






| UNIT CODE    | DESCRIPTION   |
|--------------|---|
| C-SDR 240-48 | 240 Watt, 48 Volt, Single Output Compact DIN Rail Power Supply with PFC, <b>GL</b> and <b>SEMI F47</b> approved |

| SPECIFICATIONS                  |                 |  |
|---------------------------------|-----------------|--|
| Input                           | Output          | Approvals  |
| Universal AC Input<br>88~264VAC | +48VDC @ 0 ~ 5A |      |

## Features at a Glance:

Environmentally friendly, high reliability and quiet

High efficiency **94%** and low power dissipation

Slim (63mm), Installed on DIN rail TS35 / 7.5 or 15

Working temperature ranging from -25° C~+70° C

Complies with **GL** for marine and **SEMI F47** for semi-conductor fabrication equipment

Built-in: active PFC function, PF>0.93, constant current limiting circuit & DC OK relay contact

Protections: Short circuit / Over load /  
Over voltage / Over temperature

LED indicator for power on

Cooling by natural (free air) convection

Certificates: UL, CUL, TUV, CE, CB, SEMI F47, GL

Safety standards: UL508 (industrial control equipment), TUV EN60950-1 approved and EN61000-6-2 (EN50082-2) industrial immunity level

MTBF hours: 169.3Khrs min. *MIL-HDBK-217F* (25° C)

3 year warranty

Case: 979A

Weight: 2.27 Lbs. (1.03 Kgs)

Dimensions: 2.48" W x 4.9" H x 4.46" D  
63 x 125.2 x 113.5mm (W\*H\*D)



The compact **C-SDR 240** Series are industrial DIN rail power supplies with 94% efficiency and built-in protection: against short circuits, over loads, over voltage and over temperature. This power supply is ideal for PoE and PoE Plus applications because it provides 24 volts and 240 watts to power multiple high-power devices. With UL 508 (industrial control equipment) approval and a wide operating temperature range C-SDR-240 is reliable in even the most demanding environments. Complies with **GL** for marine and **SEMI F47** for semi-conductor fabrication equipment.

We recommend it with [TAC60™ enclosure air conditioner](#) and [TACE™ series enclosures](#) and in telecom, factory automation and electro-mechanical applications and any low noise (fan-less) application.

|                |              |               |
|----------------|--------------|---------------|
| <b>Pricing</b> | <b>1 ~ 9</b> | <b>\$ 192</b> |
|                | <b>10+</b>   | <b>\$ 185</b> |
|                | <b>25+</b>   | <b>\$ 175</b> |

POLLOCK INDUSTRIES, INC. 81 Butternut Road, White River, VT 05001

toll-free 1-866-665-5434 (603) 888-2467 sales@pollock.biz


**■ Features :**

- High efficiency 94% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty


**SPECIFICATION**

| MODEL                                |   | SDR-240-24   | SDR-240-48                       |
|--------------------------------------|---|--|----------------------------------|
| OUTPUT                               | DC VOLTAGE  | 24V  | 48V                              |
|                                      | RATED CURRENT   | 10A  | 5A                               |
|                                      | CURRENT RANGE   | 0 ~ 10A  | 0 ~ 5A                           |
|                                      | RATED POWER   | 240W   | 240W                             |
|                                      | PEAK CURRENT  | 15A  | 7.5A                             |
|                                      | PEAK POWER <small>Note.6</small>  | 360W (3sec.)   |                                  |
|                                      | RIPPLE & NOISE (max.) <small>Note.2</small>   | 100mVp-p   | 120mVp-p                         |
|                                      | VOLTAGE ADJ. RANGE  | 24 ~ 28V   | 48 ~ 55V                         |
|                                      | VOLTAGE TOLERANCE <small>Note.3</small>   | ±1.0%  | ±1.0%                            |
|                                      | LINE REGULATION   | ±0.5%  | ±0.5%                            |
|                                      | LOAD REGULATION   | ±1.0%  | ±1.0%                            |
|                                      | SETUP, RISE TIME  | 1500ms, 60ms/230VAC  | 3000ms, 60ms/115VAC at full load |
| HOLD UP TIME (Typ.)                  | 20ms/230VAC   | 20ms/115VAC at full load   |                                  |
| INPUT                                | VOLTAGE RANGE   | 88 ~ 264VAC  | 124 ~ 370VDC                     |
|                                      | FREQUENCY RANGE   | 47 ~ 63Hz  |                                  |
|                                      | POWER FACTOR (Typ.)   | 0.93/230VAC  | 0.99/115VAC at full load         |
|                                      | EFFICIENCY (Typ.) <small>Note.8</small>   | 94%  |                                  |
|                                      | AC CURRENT (Typ.)   | 2.6A/115VAC  | 1.3A/230VAC                      |
|                                      | INRUSH CURRENT (Typ.)   | 33A/115VAC   | 65A/230VAC                       |
| LEAKAGE CURRENT                      | <1mA/ 240VAC  |  |                                  |
| PROTECTION                           | OVERLOAD  | Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage with auto-recovery<br>>150% rated power, constant current limiting with auto-recovery within 2 seconds and may cause to shut down if over 2 seconds |                                  |
|                                      | OVER VOLTAGE  | 29 ~ 33V   | 56 ~ 65V                         |
|                                      | OVER TEMPERATURE  | 95°C ±5°C (TSW : detect on heatsink of power switch)<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down  |                                  |
| FUNCTION                             | DC OK REALY CONTACT RATINGS (max.)  | 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load  |                                  |
| ENVIRONMENT                          | WORKING TEMP. <small>Note.5</small>   | -25 ~ +70°C (Refer to "Derating Curve")  |                                  |
|                                      | WORKING HUMIDITY  | 20 ~ 95% RH non-condensing   |                                  |
|                                      | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH   |                                  |
|                                      | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)   |                                  |
|                                      | VIBRATION   | Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6   |                                  |
| SAFETY & EMC <small>(Note 4)</small> | SAFETY STANDARDS  | UL508, TUV EN60950-1 approved  |                                  |
|                                      | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC  |                                  |
|                                      | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH  |                                  |
|                                      | EMC EMISSION  | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3  |                                  |
| OTHERS                               | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, SEMI F47, GL approved   |                                  |
|                                      | MTBF  | 169.3K hrs min.  | MIL-HDBK-217F (25°C)             |
|                                      | DIMENSION   | 63*125.2*113.5mm (W*H*D)   |                                  |
|                                      | PACKING   | 1.03Kg; 12pcs/13.4Kg/1.06CUFT  |                                  |
| NOTE                                 | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.<br>5. Installation clearances : 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.<br>6. 3 seconds max., please refer to peak loading curves.<br>7. Derating may be needed under low input voltage. Please check the derating curve for more details.<br>8. After 30 minutes of burn-in. |  |                                  |

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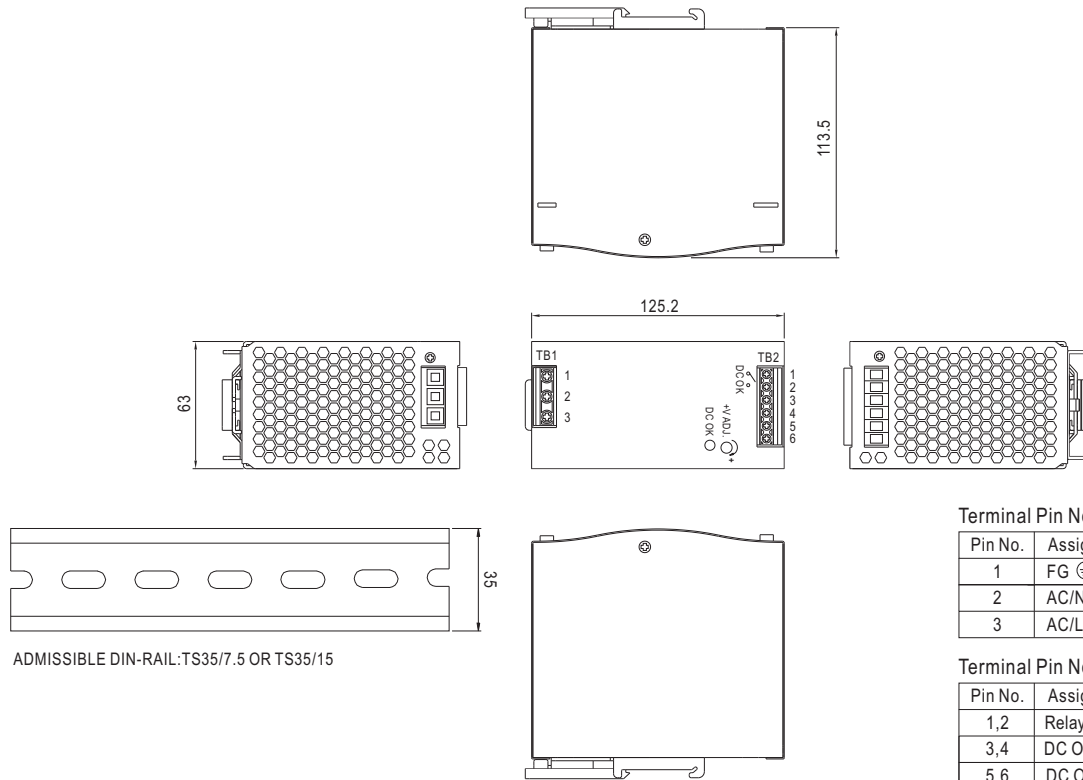


240W Single Output Industrial DIN RAIL with PFC Function

## SDR-240 series

### Mechanical Specification

Case No. 979A Unit:mm



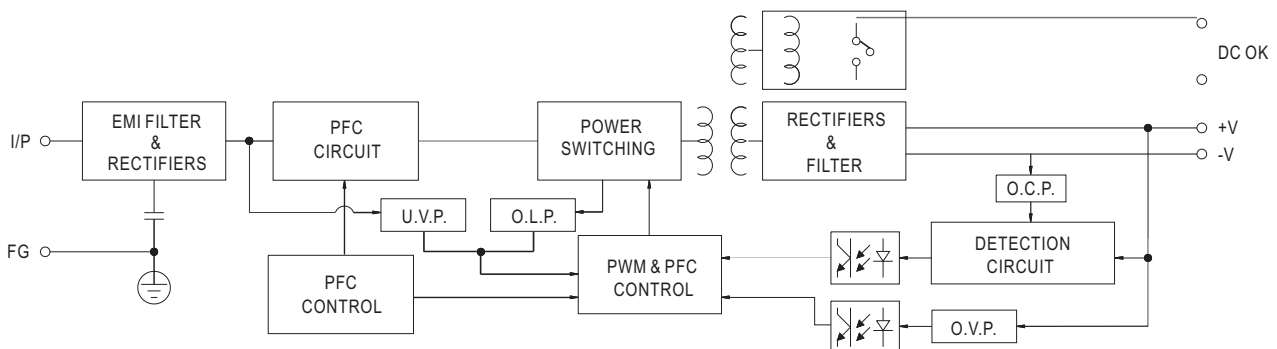
Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|------------|
| 1       | FG ⊕       |
| 2       | AC/N       |
| 3       | AC/L       |

Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment    |
|---------|---------------|
| 1,2     | Relay Contact |
| 3,4     | DC OUTPUT +V  |
| 5,6     | DC OUTPUT -V  |

### Block Diagram



### DC OK Relay Contact

|                        |                          |
|------------------------|--------------------------|
| Contact Close          | PSU turns on / DC OK.    |
| Contact Open           | PSU turns off / DC Fail. |
| Contact Ratings (max.) | 30V/1A resistive load.   |

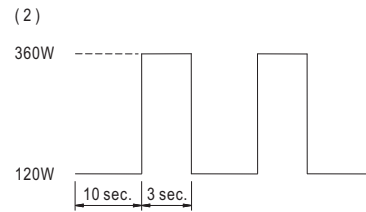
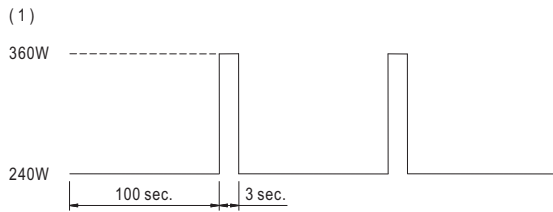
# POLLOCK INDUSTRIES



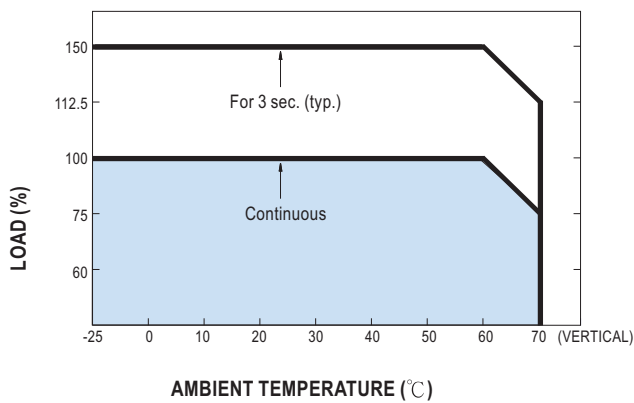
240W Single Output Industrial DIN RAIL with PFC Function

## SDR-240 series

### Peak Loading



### Derating Curve



### Output derating VS input voltage

