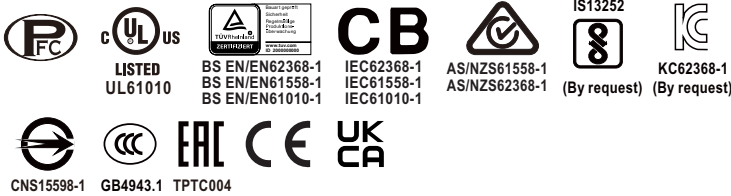




240W AC/DC Economical Ultra Slim Industrial DIN Rail Power **XDR-240E** series



User's Manual



■ Features

- 85~264Vac input with PFC
- Global certificates in multi-fields (ITE 62368-1, Industrial 61558-1/-2-16, 61010)
- 40mm slim width
- High efficiency up to 95.5% and no load power dissipation < 1.2W
- Built-in constant current limiting circuit
- 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-240E series is a 240W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 40mm casing, optimizing system installation space, and an ultra-wide input range of 85~264Vac suitable for global use. It boasts a maximum efficiency of 95.5% 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; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-240E series is a compact, high-performance, and highly reliable DIN rail power supply.

■ Model Encoding

XDR - 240E - 24

- Output voltage(12V/24V/36V/48V)
- Economical version
- Output wattage
- Series name

■ Applications

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

■ GTIN CODE

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



240W AC/DC Economical Ultra Slim Industrial DIN Rail Power **XDR-240E** series

SPECIFICATION		XDR-240E-12	XDR-240E-24	XDR-240E-36	XDR-240E-48
OUTPUT					
DC VOLTAGE		12V	24V	36V	48V
RATED CURRENT		20A	10A	6.66A	5A
CURRENT RANGE		0 ~ 20A	0 ~ 10A	0 ~ 6.66A	0 ~ 5A
RATED POWER		240W			
RIPPLE & NOISE (max.)	Note.2	100mVp-p	100mVp-p	120mVp-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		1200ms, 60ms/230Vac 2500ms, 150ms/115Vac at full load			
HOLD UP TIME (Typ.)		20ms/230Vac 20ms/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			
POWDR FACTOR (Typ.)		PF>0.95/230Vac PF>0.98/115Vac at full load			
EFFICIENCY (Typ.)		94%	95.2%	95.5%	95.5%
AC CURRENT (Typ.)		2.6A/115Vac 1.3A/230Vac			
INRUSH CURRENT (Typ.)		COLD START 15A/115Vac 30A/230Vac			
LEAKAGE CURRENT		<1mA / 240Vac			
PROTECTION					
OVERLOAD		105~130% rated output power			
		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			
OVER VOLTAGE		Max. 18V	Max. 35V	Max. 50V	Max. 63V
		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					
DC OK RELAY CONTACT		Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load			
ENVIRONMENT					
WORKING TEMP.		-40 ~ +70℃ (Refer to "Derating Curve")			
WORKING HUMIDITY		20 ~ 95% RH non-condensing			
STORAGE TEMP., HUMIDITY		-40 ~ +85℃, 10 ~ 95% RH non-condensing			
TEMP. COEFFICIENT		±0.03%/℃ (0 ~ 50℃)			
VIBRATION		Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			



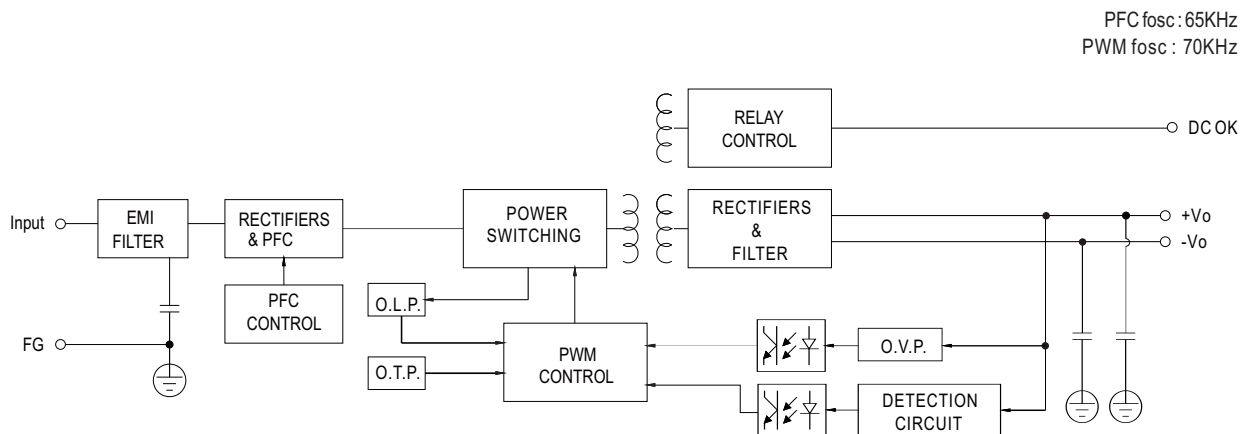
240W AC/DC Economical Ultra Slim Industrial DIN Rail Power **XDR-240E** series

SPECIFICATION		XDR-240E-12	XDR-240E-24	XDR-240E-36	XDR-240E-48
SAFETY & EMC		Note.6			
SAFETY STANDARDS		UL/CUL 61010-1/-2-201; TUV BS EN/EN 62368-1, BS EN IEC/EN IEC 61558-1/-2-16, BS EN/EN 61010-1/-2-201; CB IEC 62368-1, IEC 61558-1/2-16, IEC 61010-1/-2-201; 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 inquiries			
OVER VOLTAGE CATEGORY		Note.4 IEC/EN 61558-1/-2-16 (OVC III, altitude up to 2000m) IEC/EN/UL 61010 (OVC II, altitude up to 5000m) IEC/EN 62368-1 (OVC II, altitude up to 5000m)			
SAFETY EXTRA-LOW VOLTAGE(SELV)		IEC/EN 61558-2-16 (SELV) IEC/EN/UL 61010-2-201 (SELV) IEC/EN 62368-1 (SELV / ES1)			
WITHSTAND VOLTAGE		I/P-O/P: 4KVac I/P-FG: 2KVac O/P-FG: 1.5KVac O/P-DC OK: 0.5KVac			
ISOLATION RESISTANCE		I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500Vdc/25℃ / 70%RH			
EMC EMISSION		Parameter	Standard		Test Level / Note
		Conducted	BS EN/EN55032 (CISPR32) / BS EN/EN61204-3 / CNS15936		Class B
		Radiated	BS EN/EN55032 (CISPR32) / BS EN/EN61204-3 / CNS15936		Class B
		Harmonic Current	BS EN/EN61000-3-2		Class A
		Voltage Flicker	BS EN/EN61000-3-3		-----
EMC IMMUNITY		BS EN/EN55035 , BS EN/EN61204-3, BS EN/EN61000-6-2(BS EN/EN50082-2)			
		Parameter	Standard		Test Level / Note
		ESD	BS EN/EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact; criteria A
		Radiated	BS EN/EN61000-4-3		Level 3, 10V/m ; criteria A
		EFT / Burst	BS EN/EN61000-4-4		Level 3, 2KV ; criteria A
		Surge	BS EN/EN61000-4-5		Level 4, 2KV/Line-Line ;Level 4, 4KV/Line-Line-Chassis ;criteria A
		Conducted	BS EN/EN61000-4-6		Level 3, 10V ; criteria A
		Magnetic Field	BS EN/EN61000-4-8		Level 4, 30A/m ; criteria A
OTHERS					
MTBF		1723.2K hrs min. Telcordia SR-332 (Bellcore) ; 324.4K hrs min. MIL-HDBK-217F (25℃)			
DIMENSION		40*125.2*116mm (W*H*D)			
PACKING		610g; 16pcs/12.2Kg/1.27CUFT			
NOTE					
1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/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					

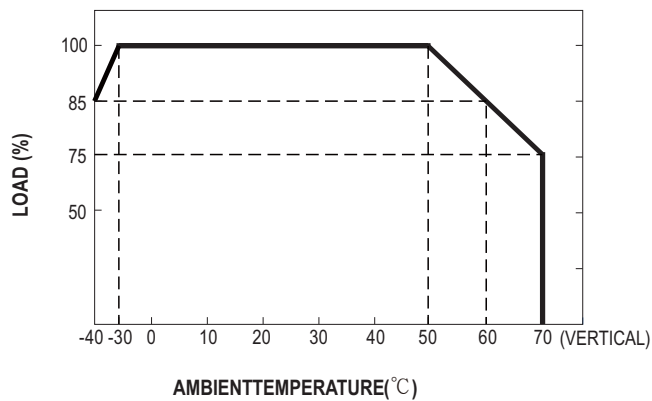


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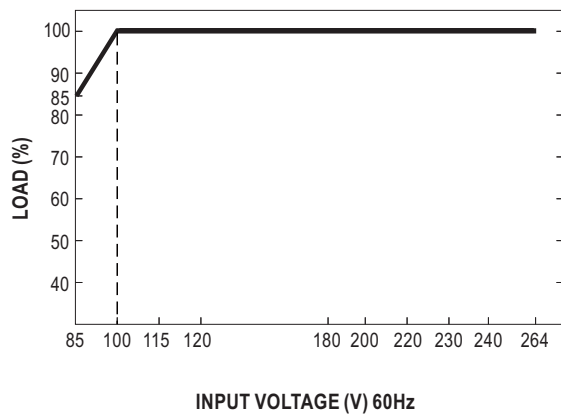
■ Block Diagram



■ Derating Curve



■ Static Characteristics



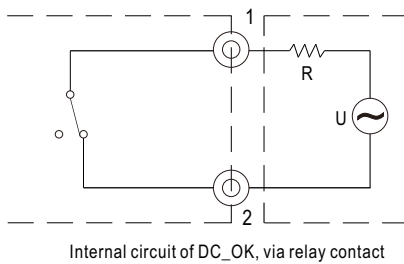


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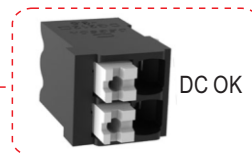
■ Function Manual

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)



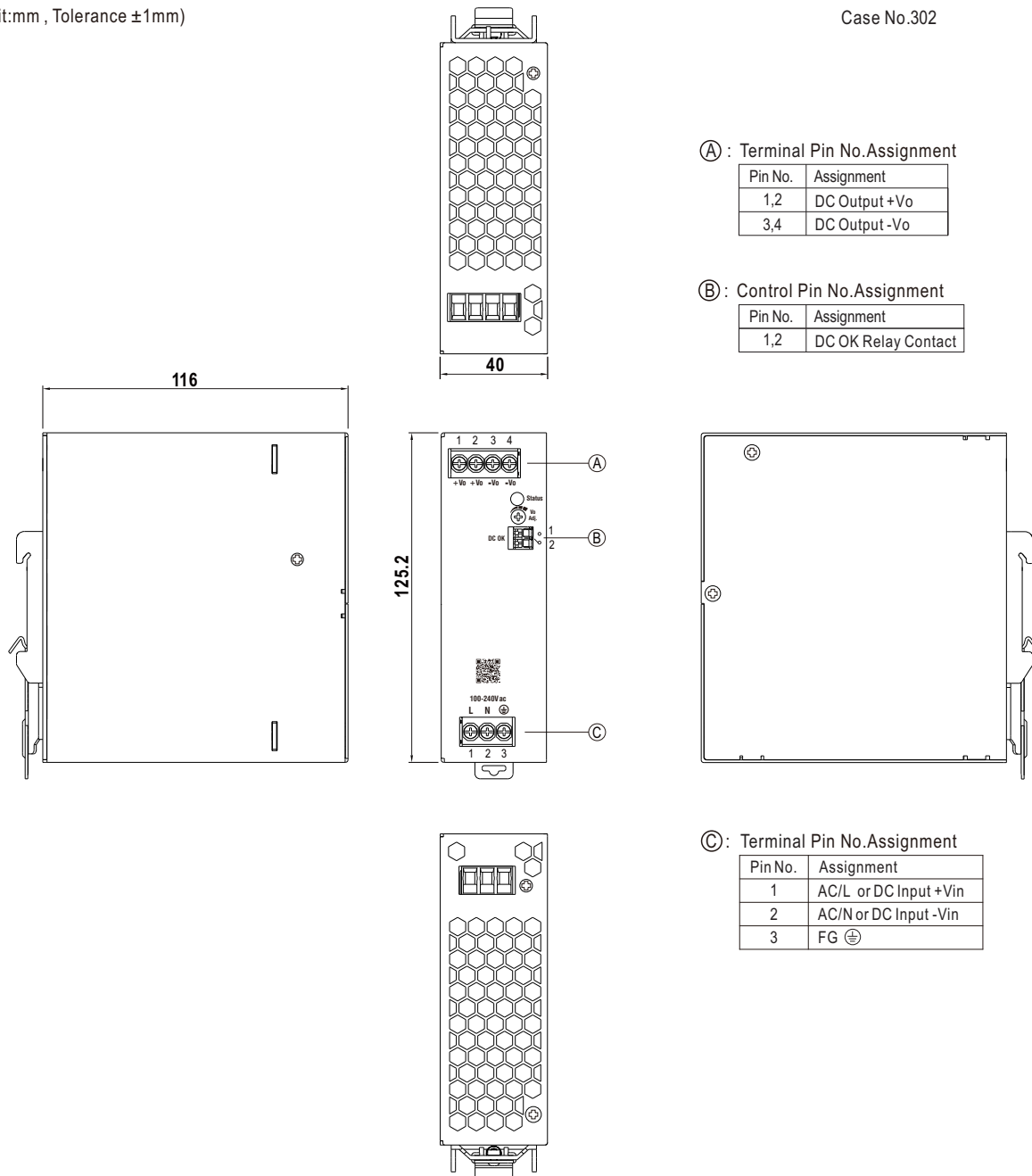


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■ Mechanical Specification

(Unit:mm , Tolerance ± 1 mm)

Case No.302



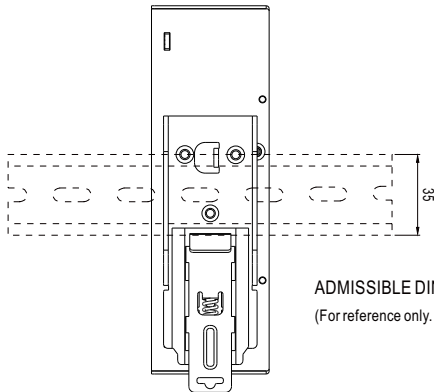
■ Recommend Wiring

		AC Input T.B	DC Output T.B	Signal connector
Solid Wire		6mm ² max.	6mm ² max.	1.5mm ² max.
A.W.G	XDR-240E-12	20~10 AWG	14~10 AWG	24~16 AWG
	XDR-240E-24/36/48		18~10 AWG	
Wire Stripping Length		7~8mm	7~8mm	8~9mm
Screw Terminal Torque		5 Lb-In	5 Lb-In	/



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■ Installation Instruction



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

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>