

# CONTROLLER CONFIGURATION

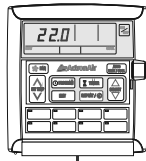
## LM - SERIES CONTROLLER CLASSIC RESIDENTIAL MODELS

**CLASSIC**

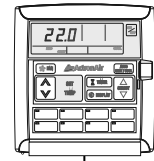
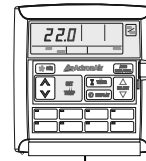
**DUAL CONTROL OPTION - A**  
Combination of 1 x 7-Day and 1 x 24-Hr Wall Controllers

**DUAL CONTROL OPTION - B**  
Combination of 2 x 24-Hr Wall Controllers

**WALL CONTROLLERS**



DUAL CONTROL  
OPTIONS  
"A" or "B"



4 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable  
(Wall Controllers - Indoor PCB)

LM7  
(Supplied)

LM24W  
(Purchased Separately)

LM24W  
(Optional)

LM24W  
(Optional)

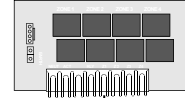
**INDOOR UNIT**



AMIB-P  
AMIB-PEC  
Indoor Board  
(Factory Supplied & Fitted)

**OPTIONAL ZONE MODULES**

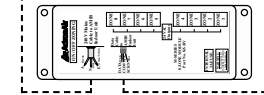
4Z-24V  
24VAC 4-Zone



AMZ  
230VAC 4-Zone



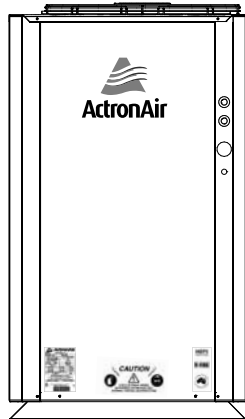
8Z-24V  
24VAC 8-Zone



**IMPORTANT NOTE FOR ID - OD FIELD DATA CABLE:**

Use 2 CORE 14/0.20 (0.44mm<sup>2</sup>) Shielded Data Cable or  
2 CORE 7/0.30 (0.5mm<sup>2</sup>) Twisted Pair Shielded Data Cable

**OUTDOOR UNIT**



230VAC Cable\*

ID - OD  
Data Cable

D4STG2  
2/3 Stage Boost Heat Board  
(Optional)

D4FD  
Fault Diagnostic Board  
(Optional)

MANUAL INPUT  
(Optional)

D4CPU-P  
Outdoor Board  
(Factory Supplied & Fitted)

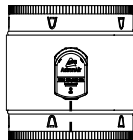
TO  
OPTIONAL  
ZONE  
MODULES

\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup> Must comply with AS/NZS 3000 Wiring Rules.

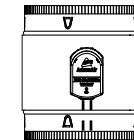
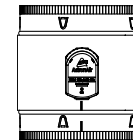
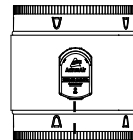
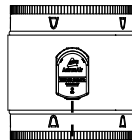
**INTEGRATED ZONE BARRELS**

1-ZONE UP TO 8-ZONE  
(Optional)

ZB-10-250
ZB-12-300
ZB-14-350
ZB-16-400



1-Zone  
Up To  
8-Zone  
Options



PIGGY BACK CONFIGURATION

**REMOTE SENSOR AND  
DUCT BEAD SENSOR**



LM-RS  
Remote Sensor  
(Optional)

AERSS  
Optional Duct Bead Sensor  
(Supplied with Cable)

CAT5E Cable with Basic  
Non-Moulded RJ45 Plug

2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

**NOTE:**

1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER TO M-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.



# CONTROLLER CONFIGURATION

## LM - SERIES CONTROLLER ESP PLUS MODELS



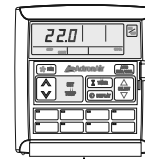
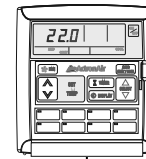
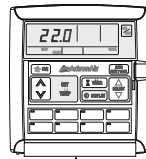
### DUAL CONTROL OPTION - A

Combination of 1 x 7-Day and 1 x 24-Hr Wall Controllers

### DUAL CONTROL OPTION - B

Combination of 2 x 24-Hr Wall Controllers

#### WALL CONTROLLERS



DUAL CONTROL  
OPTION  
"A" or "B"

4 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable  
(Wall Controllers - Indoor PCB)

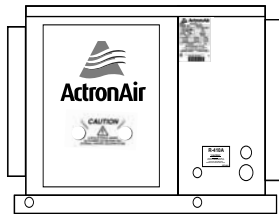
LM7-D  
(Supplied)

LM24W  
(Purchased Separately)

LM24W  
(Optional)

LM24W  
(Optional)

#### INDOOR UNIT



AMIB-P1DV (1Ph Digital)  
AMIB-P3DV (3Ph Digital)  
Indoor Board  
(Factory Supplied & Fitted)

#### OPTIONAL ZONE MODULES

4Z-24V  
24VAC 4-Zone

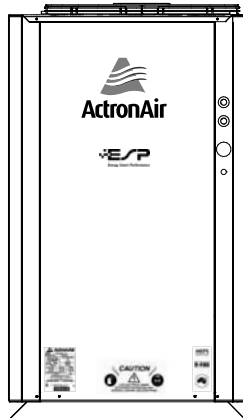
8Z-24V  
24VAC 8-Zone

#### IMPORTANT NOTE FOR ID - OD FIELD DATA CABLE:

Use 2 CORE 14/0.20 (0.44mm<sup>2</sup>) Shielded Data Cable or  
2 CORE 7/0.30 (0.5mm<sup>2</sup>) Twisted Pair Shielded Data Cable

ID - OD  
Data Cable

#### OUTDOOR UNIT



230VAC Cable\*

D4CPU-PD  
Outdoor Board  
(Factory Supplied & Fitted)

TO  
OPTIONAL  
ZONE  
MODULES

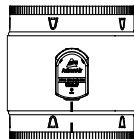
CAT5E Cable with Basic  
Non-Moulded RJ45 Plug

\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup> Must comply with AS/NZS 3000 Wiring Rules.

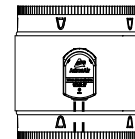
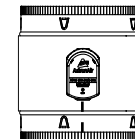
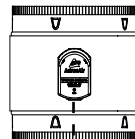
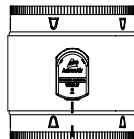
#### INTEGRATED ZONE BARRELS

1-ZONE UP TO 8-ZONE (Optional)

ZB-10-250
ZB-12-300
ZB-14-350
ZB-16-400



1-Zone  
Up To  
8-Zone  
Options



#### PIGGY BACK CONFIGURATION

#### REMOTE SENSOR AND DUCT BEAD SENSOR



LM-RS  
Remote Sensor  
(Optional)

2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

AERSS  
Optional Duct Bead Sensor  
(Supplied with Cable)

#### NOTE:

1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER TO M-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.



# CONTROLLER CONFIGURATION

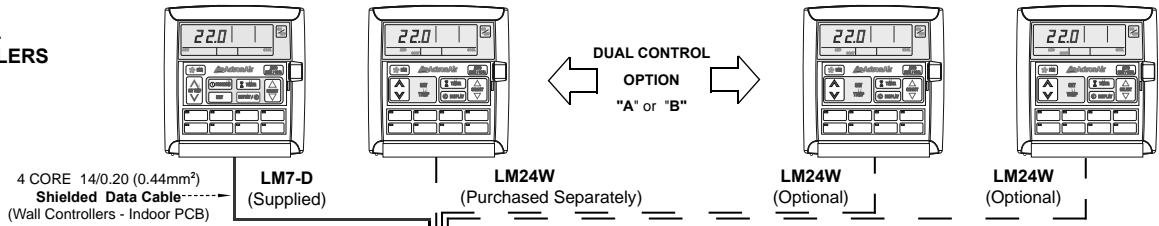
## LM - SERIES CONTROLLER ESP ULTIMA MODELS



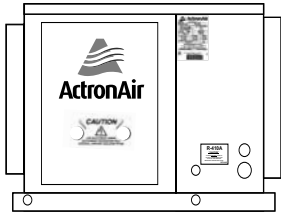
**DUAL CONTROL OPTION - A**  
Combination of 1 x 7-Day and 1 x 24-Hr Wall Controllers

**DUAL CONTROL OPTION - B**  
Combination of 2 x 24-Hr Wall Controllers

**WALL CONTROLLERS**

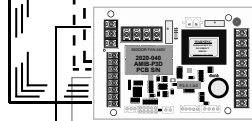


**INDOOR UNIT**



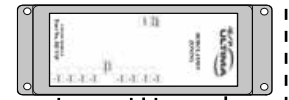
**IMPORTANT NOTE FOR ID - OD FIELD DATA CABLE:**  
Use 2 CORE 14/0.20 (0.44mm<sup>2</sup>) Shielded Data Cable or 2 CORE 7/0.30 (0.5mm<sup>2</sup>) Twisted Pair Shielded Data Cable

**AMIB-PDVM**  
Indoor Board  
(Factory Supplied & Fitted)



**ID - OD Data Cable**

**ULTIMA MODULE 8Z-VAV**  
24VAC 8-Zone  
(Factory Supplied & Fitted)



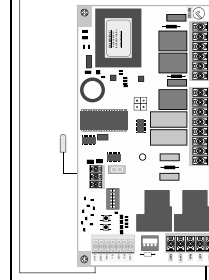
3 Way Joiner RJ45

**OUTDOOR UNIT**



230VAC Cable\*

**D4CPU-PD**  
Outdoor Board  
(Factory Supplied & Fitted)

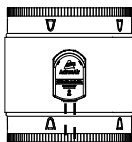


**CAT5E Cable with Fully-Moulded RJ45 Plug**

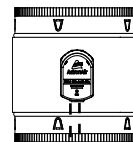
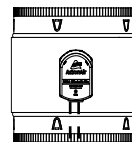
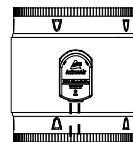
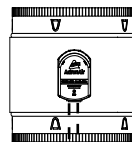
\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup> Must comply with AS/NZS 3000 Wiring Rules.

**INTEGRATED ZONE BARRELS**  
1-ZONE UP TO 8-ZONE  
(Optional)

ZB-10-250
ZB-12-300
ZB-14-350
ZB-16-400



1-Zone  
Up To  
8-Zone  
Options



**PIGGY BACK CONFIGURATION**

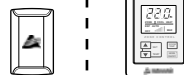
**ZONE CONTROL OPTIONS**



**OPTION A - ZONE CONTROLLER**



**OPTION B - ZONE SENSOR**



**OPTION C - AVERAGING ZONE SENSOR/ZONE CONTROLLER**



**OPTION D - PIGGY BACK CONFIGURATION**

**OPTION D - SHOWS ZONE CONTROL IN DIAGRAM BUT CAN HAVE ANY OF THE ABOVE CONFIGURATION**

**NOTE:**

1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER TO M-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.



# CONTROLLER CONFIGURATION

## LM - SERIES CONTROLLER ESP PLATINUM PLUS MODELS



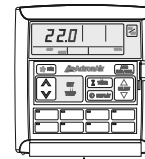
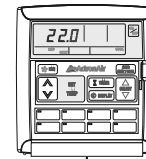
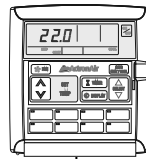
### DUAL CONTROL OPTION - A

Combination of 1 x 7-Day and 1 x 24-Hr Wall Controllers

### DUAL CONTROL OPTION - B

Combination of 2 x 24-Hr Wall Controllers

#### WALL CONTROLLERS



DUAL CONTROL  
OPTION  
"A" or "B"

4 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable  
(Wall Controllers - Indoor PCB)

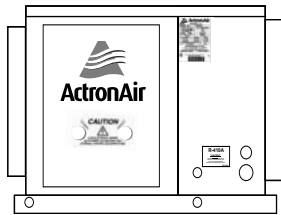
LM7-D  
(Supplied)

LM24W  
(Purchased Separately)

LM24W  
(Optional)

LM24W  
(Optional)

#### INDOOR UNIT



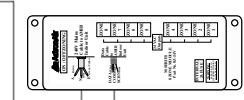
AMIB-P1VV (1Ph Digital)  
Indoor Board  
(Factory Supplied & Fitted)

#### OPTIONAL ZONE MODULES

AMZ-24V  
24VAC 4-Zone



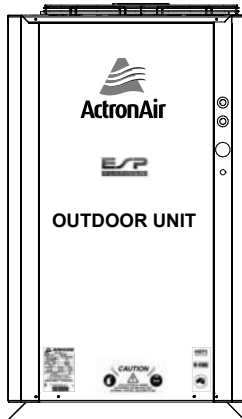
8Z-24V  
24VAC 8-Zone



#### IMPORTANT NOTE FOR ID - OD FIELD DATA CABLE:

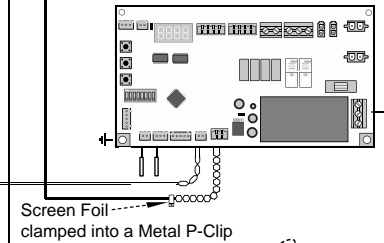
2 CORE 7/0.30 (0.5mm<sup>2</sup>) Shielded Twisted Pair Data Cable must only be used for ESP Platinum Plus models.

ID - OD  
Data Cable



176L0766 (CRV2-14AS)  
176L0765 (CRV3-17AS)  
176L0765 (CRV4-19AS)  
Variable Speed Drive  
(Factory Supplied & Fitted)

PVD1-110  
Outdoor Board  
(Factory Supplied & Fitted)



TO  
OPTIONAL  
ZONE  
MODULES

Screen Foil  
clamped into a Metal P-Clip

230VAC Cable\*

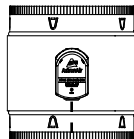
CAT5E Cable with Basic  
Non-Moulded RJ45 Plug

\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup> Must comply with AS/NZS 3000 Wiring Rules.

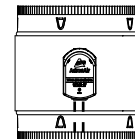
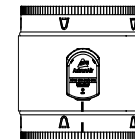
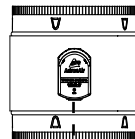
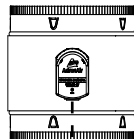
#### INTEGRATED ZONE BARRELS

1-ZONE UP TO 8-ZONE (Optional)

ZB-10-250
ZB-12-300
ZB-14-350
ZB-16-400



1-Zone  
Up To  
8-Zone  
Options



#### PIGGY BACK CONFIGURATION

#### REMOTE SENSOR AND DUCT BEAD SENSOR



LM-RS  
Remote Sensor  
(Optional)

AERSS  
Optional Duct Bead Sensor  
(Supplied with Cable)

2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

#### NOTE:

- DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
- REFER TO M-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.



# CONTROLLER CONFIGURATION

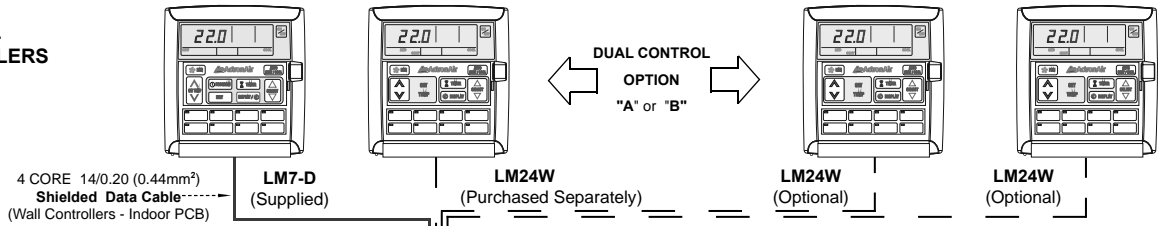
## LM - SERIES CONTROLLER ESP ULTIMA MODELS



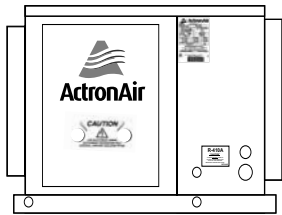
**DUAL CONTROL OPTION - A**  
Combination of 1 x 7-Day and 1 x 24-Hr Wall Controllers

**DUAL CONTROL OPTION - B**  
Combination of 2 x 24-Hr Wall Controllers

**WALL CONTROLLERS**

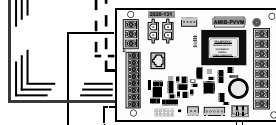


**INDOOR UNIT**



**IMPORTANT NOTE FOR ID - OD FIELD DATA CABLE:**  
2 CORE 7/0.30 (0.5mm<sup>2</sup>) Shielded Twisted Pair Data Cable must only be used for ESP Platinum Ultima models.

**AMIB-PVVM**  
Indoor Board  
(Factory Supplied & Fitted)

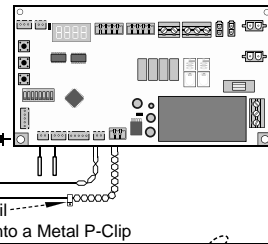


**ULTIMA MODULE 8Z-VAV**  
24VAC 8-Zone  
(Factory Supplied & Fitted)



3 Way Joiner RJ45

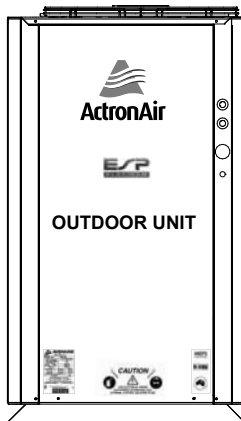
**PVD1-110**  
Outdoor Board  
(Factory Supplied & Fitted)



Screen Foil clamped into a Metal P-Clip

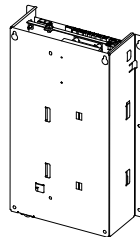
230VAC Cable\*

CAT5E Cable with Fully-Moulded RJ45 Plug



**OUTDOOR UNIT**

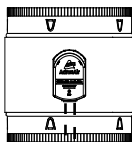
176L0766 (CRV2-14AS)  
176L0765 (CRV3-17AS)  
176L0765 (CRV4-19AS)  
Variable Speed Drive  
(Factory Supplied & Fitted)



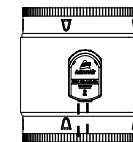
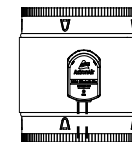
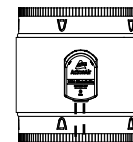
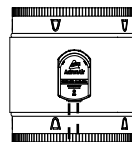
\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup> Must comply with AS/NZS 3000 Wiring Rules.

**INTEGRATED ZONE BARRELS**  
1-ZONE UP TO 8-ZONE  
(Optional)

ZB-10-250
ZB-12-300
ZB-14-350
ZB-16-400



1-Zone  
Up To  
8-Zone  
Options



**PIGGY BACK CONFIGURATION**

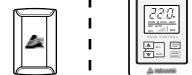
**ZONE CONTROL OPTIONS**



**OPTION A - ZONE CONTROLLER**



**OPTION B - ZONE SENSOR**



**OPTION C - AVERAGING ZONE SENSOR/ZONE CONTROLLER**



**OPTION D - PIGGY BACK CONFIGURATION**

**OPTION D - SHOWS ZONE CONTROL IN DIAGRAM BUT CAN HAVE ANY OF THE ABOVE CONFIGURATION**

**NOTE:**

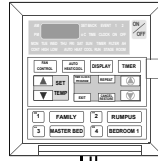
1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER TO M-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.



# CONTROLLER CONFIGURATION

## C7 - SERIES CONTROLLER COMMERCIAL MODELS

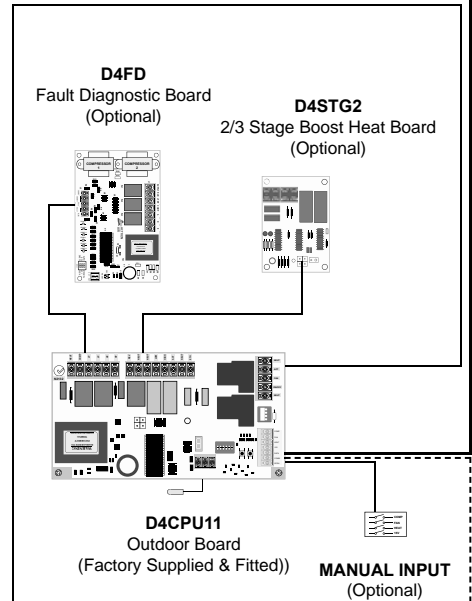
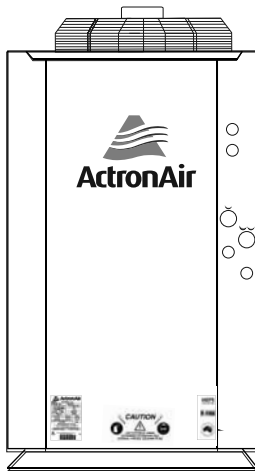
### WALL CONTROLLER C7-4



2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

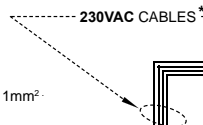
2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

### OUTDOOR UNIT (SCA CONDENSER)



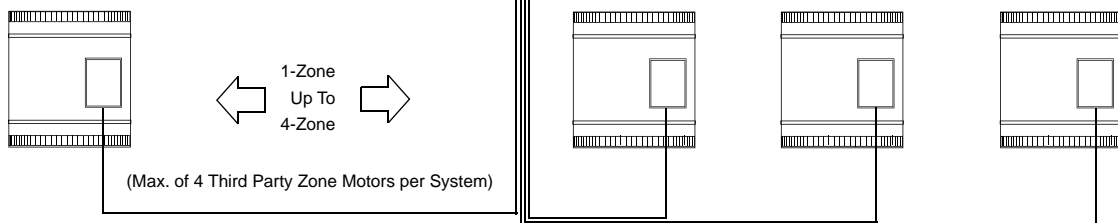
### CZ 230Volt Zone Kit (Optional)

2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable



\* 230V / 1Ph+N / 50Hz Supply. Suggested Minimum Control Cable Size = 1mm<sup>2</sup>.  
Must comply with AS/NZS 3000 Wiring Rules.

### THIRD PARTY 230VAC ZONE BARRELS



### REMOTE SENSOR AND DUCT BEAD SENSOR



**LM-RS**  
Remote Sensor  
(Optional)



**AERSS**  
Duct Bead Sensor  
(Optional)

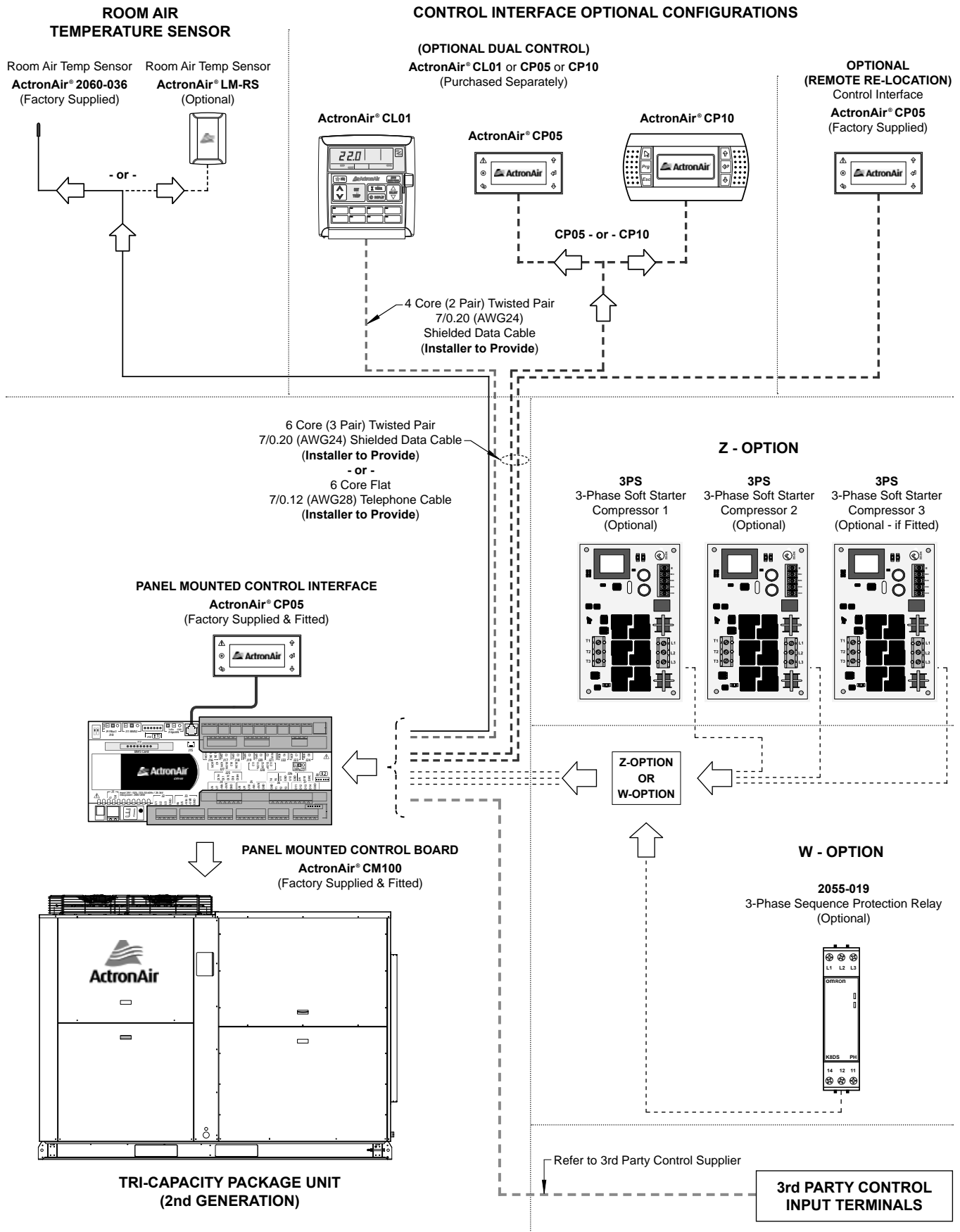
**NOTE:**

1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER TO C-SERIES MAXIMUM CABLE LENGTH PAGE FOR CABLE LENGTH DETAILS & SPECIFICATIONS.
3. SPECIFIED CABLES AND CONTROLLERS ARE ALSO APPLICABLE TO CORRESPONDING PACKAGE MODELS. SPLIT OUTDOOR UNIT SHOWN FOR ILLUSTRATION PURPOSES ONLY.



# CONTROLLER CONFIGURATION

## TRI-CAPACITY PACKAGE MODELS WITH CM100 & CL01



CONTROL INFORMATION

- NOTES:**
1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
  2. REFER MAXIMUM CABLE LENGTH DETAILS & SPECIFICATIONS TO MAXIMUM CABLE LENGTH SECTION.



# CONTROLLER CONFIGURATION

## TRI-CAPACITY SPLIT DUCTED MODELS WITH CM100 & CL01

### CONTROL INTERFACE OPTIONAL CONFIGURATIONS

#### ROOM AIR TEMPERATURE SENSOR

Room Air Temp Sensor  
**ActronAir® 2060-037**  
(Factory Supplied)

Room Air Temp Sensor  
**ActronAir® LM-RS**  
(Optional)

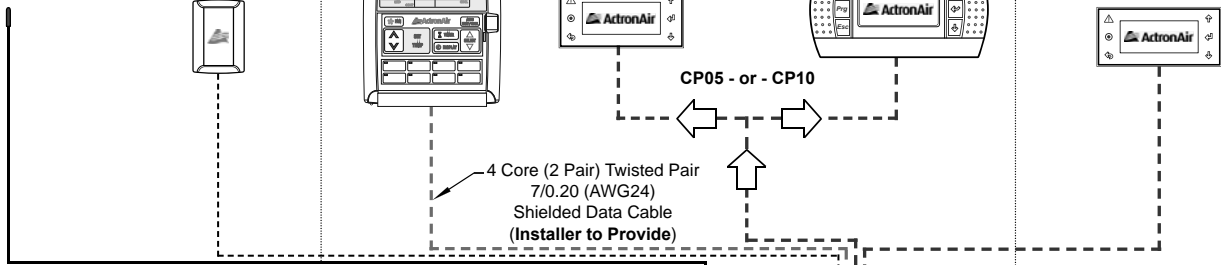
(OPTIONAL DUAL CONTROL)  
**ActronAir® CL01 or CP05 or CP10**  
(Purchased Separately)

OPTIONAL  
(REMOTE RE-LOCATION)  
Control Interface  
**ActronAir® CP05**  
(Factory Supplied)

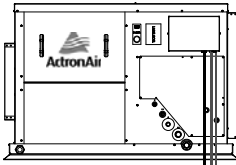
**ActronAir® CL01**

**ActronAir® CP05**

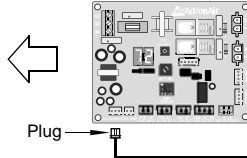
**ActronAir® CP10**



#### TRI-CAPACITY INDOOR UNIT (2nd GENERATION)



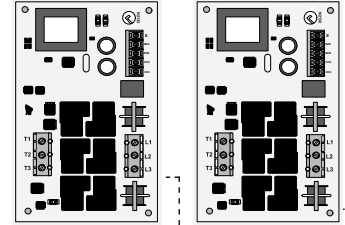
PANEL MOUNTED  
Commercial Indoor Board  
**ActronAir® CIB01**  
(Factory Supplied & Fitted)



#### Z - OPTION

**3PS**  
3-Phase Soft Starter  
Compressor 1  
(Optional)

**3PS**  
3-Phase Soft Starter  
Compressor 2  
(Optional)



Z-OPTION  
OR  
W-OPTION

#### W - OPTION

**2055-019**  
3-Phase Sequence  
Protection Relay  
(Optional)



**3rd PARTY CONTROL  
INPUT TERMINALS**

Refer to 3rd Party  
Control Supplier

2 Core 7/0.30 Shielded Twisted Pair  
Data Cable  
(Installer to Provide)

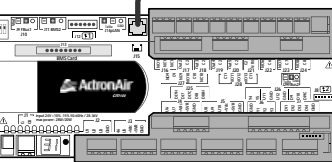
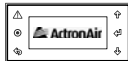
6 Core (3 Pair) Twisted Pair  
7/0.20 (AWG24)  
Shielded Data Cable  
(Installer to Provide)

6 Core Flat  
7/0.12 (AWG28)  
Telephone Cable  
(Installer to Provide)

415V / 3Ph / 50Hz Fan Supply  
Suggested Minimum  
Cable Size = 1.5mm<sup>2</sup>  
Must comply with  
AS/NZS 3000 Wiring Rules.  
(Installer to Provide)

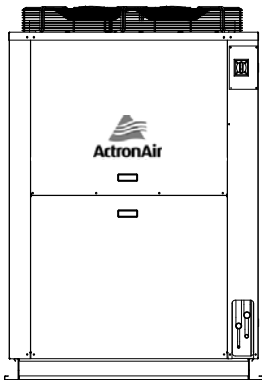
230V / 1Ph+N / 50Hz Control Supply  
Suggested Min. Cable Size = 1.0mm<sup>2</sup>.  
Must comply with  
AS/NZS 3000 Wiring Rules.  
(Installer to Provide)

PANEL MOUNTED CONTROL INTERFACE  
**ActronAir® CP05**  
(Factory Supplied & Fitted)



PANEL MOUNTED CONTROL BOARD  
**ActronAir® CM100**  
(Factory Supplied & Fitted)

#### TRI-CAPACITY OUTDOOR UNIT (2nd GENERATION)



#### NOTES:

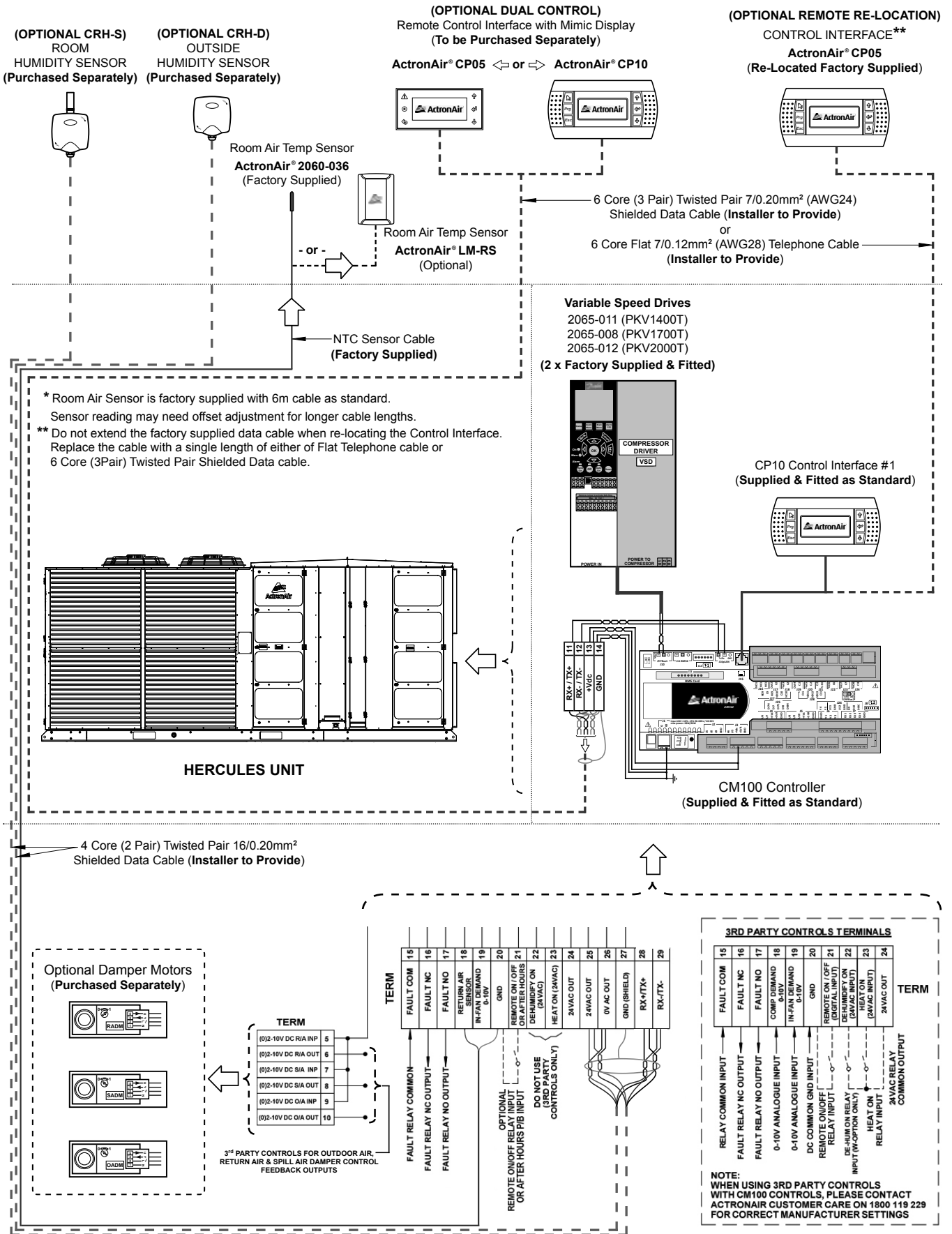
1. DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
2. REFER MAXIMUM CABLE LENGTH DETAILS & SPECIFICATIONS TO MAXIMUM CABLE LENGTH SECTION.





# CONTROLLER CONFIGURATION

## HERCULES MODELS WITH CM100



CONTROL INFORMATION

**NOTES:**

- DIAGRAM SHOWN ABOVE IS A GENERAL PRESENTATION ONLY. REFER TO INDIVIDUAL UNIT WIRING DIAGRAM FOR COMPLETE WIRING CONNECTION DETAILS.
- REFER MAXIMUM CABLE LENGTH DETAILS & SPECIFICATIONS TO MAXIMUM CABLE LENGTH SECTION OF THE TECHNICAL SELECTION CATALOGUE.



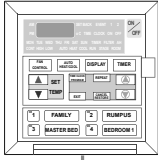
# CONTROLLER CONFIGURATION

## M-SERIES CONTROLLER ESP VERTICAL PACKAGE MODELS



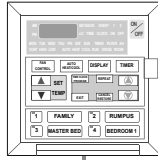
OPTIONAL DUAL CONTROLLER  
(Mimic Logic)

**ActronAir®**  
**AM24-HH**  
OPTIONAL  
SECONDARY CONTROLLER  
(Purchase Separately)



2A

**ActronAir®**  
**AM24-HH**  
MASTER CONTROLLER  
(Supplied as Standard)



2

4 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

**ActronAir®**  
REMOTE SENSOR AND DUCT BEAD SENSOR

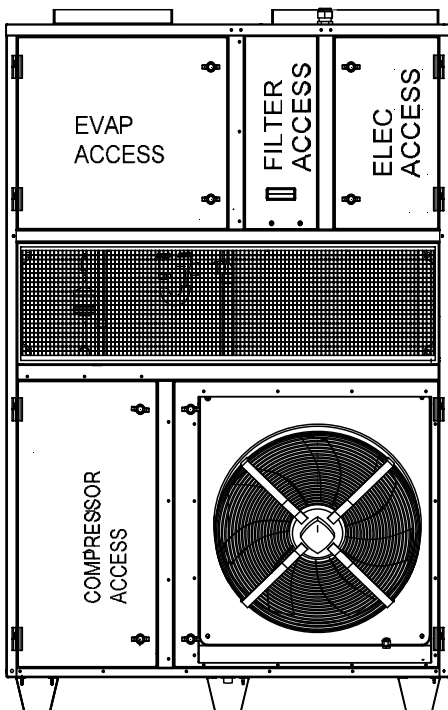
**LM-RS**  
Remote Sensor  
(Optional)



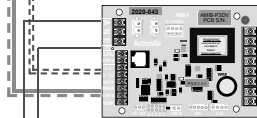
**AERSS**  
Duct Bead Sensor  
(Optional)

2 CORE 14/0.20 (0.44mm<sup>2</sup>)  
Shielded Data Cable

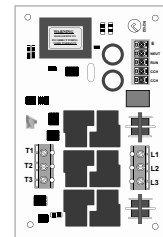
### ESP VERTICAL PACKAGE UNIT



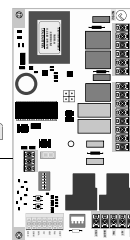
**AMIB-PDVH PMD-RH**  
Indoor Board  
(Factory Supplied & Fitted)



**3PS**  
3-Phase Soft Starter  
(Factory Supplied & Fitted)



**D4CPU-PDHH**  
Outdoor Board  
(Factory Supplied & Fitted)



**NOTES:**

1. Diagram shown above is a general presentation only. Refer to individual unit wiring diagram for complete wiring connection details.
2. Refer to ESP Vertical Package Unit Maximum Cable Length page for cable length details & specifications.
3. Model Version HRA model shown for illustration purposes only. Specified cable lengths are also applicable to the rest of version models.

CONTROL INFORMATION

