23.9	20.0	18.5	17.0	16.0	15.5	13.9	12.3	10.7	9.1	7.5
KW	5.24	5.14	5.04	4.94	4.88	4.83	4.74	4.63	4.52	4.42	4.32	4.26	4.22	4.12	4.02	3.92	3.82	3.72
AMPS	26.6	24.8	23.4	22.1	21.4	21.0	20.0	19.1	18.4	17.7	16.9	16.6	16.4	15.7	14.8	14.1	13.2	12.1
COP	3.93	3.79	3.64	3.48	3.36	3.29	3.11	2.94	2.52	2.38	2.24	2.14	2.08	1.92	1.74	1.56	1.36	1.15
EER	13.4	13.0	12.5	11.9	11.5	11.2	10.6	10.0	8.6	8.1	7.7	7.3	7.1	6.5	5.9	5.3	4.7	3.9
HI PR	411	394	379	362	354	347	333	320	306	293	281	274	269	259	249	239	230	222
LO PR	130	121	113	104	98	94	87	77	70	62	55	51	49	42	36	30	26	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

PERFORMANCE TEST

All data based upon listed indoor dry bulb temperature. .00 inches external static pressure on coil of outdoor section. Indoor air cubic feet per minute (CFM) as listed in the Performance Data Sheets:

If conditions vary from this, results will change as follows:

1. As indoor dry bulb temperatures increase, a slight increase will occur in indoor air temperature drop (Delta T). Low and high side pressures and power will not change.
2. As indoor CFM decreases, a slight increase will occur in indoor temperature drop (Delta T). A slight decrease will occur in low and high side pressures and power.

A properly operating unit should be within plus or minus **3 degrees** of the typical (**Delta T**) value shown.

A properly operating unit should be within plus or minus **7 PSIG** of the **HI PR** shown.

A properly operating unit should be within plus or minus **3 PSIG** of the **LO PR** shown.

A properly operating unit should be within plus or minus **3 Amps** of the typical value shown.



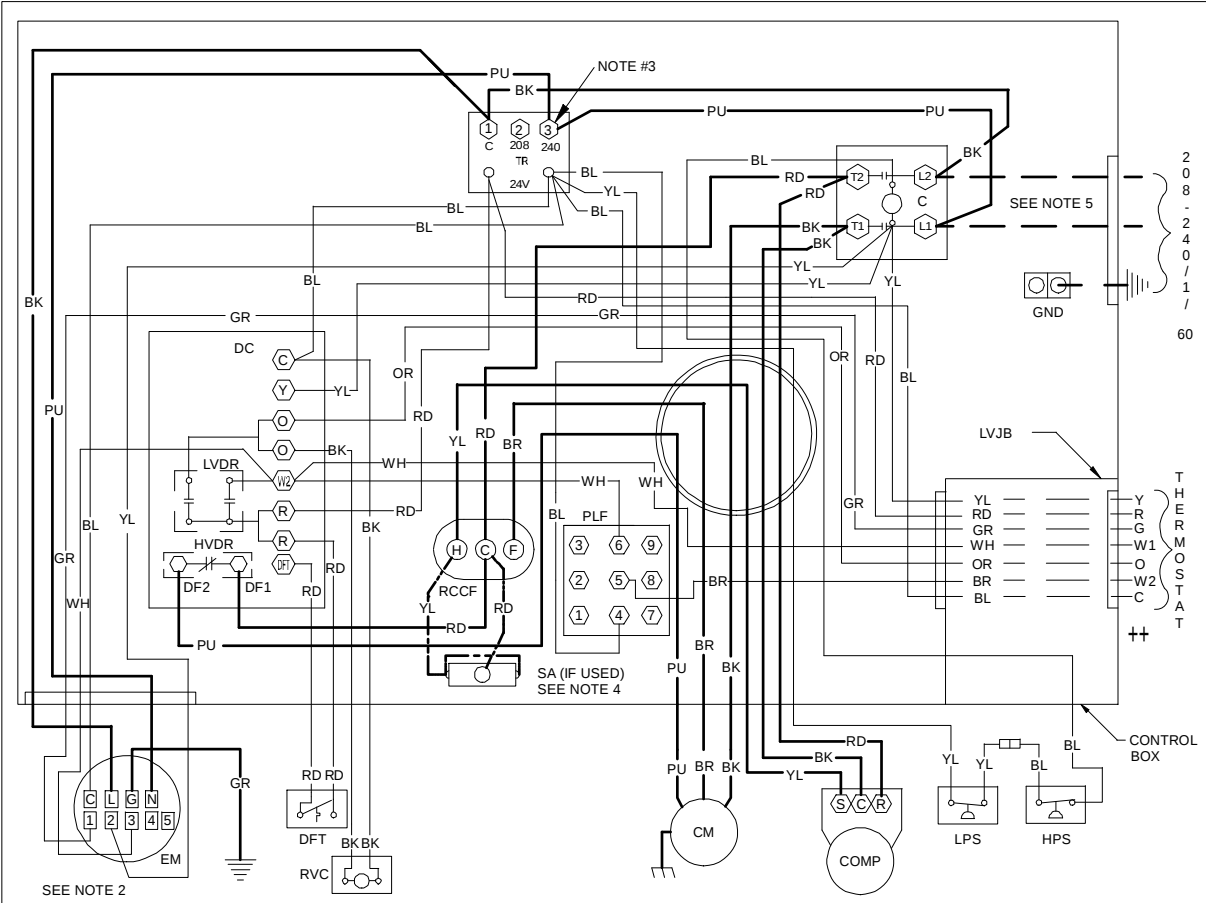
WARNING

All wires and overcurrent protection devices are sized for use with electric heaters only and without refrigeration. If heaters are not installed with above wire size, overheating and fire could occur. See PACKAGE UNIT SPECIFICATIONS section for minimum circuit ampacity and maximum overcurrent protection during refrigeration cycle.



WARNING

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



COMPONENT LEGEND

C	CONTACTOR
CM	CONDENSER MOTOR
COMP	COMPRESSOR
DC	DEFROST CONTROL
DFT	DEFROST THERMOSTAT
EM	EVAPORATOR MOTOR
GND	EQUIPMENT GROUND
HPS	HIGH PRESSURE SWITCH
HVDR	HIGH VOLTAGE DEFROST RELAY
LPS	LOW PRESSURE SWITCH
LVDR	LOW VOLTAGE DEFROST RELAY
LVJB	LOW VOLTAGE JUNCTION BOX
PLF	FEMALE PLUG / CONNECTOR
RVC	REVERSING VALVE COIL
RCCF	RUN CAPACITOR FOR COMPRESSOR AND FAN
SA	START ASSIST
TR	TRANSFORMER

FACTORY WIRING

- LINE VOLTAGE
- LOW VOLTAGE
- OPTIONAL HIGH VOLTAGE

FIELD WIRING

- HIGH VOLTAGE
- LOW VOLTAGE

WIRE CODE

BK	BLACK
BL	BLUE
BR	BROWN
GR	GREEN
OR	ORANGE
PU	PURPLE
RD	RED
WH	WHITE
YL	YELLOW

NOTES:

- REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE INSULATION AS ORIGINAL (AT LEAST 105°C) USE COPPER CONDUCTOR ONLY.
- TO CHANGE EVAPORATOR MOTOR SPEED MOVE WHITE AND YELLOW LEADS FROM EM"2" AND "3" TO "4" AND "5". IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
- FOR 208 VOLT TRANSFORMER OPERATION MOVE PURPLE WIRES FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
- START ASSIST FACTOR EQUIPPED WHEN REQUIRED
- USE COPPER CONDUCTORS ONLY
- ++ USE N.E.C. CLASS 2 WIRE

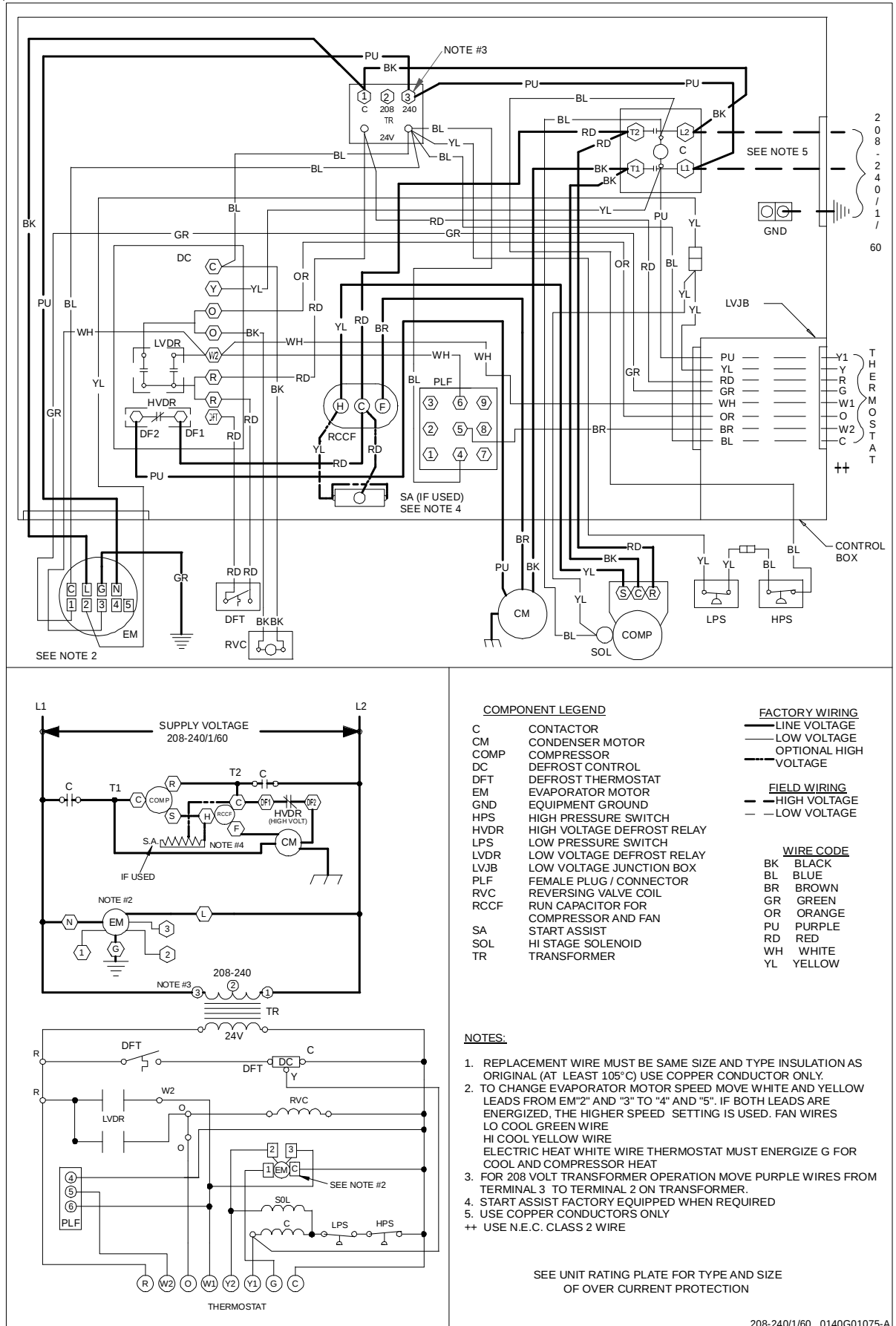
SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION

208-240/1/60 0140G00592 Rev. B

Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAMS

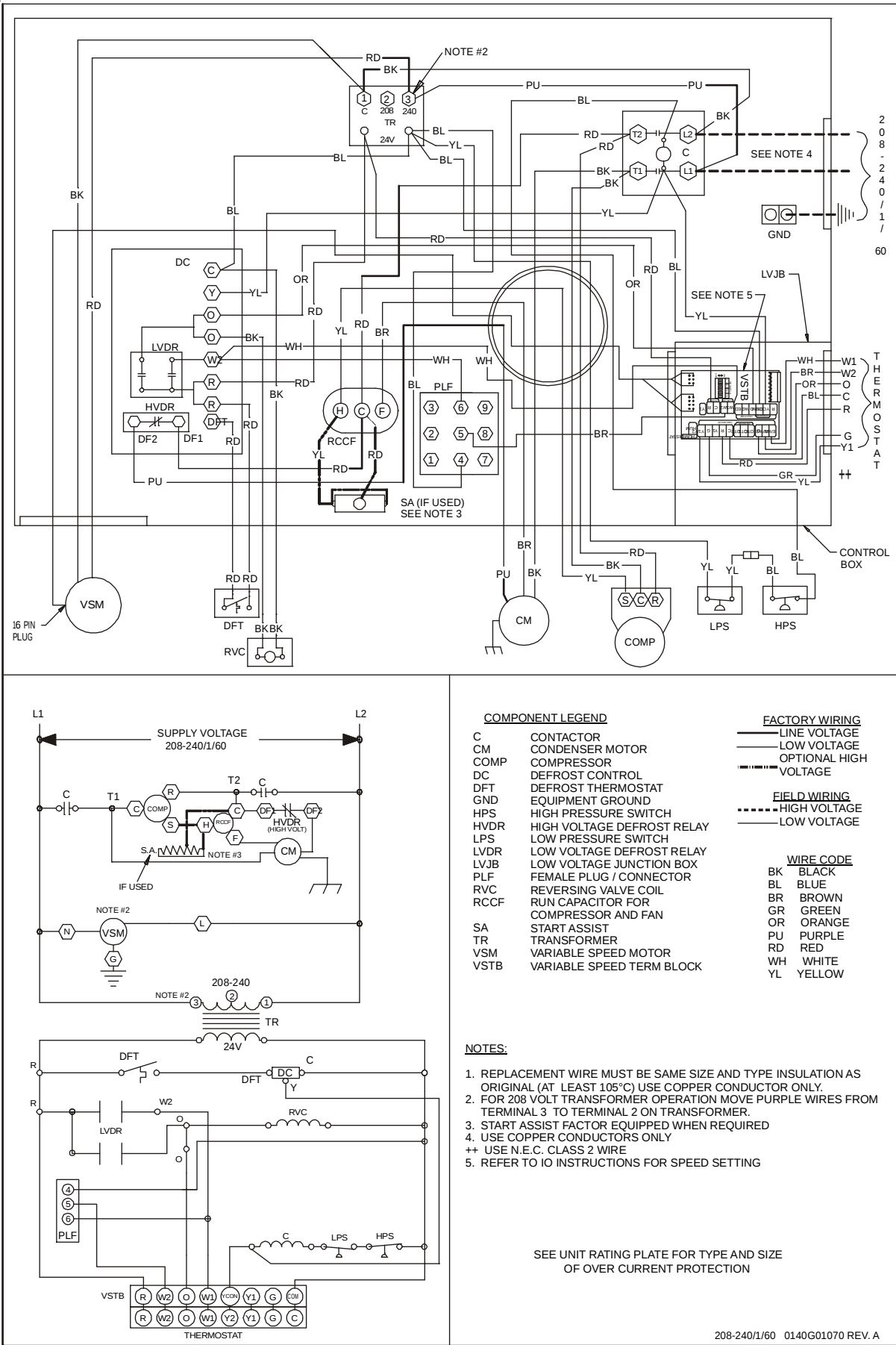
GPH15[42, 48-60]M41*



Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.

WARNING

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



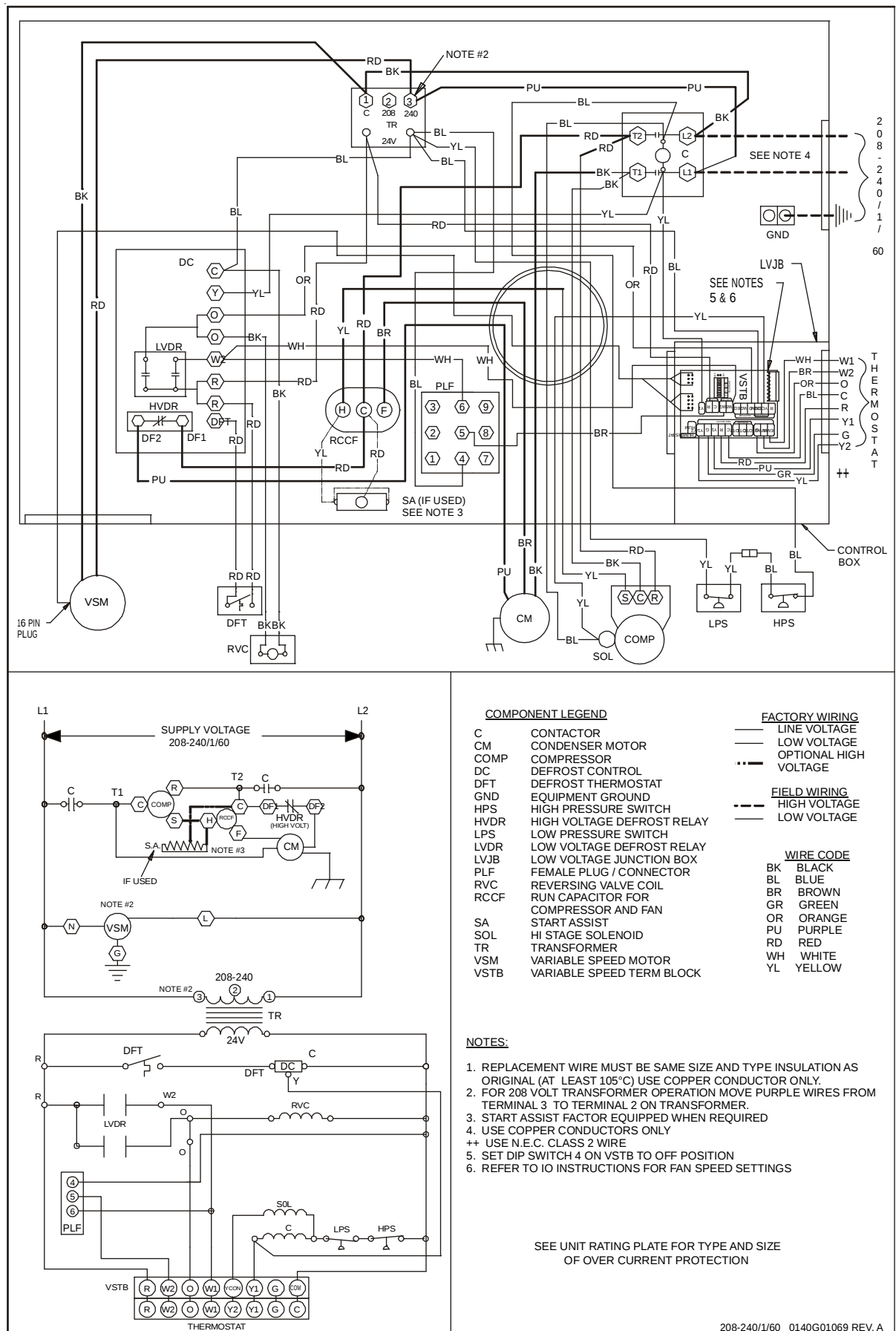
Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAMS

APH15[42, 48-60]M41*

WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.