Job Name:

System Reference: Date:

SPECIFICATIONS:

- Allows a HVAC Thermostat or I/O Controller to control a Mitsubishi Electric CITY MULTI®, M-Series or P-Series indoor unit.
- One Thermostat Interface 2 per indoor unit
- Indoor unit modes: Cool, Heat, Fan, and Off
- Provides 3 input terminals to control fan speed control:
  - High
  - Medium
  - Low
- Addressing: No addressing required
- Works with PAA intelli-HEAT™ indoor unit
  - Previous PAC-US444CN-1 is not compatible with PAA intelli-HEAT™ indoor unit
  - Includes PAA wire harness
- Connection: CN105 - IT Terminal
- Thermostats Tested:
  - Nest®
  - Honeywell®
  - Lyric®
  - INNCOM® with fan speed control
- Dimensions: (H x W x D) 3.96 in x 3.17 in x 0.93 in
- Terminal Block: 20-30 VAC Rated

REQUIREMENTS:

- Compatible Mitsubishi Electric indoor unit
  - See compatibility chart on page 3
- 24VAC Thermostat or I/O Controller (field supplied)
- 24VAC circuit for HVAC Thermostat (field supplied)

TERMINALS:

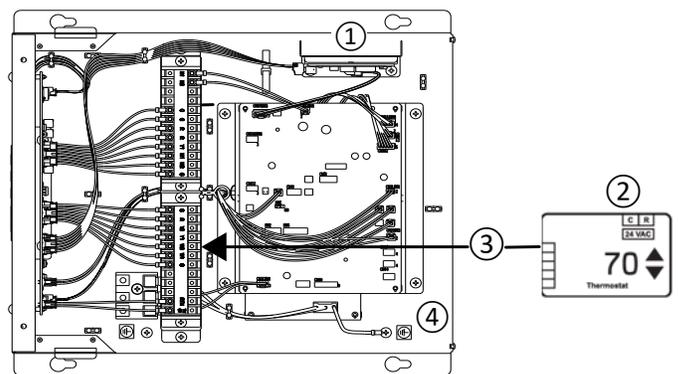| Connector	Purpose	Purpose
TC	Common (In)	To Transformer
C	Common (Out)	To Thermostat
TR	24VAC (In)	To Transformer
R	24VAC (Out)	To Thermostat
G3	Fan High	High Fan Speed
G2	Fan Medium	Medium Fan Speed
G1	Fan Low	Low Fan Speed
Y2	Y2	Stage 2 Cooling
Y1	Y1	Stage 1 Cooling
W2	W2	Stage 2 Heating
W1	W1	Stage 1 Heating
G	G	Fan

ADVANCED FEATURES:

- Zero delay timer
  - Stay in heating or cooling for 2 hours once W1 or Y1 is no longer active (default)
  - Turn off the unit or go into fan mode immediately depending on G Signal
- Fan Speed during cooling thermal off if G is off
  - OFF (default)
  - Extra low
- Fan speed during heating, thermal off
  - OFF (default)
  - Extra low
- Fan Speed
  - Custom Auto (default, more comfortable than Auto)
  - Medium
  - High
  - Auto (more efficient than Custom Auto)
- Two-stage thermostat operation
  - Capacity is adjusted (default)
  - Full capacity
- Static Pressure Adjustable Setting
- CN24 operation during defrost
  - OFF (default)
  - ON
- Auto recovery after power failure
- Select the Thermostat Power Supply Source
- Set Emergency and test mode operations
  - OFF Thermostat controls heat and fan signals (default)
  - ON Test mode operation
- Thermostat Interface DIP switch settings for intelli-HEAT™
  - OFF G & Y (default)
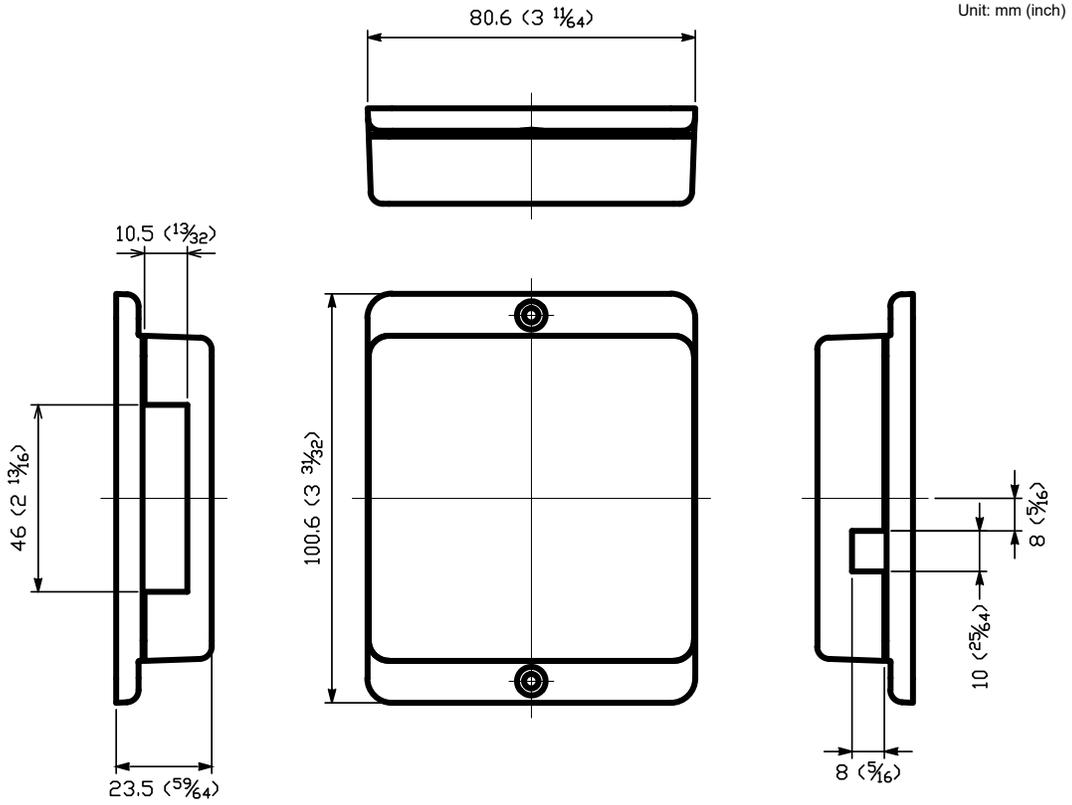 - ON Y1 & Y2

ACCESSORIES:

Transformer (VPL24-210)

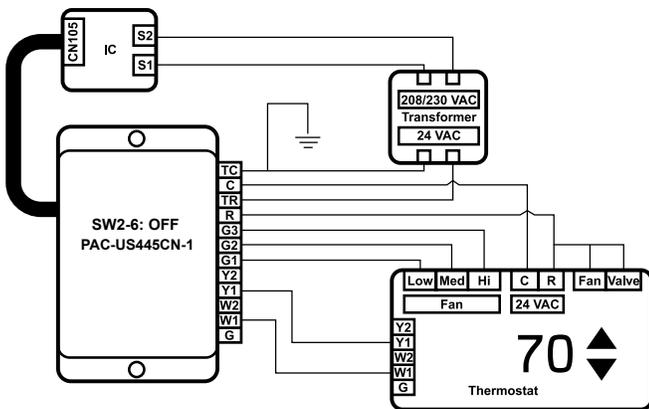## WIRING DIAGRAM: PAC-US445CN-1 WHEN USED WITH PAA intelli-HEAT™ INDOOR UNIT

① Thermostat Interface	② Third-party thermostat
③ Thermostat control signals (R, C, W1, W2, Y1, Y2, G)	④ PAA unit control box

Specifications are subject to change without notice.

DIMENSIONS AND WIRING DIAGRAMS: PAC-US445CN-1

DIMENSIONS:

Unit: mm (inch)

80.6 (3 ¹¹⁄₆₄)

10.5 (¹³⁄₃₂)

46 (2 ¹³⁄₁₆)
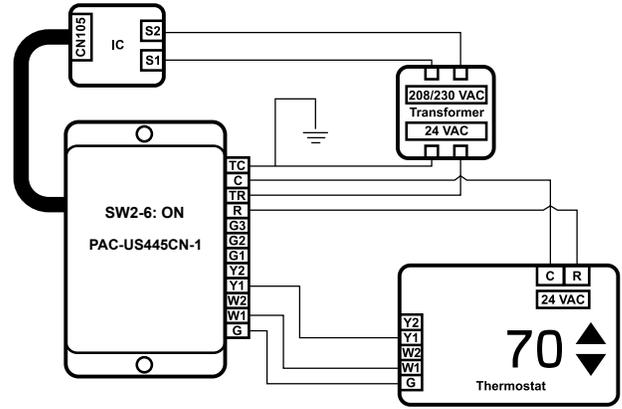
100.6 (3 ³¹⁄₃₂)

23.5 (5⁹⁄₆₄)

8 (⁵⁄₁₆)

8 (⁵⁄₁₆)

10 (²⁵⁄₆₄)

WIRING DIAGRAMS:

Single-stage Cooling and Heating with Dedicated Fan Speed Relays

Two-stage Cooling and Heating

COMPATIBILITY CHART: PAC-US445CN-1

PAC-US444CN-1 (THERMOSTAT INTERFACE) MUST BE ORDERED SEPARATELY

CITY MULTI®

Model	Compatibility
PMFY-NMBU	(E) NO (ER5) ADPT (After April 2012)
PEFY-NMU	(NMU-E) NO
PEFY-NMAU	(E) NO (E2) ADPT (After April 2012) (E3) OK (E4) OK
PEFY-NMHSU	(E) ADPT OK (After Oct 2015)
PEFY-NMHU	(E) NO (E2) ADPT (After April 2012)
PEFY-NMLU	(E) NO
PEFY-NMSU	(E) NO (ER2) ADPT (After June 2012)
PLFY- NAMU	(A) NO (E) NO
PLFY- NBMU	(E) NO (ER2) ADPT (After April 2012) (E2) OK
PLFY- NCMU	(E) NO (ER4) ADPT (After June 2012)
PLFY- NEMU	(E) OK
PLFY- NLMU	(E) NO
PCFY- VKM	NO
PLFY-NFMU	OK
PCFY- NGMU	(E) NO
PCFY- NKMU	(E) NO (E.TH) NO (ER1.TH) ADPT (After June 2012)
PFFY-NEMU	(E) ADPT (After April 2012)
PFFY-NRMU	(E) ADPT (After April 2012)
PVFY-E00	(A) OK (B) OK
PVFY-NAMU	(E) OK
PKFY-NAMU	(E) NO
PKFY-NFMU	(E) NO
PKFY-NGMU	(E) NO
PKFY-NBMU	(E) NO (E2) ADPT (E2R1) ADPT (After April 2012)
PKFY-NHMU	(E) NO (E2) ADPT (After May 2012)
PKFY-NKMU	(E) NO (E2) ADPT (E2.TH) ADPT (After June 2012)
PKFY-NLMU	(E) OK

M-Series

Model	Compatibility
MSZ/Y-A	NO
MSZ/Y-D	(NA) NO (NA-8) OK
MSZ-EF	OK
MSZ-FD	NO
MSZ-FE	09, 12 (NA) NO 09, 12 (NA-8) OK 18 (NA) OK
MSZ-FH	OK
MSZ-FS	OK
MSZ/Y-GE	06 to 18 (NA) NO (NA-8) OK (NA-9) OK 24 (NA) OK
MSZ/Y-GL	OK
MSZ/Y-GS	OK
MSZ-HE	NO
MSZ-HM	OK
MSZ-JP	OK
MS-WA	NO
MSZ-WR	OK
MFZ-KA	OK
MFZ-KJ	OK
MVZ	(AA4) OK (AA7) OK
SVZ-KP	OK
SEZ-KD	(NA) NO (KD4) OK (KD4) OK
SLZ-KA	OK
SLZ-KF	OK
MLZ-KP	OK

P-Series

Model	Compatibility
PCA	(GA) NO (KA) NO (KA4) OK (KA4.TH) OK (KA6) OK (KA7) OK
PEA	(AA) NO (AA4) OK (AA4R1.TH) OK (AA6) OK
PEAD	(AA) NO (AA4) OK (AA5) OK (AA7) OK
PKA	(FA) NO (GA) NO (HA) NO (HAL) NO (HA4) OK (HA6) OK (HA7) OK (KA) NO (KA4) OK (KA6) OK (KA7) OK (LA) OK
PLA	(AA) NO (BA) NO (BA-1) NO (BA4) OK (BA6) OK (EA7) OK
PVA	(AA4) OK (AA7) OK
PAA	(AA1) OK (BA1) OK (CA1) OK

Legend:

OK = Compatible

NO = Not compatible

ADPT = Install IT signal adapter PAC-IT51AD-E or PAC-IT52AD-E for compatibility

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