



Heating & Air Conditioning

# 16SEER-R-410A



## DESCRIPTION

The 16 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°)
- 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°; HP 14–109°

Due to continuous product improvement, specifications are subject to change without notice. Visit us at [www.midea.com](http://www.midea.com) or [www.mideaaircon.com](http://www.mideaaircon.com)

### WARRANTY

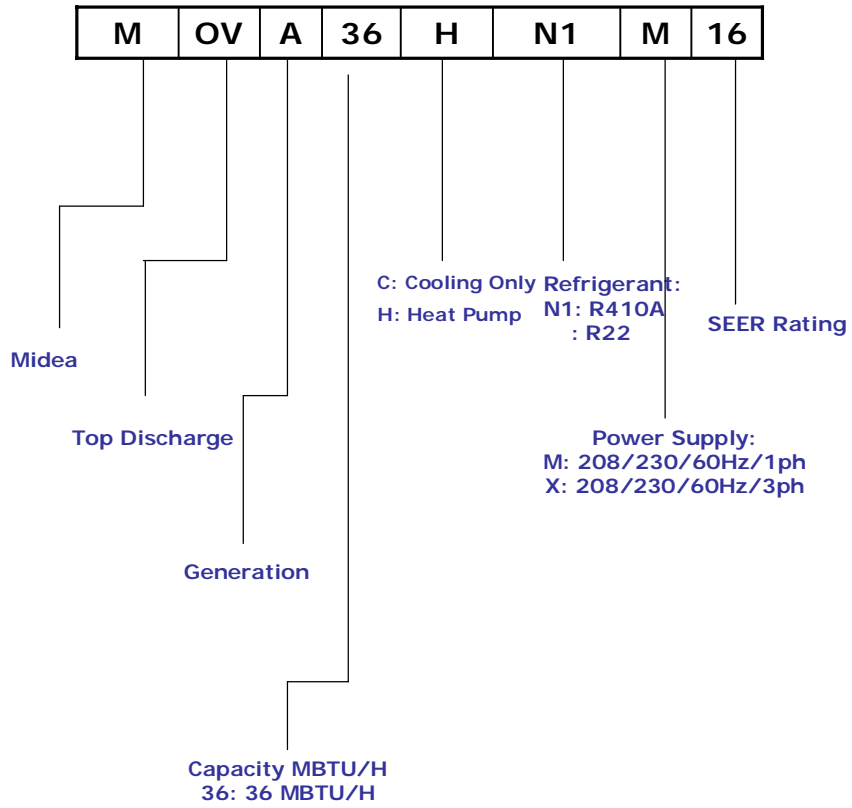
2-Year "No hassle" exchange for customer  
3–5-Year for compressor  
5-Year for parts

Tested in accordance with:





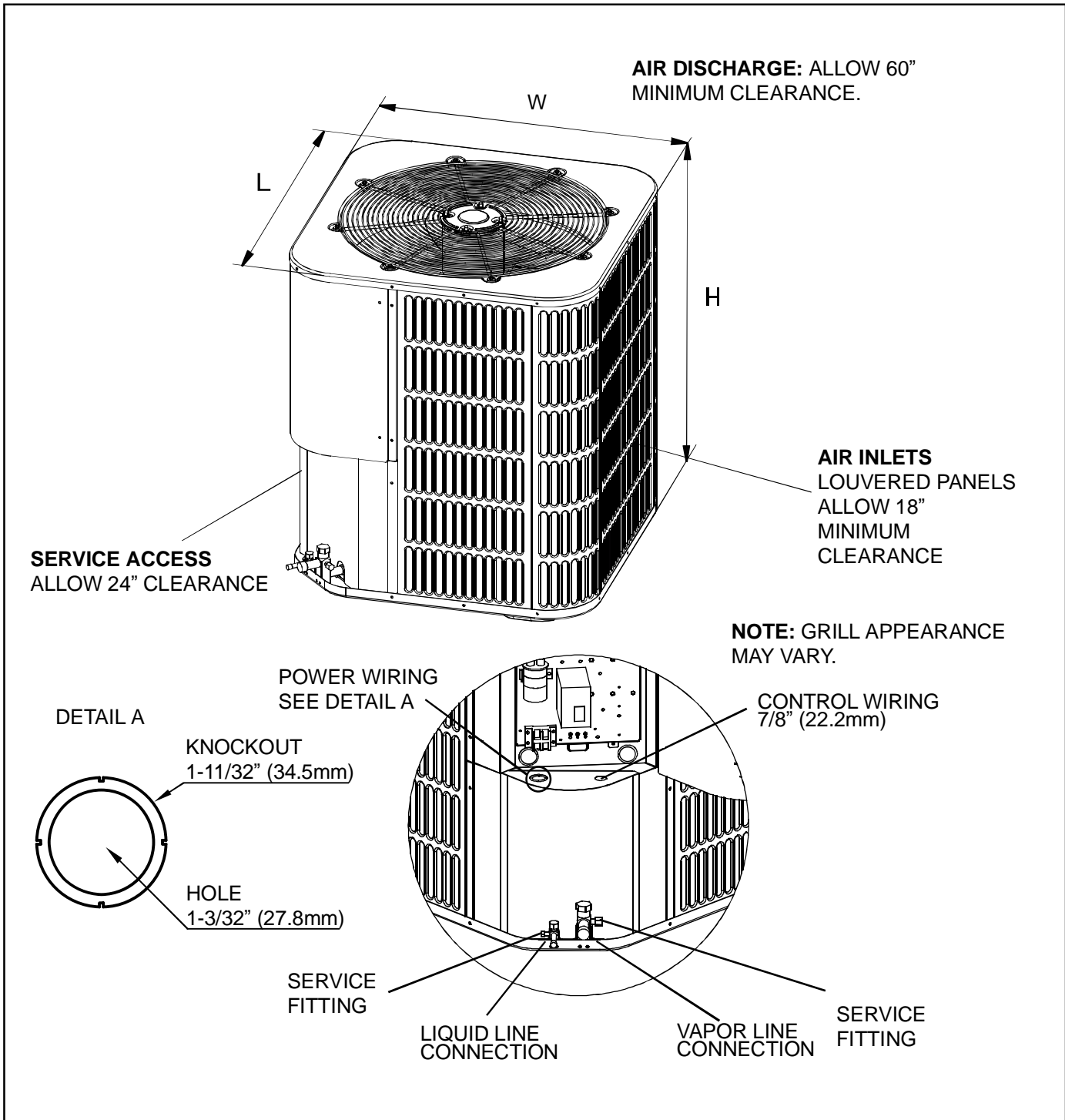
## MIDEA CONDENSING UNIT NOMENCLATURE



**Physical and Electrical Data:**

Model			MOVA-18CN1-M16	MOVA-18HN1-M16	MOVA-24CN1-M16	MOVA-24HN1-M16	MOVA-30CN1-M16
Power supply		V-Ph-Hz	208/230V-1Ph-60Hz				
Cooling	Capacity	Btu/h	18000	18000	24000	24000	30000
	SEER		16	15	16	15	16
Heating	Capacity	Btu/h	N/A	17500	N/A	23200	N/A
	HSPF		N/A	9	N/A	9	N/A
MCA		AMPS	12.3	12.3	17.9	17.9	18.7
MOP		AMPS	20	20	30	30	30
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
	Rated current(RLA)	AMPS	9	9	13.5	13.5	14.1
	Locked rotor Amp(LRA)	AMPS	48	48	58.3	58.3	73
Fan motor	Rated RPM	RPM	825	825	825	825	825
	Rated HP		1/6	1/6	1/6	1/6	1/6
Fan	Diameter	inchs	23	23	23-5/8	23-5/8	23-5/8
	Height	inchs	4-1/3	4-1/3	4-1/2	4-1/2	4-1/2
Coil	Number of rows		2	2	2	2	2
	Net face area(Outer coil)	sq. ft.	12.9	12.9	13.7	13.7	13.7
	Fins per inch		20	20	20	20	20
	Number of circuits		28	28	28	28	28
Refrigerant piping	Liquid side/ Suction side	inchs	3/8 / 3/4	3/8 / 3/4	3/8 / 3/4	3/8 / 3/4	3/8 / 3/4

Model			MOVA-30HN1-M16	MOVA-36CN1-M16	MOVA-36HN1-M16	MOVA-42CN1-M16	MOVA-42HN1-M16
Power supply		V-Ph-Hz	208/230V-1Ph-60Hz				
Cooling	Capacity	Btu/h	30000	36000	35000	42000	42000
	SEER		15	16	15	16	15
Heating	Capacity	Btu/h	29000	N/A	35000	N/A	42000
	HSPF		9	N/A	9	N/A	9
MCA		AMPS	18.7	21.9	21.9	23.4	23.4
MOP		AMPS	30	35	35	40	40
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
	Rated current(RLA)	AMPS	14.1	16.7	16.7	17.9	17.9
	Locked rotor Amp(LRA)	AMPS	73	79	79	112	112
Fan motor	Rated RPM	RPM	825	825	825	825	825
	Rated HP		1/6	1/6	1/6	1/6	1/6
Fan	Diameter	inchs	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8
	Height	inchs	4-1/2	4-1/2	4-1/2	4-1/2	4-1/2
Coil	Number of rows		2	2	2	2.6	2.6
	Net face area(Outer coil)	sq. ft.	13.7	18.6	18.6	18.6	18.6
	Fins per inch		20	20	20	20	20
	Number of circuits		28	38	38	51	51
Refrigerant piping	Liquid side/ Suction side	inchs	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8	3/8 / 7/8	3/8 / 7/8



**DIMENSIONAL DATA**

MODEL SIZE	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	"H" in. [mm]	"W" in. [mm]	"L" in. [mm]	Liquid in.	Vapor in.
18	24-15/16[633]	28[710]	28[710]	3/8	3/4
24	24-15/16[633]	29-1/8[740]	29-1/8[740]	3/8	3/4
30	24-15/16[633]	29-1/8[740]	29-1/8[740]	3/8	3/4
36	33-3/16[843]	29-1/8[740]	29-1/8[740]	3/8	7/8
42	33-3/16[843]	29-1/8[740]	29-1/8[740]	3/8	7/8

## Accessories

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

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

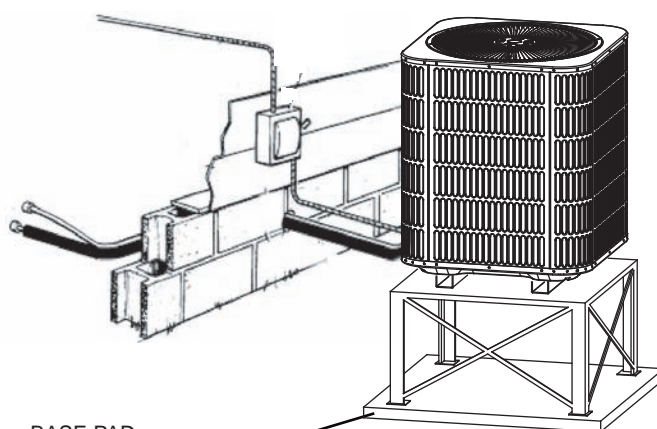
Washable filter---be washable for clean and fresh air.

Electric heater---supply sufficient heat air and make comfortable temperature soon for customer.

## Sound Power Rating

UNIT MODEL	dB (A)
18	62
24	62
30	62
36	63
42	59

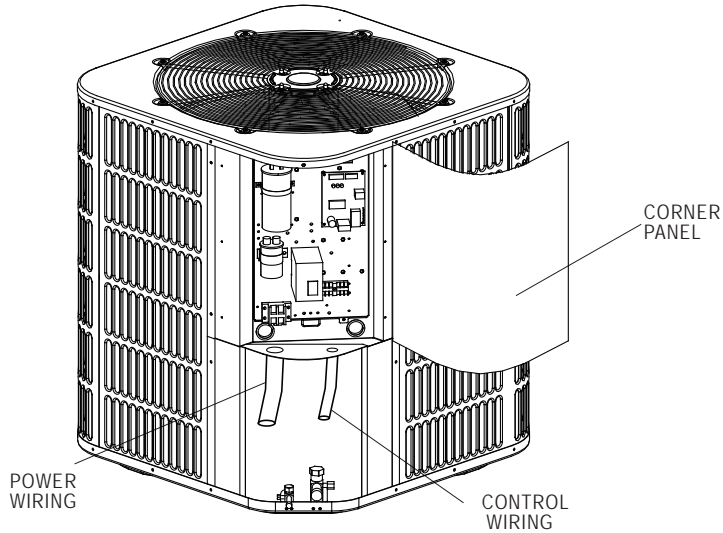
## Typical Installation



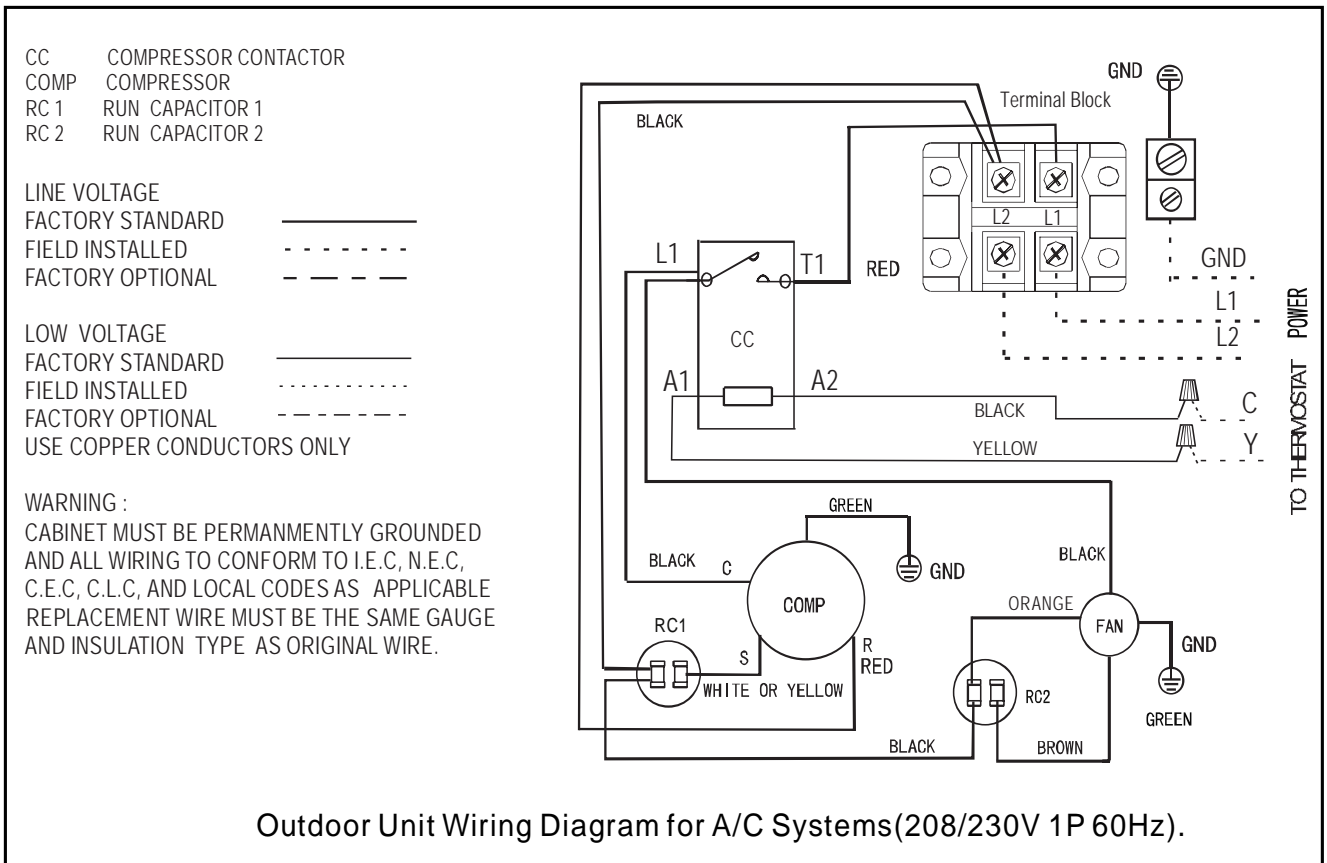
BASE PAD  
(CONCRETE OR  
OTHER SUITABLE  
MATERIAL)

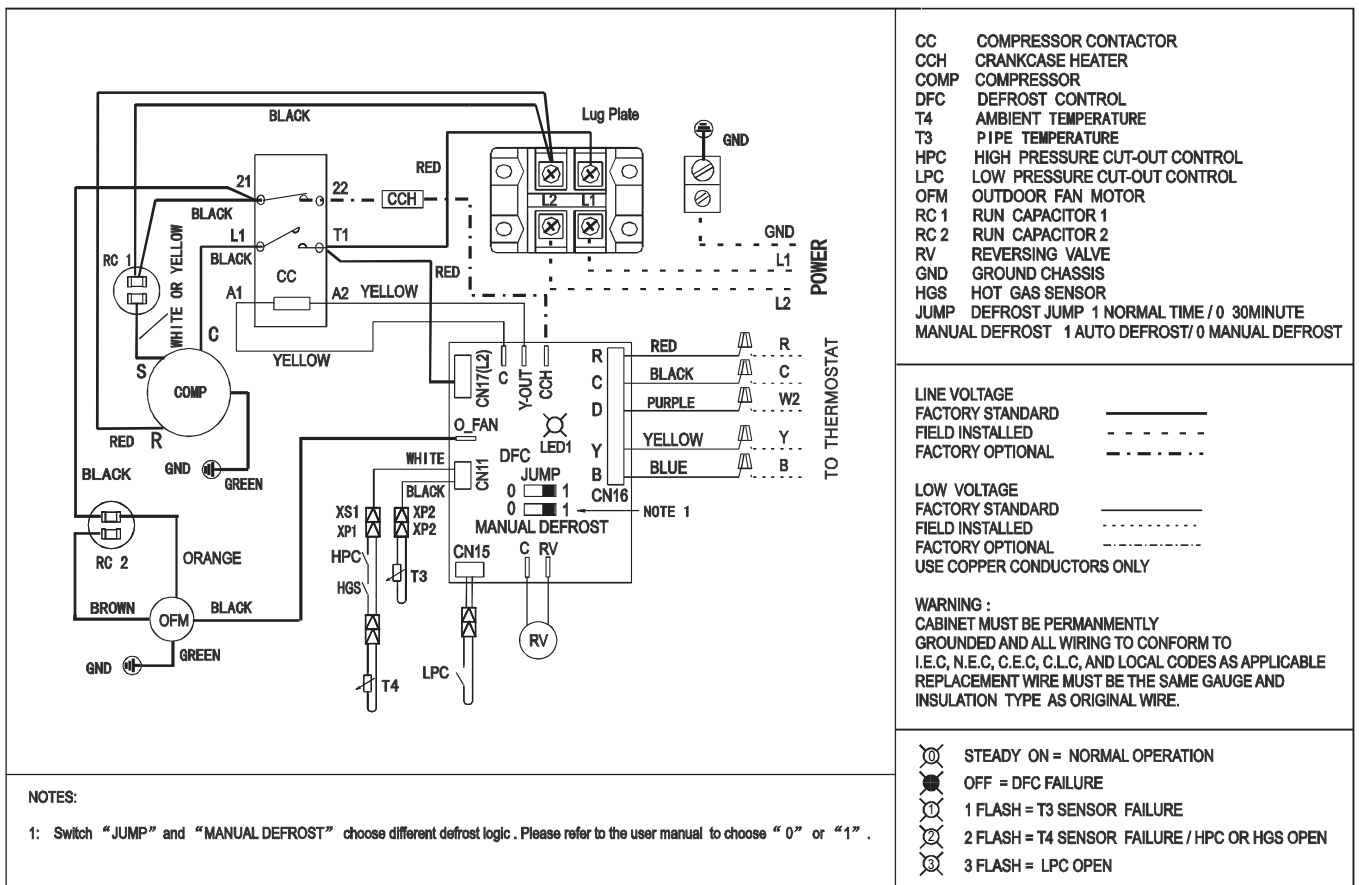
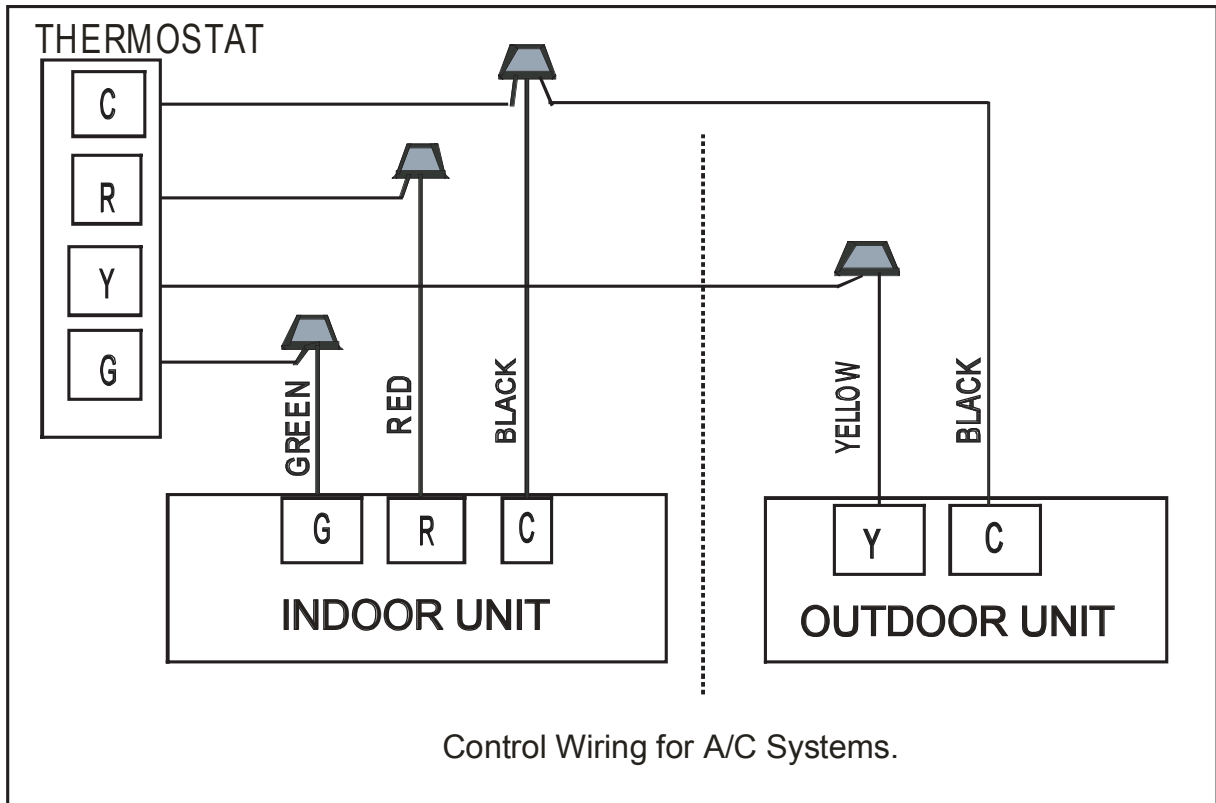
Heat pump should be installed  
12" above the anticipated snow level

# Typical Field Wiring and Wiring diagram

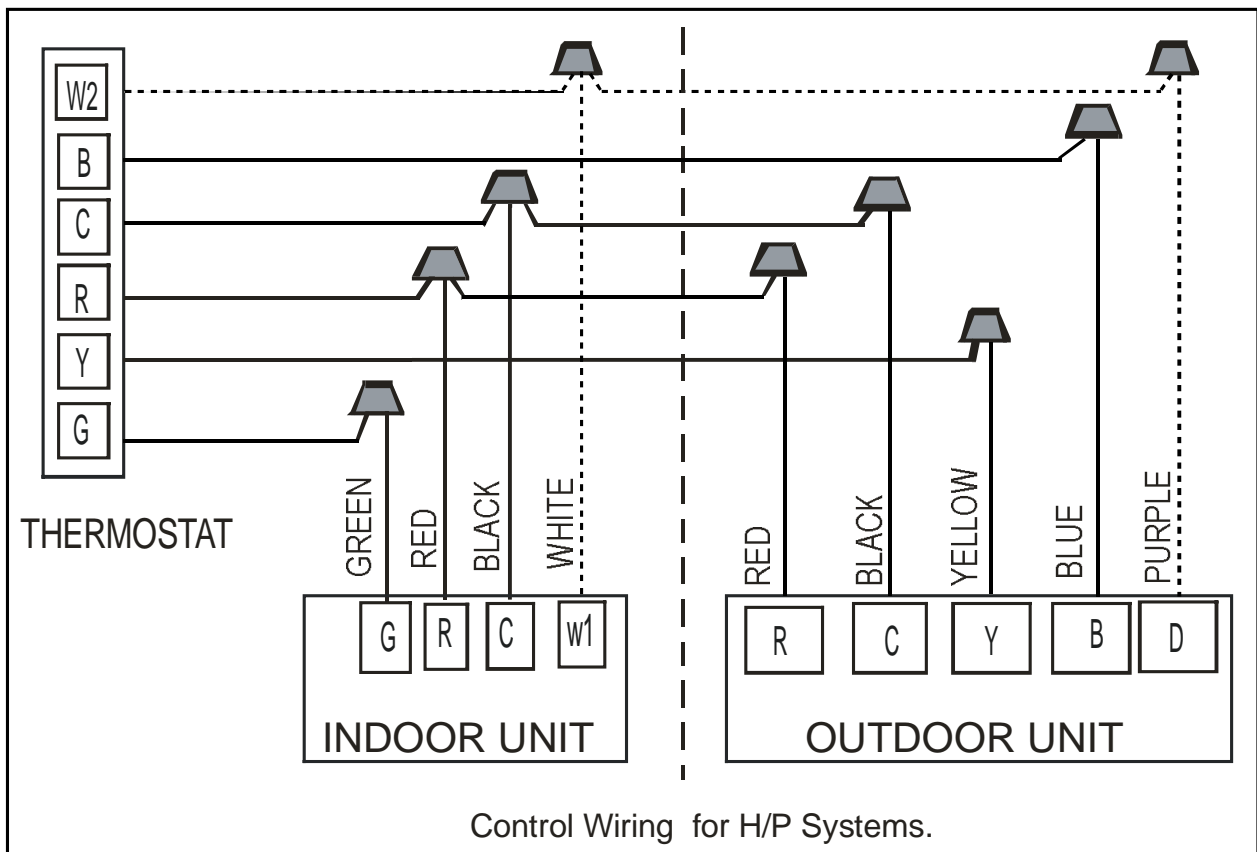


Typical Field Wiring





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



### Electrical Data:

Model	Min. Circuit Ampacity(A)	Maximum Circuit Protector(A)
18AC	12.3	20
24AC	17.9	30
30AC	18.7	30
36AC	21.9	35
42AC	23.4	40
18HP	12.3	20
24HP	17.9	30
30HP	18.7	30
36HP	21.9	35
42HP	23.4	40

NOTES: 1.AC:Air Conditioner; HP:Heat Pump