



PAC-KBU90MH-E

Medium pressure sensor installation manual

(For applications with a vertical separation between indoor and outdoor units up to 60/90 m)

[CAUTION]

(1) Common items**

Certain restrictions (vertical separation between indoor and outdoor units, operable temperature range etc.) apply, depending on where the outdoor unit is installed. Models available for 60/90* meters of vertical separation between indoor and outdoor units are listed in the following page.

*Outdoor unit below indoor unit = 60 m (196 ft); Outdoor unit above indoor unit = 90 m (295 ft)

(2) Y series**

Certain restrictions (pipe diameter, maximum piping length etc.) apply, depending on where the outdoor unit is installed.

(3) R2 series**

Certain restrictions (maximum total capacity of indoor units) apply, depending on where the outdoor unit is installed.

Turn DIP SW6-1 on the BC controller to ON.

Turn DIP SW 6-1 to ON on the G-, GA-, and HA-type BC controllers.

Use the BC controller (G/GA types) with the serial number 81W***** or later.

If the BC controller (G/GA types) has a serial number before 81W*****, replace the circuit board.

**Refer to appropriate manuals (Data Book etc.) for details.

[Parts List]

The following parts are included in the kit.

No.	Parts	Qty.
①	Medium pressure sensor assembly	1
②	Function setting connector (wire color: red x white)	1
③	Function setting connector (wire color: red x black)	1
④	Label	1

*Note that which function setting connector is used depends on the model.

②: PUHY-P*****/PURY-P*****

③: PUHY-EP*****/PURY-EP*****

If the wrong type of function setting connector is connected, the unit will not properly operate or it will come to an abnormal stop.

[Installation Procedures]

Install the sensor according to the procedures below.

(1) Turn off the power of the unit, and remove the top panel, bottom panel, and control box cover.

(2) Remove the lid of the service port on the service valve (liquid side for Y series or high-pressure side for R2 series), and install the medium pressure sensor assembly ① as shown in Figure 1 (to the tightening torque of 20±2N·m).

Apply some sealing material (ThreeBond 1110D, field-supplied) to the service port screws to keep water out of the screw part.

Screw down the mounting plate of the medium pressure sensor with the fixing screw on the left side of the refrigerant service valve, which can be found either on the gas side (Y series) or on the low-pressure side (R2 series).

*At the completion of installation, check for a refrigerant gas leak.

(3) Refer to Figure 2 for how to route the pressure sensor cable. Connect the pressure sensor connector to CN992 on the circuit board in the control box.

Fix the cables in place with the cable strap behind the frame at the bottom of the control box, just as with the cables of the sensors on the unit.

*Watch for static electricity when connecting connectors. (Static electricity can damage them.)

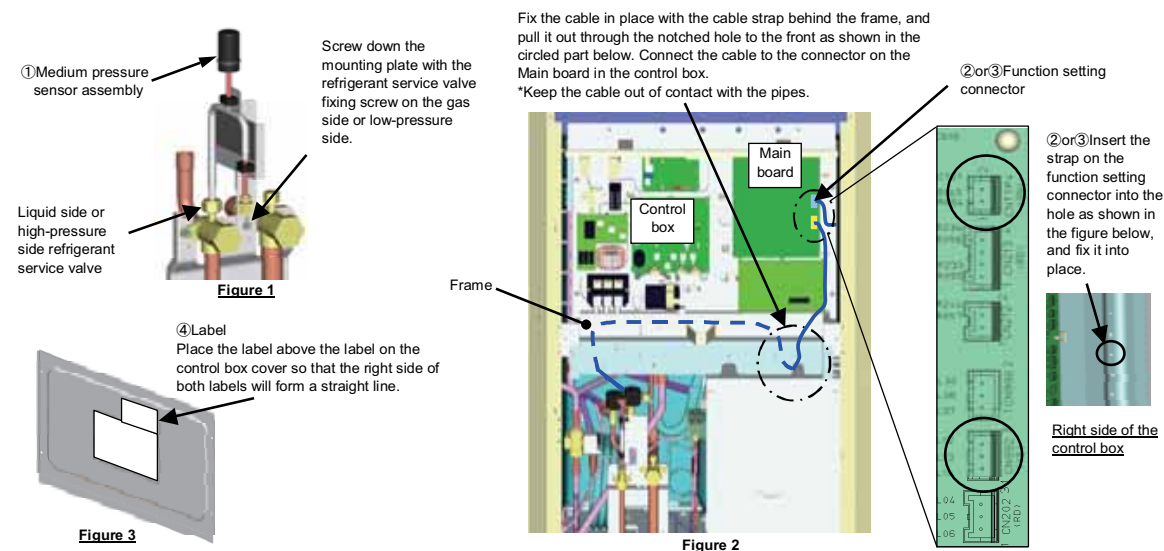
*Check that 63HS2 can be monitored from the Maintenance Tool.

(4) Remove the function setting connector that is connected to CNTYP4 on the Main board in the control box. (Figure 2)

Insert the strap on the function setting connector (enclosed part ② or ③) into the hole on the right side of the control box, and then connect the connector to CNTYP4. Remove the existing function setting connector to prevent it from being misused. (Cut the strap with a nipper if the strap does not come off.)

(5) Attach the label ④, which has the cautionary notes on replacing the circuit board, to the control box cover. (Figure 3)

(6) Replace the top panel, bottom panel, and control box cover.



Models available for 60/90 meters of vertical separation between indoor and outdoor units

[PUHY-(E)P*Y(S)HM-A(1)] Y Series**

HP	8	10	12	14	16	18
Set Name	PUHY-P200YHM-A	PUHY-P250YHM-A	PUHY-P300YHM-A	PUHY-P350YHM-A	PUHY-P400YHM-A	PUHY-P450YHM-A
Available models	√*	√	√	√	√	√

HP	20	22	24	26
Set Name	PUHY-P500YSHM-A	PUHY-P550YSHM-A	PUHY-P600YSHM-A	PUHY-P650YSHM-A
Combination	PUHY-P250YHM-A PUHY-P300YHM-A	PUHY-P250YHM-A PUHY-P300YHM-A	PUHY-P250YHM-A PUHY-P350YHM-A	PUHY-P300YHM-A PUHY-P350YHM-A
Available models	√	NA**	NA	NA

HP	28	30	32	34	36
Set Name	PUHY-P700YSHM-A	PUHY-P750YSHM-A	PUHY-P800YSHM-A	PUHY-P850YSHM-A	PUHY-P900YSHM-A
Combination	PUHY-P350YHM-A PUHY-P350YHM-A	PUHY-P350YHM-A PUHY-P400YHM-A	PUHY-P450YHM-A PUHY-P450YHM-A	PUHY-P450YHM-A PUHY-P450YHM-A	PUHY-P450YHM-A PUHY-P450YHM-A
Available models	√	√	√	√	√

HP	38	40	42	44
Set Name	PUHY-P950YSHM-A	PUHY-P1000YSHM-A	PUHY-P1050YSHM-A	PUHY-P1100YSHM-A
Combination	PUHY-P250YHM-A PUHY-P300YHM-A PUHY-P400YHM-A	PUHY-P300YHM-A PUHY-P300YHM-A PUHY-P400YHM-A	PUHY-P300YHM-A PUHY-P350YHM-A PUHY-P400YHM-A	PUHY-P350YHM-A PUHY-P350YHM-A PUHY-P400YHM-A
Available models	NA	NA	NA	√

HP	46	48	50
Set Name	PUHY-P1150YSHM-A	PUHY-P1200YSHM-A	PUHY-P1250YSHM-A
Combination	PUHY-P350YHM-A PUHY-P350YHM-A PUHY-P450YHM-A	PUHY-P350YHM-A PUHY-P400YHM-A PUHY-P450YHM-A	PUHY-P350YHM-A PUHY-P450YHM-A PUHY-P450YHM-A
Available models	√	√	√

Y Series - High COP

HP	8	10	12
Set Name	PUHY-EP200YHM-A	PUHY-EP250YHM-A	PUHY-EP300YHM-A
Available models	√	√	√

HP	16	18	20	22	24	26
Set Name	PUHY-EP400YSHM-A	PUHY-EP450YSHM-A	PUHY-EP450YSHM-A1	PUHY-EP500YSHM-A	PUHY-EP550YSHM-A	PUHY-EP550YSHM-A1
Combination	PUHY-EP200YHM-A PUHY-EP200YHM-A	PUHY-EP200YHM-A PUHY-EP250YHM-A	PUHY-EP200YHM-A PUHY-EP250YHM-A	PUHY-EP200YHM-A PUHY-EP300YHM-A	PUHY-EP250YHM-A PUHY-EP300YHM-A	PUHY-EP300YHM-A PUHY-EP300YHM-A
Available models	√	√	NA	NA	√	√

HP	28	30	32	34	36	
Set Name	PUHY-EP700YSHM-A	PUHY-EP750YSHM-A	PUHY-EP750YSHM-A1	PUHY-EP800YSHM-A	PUHY-EP850YSHM-A	
Combination	PUHY-EP200YHM-A PUHY-EP200YHM-A PUHY-EP300YHM-A	PUHY-EP200YHM-A PUHY-P250YHM-A PUHY-EP300YHM-A	PUHY-EP200YHM-A PUHY-EP250YHM-A PUHY-EP300YHM-A	PUHY-EP200YHM-A PUHY-EP300YHM-A PUHY-EP300YHM-A	PUHY-EP250YHM-A PUHY-EP300YHM-A PUHY-EP300YHM-A	PUHY-EP300YHM-A PUHY-EP300YHM-A PUHY-EP300YHM-A
Available models	NA	NA	NA	NA	√	

[PURY-(E)P*Y(S)HM-A(1)]R2 Series**

HP	8	10	12	14	16
Set Name	PURY-P200YHM-A	PURY-P250YHM-A	PURY-P300YHM-A	PURY-P350YHM-A	PURY-P400YHM-A
Available models	√*	√	√	√	√

HP	18	20	22	24	26
Set Name	PURY-P450YSHM-A	PURY-P500YSHM-A	PURY-P550YSHM-A	PURY-P600YSHM-A	PURY-P650YSHM-A
Combination	PURY-P200YHM-A PURY-P250YHM-A	PURY-P250YHM-A PURY-P250YHM-A	PURY-P300YHM-A PURY-P300YHM-A	PURY-P300YHM-A PURY-P300YHM-A	PURY-P300YHM-A PURY-P350YHM-A
Available models	√	√	√	√	√

HP	28	30	32
Set Name	PURY-P700YSHM-A	PURY-P750YSHM-A	PURY-P800YSHM-A
Combination	PURY-P300YHM-A PURY-P400YHM-A	PURY-P350YHM-A PURY-P400YHM-A	PURY-P400YHM-A PURY-P400YHM-A
Available models	√	√	√

R2 Series - High COP

HP	8	10	12
Set Name	PURY-EP200YHM-A	PURY-EP250YHM-A	PURY-EP300YHM-A
Available models	√	√	√

HP	16	18	20	22	24
Set Name	PURY-EP400YSHM-A	PURY-EP450YSHM-A	PURY-EP450YSHM-A1	PURY-EP500YSHM-A	PURY-EP550YSHM-A
Combination	PURY-EP200YHM-A PURY-EP200YHM-A	PURY-EP200YHM-A PURY-P250YHM-A	PURY-EP200YHM-A PURY-EP250YHM-A	PURY-EP200YHM-A PURY-EP300YHM-A	PURY-EP250YHM-A PURY-EP300YHM-A
Available models	√	√	√	√	√

*√ stands for "available"

**NA stands for "not available"

[PUHY-P*T(S)HMU-A] Y Series (208-230V)**

HP	8	10	12
Set Name	PUHY-P72THMU-A	PUHY-P96THMU-A	PUHY-P120THMU-A
Available models	V*	V	V

HP	16	18	20	22	24
Set Name	PUHY-P144TSHMU-A	PUHY-P168TSHMU-A	PUHY-P192TSHMU-A	PUHY-P216TSHMU-A	PUHY-P240TSHMU-A
Combination	PUHY-P72THMU-A PUHY-P72THMU-A	PUHY-P72THMU-A PUHY-P96THMU-A	PUHY-P72THMU-A PUHY-P120THMU-A	PUHY-P96THMU-A PUHY-P120THMU-A	PUHY-P120THMU-A PUHY-P120THMU-A
Available models	V	V	NA**	NA	V

HP	28	30	32	34	36
Set Name	PUHY-P264TSHMU-A	PUHY-P288TSHMU-A	PUHY-P312TSHMU-A	PUHY-P336TSHMU-A	PUHY-P360TSHMU-A
Combination	PUHY-P72THMU-A PUHY-P72THMU-A PUHY-P120THMU-A	PUHY-P72THMU-A PUHY-P96THMU-A PUHY-P120THMU-A	PUHY-P72THMU-A PUHY-P120THMU-A PUHY-P120THMU-A	PUHY-P96THMU-A PUHY-P120THMU-A PUHY-P120THMU-A	PUHY-P120THMU-A PUHY-P120THMU-A PUHY-P120THMU-A
Available models	NA	NA	NA	NA	V

[PUHY-P*Y(S)HMU-A] Y Series (460V)**

HP	8	10	12
Set Name	PUHY-P72YHMU-A	PUHY-P96YHMU-A	PUHY-P120YHMU-A
Available models	V*	V	V

HP	16	18	20	22	24
Set Name	PUHY-P144YSHMU-A	PUHY-P168YSHMU-A	PUHY-P192YSHMU-A	PUHY-P216YSHMU-A	PUHY-P240YSHMU-A
Combination	PUHY-P72YHMU-A PUHY-P72YHMU-A	PUHY-P72YHMU-A PUHY-P96YHMU-A	PUHY-P72YHMU-A PUHY-P120YHMU-A	PUHY-P96YHMU-A PUHY-P120YHMU-A	PUHY-P120YHMU-A PUHY-P120YHMU-A
Available models	V	V	NA**	NA	V

HP	28	30	32	34	36
Set Name	PUHY-P264YSHMU-A	PUHY-P288YSHMU-A	PUHY-P312YSHMU-A	PUHY-P336YSHMU-A	PUHY-P360YSHMU-A
Combination	PUHY-P72YHMU-A PUHY-P72YHMU-A PUHY-P120YHMU-A	PUHY-P72YHMU-A PUHY-P96YHMU-A PUHY-P120YHMU-A	PUHY-P72YHMU-A PUHY-P120YHMU-A PUHY-P120YHMU-A	PUHY-P96YHMU-A PUHY-P120YHMU-A PUHY-P120YHMU-A	PUHY-P120YHMU-A PUHY-P120YHMU-A PUHY-P120YHMU-A
Available models	NA	NA	NA	NA	V

[PURY-P*T(S)HMU-A] R2 Series (208-230V)**

HP	8	10	12
Set Name	PURY-P72THMU-A	PURY-P96THMU-A	PURY-P120THMU-A
Available models	V*	V	V

HP	16	18	20	22	24
Set Name	PURY-P144TSHMU-A	PURY-P168TSHMU-A	PURY-P192TSHMU-A	PURY-P216TSHMU-A	PURY-P240TSHMU-A
Combination	PURY-P72THMU-A PURY-P72THMU-A	PURY-P72THMU-A PURY-P96THMU-A	PURY-P96THMU-A PURY-P96THMU-A	PURY-P96THMU-A PURY-P120THMU-A	PURY-P120THMU-A PURY-P120THMU-A
Available models	V	V	V	V	V

[PURY-P*Y(S)HMU-A] R2 Series (460V)**

HP	8	10	12
Set Name	PURY-P72YHMU-A	PURY-P96YHMU-A	PURY-P120YHMU-A
Available models	V*	V	V

HP	16	18	20	22	24
Set Name	PURY-P144YSHMU-A	PURY-P168YSHMU-A	PURY-P192YSHMU-A	PURY-P216YSHMU-A	PURY-P240YSHMU-A
Combination	PURY-P72YHMU-A PURY-P72YHMU-A	PURY-P72YHMU-A PURY-P96YHMU-A	PURY-P96YHMU-A PURY-P96YHMU-A	PURY-P96YHMU-A PURY-P120YHMU-A	PURY-P120YHMU-A PURY-P120YHMU-A
Available models	V	V	V	V	V

*V stands for "available"

**NA stands for "not available"