

# AC Triac Variable Voltage Supply *Team*

Triac Controls adjust the voltage output of an AC supply, similar to a light dimmer or ceiling fan control. Dart offers several models which, when applied properly can be used with single phase AC motors to adjust their speed. They can also be used with resistive loads such as lighting.

It is important to note Triac Controls will NOT work with capacitor start motors, perhaps the most common motor found in single phase applications. Capacitor start motors are not designed to be run variable speed. Attempts to slow these motors will be thwarted by the motor capacitor. Visually, these motors have a large hump on the top or side which houses the motor capacitor.

Motors which may have their speed adjusted using a Triac Control include Permanent Split Capacitor (PSC), Permanent Split Phase (PSP), Shaded Pole and Universal. These are all single phase motor types which Triac Controls might adjust speed - these applications may still have limitations. It is not likely a Triac Control will offer a wide range of speed adjustment - it likely will be in the top half of speed pot adjustment. The user may need to turn the Triac Control output up to get the motor moving before slowing down. Because success is application dependent, it is wise to sample a Triac Control first to evaluate performance in the particular application. Many customers do have success - Dart sells many of these products every year in a wide variety of applications.



*AC-03 Series*



*55/57 Series*



*55/57 Series*



**RoHS**



## AC03 Series

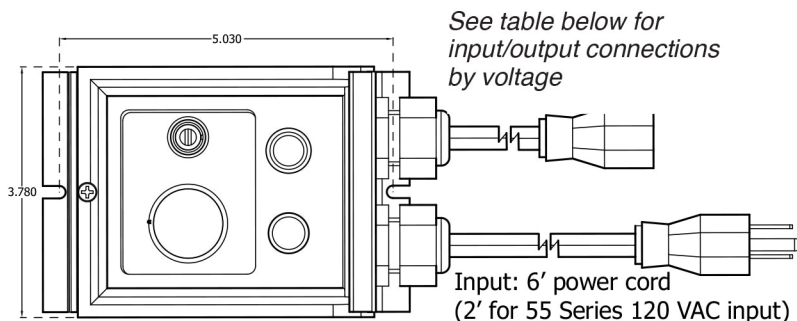
- 120VAC supply - 0-120VAC output
- Rated 2.5A continuous
- Output adjust potentiometer includes On/Off switch
- cULs Recognized

## 55/57 Series

- Chassis and enclosed (NEMA 1) models
- Chassis models include mounting hardware
- Chassis models mount via potentiometer bushing
- 120 and 240VAC supply models,  $\pm 10\%$
- 10A and 15A continuous rated models
- $-10^{\circ}$  to  $+45^{\circ}\text{C}$  ambient temperature
- 50/60Hz operation

Model	Width	Length	Depth	Weight
AC03-05S	1.50 in [3.81 cm]	2.00 in [5.08 cm]	1.10 in [2.79 cm]	4.8 oz [136 gm]
55/57 Series (chassis)	2.90 in (7.37 cm)	3.50 in [8.89 cm]	2.20 in [5.59 cm]	5.8 oz [164 gm]
55/57 Series (enclosed)	4.00 in [10.16 cm]	5.53 in [14.05 cm]	3.80 in (9.65 cm)	1.66 lb [753 gm]

55/57 Series  
Enclosed



Base Model						Options
Model	Supply Voltage	Current	Chassis (C) Enclosed (E)	Supply Connection	Output Connection	Half-Wave Output
AC03-05S	120 VAC	2.5A	C	Flying Leads	Flying Leads	N/A
55AC10C	120 VAC	10A	C	0.25" male QC	0.25" male QC	-F*
55AC10E	120 VAC	10A	E	2' cord and plug	Receptacle	-F*
57AC10C	240 VAC	10A	C	0.25" male QC	0.25" male QC	-F*
57AC10E	240 VAC	10A	E	6' cord	6' cord	-F*
55AC15C	120 VAC	15A	C	0.25" male QC	0.25" male QC	-F*
55AC15E	120 VAC	15A	E	2' cord and plug	Receptacle	-F*
57AC15C	240 VAC	15A	C	0.25" male QC	0.25" male QC	-F*
57AC15E	240 VAC	15A	E	6' cord	6' cord	-F*

N/A – Not available

\*F - Factory installed only

# Additional Products

The DM8000 is an economical microprocessor-based digital tachometer system capable of measuring shaft speeds lower than 1 RPM. The display is field programmable via the easy-to-use front panel interface. Large 1/2 inch 4-digit LED display numbers allow viewing under the most adverse conditions.

The DM8000 is actually four devices in one:

- Tachometer • Counter • Totalizer • Zero Speed Switch

The isolated 5 Amp form C relay output may be configured for many alarm, preset count and logic conditions. A single device may be shared by two speed inputs and the displayed toggled - saving cost and space.



DM8000

*For more information visit:*

<http://www.dartcontrols.com/product-guide/programmable-tachometers/>

The MSC38 is a Master Speed Control device which takes a single speed pot input and replicates it to eight isolated output channels. Each channel output may be scaled to achieve proportional control of multiple synchronized drives. The high impedance, isolated output channels will not load the connected drive's circuitry.



MSC38

*For more information visit:*

<http://www.dartcontrols.com/product-guide/accessories/msc38a/>

The VSI2 provides isolation and signal conversion for applications where drives are connected to supervisory systems such as plc's and SCADA's. The VSI2 offers both analog voltage (+5 to +250VDC) and current (4-20mA) signal input capability. These inputs are scaled and sent to the speed pot circuit on any drive that accepts a 3-wire speed pot input.



VSI2



**RoHS**