HEVAC

Auxiliary Plug in Card for the HTC5 or HTC3 Series Controllers 3 x 0-10 VDC Outputs HAX-53Y

Features

- Australian Made and designed
- Incorporates 3 x 0-10VDC Outputs **Yh, Ye** & **Yc**
- LED Indication of all modulating outputs
- Can be plugged into any existing HTC5 or HTC3
- Auto Close feature for Economy Cycle Overide
- **Yh** & **Yc** Outputs have Dead Zone Adjustment
- Damper minimum positioner adjustment for **Ye**

Use

The HAX-53Y auxiliary plug in card incorporates 3 x 0-10VDC Outputs, Yh for Heating, Ye for Economy Cycle and Yc for Cooling.

The Yh & Yc outputs have a common Dead Zone adjustment ranging from 0.5 to 5.0 Degrees Celsius and the Ye output has a Damper Minimum Position Adjustment ranging from 0 to10 VDC which is equal to 0 to 100 %.

The HAX-53Y has LED status indication for all outputs, and also incorporates a Damper Auto Close Feature which negates the use of an outside air thermostat for Damper Override.

Made in Australia
100% Australian Owned Company

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Technical Data

General Specifications	Outputs	
	Yh Heating Output range	0 to 10 Volts DC
	Ye Economy Cycle Output range	0 to 10 Volts DC
	Yc Cooling Output range	0 to 10 Volts DC
	Yh - Yc Dead Zone Adjustment	0.5 to 5.0 Degrees Celsius
	Yh, Ye & Yc Proportional Band	1.0 Degrees Celsius Fixed
	Ye Damper Minimum Position Range	0 to 10 Volts DC equal to 0 to 100 %

	Output Indication	
	Heating Output **Yh**	1 x Red LED Intensity varies with signal Output
	Economy Cycle **Ye**	1 x Yellow LED Intensity varies with signal Output
	Cooling Output **Yc**	1 x Green LED Intensity varies with signal Output

Environmental Conditions	Operation	
	Ambient Temperature	0...45oC
	Humidity	< 85 % RH (Non Condensing)
	Storage and Transport	
	Ambient Temperature	-5...65oC
	Humidity	< 90 % RH (Non Condensing)

Product Standards	C-tick	N10842

Weight	Including Packaging	80 grams

Housing	Colour	Grey
	Material	ABS POLYCARB
	UV Stabilised	YES
	Fire Retardant	YES
	Size	L67mm x W20mm x D40mm
	Mounting Method	Plugs into HTC5 or HTC3 Controllers

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Economy Cycle Auto Close Feature

The Economy Cycle Auto Close feature causes the Damper motors to revert back to the Return Air Mode 0.2 Degrees before the first stage of cooling would start, this assumes that he Yh/Yc Dead Zone is set to 1.0 Degrees Celsius.

What this means is that the Auto Close feature assumes that the fresh air is not suitable for use because the cooling demand in the zone is still increasing.

If this feature is not desired it can be disabled by removing the 2 way finger Jumper on the HAX-53Y.

If this is done another means of closing the Fresh Air mode would have to be used. (See default Drawing on Page 4)

Damper Auto Close Feature Disabled   Jumper NOT Fitted

Damper Auto Close Feature Enabled   Jumper Fitted

'Y min' damper Positioner Adjustment

The 'Y min' Damper Positioner Adjustment is to a allow the setting of a minimum Fresh Air ratio to be achieved by inhibiting the 'Ye' output signal from dropping below an adjustable amount.
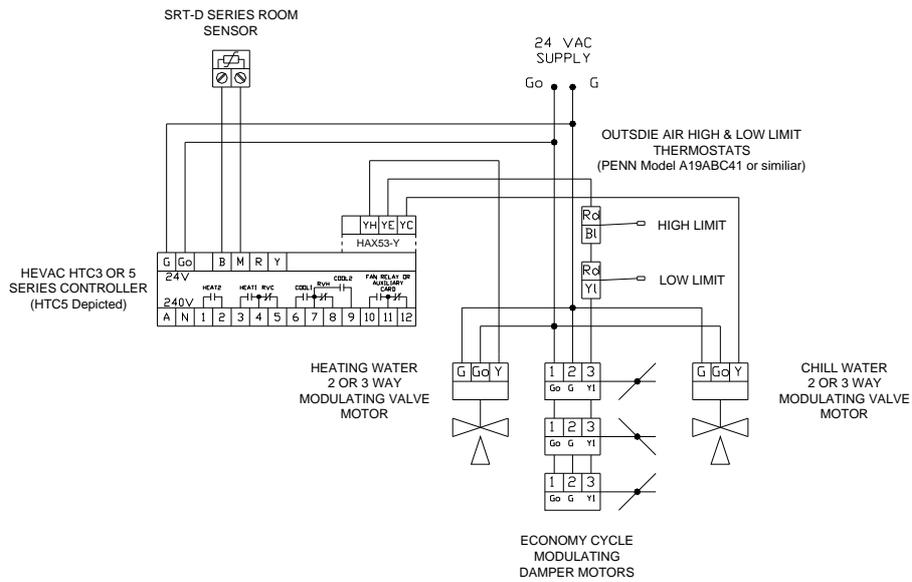
As an example setting the 'Y min' Potentiometer to 3 Volts would be equivalent to a minimum position of 30 % on the Economy Cycle Damper motors.

Installation Notes

To install the HAX-53Y Auxiliary Card you must first remove the FAN Jumper on the Controller.

This jumper can be used to enable the Economy Cycle Auto Close Feature if required.
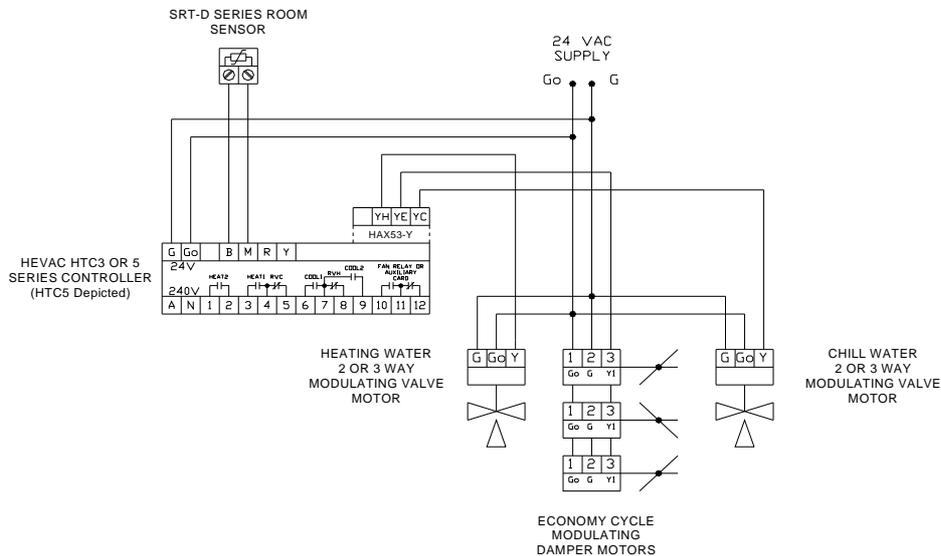
(See Economy Cycle Auto Feature above)

HAX53Y Default wiring diagram (Economy cycle Auto Close feature disabled)

Technical Notes

Supply Voltage	The Controller requires either a 240Volt AC or 24 Volt ACV Supply (Drawing depicts a 24VAC Connection)
0-10VDC Signal Outputs	If the controller is powered from a 240V supply then the 24V Ground (Go) out to the field must be connected to terminal 'M' on the HTC-5 or 3 controller
Warnings	Use ONE Supply Voltage Only Either 240 or 24 Volts AC

HAX53Y Utilising the Economy Auto Close Feature

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