



Heating & Cooling Air Conditioning

13SEER-R22



DESCRIPTION

The 13 SEER Series unit is the outdoor air conditioning element in a versatile climate-control system designed to create perfect comfort. It is constructed with a matching indoor coil component from Midea Unitary Products. This multi-functional, high-efficiency system meets all of your needs while offering industry-leading quality and unmatched value.

FEATURES

- The compressor is protected against high/low pressure and temperatures by a factory-installed high/low pressure switch and a temperature sensor which protects the compressor if undesirable operating conditions occur.
- The factory-installed discharge muffler helps insure quiet and stable operation.
- The low-pressure service valve provides easy access for service and installation.
- The factory-installed accumulator protects the compressor against liquid slugging.
- Crankcase heater that can protect the compressor from low ambient temperatures or refrigerant migration.
- High condenser coil temperature protection (127° F)
- High-quality condenser coils with inner-groove copper pipe and high-efficiency aluminum fin which absorbs the condensation water for maximum heat exchange.
- Anti-rust: painted galvanized steel cabinet, 1000 hours' salt spray test
- The operating ambient temperature range is : AC 64–109° F; HP 14–109° F

Due to continuous product improvement, specifications are subject to change without notice. Visit us at www.midea.com or www.mideaaircon.com

WARRANTY

2-Year "No hassle" exchange for customer
3-5-Year for compressor
5-Year for parts

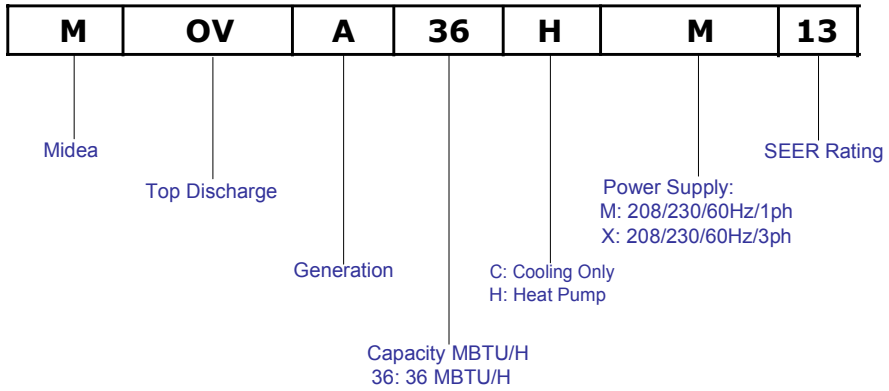
Tested in accordance with:





Heating & Air Conditioning

MIDEA CONDENSING UNIT NOMENCLATURE



Physical and Electrical Data:

MODEL		MOVA-18C-M13T	MOVA-18H-M13T	MOVA-24C-M13T	MOVA-24H-M13H
Unit Supply Voltage		208/230V,60HZ,1Ph			
Normal Voltage Range		187~ 253V			
Max Circuit Ampacity		8.9	8.9	9.4	12.6
Max. Overcurrent Device Amps		15	15	15	20
Compressor Type		Rotary	Rotary	Rotary	Rotary
Compressor	Rated Load Amps	6.65	6.65	7.0	9.6
	Locked Rotor Amps	28.6	28.6	29.6	56
Crankcase Heater		N/A	30	N/A	30
Fan Motor Amps	Rated Load	0.61	0.61	0.61	0.61
Fan Diameter Inches		18-7/8	18-7/8	18-7/8	18-7/8
Fan Motor	Rated HP	1/12	1/12	1/12	1/12
	Nominal RPM	1075	1075	1075	1075
	Nominal CFM	1581	1581	1581	1581
Coil	Face Area Sq. Ft.	10.15	10.15	10.15	10.15
	Fin / Inches	20	20	20	20
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		3/4	3/4	3/4	3/4
Unit Charge (Lbs. - Oz.)		6lbs 3oz	6lbs 3oz	7lbs 15oz	6lbs 3ozs
Charge Per Foot, Oz/ft.		0.7	0.7	0.7	0.7

MODEL		MOVA-30C-M13H	MOVA-30H-M13T	MOVA-36C-M13	MOVA-36H-M13	MOVA-42C-M13	MOVA-42H-M13
Unit Supply Voltage		208/230V,60HZ,1Ph					
Normal Voltage Range		187 ~ 253V					
Max Circuit Ampacity		13.0	15.0	19.4	19.4	22.5	22.4
Max. Overcurrent Device Amps		20	25	30	30	35	35
Compressor Type		Rotary	Rotary	Scroll	Scroll	Scroll	Scroll
Compressor	Rated Load Amps	9.6	11.2	14.7	14.7	16.5	16.5
	Locked Rotor Amps	56	45	83	83	95	95
Crankcase Heater		N/A	30	N/A	30	N/A	30
Fan Motor Amps	Rated Load	0.96	0.96	0.96	0.96	1.67	1.67
Fan Diameter Inches		23-5/8	23-5/8	23-5/8	23-5/8	23	23
Fan Motor	Rated HP	1/6	1/6	1/6	1/6	1/3	1/3
	Nominal RPM	825	825	825	825	1075	1075
	Nominal CFM	3246	3246	3246	3246	4219	4219
Coil	Face Area Sq. Ft.	13.7	13.7	13.7	13.7	15.7	15.7
	Fin / Inches	20	20	20	20	20	20
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		3/4	3/4	3/4	3/4	3/4	3/4
Unit Charge (Lbs. - Oz.)		8lbs 6oz	6lbs 13oz	7lbs 8oz	7lbs 11oz	8lbs 3oz	9lbs 1oz
Charge Per Foot, Oz/ft.		0.7	0.7	0.7	0.7	0.7	0.7

Physical and Electrical Data(be continued)

MODEL		MOVA-48C-M13	MOVA-48H-M13	MOVA-60C-M13	MOVA-60H-M13		
Unit Supply Voltage		208/230V,60HZ,1Ph					
Normal Voltage Range		208V,230V					
MaxCircuit Ampacity		24.6	24.6	33	33		
Max. Overcurrent Device Amps		40	40	50	40		
Compressor Type		Scroll	Scroll	Scroll	Scroll		
Compressor	Rated Load Amps	18.3	18.3	25	25		
	Locked Rotor Amps	109	109	148	148		
Crankcase Heater		N/A	30	N/A	30		
Fan Motor Amps	Rated Load	1.67	1.67	1.67	1.67		
Fan Diameter Inches		23	23	23-5/8	23-5/8		
Fan Motor	Rated HP	1/3	1/3	1/3	1/3		
	Nominal RPM	1075	1075	1075	1075		
	Nominal CFM	4386	4386	4269	4269		
Coil	Face Area Sq. Ft.	17.5	17.5	18.6	18.6		
	Fin / Inches	20	20	20	20		
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8		
Vapor Line Set OD (Field Installed)		7/8	7/8	7/8	7/8		
Unit Charge (Lbs. - Oz.)		9lbs 15oz	9lbs 9oz	10lbs 9oz	9lbs 15oz		
Charge Per Foot, Oz/ft.		0.7	0.7	0.7	0.7		

Accessories

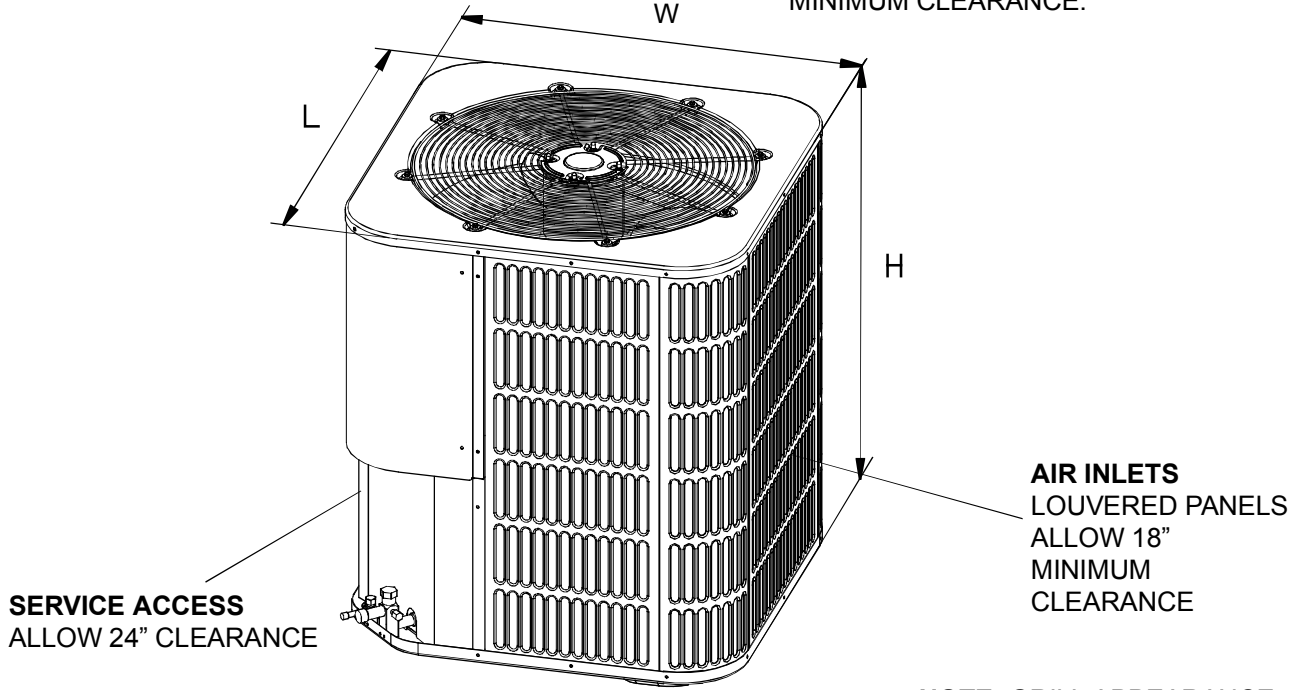
Thermostat--- Compatible thermostat controls are available through accessory sourcing.

Filter drier--- Absorbs non-condensables from the refrigerant.Recommended for all systems.

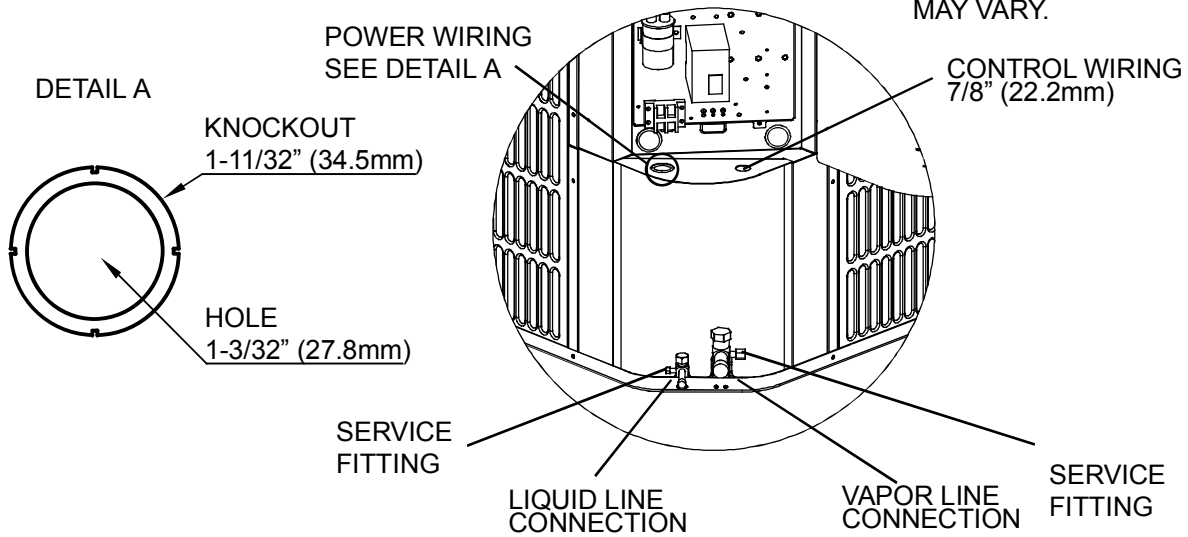
Sound Power Rating

UNIT MODEL	dB (A)
18	59
24	59
30	63
36	63
42	67
48	67
60	66

AIR DISCHARGE: ALLOW 60" MINIMUM CLEARANCE.



NOTE: GRILL APPEARANCE MAY VARY.

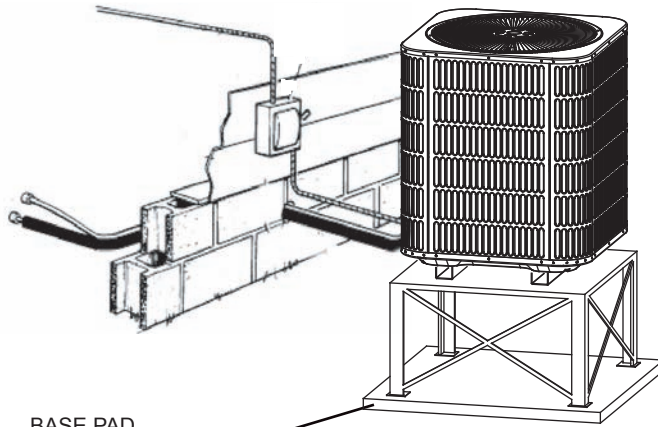


DIMENSIONS

DIMENSIONAL DATA

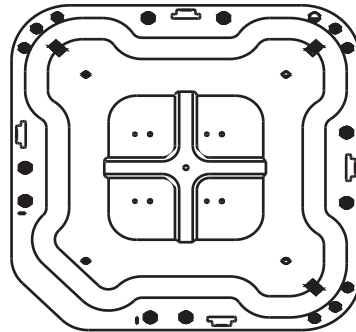
Unit Model (Btu/h)	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	"H"	"W"	"L"	Liquid (in.)	Vapor (in.)
18	24-15/16	23-5/8	23-5/8	3/8	3/4
24	24-15/16	23-5/8	23-5/8	3/8	3/4
30	24-15/16	29-1/8	29-1/8	3/8	3/4
36	24-15/16	29-1/8	29-1/8	3/8	3/4
42	29-7/8	28	28	3/8	3/4
48	33-3/16	28	28	3/8	7/8
60	33-3/16	29-1/8	29-1/8	3/8	7/8

Typical Installation



BASE PAD
(CONCRETE OR
OTHER SUITABLE
MATERIAL)

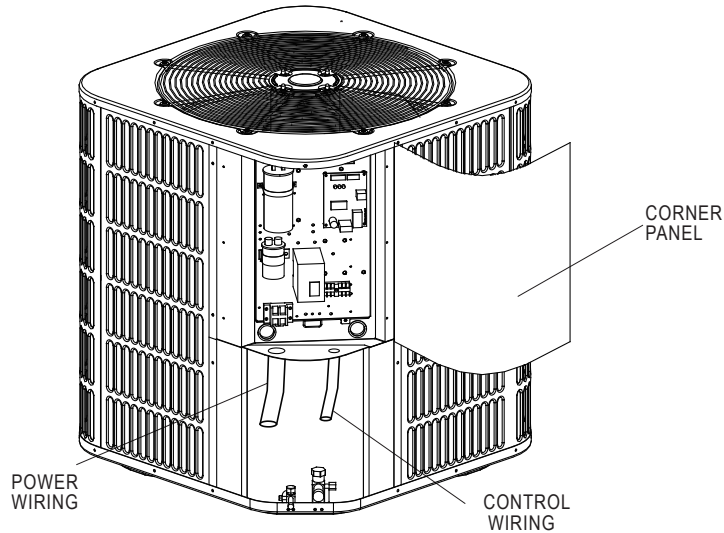
Heat pump should be installed
12" above the anticipated snow level



BASE PAN (BOTTOM VIEW) DO NOT
OBSTRUCT DRAIN HOLES
(SHADED)

RECOMMENDED ELEVATED INSTALLATION

Typical Field Wiring and Wiring diagram



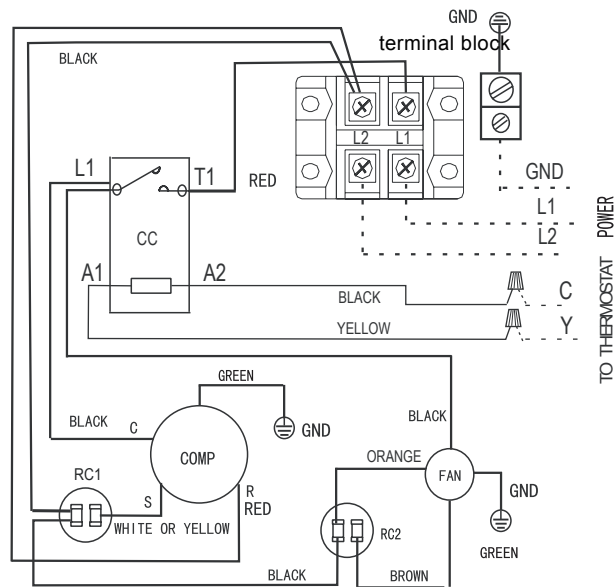
Typical Field Wiring

- CC COMPRESSOR CONTACTOR
- COMP COMPRESSOR
- RC1 RUN CAPACITOR 1
- RC2 RUN CAPACITOR 2

- LINE VOLTAGE
- FACTORY STANDARD —————
 - FIELD INSTALLED - - - - -
 - FACTORY OPTIONAL - . - . -

- LOW VOLTAGE
- FACTORY STANDARD —————
 - FIELD INSTALLED -
 - FACTORY OPTIONAL - - - - -
- USE COPPER CONDUCTORS ONLY

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



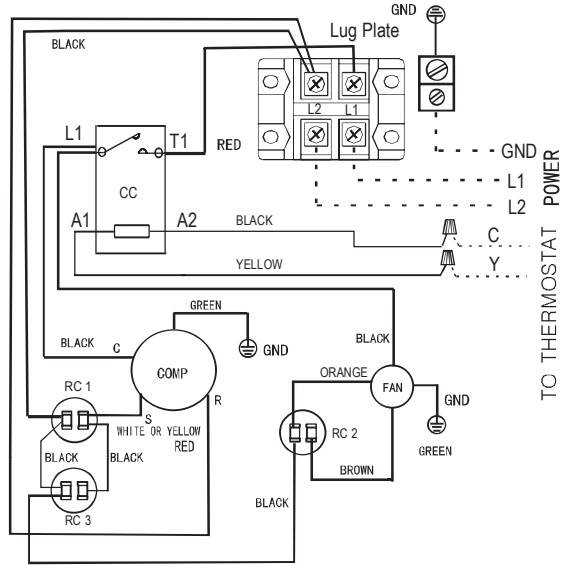
Outdoor Unit Wiring Diagram for A/C Systems(208/230V 1P 60Hz).

LINE VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · - ·

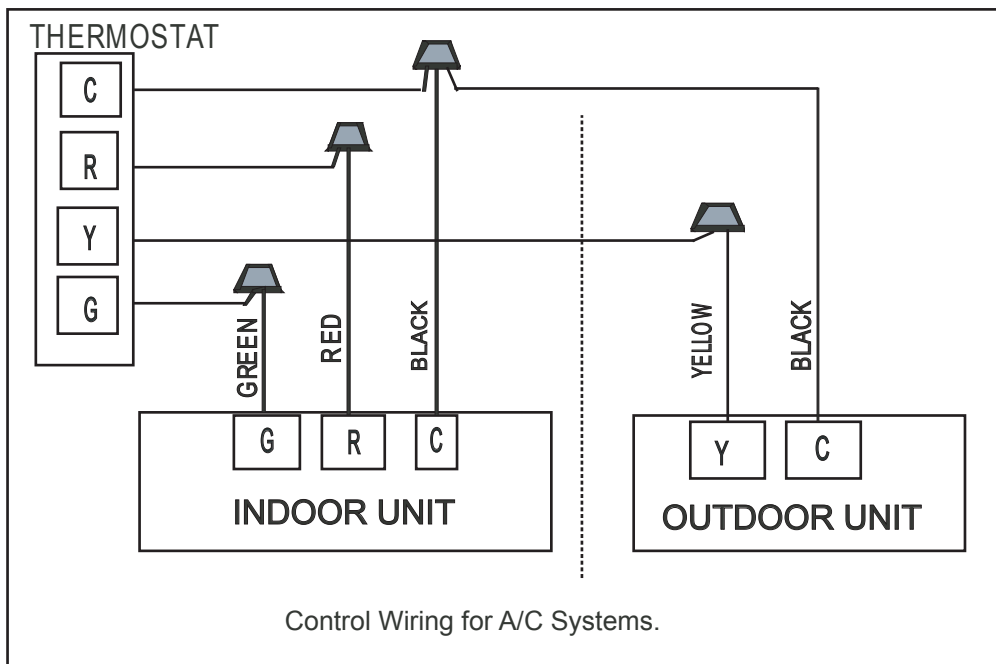
LOW VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · - ·

USE COPPER CONDUCTORS ONLY
 WARNING CABINET MUST BE PERMANENTLY
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 I.E.C.N.E.C.C.E.C.C.L.C. AND LOCAL CODES AS APPLICABLE
 REPLACEMENT WIRE MUST BE THE SAME GAUGE AND
 INSULATION TYPE AS ORIGINAL WIRE

CC COMPRESSOR CONTACTOR
 COMP COMPRESSOR
 RC 1 RUN CAPACITOR 1
 RC 2 RUN CAPACITOR 2
 RC 3 RUN CAPACITOR 3



Outdoor Unit Wiring Diagram for A/C Systems(208/230V 1P 60Hz), (For 60K only).



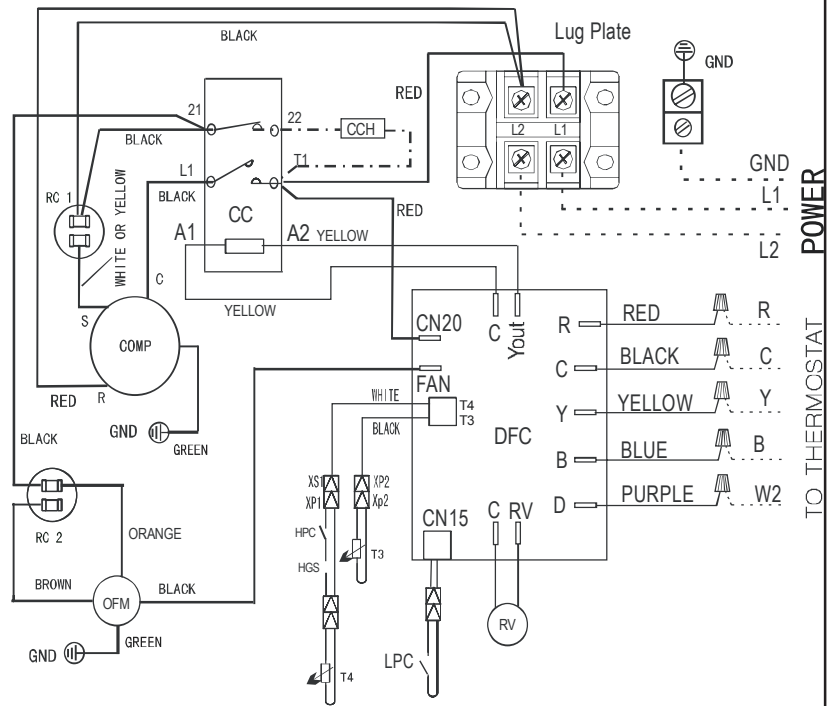
Control Wiring for A/C Systems.

- CC COMPRESSOR CONTACTOR
- CCH CRANKCASE HEATER
- COMP COMPRESSOR
- DFC DEFROST CONTROL
- T4 AMBIENT TEMPERATURE
- T3 PIPE TEMPERATURE
- HPC HIGH PRESSURE CUT-OUT CONTROL
- LPC LOW PRESSURE CUT-OUT CONTROL
- OFM OUTDOOR FAN MOTOR
- RC 1 RUN CAPACITOR 1
- RC 2 RUN CAPACITOR 2
- RV REVERSING VALVE
- GND GROUND CHASSIS
- HGS HOT GAS SENSOR

LINE VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · -

LOW VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · -
 USE COPPER CONDUCTORS ONLY

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 APPLICABLE REPLACEMENT WIRE MUST BE THE SAME
 GAUGE AND INSULATION TYPE AS ORIGINAL WIRE.



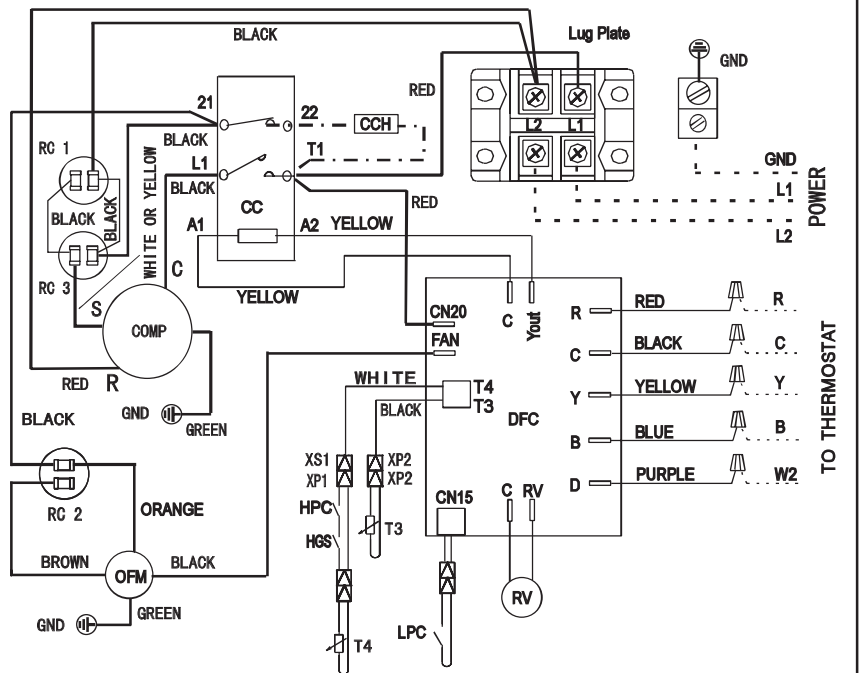
Outdoor Unit Wiring Diagram for H/P Systems(208/230V 1P 60Hz).

- CC COMPRESSOR CONTACTOR
- CCH CRANKCASE HEATER
- COMP COMPRESSOR
- DFC DEFROST CONTROL
- T4 AMBIENT TEMPERATURE
- T3 PIPE TEMPERATURE
- HPC HIGH PRESSURE CUT-OUT CONTROL
- LPC LOW PRESSURE CUT-OUT CONTROL
- OFM OUTDOOR FAN MOTOR
- RC 1 RUN CAPACITOR 1
- RC 2 RUN CAPACITOR 2
- RC 3 RUN CAPACITOR 3
- RV REVERSING VALVE
- GND GROUND CHASSIS
- HGS HOT GAS SENSOR

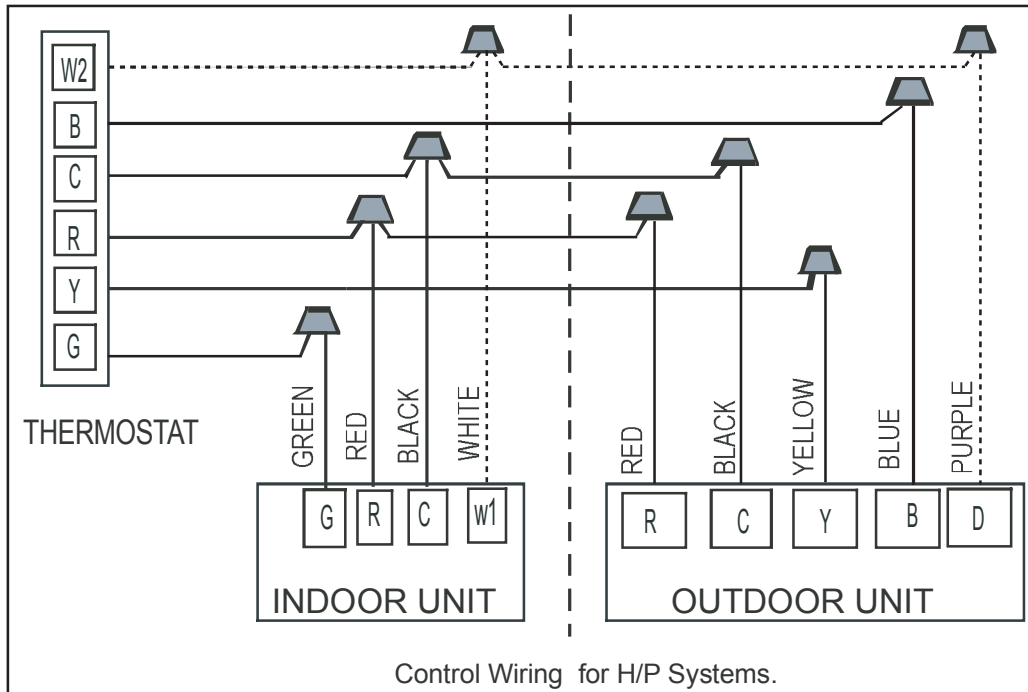
LINE VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · -

LOW VOLTAGE
 FACTORY STANDARD ————
 FIELD INSTALLED - - - - -
 FACTORY OPTIONAL - · - · -
 USE COPPER CONDUCTORS ONLY

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



Outdoor Unit Wiring Diagram for H/P Systems(208/230V 1P 60Hz), (For 60K only).



Electrical Data:

Model	Min. Circuit Ampacity(A)	Maximum Circuit Protector(A)
MOVA-18C-M13T	8.9	15
MOVA-24C-M13T	9.5	15
MOVA-30C-M13H	13.0	20
MOVA-36C-M13	19.4	30
MOVA-42V-M13	22.4	35
MOVA-48C-M13	24.6	40
MOVA-60C-M13	33.0	50
MOVA-18H-M13T	8.9	15
MOVA-24H-M13H	12.6	20
MOVA-30H-M13T	15.0	25
MOVA-36H-M13	19.4	30
MOVA-42H-M13	22.4	35
MOVA-48H-M13	24.6	40
MOVA-60H-M13	33.0	50