

FEATURES:

- Output adjustable from 24-28VDC
- LED "Power On" Indicator
- "DC-OK" 30mA Source Output monitors output voltage and allows powering external light or relay
- Wide 100-240 VAC input range
- May be used in parallel to increase power or for redundancy
- Designed to supply any type of load including battery charging and unlimited capacitive and inductive loads
- Output protected against overload, no-load and short-circuits
- Internal Input fuse
- >87% Efficiency
- Quick Connect spring-clamp terminals
- Life Expectancy = 44,000 hours at full load. MTBF = 2,456,000 hours
- Division 2 Groups A,B,C,D is standard with the 10-0315. Division 1 Groups B,C,D available with 10-0314 explosion-proof packaging



10-0314 (Div 1)

10-0315 (Div 2)

The R. C. Systems Co., Inc. Model 10-0314 and 10-0315 power supplies are offered as high reliability 24 VDC power sources. The 100-240VAC wide input range makes these supplies suitable for both domestic and international installations.

The nominal 24 VDC output may be adjusted up to 28VDC with the front potentiometer. An LED indicator and "DC-OK" 30mA current sourcing output makes it easy to detect problems. The DC-OK output remains "ON" unless the output voltage drops below 20V.

All wiring connects to quick connect spring clamp terminals. Wire gauges may range from 26 to 12 AWG.

Outputs from multiple power supplies may be connected in parallel to increase power or to provide redundancy in case one supply fails.

Primary applications include increasing the 24 VDC capacity of our ST-90 Controller product line. ST-90's are limited to 12 watts without addition of the 10-0314 or 10-0315. ST-90's are available in both Division 1 and Division 2 classifications and it is important to combine with an appropriately rated power supply. All ST-90 models include NEMA 4 ratings and this is also the case for both the 10-0314 (suitable for Division 1 areas) and the 10-0315 (suitable for Division 2 areas).

It is important to observe local electrical codes when installing any kind of electrical equipment.

SPECIFICATIONS

Output voltage	DC 24V
Adjustment range	24-28V
Output current	2.1-1.8A @ 24-28V
Output power	50W
Output ripple	< 50mVpp 20Hz to 20MHz
AC Input voltage	100-240V Wide Range Input
Mains frequency	50-60Hz ±6%
AC Input current typ.	0.77 / 0.44A at 120 / 230Vac
Power factor typ.	0.56 / 0.52 at 120 / 230Vac
AC Inrush current	17/35A typ. peak value at 120/230Vac, 40°C and cold start
DC Input	85-375Vdc
Efficiency typ.	88.4 / 89.0% at 120 / 230Vac
Losses typ.	6.6 / 6.2W at 120 / 230Vac
Temperature range	-20°C to +70°C operational
Derating	1.3W/°C between +60 & +70°C
Hold-up time typ.	35 / 190ms at 120 / 230Vac

HOUSINGS:

10-0315 Fiberglass	Wall Mount, NEMA 4X suitable for Div 2 hazardous
10-0314 Cast Aluminum	NEMA 7 & NEMA 4X with included 'O' ring and epoxy paint. Suitable for Div 1 Groups B,C,D

CERTIFICATIONS:

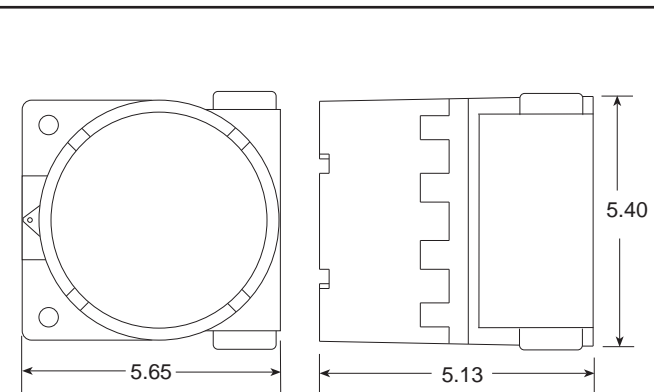
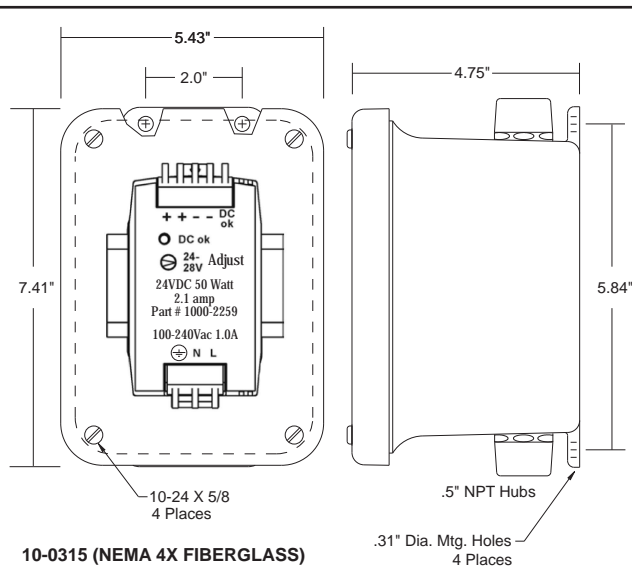
#1000-2259 Power Supply Module Certifications are by PULS Power. NEC Class 2. UL 508, LISTED as Industrial Control Equipment E198865 UL 1604, RECOGNIZED E246877 recognized for use in U.S.A. (UL 1604) and Canada (C22.2 No. 213-M1987) Hazardous Location Class I Div 2 T4 Groups A,B,C,D and Class I Zone 2 Groups IIA, IIB and IIC The unit is suitable for use in Class I Division 2 Groups A, B, C, D locations as well as for Class I Zone 2 Groups IIA, IIB and IIC locations. Substitution of components may impair suitability for Class I Division 2 environment. Do not disconnect equipment unless power has been switched off. Wiring must be in accordance with Class I, Division 2 wiring methods of the National Electrical Code, NFPA 70, and in accordance with other local or national codes.

ORDERING INFORMATION

10-0315 =	Fiberglass, Wall Mount, NEMA 4X, suitable for Div 2 hazardous areas
10-0314 =	Cast Aluminum, NEMA 7 Explosion-Proof & NEMA 4X with included 'O' ring and epoxy paint. Suitable for Div 1 Groups B,C,D
1000-2259 =	Replacement DIN RAIL Power Supply module

APPLICATION EXAMPLE

Our popular ST-90 series of controllers provides 12 watts of 24 VDC power for monitors and external devices. Using 10-0314 or 10-0315 24VDC outputs to power the ST-90 increases power available for auxiliary devices to 47 watts. **IMPORTANT!** PS module must be oriented as shown, with OUTPUT terminals on top and INPUT terminals on bottom, or additional power supply derating is required (see manual section 27.12).



ALL DIMENSIONS IN INCHES

10-0314 (NEMA 7 & NEMA 4X WITH STANDARD 'O' RING AND EPOXY PAINT)