



Model A-700 Power Supply

Specifications - Installation and Operating Instructions



The **Model A-700** economical and reliable power supply is suitable for powering all Dwyer[®] pressure, temperature or air velocity transmitters. Inexpensive, open-frame design allows convenient access to input/output solder terminals. Auxiliary inputs are selectable for operation from power sources found worldwide. Compact size eases enclosure installation. UL and CSA approved.

AC INPUT WIRING AND FUSING

The universal transformer allows four input voltage ranges - 100/117/220/230 V AC $\pm 10\%$. Before operation at a specific line voltage, the proper input jumpers must be installed. The unit is factory wired for 117 volts. Adequate input fusing is also recommended. For jumpering scheme and fusing requirements, refer to unit ID label.

DC OUTPUT WIRING

Connect the load positive lead to the output terminal marked + and the negative lead to the output terminal marked -.

OUTPUT VOLTAGE ADJUSTMENT

With AC input applied and no load, adjust output voltage by setting the potentiometer labeled V_{ADJ}. Verify the adjustment range and adjust output to nominal voltage. If over voltage trips and output voltage does not adjust within specified limits, turn V_{ADJ} to fully CCW and recycle AC input.

THERMAL CONSIDERATIONS

In normal operation the chassis gets hot due to the heat generated in the regulator. An unrestricted mounting area is recommended. Moving air is desirable in confined areas. The chassis may be mounted on other heat dissipating surfaces to improve cooling.

SPECIFICATIONS

AC Input: 100/120/220/230-240 VAC, 47-63 Hz.

DC Output: 24-28 VDC regulated.

Maximum Current Output: Dependent on model (derate output current 10% for 50 Hz operation).

Operating Temperature: 32-122°F (0-50°C).

Storage Temperature: -40 to 185°F (-40 to 85°C).

Line Regulation: $\pm 0.05\%$ for $\pm 10\%$ line change.

Load Regulation: $\pm 0.05\%$ for 50% load change.

Thermal Regulation: $\pm 0.02\%/^{\circ}\text{C}$ maximum, $\pm 0.005\%/^{\circ}\text{C}$ typical.

Output Ripple: 2 mV RMS maximum, 3 mV peak to peak.

Dynamic Response: 30 microseconds for 50% load change.

External Fuse Required: 0.5 Amp for 100-120 VAC, 0.25 Amp for 220-240 VAC (Not included).

DIMENSIONS

Model	A-700 0.5 AMP	A-700-2 2.4 AMP	A-700-4 4.8 AMP
A	4.00	4.87	9.00
B	3.375	4.125	8.00
C	4.87	5.62	4.87
D	4.125	4.875	4.125
E	0.38	0.25	.50
F	0.50	0.50	.50
G	1.62	2.50	2.75
H	0.57	0.665	----
J	----	1.250	1.250
K	0.75	0.75	0.75
L	.260	2.85	----
M	.794	1.025	----
N	----	1.250	1.250
P	0.75	0.75	0.75
R	.450	.450	.525