## Power Supplies: Open Frame

## The most economical choice for 24 VDC power



These power supplies are especially useful when an inexpensive external supply is required.
The FA-24PS compact switching power supply accepts 100-240 VAC or DC input and provides up to 1.25 A ( 30 watts) output current at 24 VDC .
The FA-24PS-90 supplies 3.7A (90 watts) at 24 VDC and its input is jumper selectable between 95-130 or 190-264 VAC.

FA-24PS-90


AC Terminals
L N $\perp$ Jumper for 95-130 VAC input


| Cencral Specifications |  |  |
| :---: | :---: | :---: |
| Part Number | FA-24PS | FA-24PS-90 |
| Input Voltage Range | 100-240 VAC/DC | 95-130 VAC or 190-264 VAC, jumper selectable |
| Input Voltage Frequency | 47 to 63 Hz | 47 to 63 Hz |
| Input Power | 40 VA | 112 VA |
| Output Voltage | 24 VDC $\pm 5 \%$ | 24 VDC $\pm 5 \%$ |
| Output Current | 1.25 A maximum continuous | 3.7 A maximum continuous, subject to derating |
| Output Ripple | $\pm 200 \mathrm{mV}$ maximum | $\pm 200 \mathrm{mV}$ maximum |
| Temperature Rating | $0^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ full rated | $0^{\circ} \mathrm{C}$ to $30^{\circ} \mathrm{C}$ full rated; derate current $1.1 \%$ per degree above $30^{\circ} \mathrm{C}$; $60^{\circ} \mathrm{C}$ max |
| Transient Response | Output stays within $1 \%$ for a load current change from $75 \%(0.9 A)$ to either $50 \%$ ( 0.6 A ) or $100 \%$ ( 1.25 A ) | Output stays within $1 \%$ for a load current change from $75 \%$ (2.8A) to either $50 \%$ (1.8A) or $100 \%$ (3.7A) |
| Mounting | DIN rail, 35mm wide; Models DN-R35S1 or DN-R35HS1 | DIN rail, 35mm wide; Models DN-R35S1 or DN-R35HS1 |
| Screw Terminals | Wire Size: 18-12 AWG Rec. Screw Torque: 4.4 in $\bullet$ lb or 0.5 Nm | Wire Size: 18-12 AWG Rec. Screw Torque: 4.4 in $\bullet \mathrm{lb}$ or 0.5 Nm |
| Insulation Resistance | $10 \mathrm{M} \Omega$ at 500 V minimum | $10 \mathrm{M} \Omega$ at 500 V minimum |
| Dielectric Withstand Voltage | L or N Input to Output: 500 V min; Ground Input to Output: 250 V min | L or N Input to Output: 500 V min; Ground Input to Output: 250 V min |
| Brown-out Protection | Provides temporary regulation down to 85 VAC at full load | Provides temporary regulation at 95VAC at full load |
| Input Protection | The power supply has an internal fuse for the AC input line, rated at 3.15 amps; not user replaceable; external input fusing required. | The power supply has an internal fuse for the AC input line, rated at 3.15 amps; not user replaceable; external input fusing required. |
| Overload Protection | Protects power supply from overload and short circuit conditions. Includes automatic recovery upon removal of the overload condition | Protects power supply from overload and short circuit conditions. Includes automatic recovery upon removal of the overload condition |
| Inrush Current (2mS) | 115 V <12.5 A / $230 \mathrm{VAC}<13.9 \mathrm{~A}$ | 115 VAC < 79 A / 230 VAC <37 A |
| Overshoot Protection | No overshoot on turn-on or turn-off | No overshoot on turn-on or turn-off |
| Agency Standards and Approvals | UL 508, CUL, UL Listed File E139594 | UL 508; Class I, Div 2, Groups A, B, C, D hazardous locations; CUL, UL Listed File E200031 |

