



12/24V Automatic Battery Compartment Vent Controller

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WARNINGS

Blower blades can be quite sharp and can cut fingers or self destruct if impeded.

Use only brushless fans or blowers in the explosive atmosphere of a battery compartment. Fuses, switches and circuit breakers in the compartment must be rated for explosive atmosphere.

Suction blowers, preferably remote from the battery compartment, can keep the batteries under negative air pressure so air sucks in leaks rather than blowing hydrogen out.

FEATURES

- w Ventilates enclosed battery compartments, especially for lead acid batteries, to remove explosive gasses, acid fumes, excess heat and humidity.
- w Turns on automatically when the battery approaches its gassing voltage of 14 or 28 volts or higher.
- w After charging ceases it starts a 15 minute drying cycle.
- w After it times out, the blower shuts down automatically.
- w Draws no current when blowers are off.
- w Draws only 0.15 amps when on.
- w 12 or 24 volt switchable input.
- w Up to 50 amps output at battery voltage.
- w The controller can be mounted in the battery Compartment or at a remote location. It is waterproof and sealed for the corrosive or explosive atmosphere.
- w A green LED indicator light shows when the blower is operating.
- w A red LED shows over temperature or low battery voltage warning.

INSTALLATION

CAUTION: When first connecting the controller

to the battery, it may turn on until the electronics stabilizes. To avoid accidental sparks or short circuit, connect the blower(s) first.

1. Mount in a convenient location. Access and visibility are not required. It comes with 30" power cables and a 24" ground lead.
2. SET THE VOLTAGE. The controller is normally set for 12 volt batteries. To change to 24 volt, cut the light gauge yellow wire that loops out of the controller. Leave the ends long enough to strip and re-join in case you ever need to switch back to 12 volts.
3. Connect the shorter, light gauge wire to battery negative.
4. Connect the blower(s) positive to the purple cable. Blower voltage should match battery voltage. Maximum load 50 amps. The negative side of the blower(s) will connect to battery negative.
5. The positive input (red wire) connects to battery positive. A fuse or circuit breaker of a rating to match the blower load should be placed between the red wire and the battery positive. If located in the battery compartment the fuse or breaker must be rated for explosive atmosphere. If desired an on/off switch can be placed between the red lead and the battery positive terminal in addition to a fuse or circuit breaker. This too should be rated for explosive atmosphere if mounted in the battery compartment.
6. If you require a manual ON control to run the blowers when not on charge, just connect a "by-pass" switch between battery positive and the blowers, (between the red and purple leads). Remember the blowers may delay turning off when this switch is turned off if a timing cycle is in progress.

OPERATION

Operation is fully automatic. It will power the blowers when the charging voltage approaches the gassing level. It will turn off 15 minutes after charging is finished.

TROUBLE SHOOTING.

BLOWER NEVER TURNS ON

Check the input voltage right on the Controller. Measure between the ground lead and the red positive lead. If that voltage stays above 14 volts for at least 30 seconds it should turn on.

Check the blowers by jumpering between red and purple cables.

THE BLOWER REQUIRES MORE THAN 14 or 28 VOLTS TO TURN ON

There is a time delay for turn on to prevent triggering on voltage spikes. The voltage has to stay above the turn on level for about 30 seconds. If it fails to turn on, measure the voltage between black and red leads to make sure power is getting to the controller and that the voltage is staying above 14 or 28 volts.

THE BLOWER RUNS MORE THAN 15 MINUTES

The blower timing components are not precise. Typically 15 minutes should be a minimum but times as long as 20 minutes are possible.

If you have a load on the batteries while charging with a 3 stage charger it may be

switching back to the bulk stage periodically to maintain the batteries and this can re-start the timer.

The battery charger must remain below 13.8 or 27.6 volts on the float charge before the timing cycle will commence. Batteries with no load will hold a "surface" charge after a charging sequence that may be keeping the voltage above 14 or 28. The blowers will normally drain this low power surface charge off but a large battery bank may take some time.

THE TIMER RUNS ONLY FOR A FEW MINUTES

There is a thermal shut down for overload conditions. If the load is over 50 amps and if it is in a hot location, the red LED may be coming on and shutting it down due to over temperature. The trip level is 85C or 185F degrees.

If the charging voltage dropped just as the blowers were being turned on, the 15 minute timer may not have been fully charged.

SUPPORT

Support is available from tech@yandina.com or toll free at 877 355 2184.

WARRANTY

All YANDINA products carry an unconditional warranty. If it ever fails to operate for any reason, return for repair or replacement at no charge.

Check at <http://www.yandina.com/AboutUs.htm> to get the return address.