



# Midea MRD M134H Series Packaged Heat Pump

13.4 SEER2

Capacity: 24 - 60 kBTU/h



## Contents:

1 NOMENCLATURE.....	2
2 SPECIFICATIONS.....	3
3 DIMENSIONS.....	5
4 AIRFLOW DATA.....	6
5 ELECTRIC HEAT KIT DATA.....	8
6 WIRING DIAGRAMS.....	9



## Features:

- High quality heat exchanger.
- Power-painted galvanized steel cabinet.
- Electric heat kit available as a field-installed option: 5/8/10/15/20kW.
- High-efficiency compressors operate smoothly, quietly, consistently.
- Fit universal curb, convenient installation and replacement.
- Horizontal or down flow application.
- Convenient access panels, slide out design for blower motor.
- AHRI Certified and ETL listed.

## 1 Nomenclature

M	R	D	-	24	H	W	N1	-	M	134	G
1	2	3		4	5	6	7		8	9	10

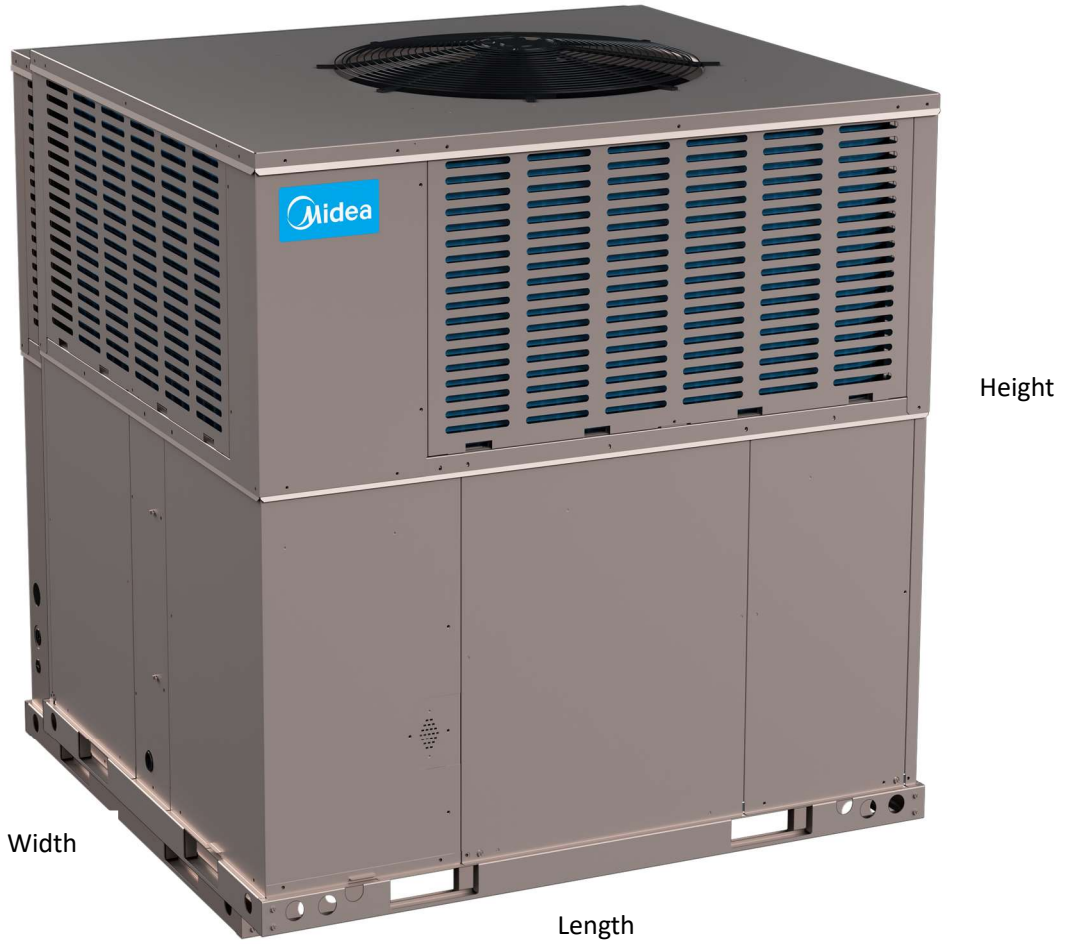
Legend		
No.	Code	Remarks
1	M	Brand: Midea
2	R	Packaged unit
3	D	Discharge type: C: Side discharge D: Double deck
4	24	Capacity: 24: 24 kBtu/h; 30: 30 kBtu/h; 36: 36 kBtu/h; 42: 42 kBtu/h; 48: 48 kBtu/h; 60: 60 kBtu/h;
5	H	Unit type: C: cooling only; H: heat pump
6	W	Controller type: W: Wired controller
7	N1	Refrigerant type: N1: R410A
8	M	Power supply type: M: 1-Phase; X: 3-Phase
9	134	Efficiency: 134: 13.4 SEER; 152: 15.2 SEER
10	G	Compressor type: G: GMCC compressor; L: LG compressor

**2 Specifications**

	<b>MRD-24HWN1-M134G</b>	<b>MRD-36HWN1-M134G</b>	<b>MRD-48HWN1-M134L</b>
<b>NOMINAL CAPACITY</b>			
Cooling (BTU/h)	24,000	36,000	48,000
Heating (BTU/h)	/	/	/
<b>ELECTRICAL DATA</b>			
Voltage / Phase (60 Hz)	208/230 / 1	208/230 / 1	208/230 / 1
Min. / Max. Voltage	187/253	187/253	187/253
MCA	15.1	24.2	35.1
MOP	25	40	50
<b>COMPRESSOR</b>			
Type	Rotary	Rotary	Scroll
Stage	Single	Single	Single
RLA	10.0	16.0	23.0
LRA	34.8	72.0	108.0
<b>OUTDOOR COIL</b>			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Size(O.D)	9/32	9/32	9/32
<b>OUTDOOR FAN MOTOR</b>			
Motor Type	PSC	PSC	PSC
Capacitor(uF)	6	6	15
Horsepower (HP)	1/12	1/6	1/3
Full Load Amps (FLA)	0.61	1.0	1.9
Rated RPM	880	830	1050
<b>INDOOR COIL</b>			
Type	Tube & Fin	Tube & Fin	Tube & Fin
Tube Size(O.D)	9/32	9/32	9/32
<b>INDOOR BLOWER MOTOR</b>			
Motor Type	PSC	ECM	PSC
Capacitor(uF)	12	/	25
Horsepower (HP)	1/5	1/2	1/2
Full Load Amps (FLA)	2.0	3.2	4.4
Rated RPM	660	855	890
<b>REFRIGERATION SYSTEM</b>			
Refrigerant Control	Orifice	Orifice	Orifice
Refrigerant Charge (lbs. - oz.)	6-6	7-15	9-4
<b>OPERATION RANGE</b>			
Cooling(°F)	55-115	55-115	55-115
Heating(°F)	5-86	5-86	5-86
<b>SOUND POWER (DB)</b>	73	72	78

## 2 Specifications

	MRD-60HWN1-M134L	MRD-60HWN1-X14G
<b>NOMINAL CAPACITY</b>		
Cooling (BTU/h)	60,000	60,000
Heating (BTU/h)	/	/
<b>ELECTRICAL DATA</b>		
Voltage / Phase (60 Hz)	208/230 / 1	208/230 / 3
Min. / Max. Voltage	187/253	187/253
MCA	38.4	35.2
MOP	50	50
<b>COMPRESSOR</b>		
Type	Scroll	Rotary
Stage	Single	Single
RLA	26.0	22.0
LRA	127.9	136.8
<b>OUTDOOR COIL</b>		
Type	Tube & Fin	Tube & Fin
Tube Size(O.D)	9/32	3/16
<b>OUTDOOR FAN MOTOR</b>		
Motor Type	PSC	PSC
Capacitor(uF)	15	15
Horsepower (HP)	1/3	1/3
Full Load Amps (FLA)	1.9	2.0
Rated RPM	1050	1050
<b>INDOOR COIL</b>		
Type	Tube & Fin	Tube & Fin
Tube Size(O.D)	9/32	9/32
<b>INDOOR BLOWER MOTOR</b>		
Motor Type	PSC	ECM
Capacitor(uF)	20	/
Horsepower (HP)	3/4	3/4
Full Load Amps (FLA)	4.0	5.8
Rated RPM	990	1025
<b>REFRIGERATION SYSTEM</b>		
Refrigerant Control	Orifice	Orifice
Refrigerant Charge (lbs. - oz.)	11-14	6-10
<b>OPERATION RANGE</b>		
Cooling(°F)	55-115	55-115
Heating(°F)	5-86	5-86
<b>SOUND POWER (DB)</b>	78	80

**3 Dimensions**


	<b>MRD-24HWN1- M134G</b>	<b>MRD-36HWN1- M134G</b>	<b>MRD-48HWN1- M134L</b>
<b>UNIT DIMENSION AND WEIGHTS</b>			
Height (in.)	46-13/16	46-13/16	51-7/16
Width (in.)	35-1/16	35-1/16	46-13/16
Length (in.)	50-11/16	50-11/16	50-9/16
Net Weight (lbs.)	400	411	537

	<b>MRD-60HWN1- M134L</b>	<b>MRC-60HWN1- X14C</b>
<b>UNIT DIMENSION AND WEIGHTS</b>		
Height (in.)	51-7/16	51-7/16
Width (in.)	46-13/16	46-13/16
Length (in.)	50-9/16	50-9/16
Net Weight (lbs.)	568	557

4 Airflow Data

Model Number	Motor Speed		External Static Pressure-Inches W.C.[kPa]								
			0[0]	0.1[.02]	0.2[.05]	0.3[.07]	0.4[.10]	0.5[.12]	0.6[.15]	0.7[.17]	0.8[.20]
24	Low-Factory	SCFM	/	860	767	677	593	/	/	/	/
		Watts	/	1.0	1.0	1.0	1.0	/	/	/	/
		Amps	/	229	225	222	218	/	/	/	/
	Middle	SCFM	/	/	/	900	819	736	629	/	/
		Watts	/	/	/	1.4	1.4	1.3	1.3	/	/
		Amps	/	/	/	314	309	303	298	/	/
	High	SCFM	/	/	/	/	/	868	761	653	600
		Watts	/	/	/	/	/	1.7	1.7	1.7	1.7
		Amps	/	/	/	/	/	384	376	370	365
36	Low (Tap2)	SCFM	1170	1107	1042	984	926	867	/	/	/
		Watts	1.6	1.6	1.7	1.7	1.8	1.8	/	/	/
		Amps	176	182	188	194	200	206	/	/	/
	Middle (Tap3)-Factory	SCFM	1339	1284	1224	1168	1119	1065	1014	961	900
		Watts	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6
		Amps	254	260	266	272	279	286	294	300	305
	High (Tap4)	SCFM	/	1385	1328	1274	1226	1178	1128	1079	1031
		Watts	/	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.0
		Amps	/	315	322	328	335	342	350	357	364
48	Low-Factory	SCFM	/	/	/	1897	1804	1715	1605	1511	1403
		Watts	/	/	/	3.0	2.9	2.8	2.7	2.6	2.5
		Amps	/	/	/	685	663	643	615	582	557
	Middle	SCFM	/	/	/	/	1904	1801	1689	1557	1432
		Watts	/	/	/	/	3.2	3.1	3.0	2.9	2.8
		Amps	/	/	/	/	728	702	673	643	611
	High	SCFM	/	/	/	/	/	1873	1757	1621	1500
		Watts	/	/	/	/	/	3.4	3.3	3.2	3.0
		Amps	/	/	/	/	/	771	743	712	676
60	Low (Tap3)	SCFM	1784	1732	1675	1610	1548	/	/	/	/
		Watts	2.6	2.7	2.7	2.8	2.9	/	/	/	/
		Amps	312	321	329	337	347	/	/	/	/
	Middle (Tap4)-Factory	SCFM	2046	1996	1953	1900	1844	1790	1738	1676	1520
		Watts	3.7	3.8	3.9	3.9	4.0	4.1	4.2	4.3	4.6
		Amps	459	471	481	492	503	514	527	538	577
	High (Tap5)	SCFM	/	2227	2185	2142	2094	2042	1991	1938	1761
		Watts	/	5.1	5.2	5.2	5.3	5.4	5.5	5.6	5.7
		Amps	/	646	658	670	683	695	709	724	735

## 4 Airflow Data

The above airflow data for reference only.

\* In any situation, the airflow of the unit should be in the range of 80% to 130% of 400CFM/Ton.

- The air distribution system has the greatest effect on airflow. The duct system is totally controlled by the contractor. For this reason, the contractor should use only industry-recognized procedures.
- Heat pump systems require a specified airflow. Each ton of cooling requires between 350 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 through bad planning or workmanship.
- 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 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.
- When installation, installer should select the air speed according to the actual setting static pressure.

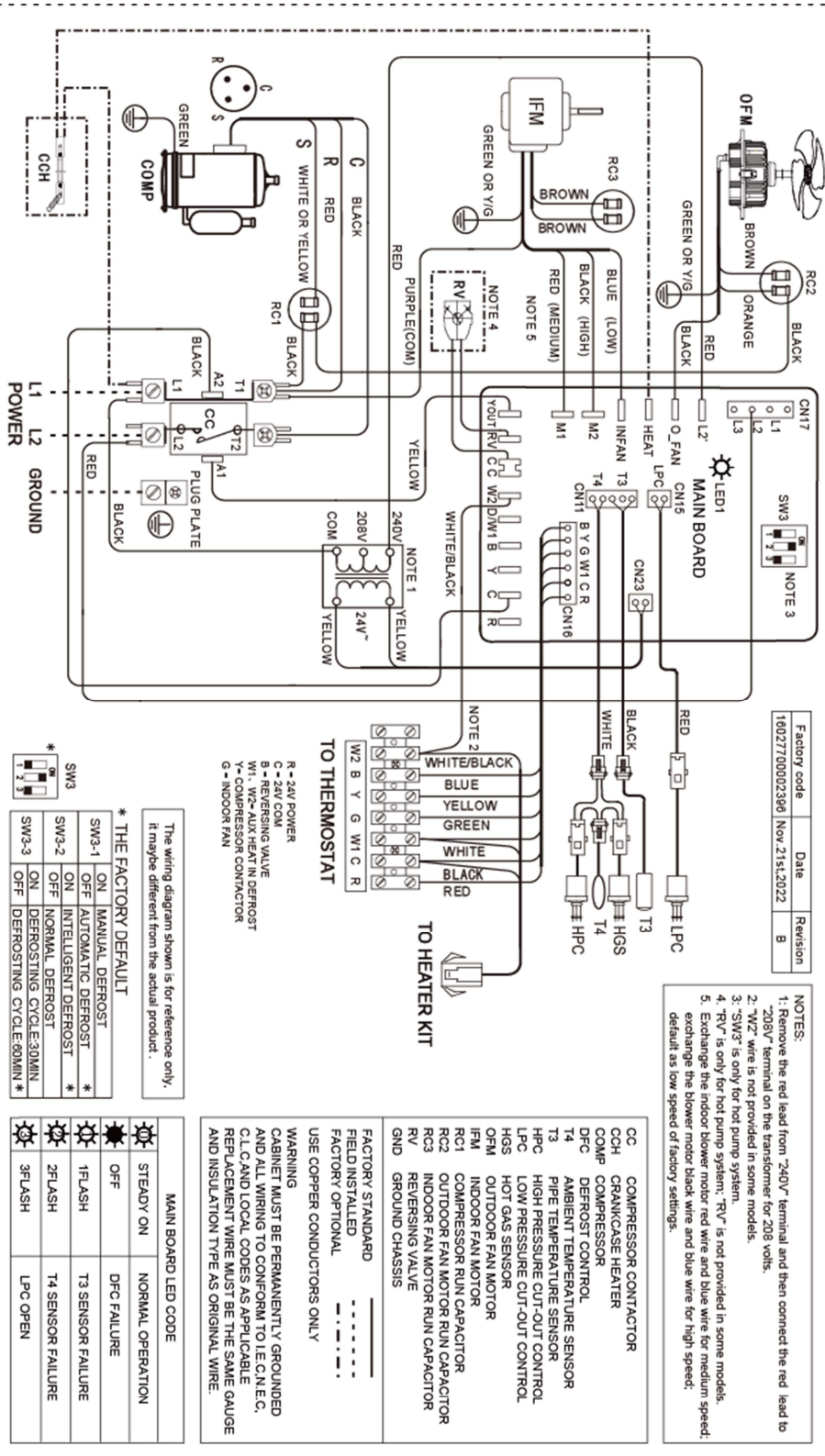
5 Electric Heat Kit Data

Capacity KBTU	Heater Circuit (without units)						Heater Fan Speed		
	Model	KW	Stages	Amps	MCA	Max Fuse Breaker Amps	L	M	H
24	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	×	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	×	•	•
36	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	×	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	×	•	•
48	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	•	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	×	•	•
	EHK-20J	15/20	2	72.3/83.4	91/105	100/110	×	×	•
60	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	•	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	×	•	•
	EHK-20J	15/20	2	72.3/83.4	91/105	100/110	×	×	•



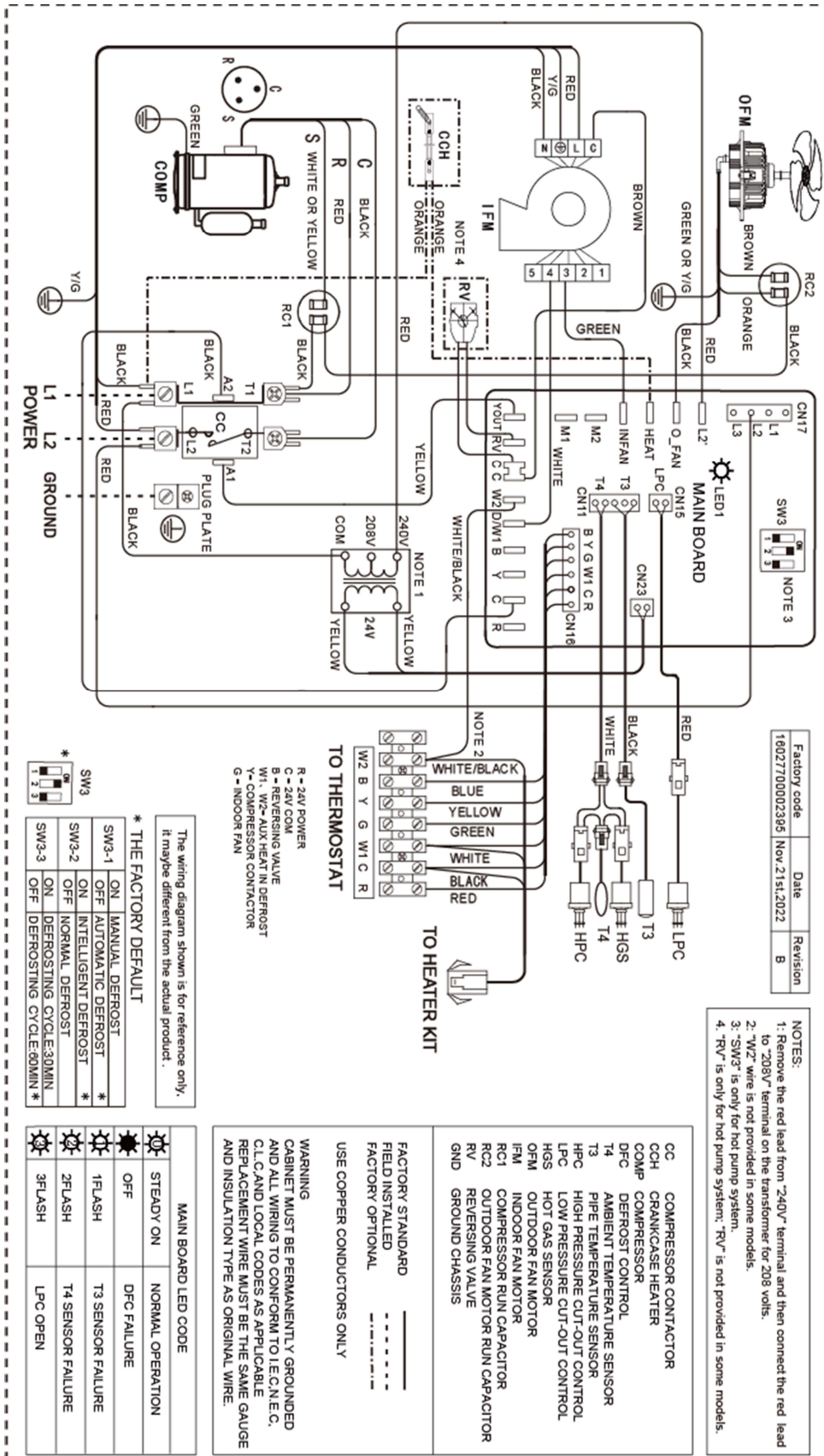
## 6 Wiring Diagrams

MRD-24HWN1-M134G, MRD-48HWN1-M134L, MRD-60HWN1-M134L



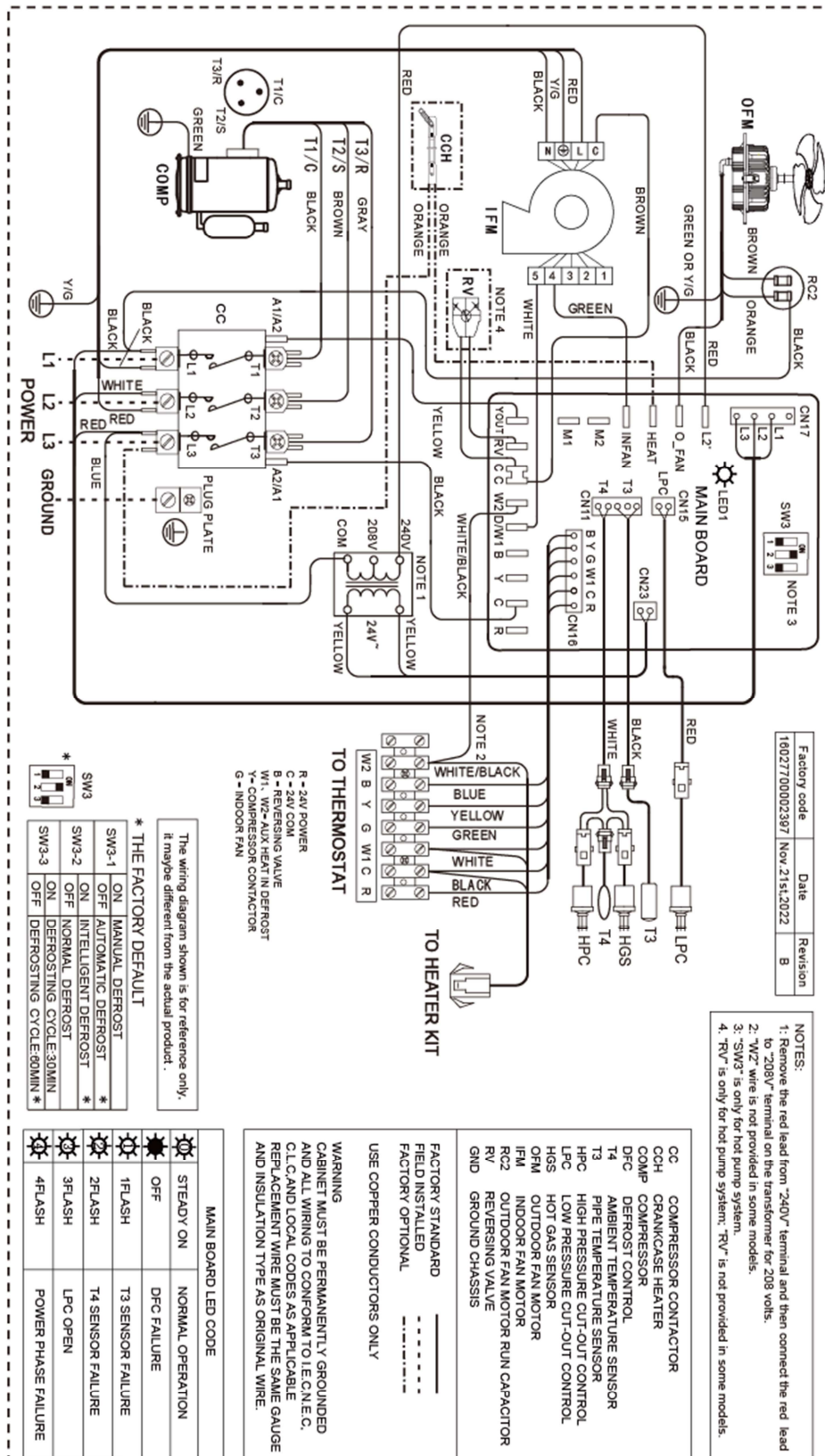
## Wiring Diagrams

MRD-36HWN1-M134G



**Wiring Diagrams**

MRD-60HWN1-X14C



Factory code	Date	Revision
18027700002397	Nov. 21st, 2022	B

- NOTES:
- 1- Remove the red lead from "240V" terminal and then connect the red lead to "208V" terminal on the transformer for 208 volts.
  - 2- "W2" wire is not provided in some models.
  - 3- SW3 is only for hot pump system.
  - 4- "RV" is only for hot pump system. "RV" is not provided in some models.

- TO THERMOSTAT
- R - 24V POWER
  - C - 24V COM
  - B - REVERSING VALVE
  - W1 - W2- AUX HEAT IN DEFROST
  - Y - COMPRESSOR CONTACTOR
  - G - INDOOR FAN

\* THE FACTORY DEFAULT

SW3-1	ON	MANUAL DEFROST	*
SW3-2	OFF	INTELLIGENT DEFROST	*
SW3-3	OFF	DEFROSTING CYCLE: 30MIN	*
	OFF	DEFROSTING CYCLE: 90MIN	*

MAIN BOARD LED CODE

STEADY ON	NORMAL OPERATION
OFF	DFC FAILURE
1FLASH	T3 SENSOR FAILURE
2FLASH	T4 SENSOR FAILURE
3FLASH	LPC OPEN
4FLASH	POWER PHASE FAILURE

WARNING  
 CABINET MUST BE PERMANENTLY GROUNDED AND ALL WIRING TO CONFORM TO I.E.C. C.C. AND LOCAL CODES AS APPLICABLE. REPLACEMENT WIRE MUST BE THE SAME GAUGE AND INSULATION TYPE AS ORIGINAL WIRE.

FACTORY STANDARD FIELD INSTALLED  
 FACTORY OPTIONAL

USE COPPER CONDUCTORS ONLY

- CC - COMPRESSOR CONTACTOR
- CCH - CRANKCASE HEATER
- COMP - COMPRESSOR
- DFC - DEFROST CONTROL
- T4 - AMBIENT TEMPERATURE SENSOR
- T3 - PIPE TEMPERATURE SENSOR
- HPC - HIGH PRESSURE CUT-OUT CONTROL
- LPC - LOW PRESSURE CUT-OUT CONTROL
- HGS - HOT GAS SENSOR
- OFM - OUTDOOR FAN MOTOR
- IFM - INDOOR FAN MOTOR
- RC2 - OUTDOOR FAN MOTOR RUN CAPACITOR
- RV - REVERSING VALVE
- GND - GROUND CHASSIS

**Midea Building Technologies Division**  
**Midea Group**

**Add.:** Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

**Postal code:** 528311

[mbt.midea.com](http://mbt.midea.com) / [global.midea.com](http://global.midea.com) / [tsp.midea.com](http://tsp.midea.com)

Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.

