

Samsung 24VAC Thermostat Adapter

Job Name _____
Purchaser _____
Submitted to _____
Unit Designation _____

Location _____
Engineer _____
Reference _____ Approval _____ Construction _____
Schedule # _____

Features

- Controls adapter that will allow control of Samsung HVAC systems sold in North America with a standard 24VAC thermostat
- One adapter per indoor unit connected to the F3-F4 communication line
- Basic control of:
 - Power: ON/OFF
 - Mode: Heat, Cool, Fan (auto, low, medium, high)
- Supports 1 or 2 stages cooling inputs, 1 or 2 stages heating inputs
- Can be configured to operate the Samsung indoor unit as primary heating source, secondary heating source, or cooling only with heat from an external source only
- External contact input to disable the unit when contact is opened
- "Emergency Heat" output to enable an external heating source when the unit is in heating Thermal-ON while in error status.
- Indoor unit error state output dry contact (no error = closed, error = open)
- Separate fan speed settings for Thermal-ON and Thermal-OFF

**Option Settings**

- Single fan input or 3 speed input for Low, Medium, and High
- Heat staging options:
 - Stage 1 and 2: Samsung indoor unit operates in heat mode
 - Stage 1: Samsung indoor unit operates in fan mode. Stage 2: Samsung indoor unit operates in heat mode
 - Stage 1: Samsung indoor unit OFF. Stage 2: Samsung indoor unit operates in heat mode
 - Stage 1: Samsung indoor unit OFF. Stage 2: Samsung indoor unit OFF (heating is only provided by external source that does not require fan operation from the Samsung indoor unit)
- "Emergency Heat" output enable
- Stage 1 and stage 2 heating and cooling set temperature
- Supports direct connection of MRW-TA external temperature sensor
- 16 cool mode and 16 heat mode temperature setting options (see table on page 2)

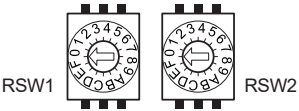
Specifications

- 24VAC (requires field provided external 24VAC transformer).
- Dimensions (W X H X D): 5" X 5 1/8" X 1 1/2"
- Installation location temperature range: 32°F ~ 122°F (0°C ~ 50°C), Relative humidity: 10 ~ 85%.
- Compatibility: DVM S (AM****N****/AA), CAC (AC****N****/AA), FJM (AJ0**TN****/AA, JNH****T), RAC (AR**TSF*BWKNCV, RNS***BT).
- Maximum one MIM-A60UN per 24VAC transformer
- Sub-PCB model MIM-A00UN is required with RAC (AR**TSF*BWKNCV,RNS***BT)
- F3 / F4 maximum wire length: 328'

NOTE: Two operation priority settings are available. Depending on the setting, the indoor unit may ignore commands sent from other controllers connected to the unit, including central controller schedule and control logic settings.

Rotary Switch Functions

- RSW 1 sets the indoor unit set temperature for first and second stage cooling inputs (Y1/Y2)
- RSW 2 sets the indoor unit set temperature for first and second stage heating inputs (W1/W2)
- Determine average user cooling and heating set temperatures and adjust RSW1 and RSW2 accordingly for optimal comfort after installation.
- The indoor unit may not operate properly if it is set to use “discharge air temperature” control.



- RSW 1: Cool mode set temperature (Y1/Y2), Cooling: 64.4 ~ 82.4°F (18 ~ 28°C)

0 (default)		1		2		3		4		5		6		7	
Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2
73.4	68	68	64.4	69.8	66.2	71.6	68	75.2	71.6	77	73.4	78.8	75.2	80.6	77
°F															
23	20	20	18	21	19	22	20	24	22	25	23	26	24	27	25
°C															

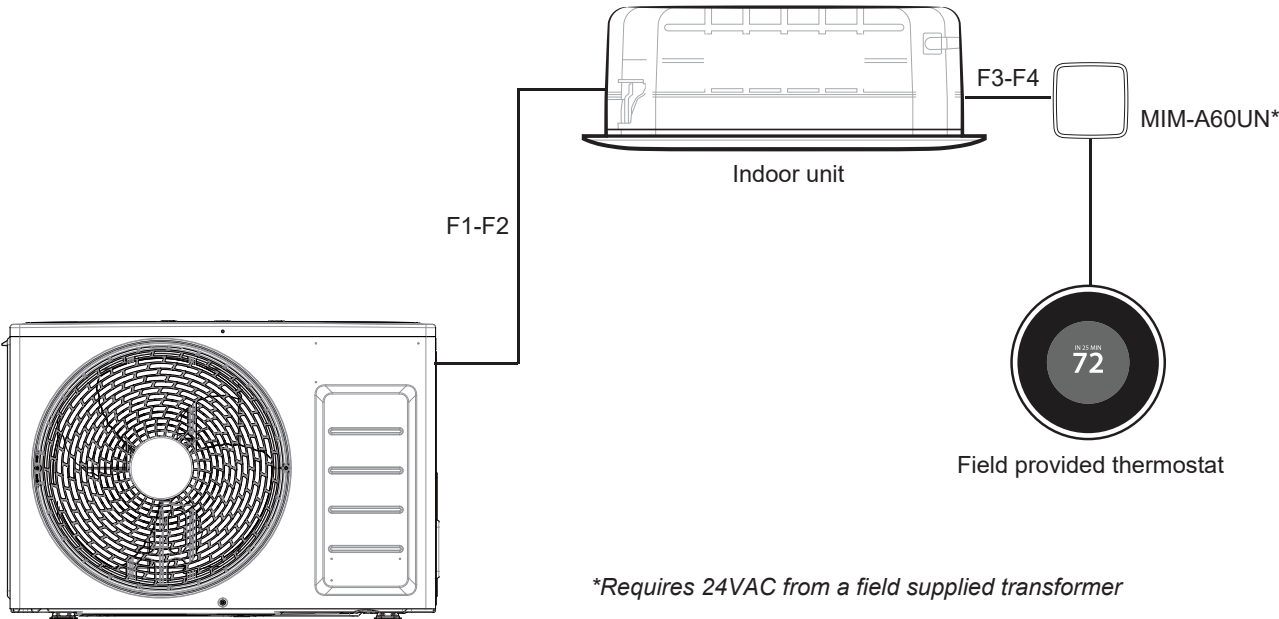
8		9		A		B		C		D		E		F	
Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2
69.8	64.4	71.6	64.4	73.4	64.4	75.2	64.4	77	64.4	78.8	64.4	80.6	64.4	82.4	64.4
°F															
21	18	22	18	23	18	24	18	25	18	26	18	27	18	28	18
°C															

- RSW 2: Heat mode set temperature (W1/W2), Heating: 68 ~ 86°F (20 ~ 30°C)

0 (default)		1		2		3		4		5		6		7	
W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2
71.6	77	69.8	75.2	73.4	78.8	77	82.4	78.8	84.2	80.6	86	68	86	69.8	86
°F															
22	25	21	24	23	26	25	28	26	29	27	30	20	30	21	30
°C															

8		9		A		B		C		D		E		F	
W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2
71.6	86	73.4	86	75.2	86	77	86	78.8	86	82.4	86	71.6	77	71.6	77
°F															
22	30	23	30	24	30	25	30	26	30	28	30	22	25	22	25
°C															

Note: If the room thermostat is set outside of the rotary dial set tempertaure range, the indoor unit will only operate until it meets the rotary dial temperature setting (RSW 1 and RSW 2).



*Requires 24VAC from a field supplied transformer