



VersaPro® Series Packaged Heat Pump

13.4 SEER2
Capacity:24-60 kBTU/h



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Standard Features:

- Quiet horizontal discharge
- Power-painted galvanized steel cabinet
- Electric heat kit available as an installed field option: 5/8/10/15/20kW
- High-efficiency compressors operate smoothly, quietly, and consistently.
- Internal safeguards protect the compressor against high and low pressure, and coil temperature
- Aluminum tube/aluminum fin coil
- High-efficiency ECM blower motor
- AHRI Certified and ETL listed
- Compliant with UL-60335 certification
- Uses more environmentally friendly R-454B refrigerant
- Full series 5mm condenser, higher heat exchange efficiency with less flammable, safer refrigerant charge
- Full DC variable speed motor--more efficient, smarter, and quieter

VersaPro® Series Packaged Heat Pump

1 Nomenclature

M	P	H	24	1	H	O	13	C
1	2	3	4	5	6	7	8	9

Legend		
#	Code	Remarks
1	M	MRCOOL®
2	P	Packaged Unit
3	H	Heat Pump
4	24	Capacity: 24:24K BTU/H; 30: 30K BTU/H; 36: 36KBTU/H 42: 42K BTU/H; 48: 48K BTU/H; 60:60K BTU/H
5	1	Single Phase
6	H	M=Multi-Position (Horizontal/Downflow) H=Horizontal
7	O	Refrigerant Type: O=R-454B
8	13	13.4 SEER
9	C	4th Generation

VersaPro® Series Packaged Heat Pump

2 Specifications

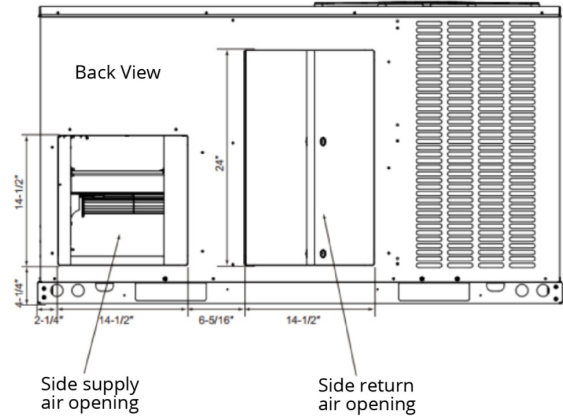
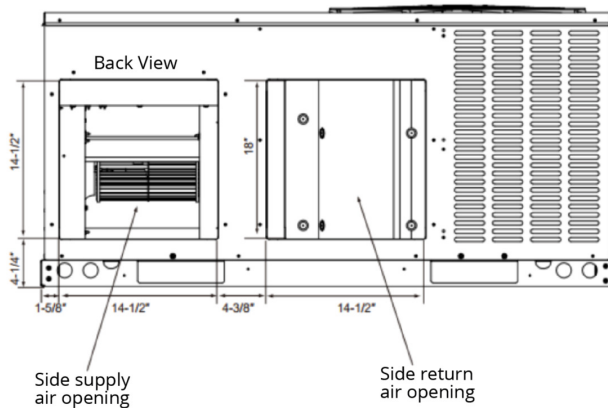
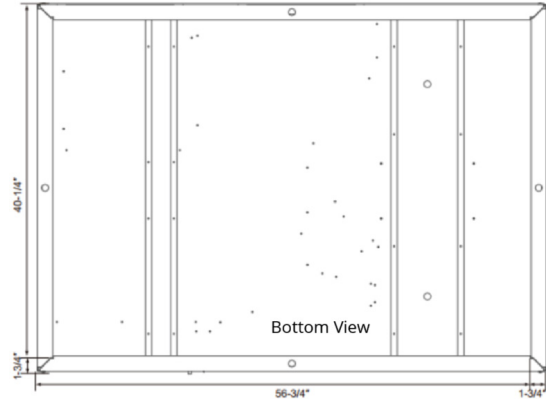
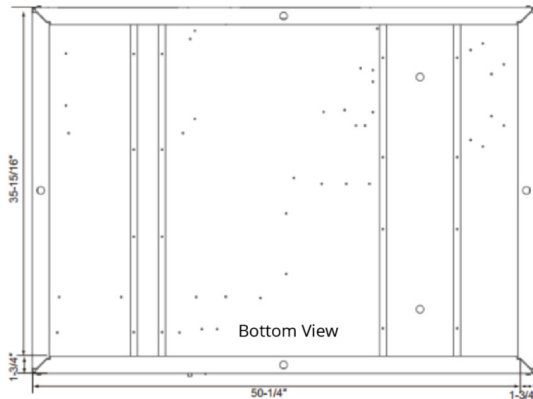
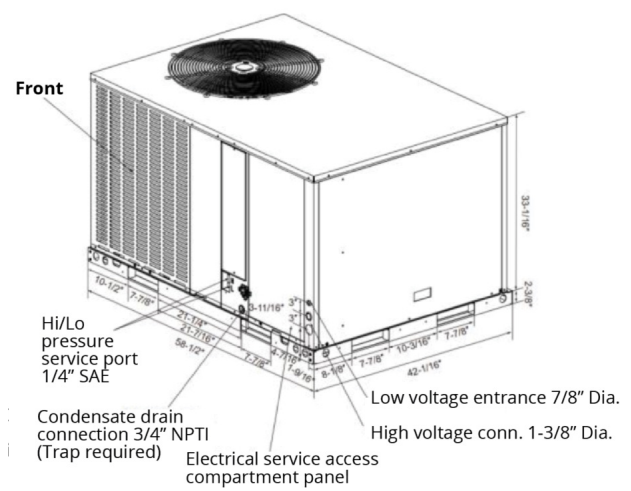
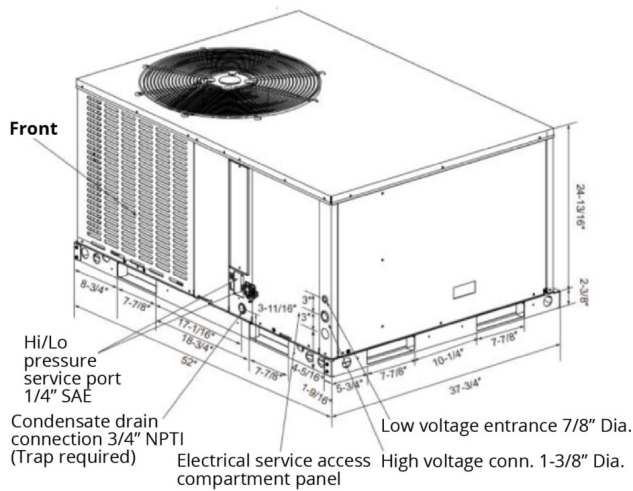
	MPH241HO13C	MPH301HO13C	MPH361HO13C
NOMINAL CAPACITY			
Cooling (BTU/h)	22,800	28,200	34,200
Heating (BTU/h)	22,400	27,600	34,200
ELECTRICAL DATA			
Voltage/Phase (60 Hz)	208/230V-1Ph	208/230V-1Ph	208/230V-1Ph
Min./Max. Voltage (V)	187/253	187/253	187/253
Min. Circuit Amps (MCA) (A)	17.9	24.4	27.1
Max. Overcurrent Protection (MOP) (A)	25	30	35
COMPRESSOR			
Type	Rotary	Rotary	Scroll
Stage	Single	Single	Single
Rated Load Amps (RLA) (A)	11.9	15.5	17.6
Locked Rotor Amps (LRA) (A)	55	55	86
OUTDOOR COIL			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Outside Dia. (mm)	5	5	5
OUTDOOR FAN MOTOR			
Motor Type	ECM	ECM	ECM
Capacitor (uF)	/	/	/
Horsepower (HP)	1/4	1/3	1/3
Full Load Amps (FLA) (A)	1.4	2.1	2.1
Rated Airflow (CFM)	2,250	2,550	2,550
INDOOR COIL			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Outside Dia. (mm)	7	7	7
INDOOR BLOWER MOTOR			
Motor Type	PSC	ECM	ECM
Capacitor (uF)	/	/	/
Horsepower (HP)	1/4	1/2	1/4
Full Load Amps (FLA) (A)	1.6	2.9	3.0
Rated Airflow (CFM at 0.58 in H ₂ O)	840	1050	1200
REFRIGERATION SYSTEM			
Refrigerant Control	Piston	Piston	Piston
Refrigerant Charge (lbs.-oz.)	3 lbs. 14 oz.	3 lbs. 10 oz	3 lbs. 12 oz
SOUND POWER (dB(A))	80	81	81
OPERATION RANGE			
Cooling (°C)	0~46.1	0~46.1	0~46.1
Cooling (°F)	32~114.9	32~114.9	32~114.9
Heating (°C)	-18~30	-18~30	-18~30
Heating (°F)	-0.4~86	-0.4~86	-0.4~86
Dimension & Weight			
Unpacking (W*H*D) mm	958 x 630 x 1321	958 x 630 x 1321	958 x 630 x 1321
inch	37.75 x 24.81 x 52	37.75 x 24.81 x 52	37.75 x 24.81 x 52
Packing (W*H*D) mm	965 x 655 x 1340	965 x 655 x 1340	965 x 655 x 1340
inch	38 x 25.81 x 52.76	38 x 25.81 x 52.76	38 x 25.81 x 52.76
Net/Gross Weight kg	148/154	148/154	153/159
lb	326/340	326/340	337/351
Shipping per STD 40HQ	84	84	84

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	MPH421HO13C	MPH481HO13C	MPH601HO13C
NOMINAL CAPACITY			
Cooling (BTU/h)	40,500	46,500	56,500
Heating (BTU/h)	40,500	46,500	56,000
ELECTRICAL DATA			
Voltage/Phase (60 Hz)	208/230V-1Ph	208/230V-1Ph	208/230V-1Ph
Min./Max. Voltage (V)	187/253	187/253	187/253
Min. Circuit Amps (MCA) (A)	29.9	36	48.6
Max. Overcurrent Protection (MOP) (A)	40	45	60
COMPRESSOR			
Type	Scroll	Scroll	Scroll
Stage	Single	Single	Single
Rated Load Amps (RLA) (A)	19.9	23.8	32
Locked Rotor Amps (LRA) (A)	96	95	125
OUTDOOR COIL			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Outside Dia. (mm)	5	5	5
OUTDOOR FAN MOTOR			
Motor Type	ECM	ECM	ECM
Capacitor (uF)	/	/	/
Horsepower (HP)	1/3	1/4	1/4
Full Load Amps (FLA) (A)	2.3	2.3	2.8
Rated Airflow (CFM)	3,600	3,600	3,600
INDOOR COIL			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Outside Dia. (mm)	7	7	7
INDOOR BLOWER MOTOR			
Motor Type	PSC	PSC	ECM
Capacitor (uF)	/	/	/
Horsepower (HP)	1/4	1/2	3/4
Full Load Amps (FLA) (A)	2.7	2.9	5.8
Rated Airflow (CFM at 0.58 in H ₂ O)	1430	1620	1750
REFRIGERATION SYSTEM			
Refrigerant Control	Piston	Piston	Piston
Refrigerant Charge (lbs.-oz.)	5 lbs. 15 oz.	6 lbs. 1 oz	5 lbs. 15 oz
SOUND POWER (dB(A))	80	81	81
OPERATION RANGE			
Cooling (°C)	0~46.1	0~46.1	0~46.1
Cooling (°F)	32~114.9	32~114.9	32~114.9
Heating (°C)	-18~30	-18~30	-18~30
Heating (°F)	-0.4~86	-0.4~86	-0.4~86
Dimension & Weight			
Unpacking (W*H*D) mm	1068 x 840 x 1485.9	1068 x 840 x 1485.9	1068 x 840 x 1485.9
inch	42.06 x 33.06 x 58.5	42.06 x 33.06 x 58.5	42.06 x 33.06 x 58.5
Packing (W*H*D) mm	1073 x 865 x 1505	1073 x 865 x 1505	1073 x 865 x 1505
inch	42.24 x 34.07 x 59.25	42.24 x 34.07 x 59.25	42.24 x 34.07 x 59.25
Net/Gross Weight kg	206/214	206/214	204/212
lb	454/472	454/472	450/467
Shipping per STD 40HQ	45	45	45

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3 Dimensional Drawing



Model	Unit Width "W" in. [mm]	Unit Height "H" in. [mm]	Unit Length "D" in. [mm]	Net Weight kg [lb]	Gross Weight kg [lb]
24	37.75 [958]	24.81 [630]	52 [1321]	148 [326]	154 [340]
30	37.75 [958]	24.81 [630]	52 [1321]	148 [326]	154 [340]
36	37.75 [958]	24.81 [630]	52 [1321]	153 [337]	159 [351]
42	42.06 [1068]	33.06 [840]	58.5 [1485.9]	206 [454]	214 [472]
48	42.06 [1068]	33.06 [840]	58.5 [1485.9]	206 [454]	214 [472]
60	42.06 [1068]	33.06 [840]	58.5 [1485.9]	204 [450]	212 [467]

VersaPro® Series Packaged Heat Pump

4 Electrical Heater Kit (Optional)

Electric Heater Kit Electrical Data (only Electric Heat)

Model Number	Volt	Heater Circuit (without units)					
		Model	kW	Stages	Amps	MCA (Amps)	Max Fuse Breaker Size (Amps)
24	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
30	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
		EHK-15G	11.3/15	1	54.2/62.5	68/79	70/80
36	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
		EHK-15G	11.3/15	1	54.2/62.5	68/79	70/80
42	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
		EHK-15G	11.3/15	1	54.2/62.5	68/79	70/80
		EHK-20G	15/20	1	72.3/83.4	91/105	100/110
48	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
		EHK-15G	11.3/15	1	54.2/62.5	68/79	70/80
		EHK-20G	15/20	1	72.3/83.4	91/105	100/110
60	208/230-1-60	EHK-05G	3.8/5	1	18.1/20.8	23/26	25/30
		EHK-08G	5.6/7.5	1	27.1/31.3	34/40	35/40
		EHK-10G	7.5/10	1	36.1/41.7	46/53	50/60
		EHK-15G	11.3/15	1	54.2/62.5	68/79	70/80
		EHK-20G	15/20	1	72.3/83.4	91/105	100/110

1. MCA=Minimum Circuit Ampacity.
2. Maximum Over Current Protection per Standard UL 60335.
3. Fuse or HACR circuit breaker size installed at factory or field installed.

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5 Airflow Data

Duct Application (230V)

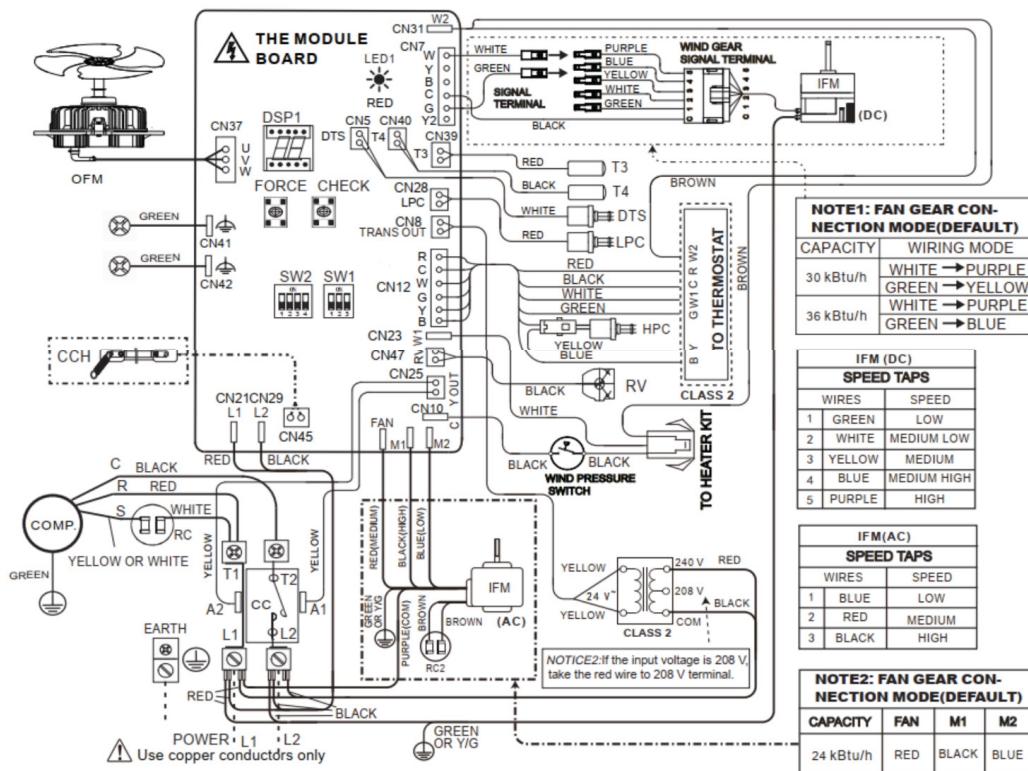
Model Number	Motor Speed		SCFM								
			External Static Pressure in H ₂ O[kPa]								
			0[0]	0.1[.02]	0.2[.05]	0.3[.07]	0.4[.10]	0.5[.12]	0.6[.015]	0.7[.017]	0.8[.20]
24	Low-Tap(1)	SCFM	885	744	691	643	/	/	/	/	/
		Watts	227	185	182	152	/	/	/	/	/
		Amps	2.07	0.77	0.75	0.73	/	/	/	/	/
	Mid-Tap(2) (Factory)	SCFM	/	/	/	882	828	751	698	/	/
		Watts	/	/	/	269	262	253	246	/	/
		Amps	/	/	/	1.37	1.34	1.31	1.27	/	/
	High-Tap(3)	SCFM	/	/	/	/	/	964	896	759	621
		Watts	/	/	/	/	/	360	330	307	276
		Amps	/	/	/	/	/	1.78	1.71	1.64	1.57
30	Low-Tap(1)	SCFM	911	869	828	782	723	/	/	/	/
		Watts	0.9	1	1	1.1	1.2	/	/	/	/
		Amps	103	113	122	131	141	/	/	/	/
	Mid-Tap(2)	SCFM	/	1031	995	961	927	876	829	782	740
		Watts	/	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9
		Amps	/	159	170	180	190	203	213	222	230
	High-Tap(3) (Factory)	SCFM	/	/	/	/	1079	1050	1015	967	926
		Watts	/	/	/	/	2	2.1	2.2	2.3	2.4
		Amps	/	/	/	/	246	257	270	286	297
36	Low-Tap(2)	SCFM	1073	1031	995	961	927	876	/	/	/
		Watts	1.2	1.3	1.4	1.5	1.6	1.7	/	/	/
		Amps	148	159	170	180	190	203	/	/	/
	Mid-Tap(3)	SCFM	/	1177	1142	1110	1079	1050	1015	967	926
		Watts	/	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4
		Amps	/	209	221	233	246	257	270	286	297
	High-Tap(4) (Factory)	SCFM	/	/	/	/	/	1232	1205	1178	1152
		Watts	/	/	/	/	/	2.8	2.9	3	3.1
		Amps	/	/	/	/	/	347	361	374	386
42	Low-Tap(1) (Factory)	SCFM	1735	1507	1463	1418	1366	1307	1239	1144	/
		Watts	579	479	469	458	447	433	418	400	/
		Amps	2.52	2.55	2.52	2.49	2.46	2.42	2.38	2.33	/
	Mid-Tap(2)	SCFM	/	/	/	/	1551	1488	1414	1318	1200
		Watts	/	/	/	/	728	712	693	672	644
		Amps	/	/	/	/	4.1	4.05	3.99	3.92	3.84
	High-Tap(3)	SCFM	/	/	/	/	/	/	1570	1499	1380
		Watts	/	/	/	/	/	/	812	787	759
		Amps	/	/	/	/	/	/	4.57	4.49	4.4
48	Low-Tap(1)	SCFM	1735	1701	1654	1608	1554	1495	1429	1340	/
		Watts	579	573	561	545	527	510	469	465	/
		Amps	2.52	2.49	2.44	2.37	2.29	2.22	2.15	2.02	/
	Mid-Tap(2) (Factory)	SCFM	/	/	/	1790	1730	1665	1591	1503	1384
		Watts	/	/	/	658	642	614	592	566	533
		Amps	/	/	/	2.86	2.79	2.67	2.57	2.46	2.32
	High-Tap(3)	SCFM	/	/	/	/	/	/	1761	1666	1548
		Watts	/	/	/	/	/	/	732	704	662
		Amps	/	/	/	/	/	/	3.18	3.06	2.88
60	Low-Tap(3) (Factory)	SCFM	1830	1784	1742	1700	1658	1618	1579	1542	1503
		Watts	2.4	2.5	2.7	2.8	2.9	3	3.1	3.2	3.3
		Amps	306	320	336	350	365	380	392	407	420
	Mid-Tap(4) (Factory)	SCFM	1983	1943	1906	1862	1824	1784	1745	1709	1674
		Watts	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.9	4.0
		Amps	391	406	421	438	453	469	486	501	515
	High-Tap(5)	SCFM	2250	2201	2159	2120	2083	2047	2023	1978	1946
		Watts	4.3	4.4	4.5	4.6	4.7	4.9	5	5.1	5.2
		Amps	562	575	593	609	627	645	666	682	700

- The above airflow data is for reference only.
- The air distribution system has the greatest affect on airflow. The duct system is totally controlled by the contractor. For this reason, the contractor should only use industry-recognized procedures.
- The installers should balance the air distribution system to ensure proper quiet airflow to all rooms in the home. This ensures a comfortable living space.
- Heat pump systems require a specified airflow. Each ton of cooling requires between 300 and 450 cubic feet of air per minute (CFM), or 400 CFM nominally.
- Duct design and construction should be carefully done. System performance can be lowered dramatically due to poor duct design.
- Air supply diffusers must be selected and located carefully. They must be sized and positioned to deliver treated air along the perimeter of the space. If they are too small for their intended airflow, they become noisy. If they are not located properly, they can cause drafts. Return air grilles must be properly sized to carry air back to the blower. If they are too small, they also cause noise.
- The installers should balance the air distribution system to ensure proper quiet airflow to all rooms in the home. This ensures a comfortable living space.
- An air velocity meter or airflow hood can give a reading of system CFM.
- During installation, the installer should select the air speed according to the actual setting static pressure. Please refer to the Airflow Data.

VersaPro® Series Packaged Heat Pump

6 Wiring Diagram

24/30/36K:



NOTE1: FAN GEAR CONNECTION MODE(DEFAULT)

CAPACITY	WIRING MODE
30 kBTu/h	WHITE → PURPLE GREEN → YELLOW
36 kBTu/h	WHITE → PURPLE GREEN → BLUE

IFM (DC) SPEED TAPS

WIRES	SPEED
1 GREEN	LOW
2 WHITE	MEDIUM LOW
3 YELLOW	MEDIUM
4 BLUE	MEDIUM HIGH
5 PURPLE	HIGH

IFM (AC) SPEED TAPS

WIRES	SPEED
1 BLUE	LOW
2 RED	MEDIUM
3 BLACK	HIGH

NOTE2: FAN GEAR CONNECTION MODE(DEFAULT)

CAPACITY	FAN	M1	M2
24 kBTu/h	RED	BLACK	BLUE

CODE	FAULT DESCRIPTION
E3	T3 sensor fault
E4	T4 sensor fault
E8	Capacity setting no set
E9	R110 resistor or drive chip software fault
P2	LPC protection
P4	Discharge temperature protection
P5	T3 high-temperature protection
AL	Ambient temperature limitation
H0	Communication fault between drive chip and main control chip
n1X	OFM overcurrent protection
n2X	Drive module overtemperature protection
n3X	DC bus voltage fault
n4X	IPM Fault
n5X	OFM startup fault
n6X	Phase loss protection
"n" serial faults, alternately display n and xx	

SW1	SW1-1	ON	13.4HP package(only used for replacing board)
	SW1-2	OFF	Reserved
	SW1-3	ON	Reserved
		OFF	Reserved
		ON	Defrosting cycle:30 min
		OFF	Defrosting cycle:60 min

Hazardous voltage line

- Factory standard
- Field installed
- Factory optional

Extra-low-voltage line

- Factory standard
- Factory optional

MODEL	DESCRIPTION
13.4 HP	13.4 SEER heat exchanger package unit

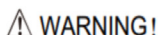
CODE	DESCRIPTION
CC	Compressor Contactor
COMP.	Compressor
CCH	Crankcase Heater
T4	Ambient Temperature Sensor
T3	Pipe Temperature Sensor
HPC	High Pressure Cut-out Control
LPC	Low Pressure Cut-out Control
DTS	Discharge Temperature Switch
OFM	Outdoor Fan Motor
IFM	Indoor Fan Motor
RC	Run Capacitor
RV	Reversing Valve

CAPACITY SETTING	MODEL	24 kBTu/h 2 TON	30 kBTu/h 2.5 TON	36 kBTu/h 3 TON	SW2 - 4 definition
SW2	13.4 HP	001,1	010,1	010,1	100 W Fan motor
		42 kBTu/h 3.5 TON	48 kBTu/h 4 TON	60 kBTu/h 5 TON	200 W Fan motor
		100,1	100,1	100,1	

0/1 DEFINITION OF DIP SWITCH	CODE	DESCRIPTION
means 0=OFF	--	Standby
	-C	Cooling mode
	-H	Heating mode
	FC	Forced cooling mode
	dF	Defrosting mode
	CH	Abnormal signal

Force	Press 1 s	Forced cooling mode
	Press 6 s	Forced defrosting mode
Check	Press 1 s	Check the system parameters

NUMBER	POINT CHECK CONTENT
1	Unit capacity
2	Operation mode
3	Current fan speed(Actual speed divided by 10, for example, 560R is represented by '56.', 1050R is represented by 'A5.', hexadecimal number A represents 10.)
4	Target fan speed(Target speed divided by 10, for example, 560R is represented by '56.', 1050R is represented by 'A5.', hexadecimal number A represents 10.)
5	T3 temperature("F)(if the value is less than 100, the actual value is displayed. if over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
6	T4 temperature("F)(if the value is less than 100, the actual value is displayed. if over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
7	Compressor running time(day)(if the value is less than 100, the actual number of days is displayed. if over 100 and less than 1000, 360 days are represented by '36.', if over 1000, 3600 days are represented by '3.6.')
8	Main control chip software version
9	Drive chip software version
10	Y signal state(1=ON, 0=OFF)
11	B signal state(1=ON, 0=OFF)
12	W1 signal state(1=ON, 0=OFF)
13	W2 signal state(1=ON, 0=OFF)
14	RV(4-Way Valve) condition (1=ON, 0=OFF)
15	High fan speed mode (1=ON, 0=OFF)
16	Last fault code
17	Last second fault code
18	Last third fault code
19	--



WARNING!

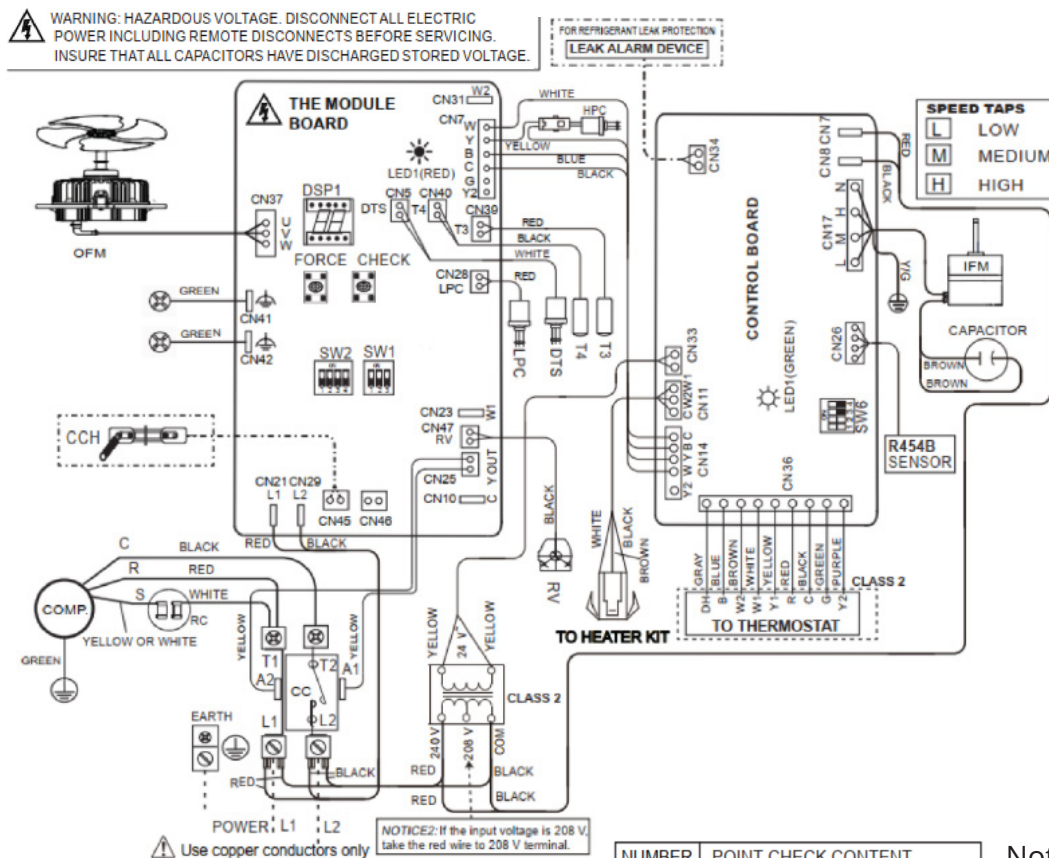
Cabinet must be permanently earthed, and all wiring conform to UL60335.
Replacement wires must be the same gauge and insulation type as original wires.

Notice:

1. B terminal is connected and energized for heating operation.
2. W terminal is energized in defrosting operation.

VersaPro® Series Packaged Heat Pump

42/48K:



CODE	FAULT DESCRIPTION
E3	T3 sensor fault
E4	T4 sensor fault
E8	Capacity setting no set
E9	R110 resistor or drive chip software fault
P2	LPC protection
P4	Discharge temperature protection
P5	T3 high-temperature protection
AL	Ambient temperature limitation
H0	Communication fault between drive chip and main control chip
n1X	OFM overcurrent protection
n2X	Drive module overtemperature protection
n3X	DC bus voltage fault
n4X	IPM Fault
n5X	OFM startup fault
n6X	Phase loss protection
"n" serial faults, alternately display n and xx	

CODE	DESCRIPTION
CC	Compressor Contactor
COMP.	Compressor
CCH	Crankcase Heater
T4	Ambient Temperature Sensor
T3	Pipe Temperature Sensor
HPC	High Pressure Cut-out Control
LPC	Low Pressure Cut-out Control
DTS	Discharge Temperature Switch
OFM	Outdoor Fan Motor
RC	Run Capacitor
RV	Reversing Valve
IFM	Indoor Fan Motor
Force	Press 1 s Forced cooling mode
Press 6 s	Forced defrosting mode
Check	Press 1 s Check the system parameters

LED1(GREEN) STATUS	CONTENT
STEADY ON	Normal Operation
OFF	Power Supply Fault
KEEP FLASHING	Refrigerant Leak Protection
3 FLASH/CYCLE	R454B Refrigerant Sensor Fault
4 FLASH/CYCLE	R454B Refrigerant Sensor Communication Fault
8 FLASH/CYCLE	R454B Refrigerant Sensor Over Service Life

CODE	DESCRIPTION
- -	Standby
-C	Cooling mode
-H	Heating mode
FC	Forced cooling mode
dF	Defrosting mode
CH	Abnormal signal

NUMBER	POINT CHECK CONTENT
1	Unit capacity
2	Operation mode
3	Current fan speed(Actual speed divided by 10, for example, 560R is represented by '56.', 1050R is represented by 'A5.', hexadecimal number A represents 10.)
4	Target fan speed(Target speed divided by 10, for example, 560R is represented by '56.', 1050R is represented by 'A5.', hexadecimal number A represents 10.)
5	T3 temperature("F)(if the value is less than 100, the actual value is displayed. If over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
6	T4 temperature("F)(if the value is less than 100, the actual value is displayed. If over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
7	Compressor running time(day)(if the value is less than 100, the actual number of days is displayed. If over 100 and less than 1000, 360 days are represented by '36.', if over 1000, 3600 days are represented by '3.6.')
8	Main control chip software version
9	Drive chip software version
10	Y1 signal state(1=ON, 0=OFF)
11	B signal state(1=ON, 0=OFF)
12	W1 signal state(1=ON, 0=OFF)
13	W2 signal state(1=ON, 0=OFF)
14	Y2 signal state(1=ON, 0=OFF)
15	RV(4-Way Valve) condition (1=ON, 0=OFF)
16	High fan speed mode (1=ON, 0=OFF)
17	Last fault code
18	Last second fault code
19	Last third fault code

Notice:

1. B terminal is connected and energized for heating operation.
2. W terminal is energized in defrosting operation.

VersaPro® Series Packaged Heat Pump

Hazardous voltage line

- Factory standard ———
- Field installed - - - - -
- Factory optional - - - - -

Extra-low-voltage line

- Factory standard ———
- Factory optional - - - - -

0/1 DEFINITION OF DIP SWITCH

	means 0=OFF
	means 1=ON

CAPACITY SETTING	MODEL	24 kBtu/h 2 TON	30 kBtu/h 2.5 TON	36 kBtu/h 3 TON
	13.4 HP	001,1	010,1	010,1
		42 kBtu/h 3.5 TON	48 kBtu/h 4 TON	60 kBtu/h 5 TON
		100,1	100,1	100,1

SW2 - 4 definition

	100 W Fan motor		200 W Fan motor
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	SW1-1	ON	13.4HP package (only used for replacing board)
		OFF	Reserved
	SW1-2	ON	Reserved
		OFF	Reserved
	SW1-3	ON	Defrosting cycle:30 min
		OFF	Defrosting cycle:60 min

MODEL	DESCRIPTION
13.4 HP	13.4 SEER heat exchanger package unit

SETTING INSTRUCTIONS

	DIP SWITCH		G	W/W1/W2
SW6-1,2 FAN SPEED TAPS			L	H
			L	H
			M	H
			H	H
SW6-3		0 S OFF-DELAY		
		90S OFF-DELAY (FACTORY DEFAULT)		
NOT USED				
SW6-4		FACTORY DEFAULT		



CAUTION:

- 1: Use copper wire (75 °C min.) only between disconnect switch and unit.
- 2: To be wired in accordance with NEC and local codes.
- 3: If any of the original wires, as supplied, must be replaced. Use the same or equivalent type wires.
- 4: If the input voltage is 208 V, please change the transformer tap by taking the red wire to 208 V terminal.
- 5: The rated output operating condition of CN34 is 24 VAC/1A or 30 VDC/1A or 250 VAC/1A. Please refer to the manual for wiring methods.



WARNING !

Cabinet must be permanently earthed, and all wiring conform to UL60335.
Replacement wires must be the same gauge and insulation type as original wires.

Notice:

1. If connected to the 1-Stage controller, please short the signals Y1 and Y2.
2. Connect R to R, G to G, Y to Y, etc. See outdoor instruction for details.
3. If some signal lines of **CN36** are not used, please wrap them up separately with **CAP**.

VersaPro® Series Packaged Heat Pump

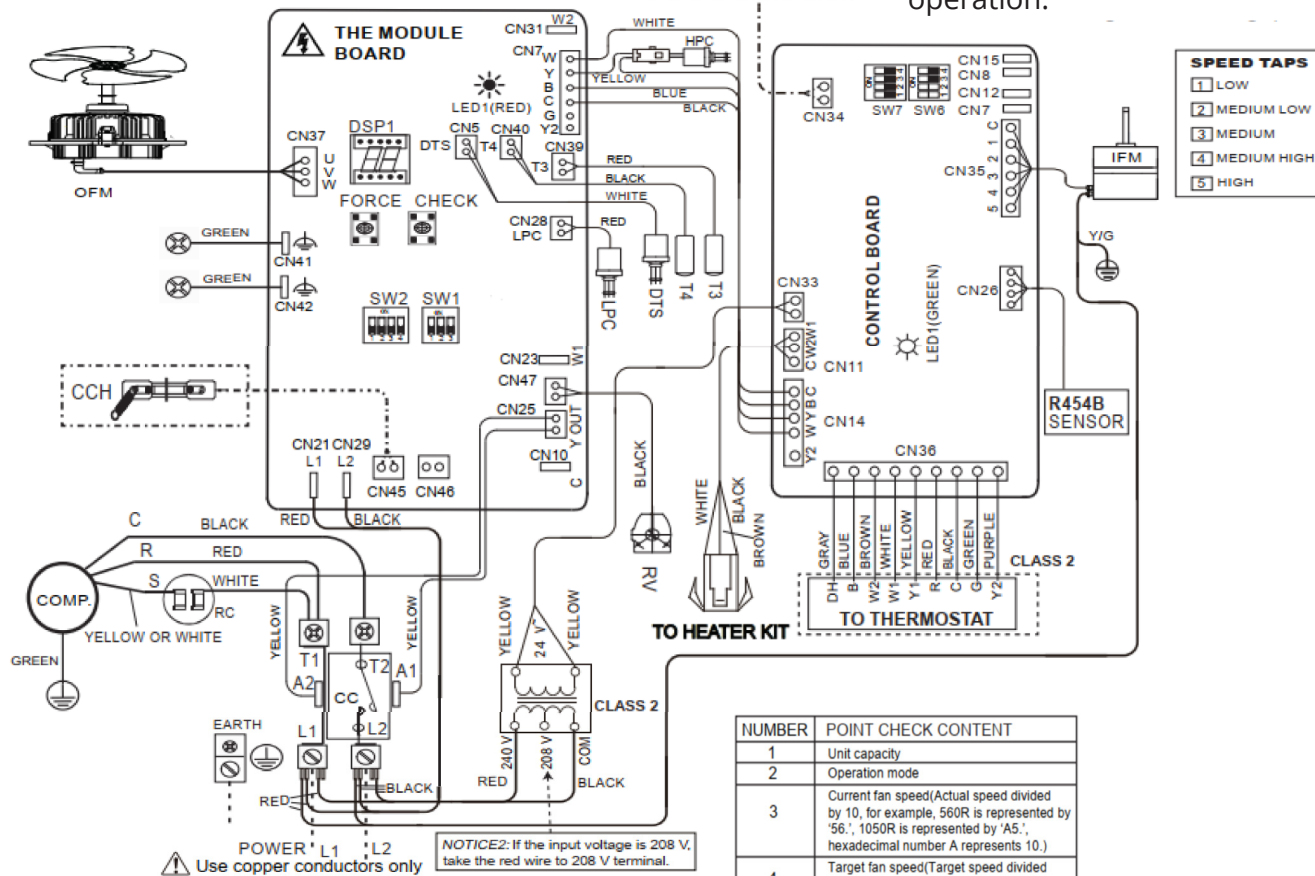
60K:

Notice:

1. B terminal is connected and energized for heating operation.
2. W terminal is energized in defrosting operation.

WARNING: HAZARDOUS VOLTAGE. DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. INSURE THAT ALL CAPACITORS HAVE DISCHARGED STORED VOLTAGE.

FOR REFRIGERANT LEAK PROTECTION
LEAK ALARM DEVICE



CODE	FAULT DESCRIPTION
E3	T3 sensor fault
E4	T4 sensor fault
E8	Capacity setting no set
E9	R110 resistor or drive chip software fault
P2	LPC protection
P4	Discharge temperature protection
P5	T3 high-temperature protection
AL	Ambient temperature limitation
H0	Communication fault between drive chip and main control chip
n1X	OFM overcurrent protection
n2X	Drive module overtemperature protection
n3X	DC bus voltage fault
n4X	IPM Fault
n5X	OFM startup fault
n6X	Phase loss protection
"n" serial faults, alternately display n and xx	

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CC	Compressor Contactor
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T4	Ambient Temperature Sensor
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IFM	Indoor Fan Motor
Force	Press 1 s Forced cooling mode
	Press 6 s Forced defrosting mode
Check	Press 1 s Check the system paramters

LED1(GREEN) STATUS	CONTENT
STEADY ON	Normal Operation
OFF	Power Supply Fault
KEEP FLASHING	Refrigerant Leak Protection
3 FLASH/CYCLE	R454B Refrigerant Sensor Fault
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FC	Forced cooling mode
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CH	Abnormal signal

NUMBER	POINT CHECK CONTENT
1	Unit capacity
2	Operation mode
3	Current fan speed(Actual speed divided by 10, for example, 560R is represented by '56.', 1050R is represented by 'A5.', hexadecimal number A represents 10.)
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5	T3 temperature("F)(if the value is less than 100, the actual value is displayed. if over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
6	T4 temperature("F)(if the value is less than 100, the actual value is displayed. if over 100, divided by 10, 135 is represented by '13.', if it is negative, '1.0' means -10, '5' means -5)
7	Compressor running time(day)(if the value is less than 100, the actual number of days is displayed. if over 100 and less than 1000, 360 days are represented by '36.', if over 1000, 3600 days are represented by '3.6.')
8	Main control chip software version
9	Drive chip software version
10	Y1 signal state(1=ON, 0=OFF)
11	B signal state(1=ON, 0=OFF)
12	W1 signal state(1=ON, 0=OFF)
13	W2 signal state(1=ON, 0=OFF)
14	Y2 signal state(1=ON, 0=OFF)
15	RV(4-Way Valve) condition (1=ON, 0=OFF)
16	High fan speed mode (1=ON, 0=OFF)
17	Last fault code
18	Last second fault code
19	Last third fault code

VersaPro® Series Packaged Heat Pump

Hazardous voltage line

- Factory standard —————
- Field installed - - - - -
- Factory optional - - - - -

Extra-low-voltage line

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0/1 DEFINITION OF DIP SWITCH

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		42 kBtu/h 3.5 TON	48 kBtu/h 4 TON	60 kBtu/h 5 TON
		100,1	100,1	100,1

SW2 - 4 definition

	100 W Fan motor		200 W Fan motor
---	--------------------	---	--------------------

	SW1	SW1-1	ON	13.4HP package (only used for replacing board)
			OFF	Reserved
		SW1-2	ON	Reserved
			OFF	Reserved
		SW1-3	ON	Defrosting cycle:30 min
			OFF	Defrosting cycle:60 min

MODEL	DESCRIPTION
13.4 HP	13.4 SEER heat exchanger package unit

SETTING INSTRUCTIONS

1-STAGE CONTROLLER

	DIP SWITCH	Y1 OR G	W/W1/W2
SW6-1,2 FAN SPEED TAPS		2	3
		3	4
		4	5
	60 kBtu/h		
		5	5

NOT USED

SW6-3,4		FACTORY DEFAULT
SW7-1,2 SW7-3,4		FACTORY DEFAULT



CAUTION:

- 1: Use copper wire (75 °C min.) only between disconnect switch and unit.
- 2: To be wired in accordance with NEC and local codes.
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- 4: If the input voltage is 208 V, please change the transformer tap by taking the red wire to 208 V terminal.
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2. Connect R to R, G to G, Y to Y, etc. See outdoor instruction for details.
3. If some signal lines of **CN36** are not used, please wrap them up separately with **CAP**.