

AIR-COOLED ROOFTOP PACKAGED AIR CONDITIONERS

Series

HEAT PUMP

PRHG-8,10,15,20

Cooling Capacity kW			
PRHG-8	PRHG-10	PRHG-15	PRHG-20
23.8	29.7	46.3	60.8

Heating Capacity kW			
PRHG-8	PRHG-10	PRHG-15	PRHG-20
23.0	32.0	45.5	61.2

Highly Efficient, Powerful Heating and Cooling.

Features

Highly Efficient operation

The EER(Energy Efficiency Ratio) on these models is greatly improved by revised design specifications and by being manufactured stringently to Mitsubishi Electric high quality standards.

High sensible cooling capacity

The sensible cooling capacity has been significantly improved through balanced optimised heat exchanger design.

Flexible Installation (Convertible Airflow)

The customer can select whichever side flow and down flow in the PRHG series. The standard specification is side flow. Also the PRHG series can install more flexible in local work, too.

Labor Saving Installation

Because of the single unit configuration, all refrigeration work can be omitted.

The unit operation can commence immediately after connection to the power supply, drain piping, ducting and control system.

Minimum Floor Space

The PRHG series feature a compact design and has been succeeded in reducing more floor space.

Flexibility of Supply Air Delivery

All series feature belt driven Supply Air fans enabling accurate matching of actual airflow rates to the specified quantities.

Accurate commissioning is assisted by the capability to exchange pulleys and belts if necessary to achieve the desired air balance.

Comfort heating

The PRHG series are designed to provide effective heating even when the outside temperature is down to -15°C .

Economizer (Special Order)

In the PRHG series, Economizer is prepared as special order.

The Economizer can save energy while moving Economizer damper.

Please consult your local Mitsubishi Electric Sales office for application advice on these control.

Wide Electrical Control Capability

All series is flexible mechanical control configuration. In addition Global Remote Controller is prepared on standard.

The Global Remote Controller give the programmable weekly timer, compressor anti-short cycle timer(3 min), cool/heat/fan/auto changeover etc.

This controller utilises a microprocessor and includes liquid crystal display with touch pad for adjustment for control program.

The factory standard is for provision of 24volt terminal block to enable a field wired control of contractors choice to be connected.

Please consult your local Mitsubishi Electric Sales office for application advice on these control.



Global Remote Controller

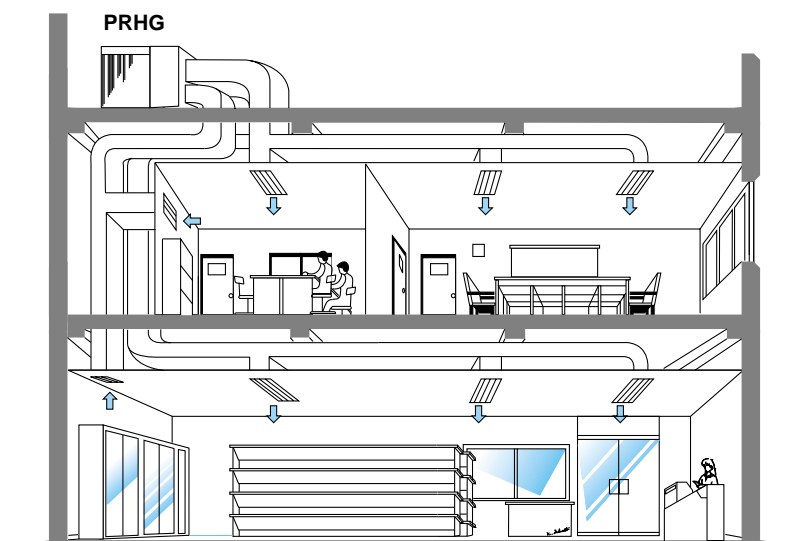
Low Ambient Cooling Kit (Special order)

In applications with relatively high internal loads, there may be a requirement for all series to operate on cooling at low ambient conditions.

An optional accessory is available to maintain the refrigeration circuit in balance at outdoor temperatures as low as -5°C .

Please consult your local Mitsubishi Electric Sales office for application advice on this accessory.

Typical Installation Example



SPECIFICATIONS

Model name		PRHG-8MYA	PRHG-10MYA	PRHG-15MYA	PRHG-20MYA
Service reference		PRHG-8MYA	PRHG-10MYA	PRHG-15MYA	PRHG-20MYA
Power supply		3N~ 380 ~ 415V 50Hz			
Total cooling capacity (Gross)	kW	23.8	29.7	46.3	60.8
	Btu/h	81,200	101,400	158,000	207,500
	kcal/h	20,500	25,600	39,900	52,300
Sensible cooling capacity (Gross)	kW	19.0	23.8	37.0	48.6
	Btu/h	64,900	81,200	126,300	165,900
	kcal/h	16,400	20,500	31,900	41,800
Total heating capacity (Gross)	kW	23.0	32.0	45.5	61.2
	Btu/h	78,600	109,100	155,100	208,700
	kcal/h	19,800	27,500	39,100	52,600
Capacity steps	%	0-100		0-50-100	
Refrigerant		R-22			
Refrigerant charge	kg	4.7	5.6	2x4.7	2x5.6
Refrigerant control		Capillary tube			
External finish		Acrylic resin coating			
Color		MUNSELL 5Y8/1			
Dimension	Height	mm	1,000		1,200
	Width	mm	1,300		1,990
	Depth	mm	1,530		1,800
Net weight	kg	385	415	700	800
Compressor		Hermetic line start (reciprocating)			
No. x Motor output	kW	5.5	7.5	2x5.5	2x7.5
Indoor coil		Cross fin coil			
Indoor fan		Centrifugal (galvanized steel) - belt drive			
Indoor fan motor		Three phase cage induction motor			
No. x Motor output	kW	1.1	1.5	2.2	3.7
Indoor fan air flow	CMM	80	100	160	190
	CFM	2,826	3,532	5,651	6,710
	L/S	1,333	1,667	2,667	3,167
External static pressure	mmAq	10		20	
	Pa	100		200	
Outdoor coil		Cross fin coil			
Outdoor fan		Propeller - direct drive			
Outdoor fan motor		Three phase cage induction motor			
No. x Motor output	kW	0.55		2x0.55	
Condenser fan air flow	CMM	160		320	
	CFM	5,651		11,302	
	L/S	2,667		5,333	
Drain connection	mm	25.4			
Sound pressure level	dB(A)	66		70	
Protection devices		High pressure switch, fuse Over current relay (compressor, indoor fan and outdoor fan) Internal thermostat (compressor and outdoor fan motor)			

Note 1. Cooling & Heating capacity is based on the following conditions.

Cooling : Indoor:27°CDB , 19°CWB ; Outdoor:35°CDB
Heating : Indoor:21°CDB ; Outdoor:7°CDB , 6°CWB

2. Refrigerant charge volumes are factory charged.

3. Capacity is gross capacity which do not include a deduction for evaporator fan motor heat.

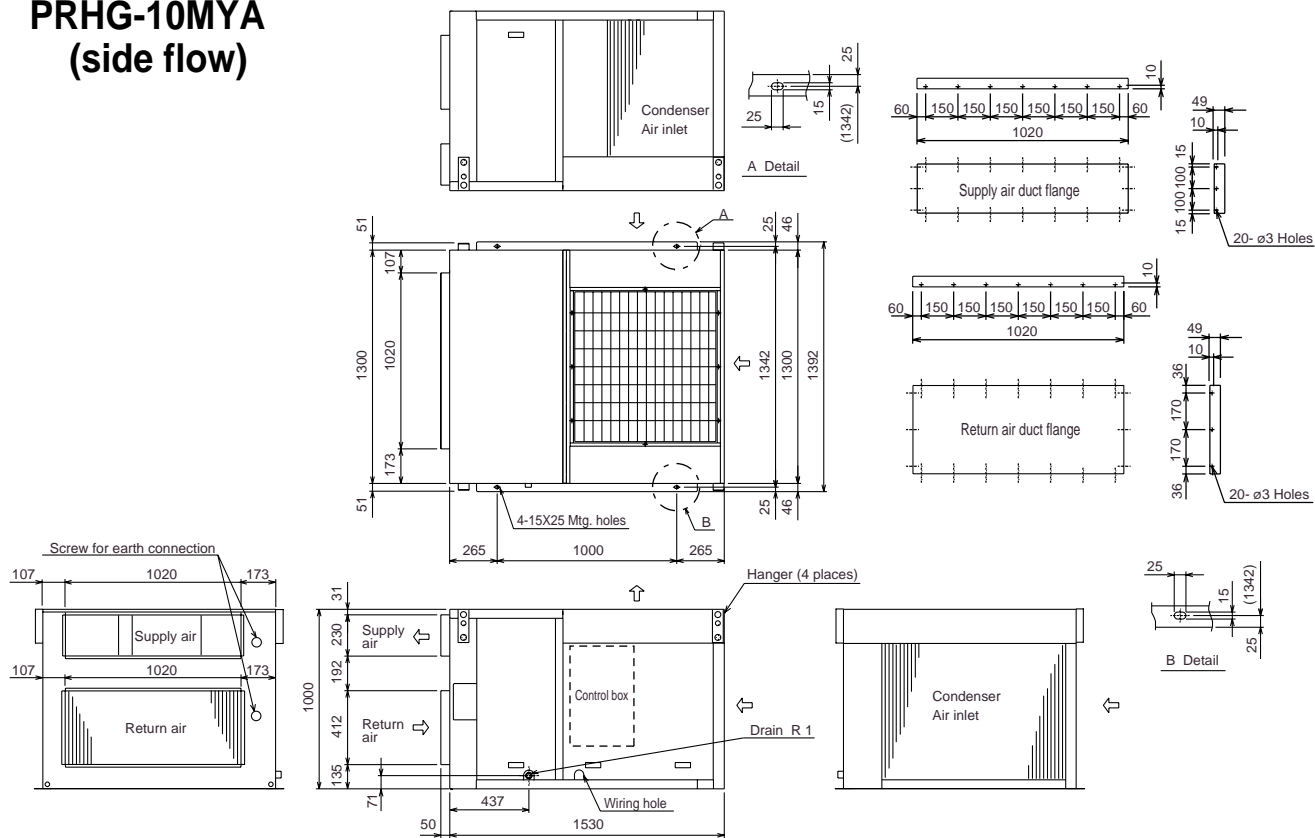
4. The measuring point of the Sound pressure level is 1m from the unit surface.

5. The range of working voltage is with in ±10% voltage of power supply.

6. Specification subject to change without notice.

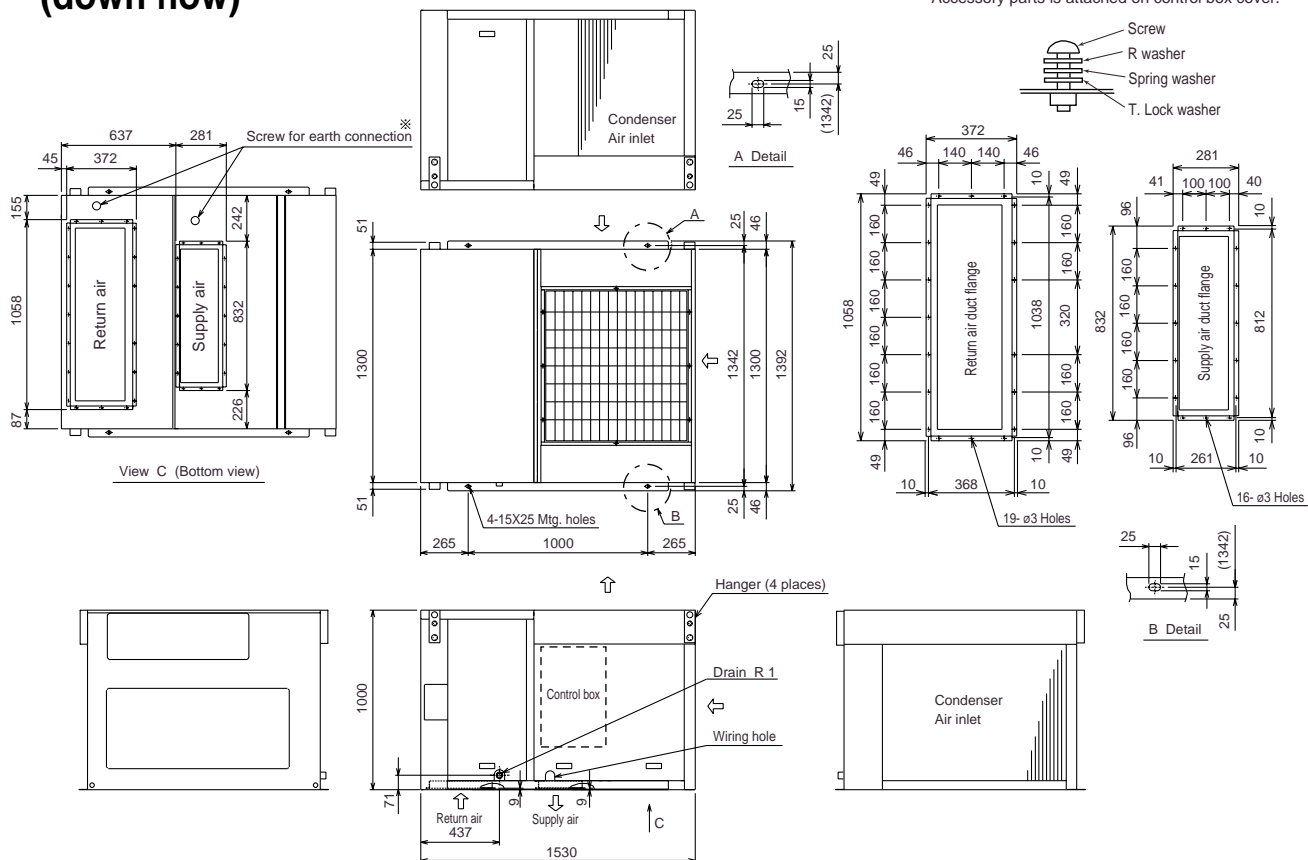
Outline Dimensions

PRHG- 8MYA PRHG-10MYA (side flow)



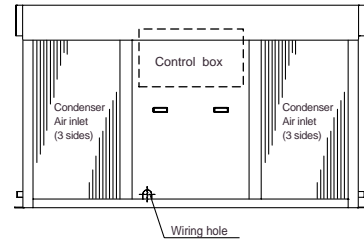
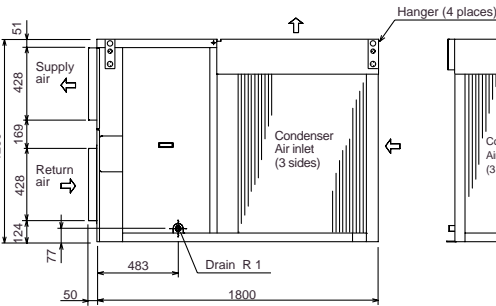
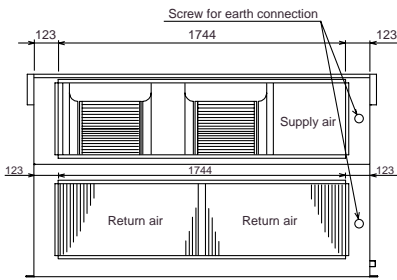
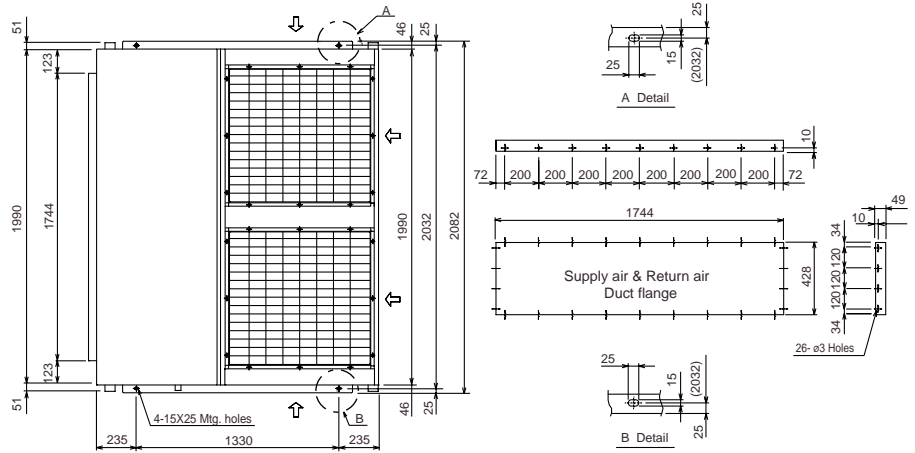
(down flow)

※ Screw is accessory parts.
Accessory parts is attached on control box cover.

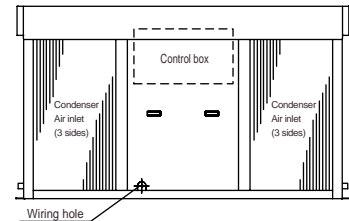
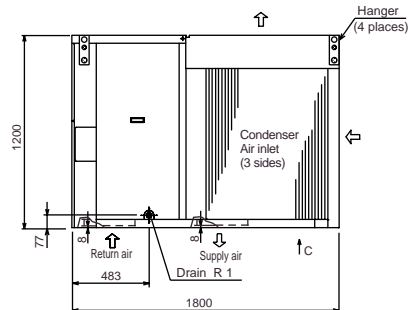
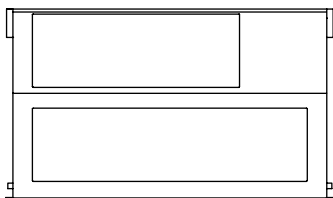
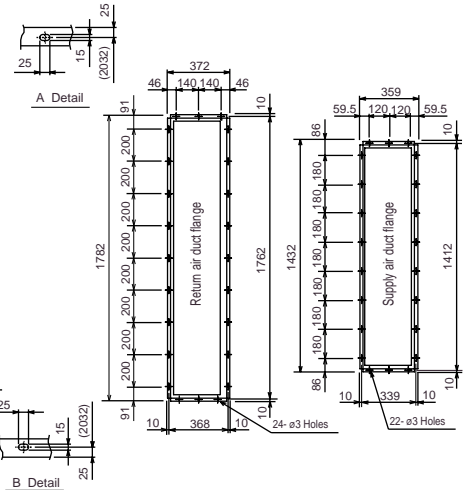
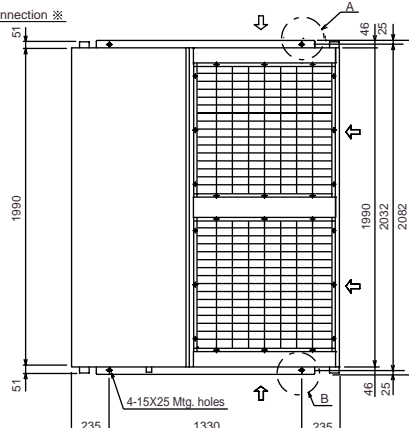
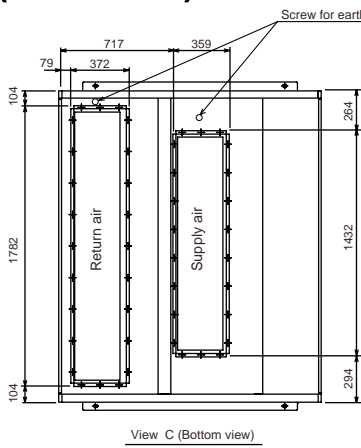


Outline Dimensions

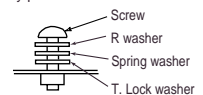
**PRHG-15MYA
PRHG-20MYA
(side flow)**



(down flow)



※ Screw is accessory parts.
Accessory parts is attached on control box cover.



Out Look

PRHG- 8MYA
PRHG-10MYA

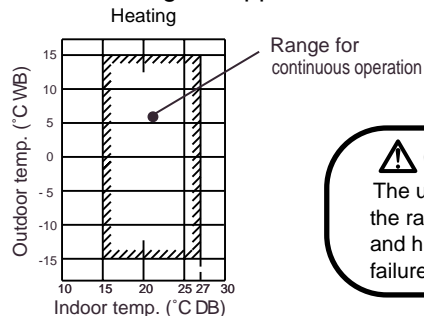
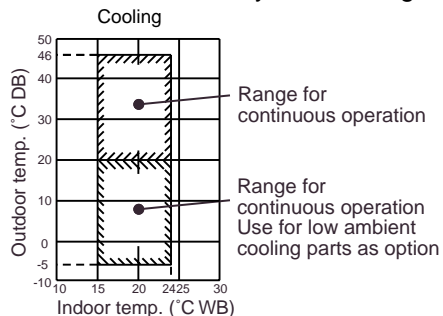


PRHG-15MYA
PRHG-20MYA



Operation Range

The range of working temperatures is as below.
Make sure which unit you are using and confirm the range of application.



⚠ Caution

The use of your air conditioner outside the range of working temperature and humidity can result in serious failure.

(Note)

As an applicable humidity outside standard for both indoors and outdoors, we recommend use within a range of 35-80% relative humidity. However, it is a condition that there is no be dewy in surfaces of electric parts.

Special Order

Description	Model	PRHG-8MYA	PRHG-10MYA	PRHG-15MYA	PRHG-20MYA
	Service ref.	PRHG-8MYA	PRHG-10MYA	PRHG-15MYA	PRHG-20MYA
* Low Ambient Cooling parts	PAC-205FC				
* Economizer	Near future				
Pressure Gauge		○	○	○	○
Roof curve	Near future				
Air filter		○	○	○	○

* *Low Ambient cooling* It is possible to conduct cooling operation under an outdoor temperature even down to -5 °C.

* *Economizer* The Economizer can save energy while moving Economizer damper in low ambient temperature .

