

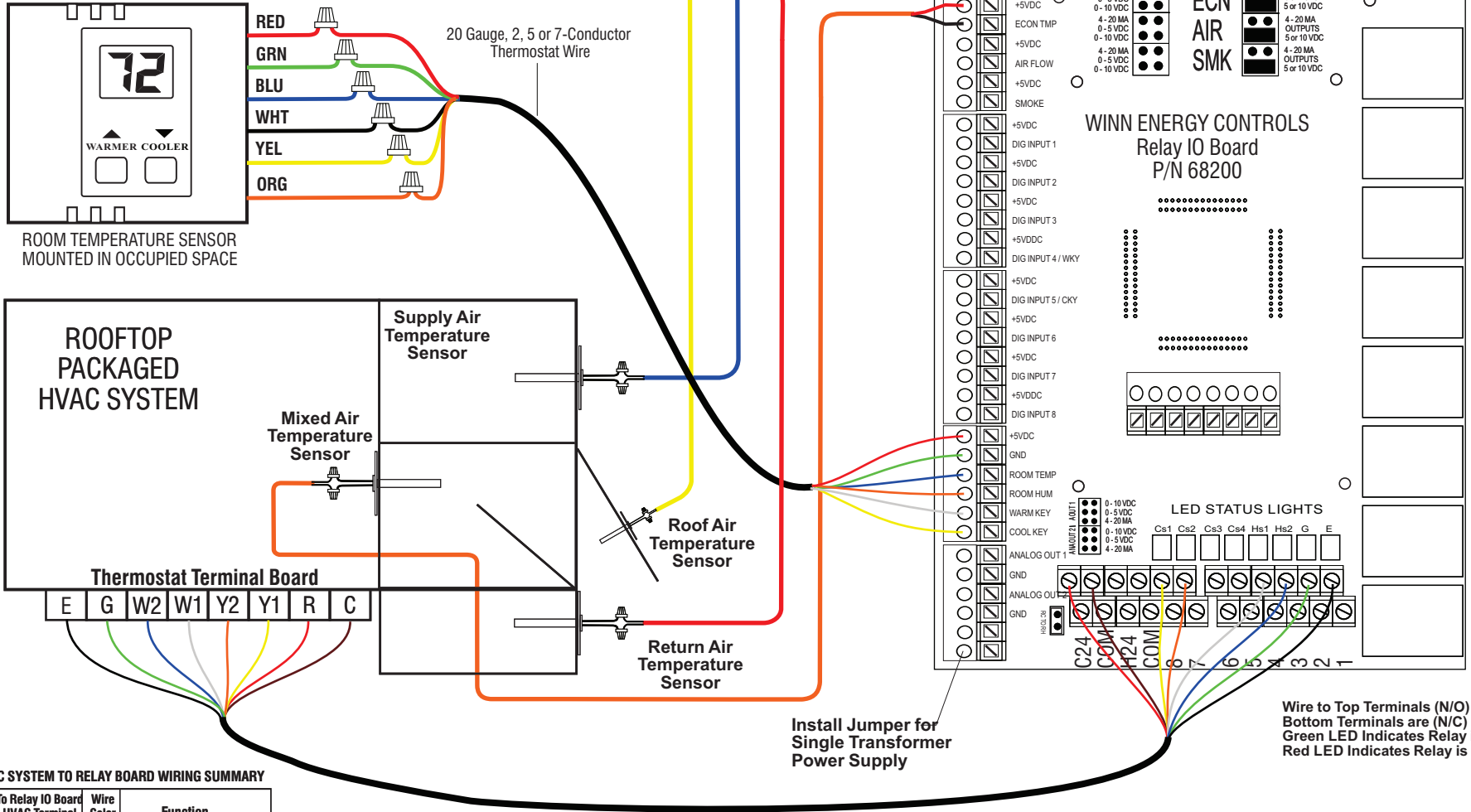
Revisions			
Ltr	Description	Date	Appr'd
N/C	Recommended Installation	4/12/14	RM

**ROOM TEMPERATURE SENSOR WIRING SUMMARY**

At the RTS	To Relay IO Terminal	Wire Color	Function
GND	GND	GRN	Signal Ground
+5VDC	+5VDC	RED	+5VDC Power from Relay Board
SNR	ROOM TMP	BLU	Thermistor Output
WRM	WRM KEY	WHT	Warmer Key
CLR	CLR KEY	YEL	Cooler Key
HUM	ROOM HUM	ORG	Humidity Sensor

The GND, HUM, WRM KEY and CLR KEY wires do not have to be connected if only a temperature sensor is being used.

Install Jumper across the 0-5 or 10 VDC Output for each thermistor sensor



**TYPICAL HVAC SYSTEM TO RELAY BOARD WIRING SUMMARY**

At the HVAC System	To Relay IO Board HVAC Terminal	Wire Color	Function
R	RH and RC	RED	24VAC
C	C	BRN	24VAC Common
RV	Hs1	WHT	Reversing Valve
W2	Hs2	BLU	Stage 2 Heating Control
Y1	Cs1	YEL	Stage 1 Cooling Control
Y2	Cs2	ORG	Stage 2 Cooling Control
G	FAN	GRN	Indoor Fan Control
E	ECN	BLK	Economizer Control Relay

20 Gauge, 2, 5 or 7-Conductor Thermostat Wire

Install Jumper for Single Transformer Power Supply

Wire to Top Terminals (N/O)  
Bottom Terminals are (N/C)  
Green LED Indicates Relay is ON  
Red LED Indicates Relay is OFF

**Notes:**

1. See HVAC WD-04 for wiring an advanced digital economizer to the ADRES Analog Output 1 Terminal.
1. See HVAC WD-05 for wiring a variable frequency drive indoor fan to the ADRES Analog Output 2 Terminal.

**WEC**  
Approved

Project	Date
Design	Date
Check	Date
Draft	Date

Customer Identification Number

Customer

This drawing and the information disclosed thereon are the property of Winn Energy Controls, Inc. The drawing and information are provided on a restricted basis and are not to be used in any way detrimental to WEC.

**ADRES HVAC Installation Typical Wiring Diagram Heat Pump Rooftop Packaged Unit**

**Winn Energy Controls, Inc.**

Drawing Number	Scale	Revision
HVAC WD-01		

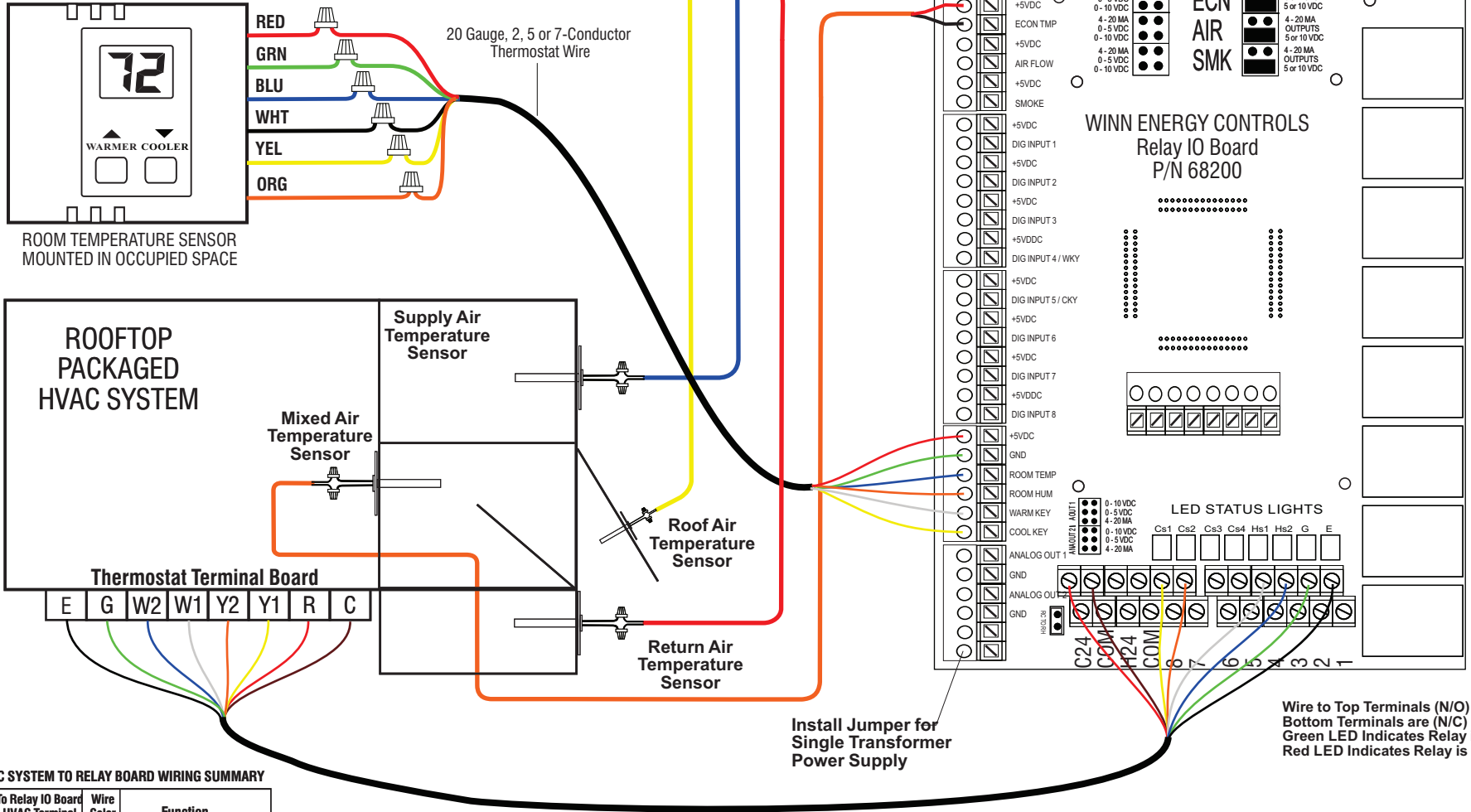
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**Notes:**

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**WEC Approved**

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Customer: \_\_\_\_\_

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**ADRES HVAC Installation Typical Wiring Diagram Heat Pump Rooftop Packaged Unit**

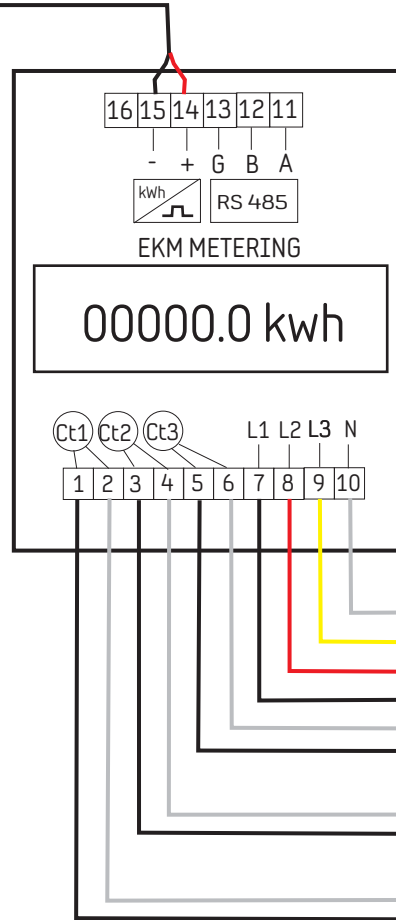
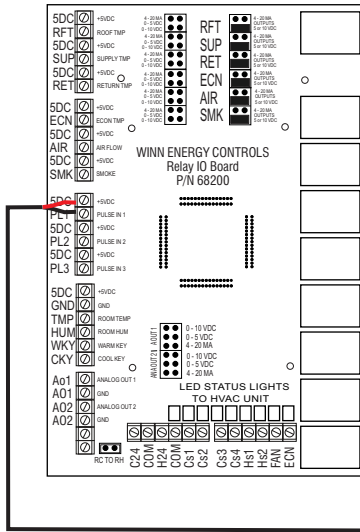
**Winn Energy Controls, Inc.**  
Drawing Number: HVAC WD-01  
Scale: \_\_\_\_\_  
Revision: \_\_\_\_\_

# Electric Meter

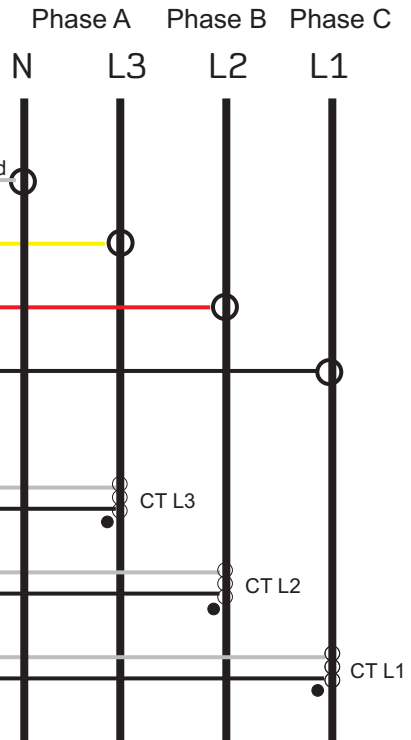
P/N EKM OMNIMETER PULSE V3 or V4

Revisions			
Ltr	Description	Date	Appr'd
N/C	Recommended Installation	4/12/07	RW

## ADRES Relay Board 68200



## 3 Phase Power Circuit



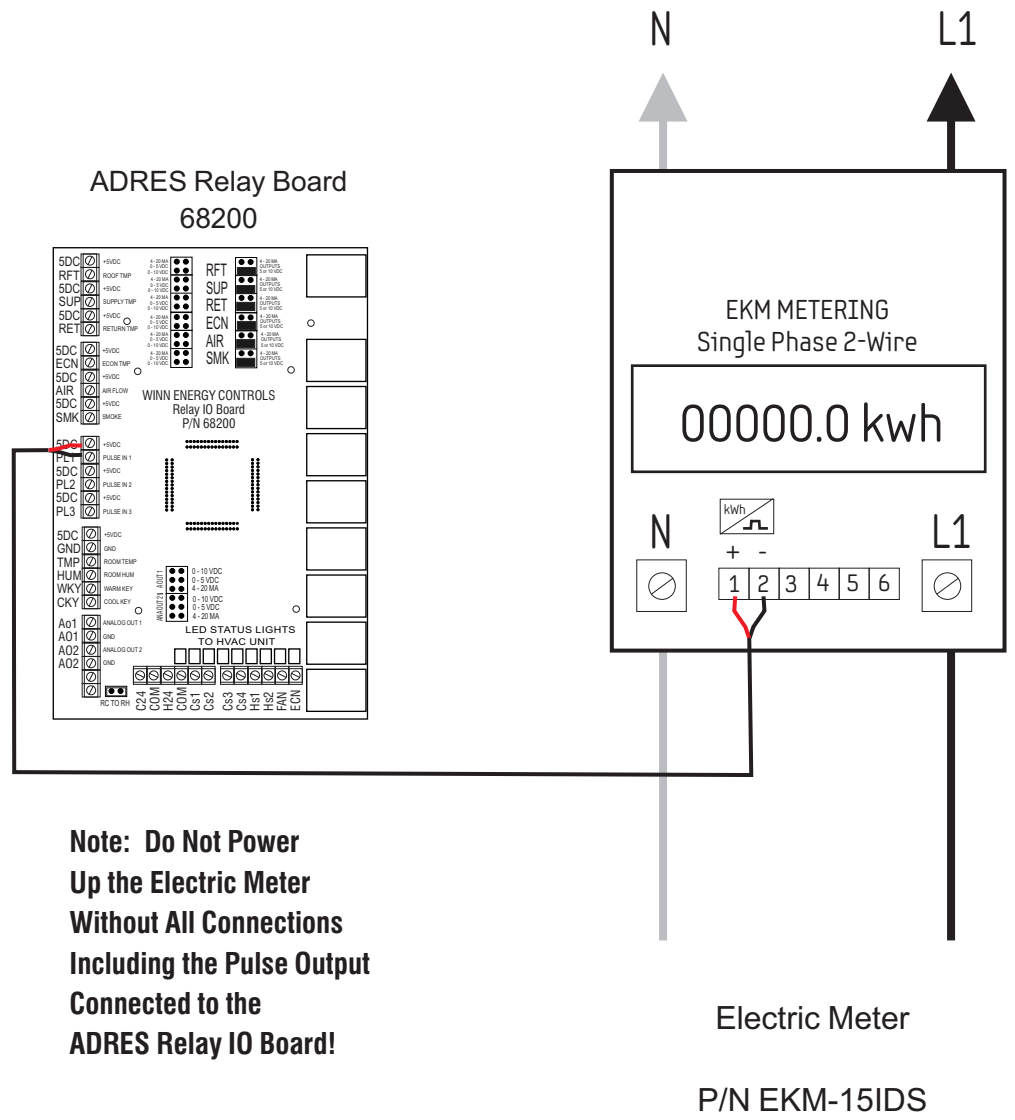
**Note: Do Not Power Up the Electric Meter Without All Connections Including the Pulse Output Connected to the Motherboard!!!**

### Notes

- 1) This drawing outlines the recommended installation of the electric meter for submetering a typical 3 Phase 4 Wire Circuit.
- 2) The current transformers (Cts) should be installed with the THIS SIDE FORWARD label toward the line side of the input power.
- 3) Do not power the electric meter until all connections are made including the pulse output to the ADRES board.

<b>WEC</b> Approved		This drawing and the information disclosed thereon are the property of Winn Energy Controls, Inc. The drawing and information are provided on a restricted basis and are not to be used in any way detrimental to WEC.		
Project	Date	<b>Electric Meter Installation Typical Wiring Diagram EKM Submeter</b>		
Design	Date			
Check	Date			
Draft	Date			
WEC Project Number	Date			
Customer Identification Number			Scale	Revision
Customer	DWG-EKM METER			

Revisions			
Ltr	Description	Date	Appr'd
N/C	Recommended Installation	4/12/07	RW



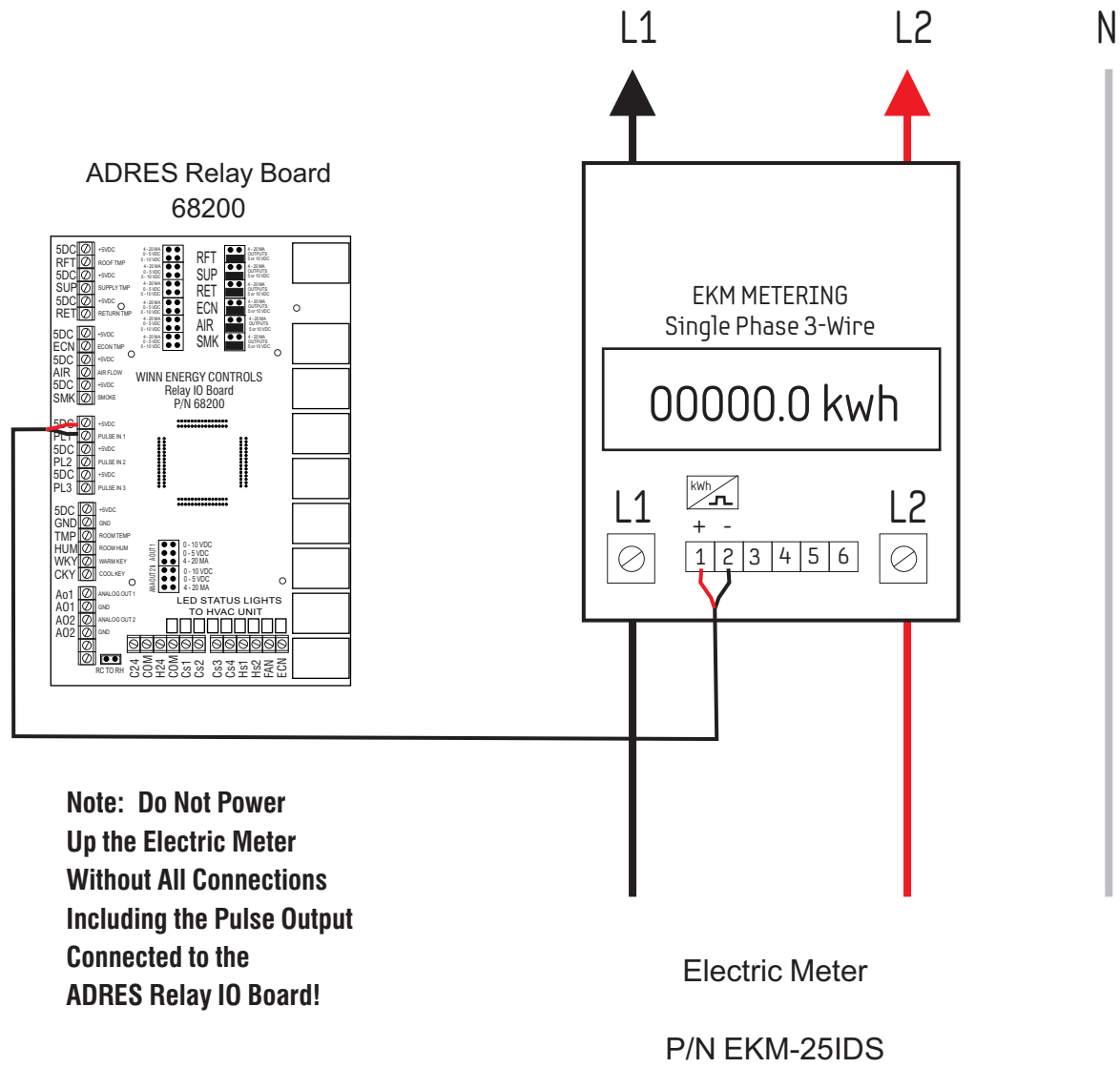
**Note: Do Not Power Up the Electric Meter Without All Connections Including the Pulse Output Connected to the ADRES Relay IO Board!**

**Notes**

- 1) This drawing outlines the recommended installation of a single phase 2-wire EKM Meter P/N 15IDS.
- 2) The current transformers (Cts) are in the meter and the power wiring to the load should be installed passing through the meter.
- 3) The voltage taps are made using the L1 and L2 Screws in the top of the meter to pierce the L1 and L2 lines.
- 4) The pulse output from this meter is defaulted to 800 pulses / kWh.

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Project	Date	<b>Electric Meter Installation Typical Wiring Diagram EKM Submeter Single Phase Model 15IDS</b>	
Design	Date		
Check	Date		
Draft	Date		
WEC Project Number	Date		
Customer Identification Number			
Customer		Drawing Number DWG-EKM 15IDS	Scale Revision

Revisions			
Ltr	Description	Date	Appr'd
N/C	Recommended Installation	4/12/07	RW



**Note: Do Not Power Up the Electric Meter Without All Connections Including the Pulse Output Connected to the ADRES Relay IO Board!**

Electric Meter  
P/N EKM-25IDS

**Notes**

- 1) This drawing outlines the recommended installation of a single phase 3-wire EKM Meter P/N 25IDS.
- 2) The current transformers (Cts) are in the meter and the power wiring to the load should be installed passing through the meter.
- 3) The voltage taps are made using the L1 and L2 Screws in the top of the meter to pierce the L1 and L2 lines.
- 4) The pulse output from this meter is defaulted to 800 pulses / kWh.

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Project	Date	<b>Electric Meter Installation Typical Wiring Diagram EKM Submeter Single Phase Model 25IDS</b>	
Design	Date		
Check	Date		
Draft	Date		
WEC Project Number			
Customer Identification Number			
Customer			
Drawing Number		Scale	Revision
DWG-EKM 25IDS			