



Replacing ALC/RSOD with ALC/RUPS

Application Note

Replacing_ALC_RSOD_with_RUPS

rev. 04/01/15

The ALC room sensor **ALC/10K-2-RSOD** was discontinued in 2000, but it can be replaced with an ALC/RμPS sensor. The original sensor required 5 VDC power; however, the RμPS sensor is available as a 5 VDC model or as a model which can be powered by 9 to 40 VDC or 18 to 24 VAC. The part numbers are as follows:

ALC/RUPSF-81-P-5-102-CG - °F Indication, 5 VDC Power

ALC/RUPSC-81-P-5-102-CG - °C Indication, 5 VDC Power

ALC/RUPSF-81-P-24-102-CG - °F Indication, 9 to 40 VDC or 18 to 24 VAC Power

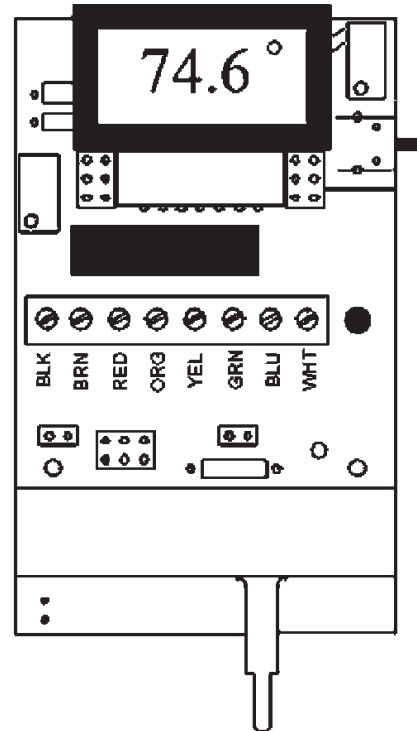
ALC/RUPSC-81-P-24-102-CG - °C Indication, 9 to 40 VDC or 18 to 24 VAC Power

An **ALC/VC350A-EZ** Voltage Converter may be used to convert 24 VAC/VDC to the regulated 5VDC required to power the 5 Volt Models. An **ALC/VC350A-EZ** Voltage Converter may be used to create the 15 VDC which is recommended for the 9 to 40 VDC or 18 to 24 VAC models. For more information on why BAPI recommends 15 VDC for these models, see the Application Note "Why Use DC Instead of AC Power" on BAPI's Website (http://www.bapihvac.com/content/uploads/DC_vs_AC_Letter.pdf)

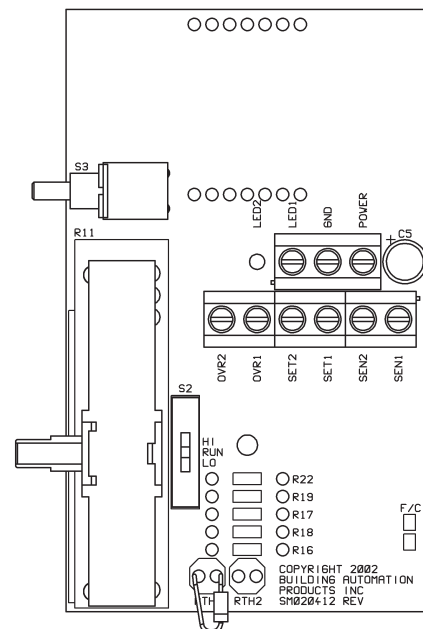
The Chart below and the images at right indicate the proper wiring terminations when replacing an older RSOD unit with the newer RμPS model:

RSOD Connection	RUPS Connection	Purpose
BLK	GND	(Ground)
BRN	SEN1	10K-2 Sensor
RED	SET1	ALC Set Point
ORG	LED1	LED On/Off
YEL	N/C	No Connection
GRN	N/C	No Connection
BLU	Power	Power
WHT	N/C	No Connection

Note: The RμPS does not require the 10K precision resistor that is located between terminals "BLU" and "BRN" on the RSOD models.



Older RSOD Unit Circuit Board



RμPS Unit Circuit Board