

**⚠ WARNING**

- When being charged, industrial batteries produce **HYDROGEN GAS!**



## BACKGROUND

- In many applications, the room or enclosure where batteries are stored is vented with a powered fan.
- Since most gassing occurs during *equalize* mode, a "vent/fan control assembly" can be utilized.
- This unit will automatically open a powered vent, or turn on a fan, when the dc bus voltage has risen above the float value. This saves power and adds life to the fan.
- How does it work? A voltage-adjustable pc board (A1) and relay (K1) provide a contact, that will *close* when dc voltage rises 2% above the float setting. The vent/fan ac power supply can now be controlled (at TB2) on or off, depending on the charger/dc bus voltage (at TB1).
- A powered dc source is recommended, when a equalize voltage contact is not available inside the battery charger to operate the vent/fan.
- The control assembly is small, and can be conveniently mounted *near* the vent/van.
- Inputs are available for 12, 24, 48, and 130V charger/battery systems as standard.
- Depending on rating of contact and dc voltage, the vent/fan control comes in four (4) variants. See table below.

## STANDARD DRAWINGS

assembly rating (input / contactor)	dc bus (eqlz voltage)	ordering p/n	Mechanical (Outline-1 / Internal-2 of 2)	Schematic / Connection Diagram
120Vac @ 10A	48V	<b>EJ5017-25</b>	<a href="#">JE5119-25</a>	<a href="#">JE5120-25</a>
120Vac @ 10A	130V	<b>EJ5017-26</b>	<a href="#">JE5119-26</a>	<a href="#">JE5120-26</a>
120/240Vac @ 20A	48V	<b>EJ5017-35</b>	<a href="#">JE5119-35</a>	<a href="#">JE5120-35</a>
120/240Vac @ 20A	130V	<b>EJ5017-36</b>	<a href="#">JE5119-36</a>	<a href="#">JE5120-36</a>

- Contact the factory for other ventilation/fan control options available.

## INSTALLATION

**⚠ CAUTION** *Dangerous voltages exist at many points inside the assembly. When performing tasks inside the enclosure, be sure to disconnect all input power sources. Lock out breakers and/or safety switches. Use extreme care and wear safety gloves while performing this procedure.*

### Wall Mounting:

- For NEMA-1 Style-599 enclosure dimensions, see Outline Drawing (JE5119-##, Sheet 1 of 2).
- Remove the top vent cover, and locate the four (4) mounting holes located on the back of the enclosure.
- Use 1/4-20 hardware to wall-mount the enclosure as shown on drawings.

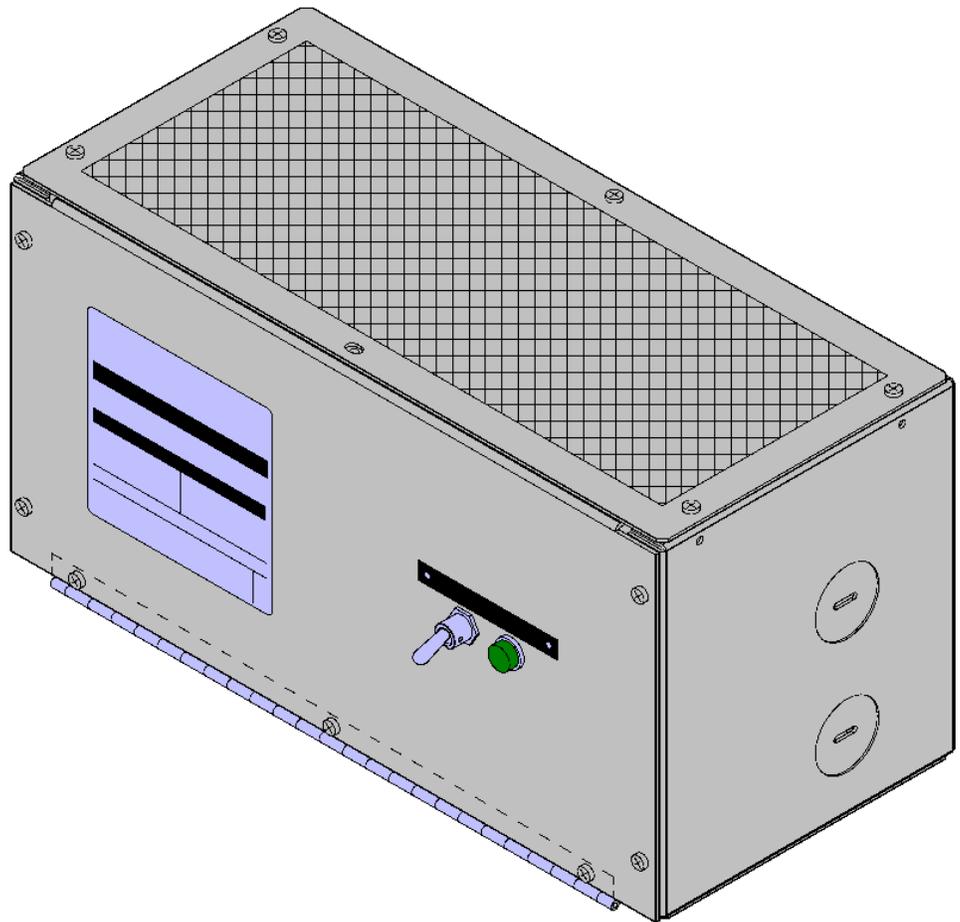
### Electrical Connections:

- See Intenal Component Layout Drawing (JE5119-##, Sheet 2 of 2) for user connection specs.
- User contacts (TB2) interrupts the *hot* lead (120 Vac or 240 Vac, depending on model) of the fan power.
  - 1) Connect the *hot* ac line to TB2-C.
  - 2) Connect the fan ac input to TB2-NO. This contact *closes* when the fan is to be turned *on*.
  - 3) Connect dc bus wiring to TB1(+/-) as labeled.
- Internal ac and dc wiring is not fused. Typical current draw for the control is **10mA** on a 120V battery.
- Momentarily *test* the installation wiring, by toggling the front panel manual switch (SW1) up.
- The relay (K1) will turn on, and the front panel "**VENT/FAN ON**" indicator lamp (DS01) will light.
- Resistors (e.g. R1, R2, and R3) are utilized along the circuit, to drop voltage to appropriate levels for control.

## ADJUSTMENTS

- See Electrical Schematic / Connection Diagram (JE5120-##) for unit function and point-to-point wiring.
- Adjust the battery charger's float setting 2V *above* normal float voltage.
- Adjust the HVDC potentiometer (R4) on the pc board (A1) until the voltage from R10-to-C2(-) begins to fall from 9Vdc. Stop adjusting R4, to allow for time delay.
- When the voltage on R10 falls to 2.5V, the relay (K1) will turn on, and the "**VENT/FAN ON**" front panel indicator lamp (DS01) will light.
- Reset the charge's float voltage to the previous (standard) setting.
- Manually place the charger into *Equalize* mode. The site vent and/or fan, wired to the assembly, will turn on.
- **NOTICE** It may take a few tries for optimum setting.
- With adjustment complete, close the bottom-hinged front panel, and re-install the top vent cover.

## ASSEMBLY REFERENCE IMAGE



**JA5052-10**

<http://www.ATSeries.net/PDFs/JA5052-10.pdf>

[\[http://www.ATSeries.net/PDFs/JA5052-10.pdf\]](http://www.ATSeries.net/PDFs/JA5052-10.pdf)

*Operating Instructions*  
**VOLTAGE-SENSE VENT / FAN  
CONTROL ASSEMBLY** (p/n EJ5017-20 thru 40)