

Наличие и актуальные цены на

# **XDR-480E-36**

https://www.mean-well.ru/store/XDR-480E-36/



























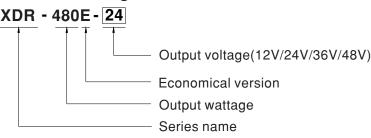


- · 85~264Vac input with PFC
- · Global certificates in multi-fields (ITE 62368-1, Industrial 61558-1/-2-16, 61010)
- · 48mm slim width
- · High efficiency up to 96% and no load power dissipation<1.2W
- · Built-in constant current limiting circuit
- · Current sharing up to 1920W (3+1) for parallel use
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Fanless design, cooling by free air convection
- · Over voltage category III (OVC III)
- -40~+70°C wide range operation temperature (>+50°C derating)
- · Operating altitude up to 5000 meters
- · Built-in DC OK relay contact
- · Can be installed on DIN rail TS-35/7.5 or 15
- · 3 years warranty

### Description

The XDR-480E series is a 480W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 48mm casing, optimizing system installation space, and an ultra-wide input range of 85~264Vac suitable for global use. It boasts a maximum efficiency of 96% and a low standby power consumption <1.2W for energy savings and carbon reduction. It has built-in constant current, fanless design, a wide operating temperature range of -40 to +70°C (up to +50°C at full load); OVCIII compliance; parallel function capability up to 1920W; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-480E series is a compact, high-performance, and highly reliable DIN rail power supply.

### Model Encoding





### Applications

- · Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- · Electro-mechanical apparatus
- · Battery charger

### GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

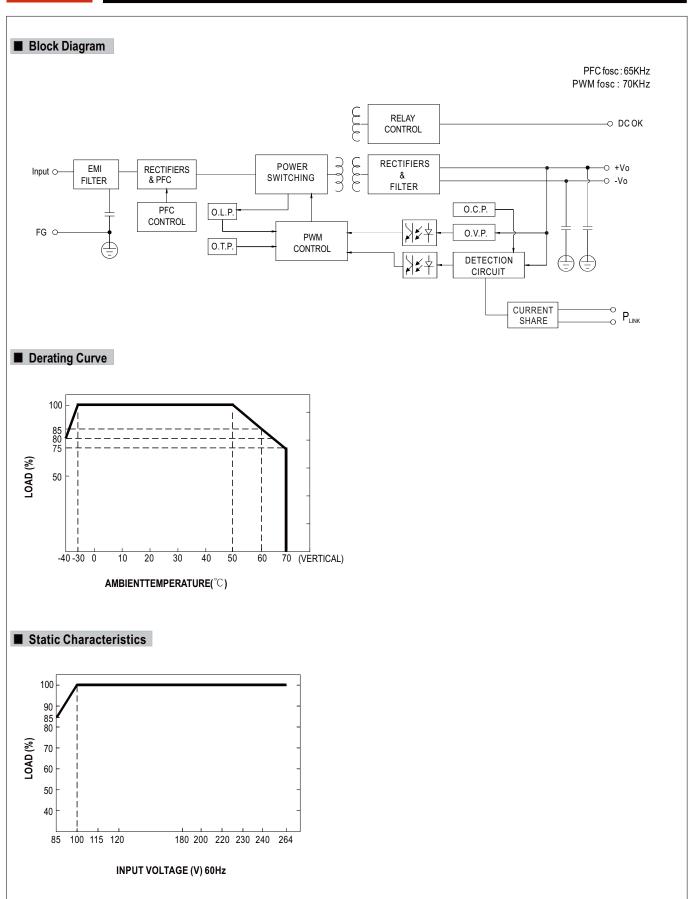


| SPECIFICATION                    | XDR-480E-12   | XDR-480E-24                   | XDR-480E-36           | XDR-480E-48 |
|----------------------------------|---|-------------------------------|-----------------------|-------------|
| OUTPUT                           |   | _                             |                       |             |
| DC VOLTAGE                       | 12V   | 24V                           | 36V                   | 48V         |
| RATED CURRENT                    | 30A   | 20A                           | 13.3A                 | 10A         |
| CURRENT RANGE                    | 0~30A   | 0 ~ 20A                       | 0 ~ 13.3A             | 0 ~ 10A     |
| RATED POWER                      | 360W  | 480W                          | 478.8W                | 480W        |
| RIPPLE & NOISE (max.) Note.2     | 100mVp-p  | 120mVp-p                      | 150mVp-p              | 150mVp-p    |
| VOLTAGE ADJ. RANGE               | 12 ~ 15V  | 24 ~ 29V                      | 36 ~ 42V              | 48 ~ 55V    |
| VOLTAGE TOLERANCE Note.3         | ±2.0%   | ±1.0%                         | ±1.0%                 | ±1.0%       |
| LINE REGULATION                  | ±0.5%   | ±0.5%                         | ±0.5%                 | ±0.5%       |
| LOAD REGULATION                  | ±1.0%   | ±1.0%                         | ±1.0%                 | ±1.0%       |
| SETUP, RISE TIME                 | 1500ms, 150ms/230Vac 3000r  | ms, 150ms/115Vac at full load |                       |             |
| HOLD UP TIME (Typ.)              | 15ms/230Vac 15ms/115Vac at  | full load                     |                       |             |
| INPUT                            |   |                               |                       |             |
| AC VOLTAGE RANGE                 | 85 ~ 264Vac   |                               |                       |             |
| DC VOLTAGE RANGE                 | 120 ~ 370Vdc  |                               |                       |             |
| NO LOAD POWER CONSUMPTION (Typ.) | 1W @115Vac & 230Vac   |                               | 1.2W @115Vac & 230Vac |             |
| FREQUENCY RANGE                  | 47 ~ 63Hz   | 47~63Hz                       |                       |             |
| POWDR FACTOR (Typ.)              | PF>0.95/230Vac PF>0.98/115Vac   | at full load                  |                       |             |
| EFFICIENCY (Typ.)                | 94%   | 94% 95.5% 95.5% 96%           |                       |             |
| AC CURRENT (Typ.)                | 6A/115Vac 3A/230Vac   | 6A/115Vac 3A/230Vac           |                       |             |
| INRUSH CURRENT (Typ.)            | COLD START 15A/115Vac 30A/230Vac  |                               |                       |             |
| LEAKAGE CURRENT                  | <1mA / 240Vac   |                               |                       |             |
| PROTECTION                       |   |                               |                       |             |
|                                  | 105~130% rated output power   |                               |                       |             |
| OVERLOAD                         | Hiccup mode when output voltage <30%, recovers automatically after fault condition is removed  Constant current limiting without shutdown within 30%~100% rated output voltage, recovers automatically after fault condition is removed |                               |                       |             |
| OVED VOLTAGE                     | Max. 18V  | Max. 35V                      | Max. 50V              | Max. 63V    |
| OVER VOLTAGE                     | Protection type : Hiccup mode, recovers automatically after fault condition is removed.   |                               |                       |             |
| OVER TEMPERATURE                 | Protection type: Shut down o/p voltage,recovers automatically after temperature goes down   |                               |                       |             |
| FUNCTION                         |   |                               |                       |             |
| PARALLEL (Droop Mode)            | Up to 1920WMax (3+1) units;Please refer to Function Manual for more details   |                               |                       |             |
| DC OK RELAY CONTACT              | Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load  |                               |                       |             |
| ENVIRONMENT                      |   |                               |                       |             |
| WORKING TEMP.                    | -40 ~ +70 °C (Refer to "Derating Curve")  |                               |                       |             |
| WORKING HUMIDITY                 | 20 ~ 95% RH non-condensing  |                               |                       |             |
| STORAGE TEMP., HUMIDITY          | -40 ~ +85°C, 10 ~ 95% RH non-condensing   |                               |                       |             |
| 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   |                               |                       |             |



| SPECIFICATION                  | XDR-480E-12   | XDR-480E-24                                   | XDR-480E-36            | XDR-480E-48  |  |
|--------------------------------|---|---|------------------------|--|--|
| SAFETY & EMC Note.             | 3   |   | <u>'</u>               |  |  |
| SAFETY STANDARDS               | UL61010; TUV BS EN/EN62368-1, BS EN/EN61558-1/-2-16, BS EN/EN61010; CB IEC62368-1, IEC61558-1, IEC61010; RCM AS/NZS 62368-1, AS/NZS 61558-1/-2-16; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 and BIS IS13252 (Part 1):2010 certified, no stock ,contact sale for inquires |   |                        |  |  |
| OVER VOLTAGE CATEGORY Note.4   | 1 IEC/EN/UL 61010 (OVC Ⅱ, al  |   |                        |  |  |
| SAFETY EXTRA-LOW VOLTAGE(SELV) | IEC/EN 61558-2-16 (SELV) IEC/EN/UL 61010-2-201 (SELV) IEC/EN 62368-1 (SELV / E  | IEC/EN/UL 61010-2-201 (SELV )                 |                        |  |  |
| VITHSTAND VOLTAGE              | I/P-O/P: 4KVac I/P-FG: 2KVac  | O/P-FG: 1.5KVac O/P-D                         | C OK: 0.5KVac          |  |  |
| SOLATION RESISTANCE            | I/P-O/P, I/P-FG, O/P-FG: 100M O   | hms/500Vdc/25°C/70%RH                         |                        |  |  |
|                                | Parameter   | Standard                                      | Test Leve              | I / Note   |  |
|                                | Conducted   | BS EN/EN55032 (CISPR<br>BS EN/EN61204-3 / CNS | ' (:lass B             |  |  |
| EMC EMISSION                   | Radiated  | BS EN/EN55032 (CISPR<br>BS EN/EN61204-3 / CNS | ' Lass B               |  |  |
|                                | Harmonic Current  | BS EN/EN61000-3-2                             | Class A                |  |  |
|                                | Voltage Flicker   | BS EN/EN61000-3-3                             |                        |  |  |
|                                | BS EN/EN55035 , BS EN/EN61204-3, BS EN/EN61000-6-2(BS EN/EN50082-2)   |   |                        |  |  |
|                                | Parameter   | Standard                                      | Test Leve              | I / Note   |  |
|                                | ESD   | BS EN/EN61000-4-2                             | Level 3, 81 criteria A | (V air ; Level 2, 4KV contact;                     |  |
|                                | Radiated  | BS EN/EN61000-4-3                             | Level 3, 10            | OV/m ; criteria A                                  |  |
| MC IMMUNITY                    | EFT / Burst   | BS EN/EN61000-4-4                             | Level 3, 21            | KV ; criteria A                                    |  |
|                                | Surge   | BS EN/EN61000-4-5                             |                        | KV/Line-Line ;Level 4,<br>Line-Chassis ;criteria A |  |
|                                | Conducted   | BS EN/EN61000-4-6                             | Level 3, 10            | OV ; criteria A                                    |  |
|                                | Magnetic Field  | BS EN/EN61000-4-8                             | Level 4, 30            | OA/m ; criteria A                                  |  |
| THERS                          |   |   |                        |  |  |
| ITBF                           | 1482.0K hrs min. Telcordia SR-332 (Bellcore); 258.3K hrs min. MIL-HDBK-217F (25°C)  |   |                        |  |  |
| IMENSION                       | 48*125.2*125mm (W*H*D)  |   |                        |  |  |
| ACKING                         | NG 890g; 12pcs/13Kg/1.16CUFT  |   |                        |  |  |
| IOTE                           |   |   |                        |  |  |

- 1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1  $\mu$  F & 47  $\mu$  F parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- 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.
- 6. 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. (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- \* Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



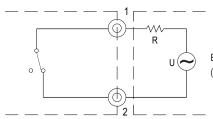


#### **■** Function Manual

| Pin No. | Function                              | Description  Contact Close: PSU turns ON/DC_OK Contact Open: PSU turns OFF/DC_fail  P_LINK should be short to enable droop parallel use.(Default disable) |  |
|---------|---------------------------------------|---|--|
| 1,2     | DC OK Relay Contact                   |   |  |
| 3,4     | Paraller Use Link(P <sub>LINK</sub> ) |   |  |

#### 1.DC OK Relay Contact

| Contact Close          | PSU turns ON/DC OK.                  |
|------------------------|--------------------------------------|
| Contact Open           | PSU turns OFF/DC Fail.               |
| Contact Ratings (max.) | 30Vdc/1A, 30Vac/0.5A resistive load. |



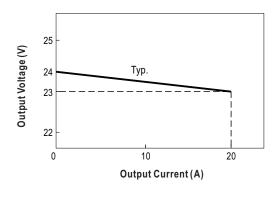
External voltage source (U) and resistor (R) (The max. Sink is 30Vdc/1A,30Vac/0.5A)

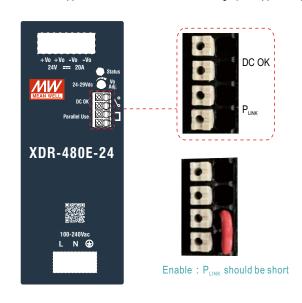
Internal circuit of DC\_OK, via relay contact

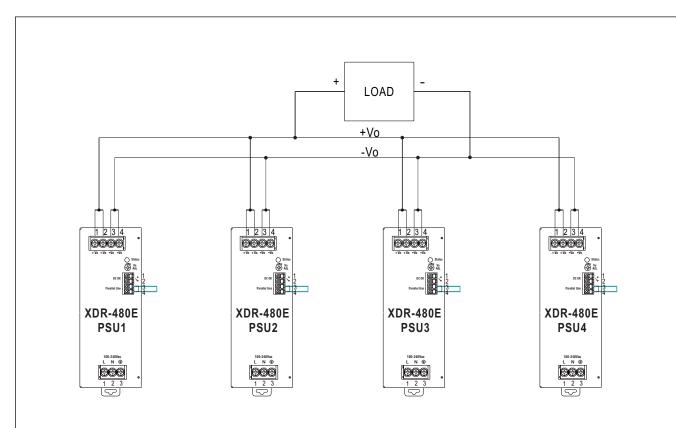
XDR-480E has the built-in droop mode current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below:

- (1) Difference of output voltages among parallel units should be less than 0.1V.
- (2) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)=(The rated current per unit) x (Number of unit) x 0.9.
- (3) In parallel operation 4 units is the maximum, please consult the manufacture for other applications.
- (4) The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- (5) When in parallel operation, the minimum output load should be greater than 7% of total output load. (Min. load >7% rated current per unit x number of unit)
- (6) In parallel connection, maybe only one unit (master) operate if the total output load is less than 7% of rated load condition. The other PSUs (slaves) may go into standby mode and their output LEDs & relays will not turn on.
- (7) PLINK lines should be shorted locally.
- (8) In parallel operation, after overload or short circuit fault occurs, re-power on to recover.
- (9) The "Parallel Use" mode regulates the output voltage in such a manner that the rated load is approx. 4% lower than the no-load voltage (12V:approx.7%).

For example XDR-480E-24: No load output voltage=24V Normal load output current=20A 0~100% load output voltage=24V~23V





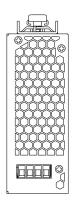


\* Please contact MEAN WELL for more details.

### ■ Mechanical Specification

(Unit:mm, Tolerance ±1mm)

Case No.303

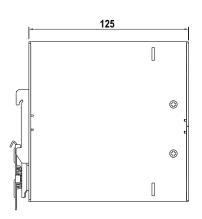


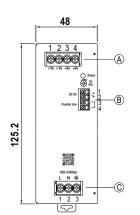
#### (A): Terminal Pin No. Assignment

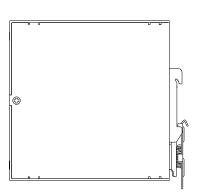
| Pin No. | Assignment    |  |
|---------|---------------|--|
| 1,2     | DC Output +Vo |  |
| 3,4     | DC Output -Vo |  |

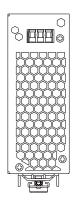
#### B: Control Pin No.Assignment

|           | Pin No. | Assignment                         |
|-----------|---------|------------------------------------|
| 1,2 DC OF |         | DC OK Relay Contact                |
|           | 3,4     | Parallel Use Link(Current Sharing) |









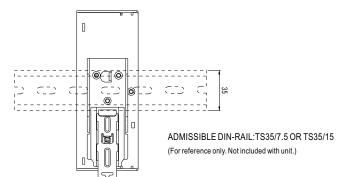
#### ©: Terminal Pin No.Assignment

| Pin No. | Assignment            |  |
|---------|-----------------------|--|
| 1       | AC/L or DC Input +Vin |  |
| 2       | AC/N or DC Input -Vin |  |
| 3       | FG ⊕                  |  |

### ■ Recommend Wiring

|                       |                   | AC Input T.B | DC Output T.B        | Signal connector |
|-----------------------|-------------------|--------------|----------------------|------------------|
| Solid Wire            |                   | 6mm² max.    | 6mm² max. 1.5mm² max |                  |
| A.W.G                 | XDR-480E-12       | 18~10 AWG    | 12~10 AWG            | 24~16 AWG        |
| A.W.G                 | XDR-480E-24/36/48 | 10~10 AWG    | 16~10 AWG            |                  |
| Wire Stripping Length |                   | 10~11mm      | 10~11mm              | 8~9mm            |
| Screw Terminal Torque |                   | 5 Lb-In      | 5 Lb-In              | 1                |

### ■ Installation Instruction



This series fits DIN rail TS35/7.5 or TS35/15. For installation details, please refer to the Instruction manual.

### ■ Installation Manual

Please refer to: http://www.meanwell.com/manual.html