RC1

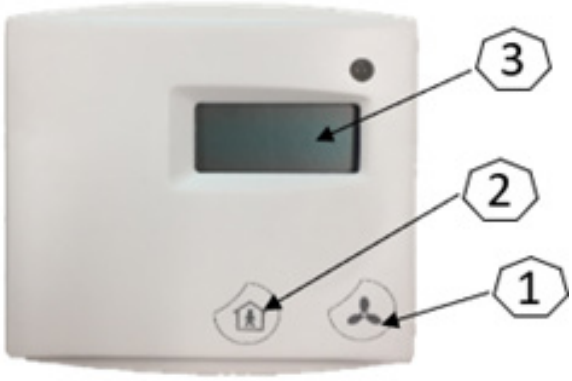
Passive House Apartment Controller

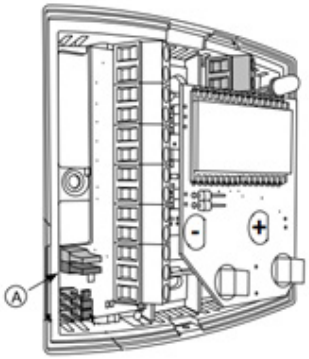
Swegon

Technical Data

Power Supply	24 VAC / DC (20... 28 V), <1 VA (Using DC power supply, it only operates between 0 to 10 V)
Room Humidity	0... 85% RH (noncondensing)
Line Terminal	1.5 mm^2
Cover	ABS plastic, IP20
Dimensions (w x h x d)	87 x 86 x 32 mm

This product is based on Produals own HLS 44 with the following changes:





Layout

- Color: Produals standard color (Off-white)
- Access to the plus and minus button only when the cover is off
- Half-sized cushions for plus and minus button and full sized cushions for the House and Fan button

User shall be able to input the output voltage signal (0-10 vdc) for Economizer, Boost, Normal and Set Back modes. For example the user may set up ”Boost= 8,3 vdc” and Normal = 6,4 vdc)

Default Econo = 10, Boost = 6, Norml = 5 and SetBk = 4.

The Boost mode also includes a timer setting that is inputted in minutes from 1 to 120 minutes. Default 120 minutes.

For Hi Humidity mode, the user shall be able to input the low humidity setpoint where the output signal to the react damper will start at RHmin vdc. For example ”45% RH” is equals to 4,5 Vdc. The user will then input the high humidity setpoint where the controller will reach 10 vdc output signal. For example ”65% RH” is equals to 10 Vdc. The controller will linearly vary the output signal based on a ramp between the two inputted values. For example, at 55% RH, the output signal will be 7,25 vdc.

If RHmin is set to 20% via menu-> output scale is 2...10V (when the external RH-signal goes from 20...60%)

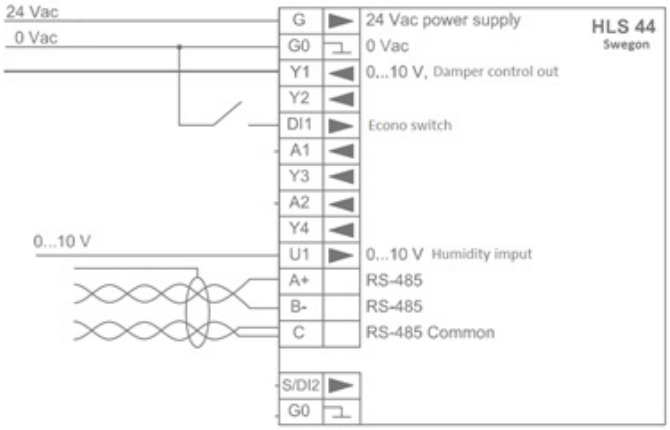
Default RHmin = 40 % and RHmax = 60 %

NOTE: When hi humidity is triggered a comparison is made with the manually activated mode. The mode with the highest signal shall override the other signal. For example if hi humidity is activated as in the above example at 5 vdc and economizer becomes activated (which has been set at 10 vdc) then economizer mode should override the hi humidity mode and the output signal should be 10 vdc.

Function

Mode	Display Name (3)	Input	Output	Vdc	Default Vdc
Economizer	Econo	External contact	Analog to React Controller	0–10	10
Boost	Boost	Fan (2)	Analog to React Controller	0–10	6
Normal	Norml	Basic position	Analog to React Controller	0–10	5
Set Back	SetBk	House button (1)	Analog to React Controller	0–10	4
RHmin	HiHum	External humidity sensor	Analog to React Controller	0–10	4
RHmax	HiHum	External humidity sensor	Analog to React Controller	0–10	6

Diagram



Accessing and Changing Functions in the Menu

To access the configuration mode you must put a jumber lead over (A).

Factory settings = No jumper lead over (A).

Buttons are used to maneuver through the menu
The fans also used to accept the changed values

Changes the values in the selected tab

The following schedule explains how to maneuver through the menu.