MANUFACTURED FOR:
MITSUBISHI ELECTRIC US, INC.

Drain Pan Level Sensor/Control

DPLS2

for use with:

M-Series MFZ, MS, MSY/Z, SEZ, SLZ, MSZ-FH and MVZ
P-Series PCA, PEA, PEAD, PKA, and PVA
CITY MULTI® PCFY, PDFY, PEFY, PKFY, PLKA, PLFY, PMFY and PVFY
Indoor Units Units

INSTALLATION MANUAL

FOR INSTALLER

For safe and effective use of this kit, please read this installation manual thoroughly before installing these components

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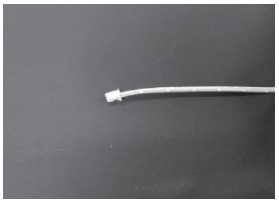
Contents

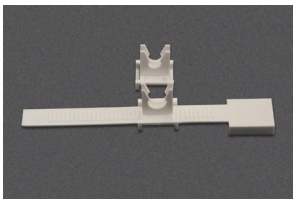
1. Components

CONTROL BOX

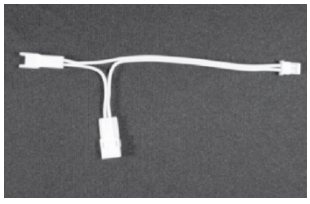
MICRO SENSOR



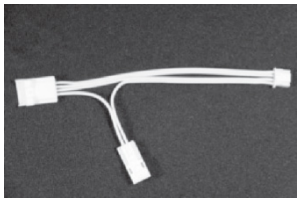
SPLICE CONNECTOR



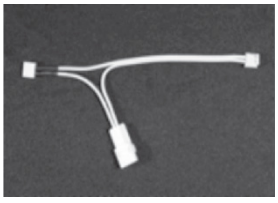
Coil Clips



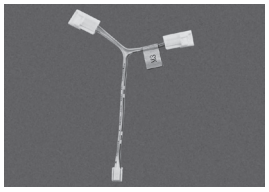
P WIRE HARNESS



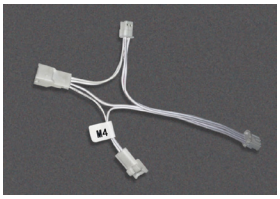
M1 WIRE HARNESS



M2 WIRE HARNESS



M3



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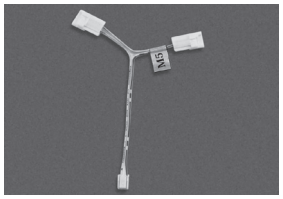
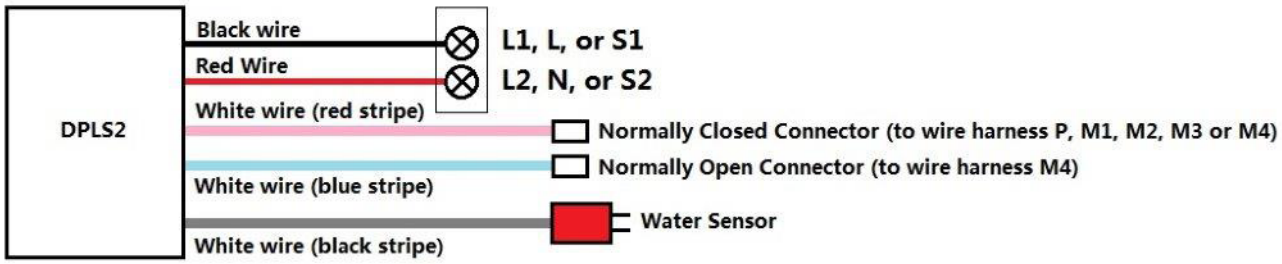


M5



BASE DIAGRAM FOR HIGH VOLTAGE WIRING

Work Safe, READ THIS!

ATTENTION:
FAILURE TO READ AND COMPLY WITH ALL WARNINGS, CAUTIONS AND INSTRUCTIONS PRIOR TO STARTING INSTALLATION MAY CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE AND VOID WARRANTY.

This device must be installed in accordance with Equipment Manufacturer's instructions and in accordance with all applicable local codes,including plumbing, drainage and electrical.

"Branch circuit protection shall be provided using a Listed branch circuit protection device rated minimum 250V AC/100V DC, maximum 1A as appropriate for the supply source"

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Table 1: Description of Wire Harnesses

Type of Wire Harness	Indoor Unit Models	Connector to Indoor Unit Control Board	Connector to Thermistor	Connector to Control Board
M2 Wire Harness	MS MSZ/Y-A/FE/GA/GE MSZ/Y-GL06/09/12/15/24 *Not MSZ/Y-GL18* MFZ	2 pin, female connector (with black heat shrink)	2 pin, male connector to: RT11 (Room Temp. Thermistor)	2 pin, male connector
	MVZ	2 pin, female connector (with black heat shrink) to CN20		
M5 Wire Harness	MSZ/Y-GL18	Connector	TH - Coil Thernmistor	
P Wire Harness	PKA PCA PEA(D) SEZ PVA	2 pin, female connector to CN20	2 pin, male connector to: TH1 (Room Temp. Thermistor)	2 pin, male connector
	PKFY-P**NBMU-E PLFY-P**NCMU-E PMFY-P**NBMU-E PVFY-P**NAMU PEFY-P**NMHU-E	2 pin, female connector to CN20, CN21 or CN29	2 pin, male connector to: TH1 (Room Temp. Thermistor) or TH22 (Pipe Temp. Thermistor /Liquid) or TH23 (Pipe Temp. Thermistor /Gas)	
M1 Wire Harness	PKA PCA PEA(D) SEZ PKFY-P**NH/KMU-E PLFY-P**NBMU-E PCFY-P**NKMU-E PEFY-P**NMS/AU-E	4 pin, female connector to CN44	4 pin, male connector to: TH2 (Pipe Temp. Thermistor/Liquid) and TH5 (Pipe Temp. Thermistor/Gas)	2 pin, male connector
	MS	4 pin, female connector to CN112	4 pin, male connector to: RT12 (Coil Temp. Thermistor)	
	MSZ/Y		4 pin, male connector to; RT12 (Coil Temp. Thermistor – Main) and RT13 (Coil Temp. Thermistor – Sub)	
	MFZ	4 pin, female connector to CN113	4 pin, male connector to: RT15 (Coil Temp. Thermistor)	
M3 Wire Harness	MSZ-F	3 pin, female connector to CN111	3 pin, male connector to: Thermistor	2 pin, male connector
M4 Wire Harness	Indoor Unit with CN4F Port	4 pin, female connector to CN4F	N/A	2 pin, male connector

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2. Installation of DPLS2

Drain Pan Level Sensor/Control:

(To ensure proper performance of product, instructions must be followed.)

1. Disconnect (and lock-out, if required) all power to the M-Series, P-Series, S-Series or CITY MULTI Indoor Unit at the Disconnect Switch (if installed) or at the main disconnect panel serving the indoor and/or outdoor unit.

2. Connect DPLS2 Splice Connector to the selected mating Wire Harness Connector – see wiring harness selection
(Table 1). Connect the Control Box's Splice Connector to the mating connector on the Wire Harness (Fig 1).

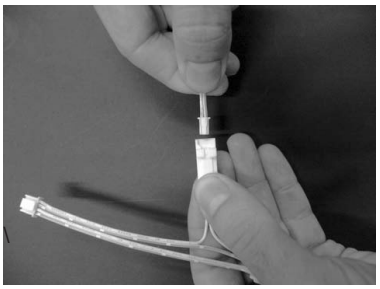

Fig 1

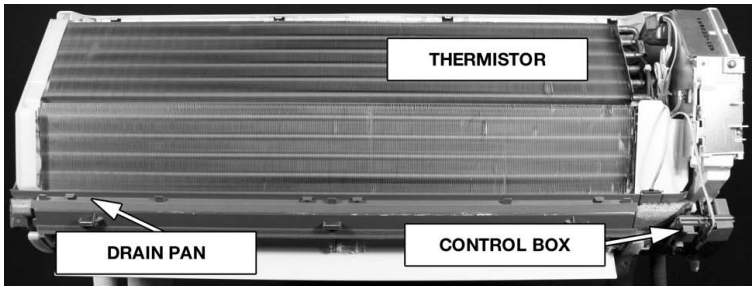

Fig 2: Typical indoor unit with cover removed

Typical Installation - *example*: Wall Mount Indoor Unit – MS/MSY/MSZ/PKA/PKFY:

1. Remove front cover of indoor unit in order to expose the coil and the control circuit area of the unit (Fig 2). The disassemblyof the front cover, air filters, and possibly electrical shields will vary according to style of indoor unit installed. See the Mitsubishi Electric's Technical Manual for detailed disassembly and details.

2. Locate the corresponding connector (see Table 1) on the printed control circuit board and, remove the connector of the thermistor (Fig 4). Plug female connector of the Wire Harness into the printed circuit board, and plug the male
connector on the opposite end into the thermistor connector (Fig 5).

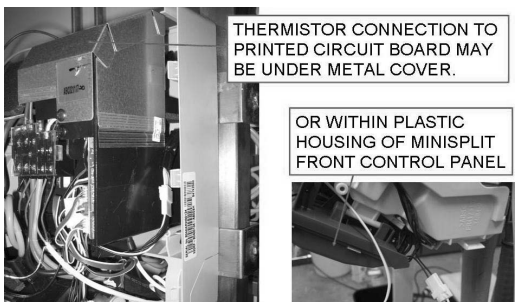

Fig 3

Fig 4

Fig 5

Fig 6

3. Connect black/red power input wire to indoor unit power supply terminal (S1, S2).

4. Determine the best location for the DPLS2 Control Box (above the drain pan and outside of the main airflow):

   Using the double-sided adhesive pad, mount the Control Box in a location inside the indoor unit that will allow clearance for the cover to be reassembled (Fig 6).

5. Reassemble all covers that were removed during the installation.

6. Test the DPLS2:
Reconnect power to the indoor unit. Use extreme caution, beware of high voltage on the indoor unit during testing. Turn unit on and set cooling thermostat to lowest temperature setting. Make sure to restore power to the outdoor unit before performing the test in step 7.

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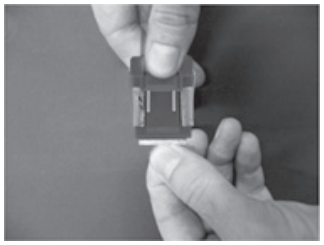


Fig 7

Fig 8

Fig 9

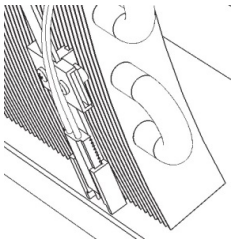


Fig 10

7. Using a clip lead or other metallic object, carefully make a connection between the two pins on the Micro Sensor (Fig 7). Indoor unit should shut down after a 5-10 second delay.

8. Disconnect indoor unit power before proceeding to the next step.

9. Determine the best location for the DPLS2 Micro Sensor. Make sure that power has been disconnected. Find the drain pan below the coil in the indoor unit. It is located directly below the aluminum fins of the coil and is slightly wider than the coil depending on the style of indoor unit.

10. Wipe all water, dirt and dust from the drain pan with a damp cloth. Temporarily locate the Micro Sensor in the drain pan.

11. Slide pan clip with sensor onto the front edge of the drain pan (Fig 8). Push the sensor down into the pan to a position where the two sensing tips remain above the condensate level in normal operation, ensure the Micro Sensor touches the bottom of the trough and the panel clips are pushed all the way down on the front edge of the trough (Fig 9).

    (These installation instructions are typical for all wall mounted, floor standing, ceiling recessed, and ceiling concealed, and ceiling suspended units. Location of the micro sensor should at the drain pan no less than 3/8” from the bottom.)

12. If there is no place for pan clip attach the sensor to the coil clip (there are two optional coil clips: 7mm and 5mm).

    Clip the coil clip onto the evaporator coil. Insert the coil clip between tins or at the coil U-bend. Position the wires up and senor pins down. Adjust sensor height by moving the vertical member (with sensor attached) up and down. Sensor pins should be coated above normal condensate level, while below the condensate overflow level. (Fig 10)

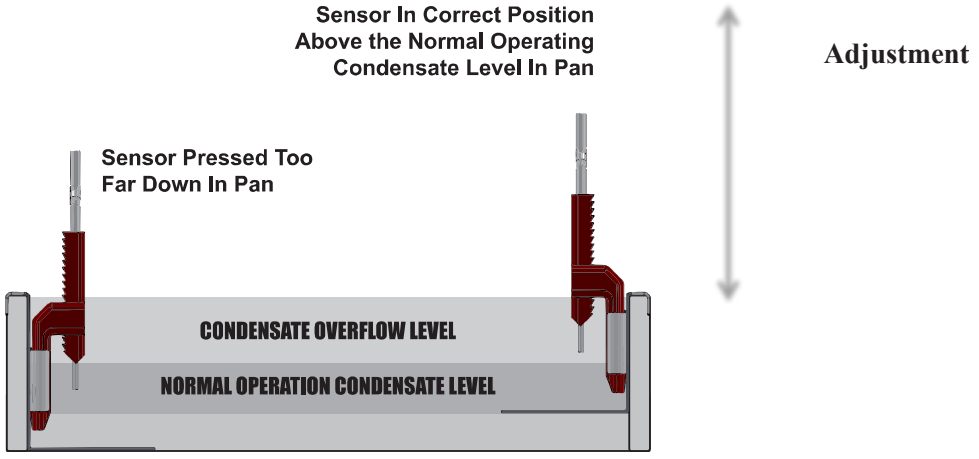
13. Temporarily reassemble the front cover of the indoor unit to make sure that it reattaches properly. If there is interference with the front cover, relocate the Micro Sensor on the drain pan and recheck clearances.

14. Once the best location has been determined, remove the double-sided tape on the Micro Sensor and reinstall it in the same manner as described above. Ensure the Micro Sensor does not touch the bottom of the drain pan and the panel clips are pushed all the way down on the front edge of the trough (Fig 9).

15. Bundle and tie wrap excess wire. Locate and anchor the excess wire bundles so that they do not interfere with the reassembly of the cover of the Indoor Unit.

16. Reassemble the Indoor Unit cover.

17. Turn power on to Indoor Unit and Outdoor Unit.



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3. Limited Warranty

1. **ONE YEAR DRAIN PAN LEVEL SENSOR/CONTROL WARRANTY** - MITSUBISHI ELECTRIC US, INC. (“MEUS”) warrants to the original end-user of this Drain Pan Level Sensor/Control that, should it prove defective due to improper workmanship and/or material under normal use and proper installation for a period of one year from the date of installation, we will repair or replace, at our option, any defective Drain Pan Level Sensor/Control or component without charge for the part. Replacement Drain Pan Level Sensor/Controls is warranted for the remainder of the original warranty period.

2. **THIS WARRANTY DOES NOT INCLUDE LABOR** or other costs incurred for servicing, repairing, removing, installing, shipping or handling of defective or replacement Drain Pan Level Sensor/Control.

3. **TO OBTAIN WARRANTY SERVICE,** please contact your dealer or contractor who installed this product. If your dealer or contractor needs assistance, its distributor is available for consultation. Should you not receive satisfactory warranty service, please call, fax or write to us at:

   warranty@hvac.mea.com
   Mitsubishi Electric US, Inc.
   Attn.: Customer Service,
   1340 Satellite Boulevard, Suwanee GA 30024
   Telephone:1-800-433-4822

4. This limited warranty applies only while the Drain Pan Level Sensor/Control remains at the site of the original installation. This limited warranty applies only if the Drain Pan Level Sensor/Control is installed and operated in accordance with the manufacturer’s instructions and in compliance with applicable local installation and building codes and good trade practices.

5. Any defective Drain Pan Level Sensor/Control to be replaced must be made available to your dealer or contractor in exchange for the replacement part. You must present proof of the original date of installation of the product in order to establish the effective date of the warranty.

6. **THIS WARRANTY DOES NOT COVER** any damage resulting or arising from: (a) installation that is not strictly according to the manufacturer’s instructions; (b) incorrect mounting or locating control or sensor; (c) accident, abuse, negligence, or misuse;
   (d) improper wiring; (e) modification or alteration; (f) improper application of the product; (g) failure to properly maintain and service
   the product according to manufacturer’s instructions; (h) installation or operating of the product in a manner contrary to the instructions
   of the manufacturer; or (i) lightning, fluctuations in electrical power or acts of God. This limited warranty also excludes all costs of installation, disconnection or dismantling the product and owner-required maintenance. Consult the instructions enclosed with the product for information regarding recommended maintenance.

7. No one is authorized to change this LIMITED WARRANTY in any respect, or to create for us any other obligation or liability in connection with this product.

8. **YOUR ONLY REMEDIES ARE PROVIDED IN THIS LIMITED WARRANTY. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO TERM OF ONE YEAR FROM THE DATE OF ORIGINAL INSTALLATION. UNDER NO CIRCUMSTANCES SHALL MEUS BE LIABLE TO THE OWNER OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THIS PRODUCT, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT OR OTHERWISE.**

9. Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental, special or consequential damages, so the above limitations or exclusions may not apply to you.

10. This warranty gives your specific legal rights, and you may also have other rights, which vary, from state to state.

11. This warranty is valid only in the U.S.A. and is not transferable.

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Memo

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This product is designed and intended for use in the residential, light-commercial and commercial environment.

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

Manufactured for MITSUBISHI ELECTRIC US, INC.

www.mitsubishielectric-usa.com

Toll Free: 800-433-4822

DPLS2 Installation Instructions, February 2016

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