75W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-75E series

User's Manual

LISTED UL61010 | BS EN/EN62368-1 BS EN/EN61558-1 BS EN/EN61010 | IEC62368-1 IEC61558-1 IEC61010 | AS/NES61558-1 AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

Features

- 85~264Vac input range
- Global certificates in multi-fields (ITE 62368-1,Industrial 61558-1/-2-16,61010)
- 30mm slim width
- High efficiency up to 91% and no load power dissipation<1W
- 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℃ 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

Applications

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

GTIN CODE

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

Description

The XDR-75E series is a 75W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 30mm casing, optimizing system installation space, and an ultra-wide input range of 85~264Vac suitable for global use. It boasts a maximum efficiency of 91% and a low standby power consumption <1W for energy savings and carbon reduction. It has built-in constant current, fanless design, a wide operating temperature range of -40 to +70℃ (up to +50℃ at full load); OVCIII compliance; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-75E series is a compact, high-performance, and highly reliable DIN rail power supply.

Model Encoding

XDR - 75 E - 24

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

75W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-75E series

SPECIFICATION

MODEL		XDR-75E-12	XDR-75E-24	XDR-75E-36	XDR-75E-48
OUTPUT	DC VOLTAGE	12V	24V	36V	48V
	RATED CURRENT	6.3A	3.2A	2.1A	1.6A
	CURRENT RANGE	0 ~ 6.3A	0 ~ 3.2A	0 ~ 2.1A	0 ~ 1.6A
	RATED POWER	75.6W	76.8W	75.6W	76.8W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	120mVp-p	120mVp-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, 60ms/115Vac at full load			
	HOLD UP TIME (Typ.)	16ms/230Vac 10ms/115Vac at full load			
INPUT	AC VOLTAGE RANGE	85 ~ 264Vac			
	DC VOLTAGE RANGE	120 ~ 370Vdc			
	NO LOAD POWER CONSUMPTION (Typ.)	0.7W @115Vac & 230Vac	1W @115Vac & 230Vac		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	89%	90%	91%	91%
	AC CURRENT (Typ.)	1.4A/115Vac 0.8A/230Vac			
	INRUSH CURRENT (Typ.)	COLD START 18A/115Vac 35A/230Vac			
	LEAKAGE CURRENT	<1mA / 240Vac			
PROTECTION	OVERLOAD	105-130% rated output power, constant current limiting without shutdown, recovers automatically after fault condition is removed			
	OVER VOLTAGE	15 ~ 18V	30 ~ 34V	43 ~ 50V	56 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Protection type : Hiccup mode, recovers automatically after fault condition is removed			
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			
SAFETY & EMC (Note 6)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires			
	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) / CNS15936	Class B	
		Radiated	BS EN/EN55032 (CISPR32) / CNS15936	Class B	
		Harmonic Current	BS EN/EN61000-3-2	Class A	
		Voltage Flicker	BS EN/EN61000-3-2	-----	
	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 3, 4KV contact; criteria A	
		Radiated	BS EN/EN61000-4-3	Level 3, 10V/m ; criteria A	
		EFT / Burst	BS EN/EN61000-4-4	Level 2, 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	2425.7K hrs min. Telcordia SR-332 (Bellcore) ; 533.7K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	**30*125.2*116mm (W*H*D)**			
	PACKING	400g; 24pcs/10.6Kg/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 μF & 47 μF 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)

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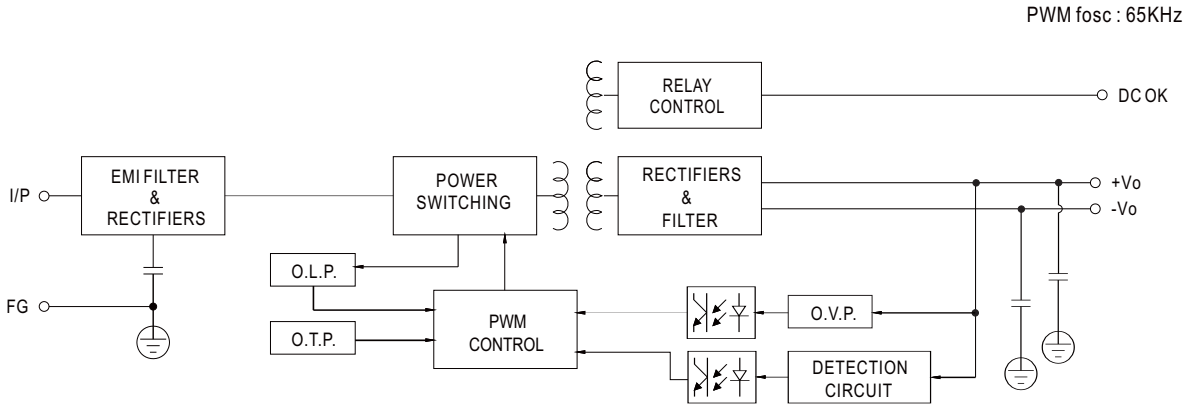
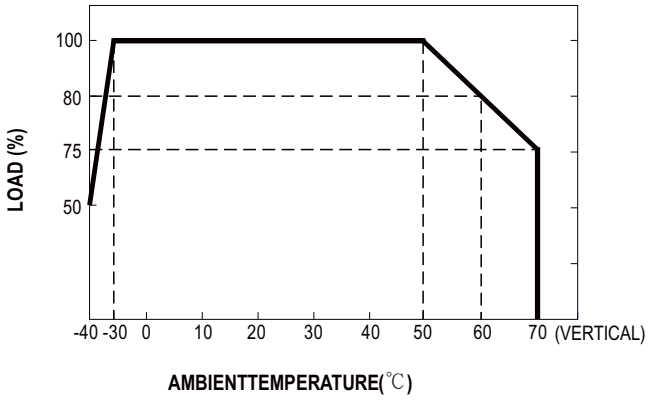
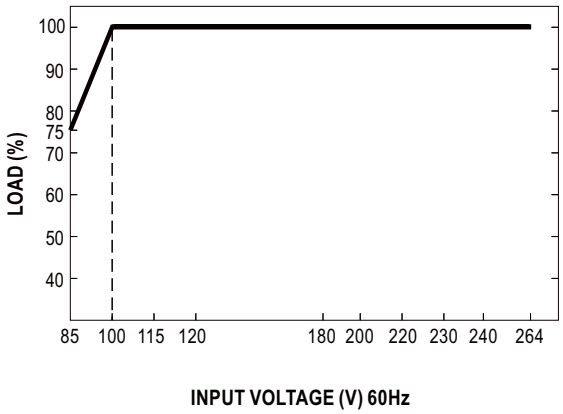
■ Block Diagram



■ Derating Curve



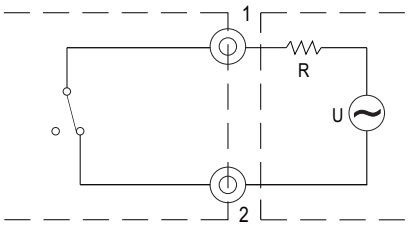
■ Static Characteristics



■ Function Manual

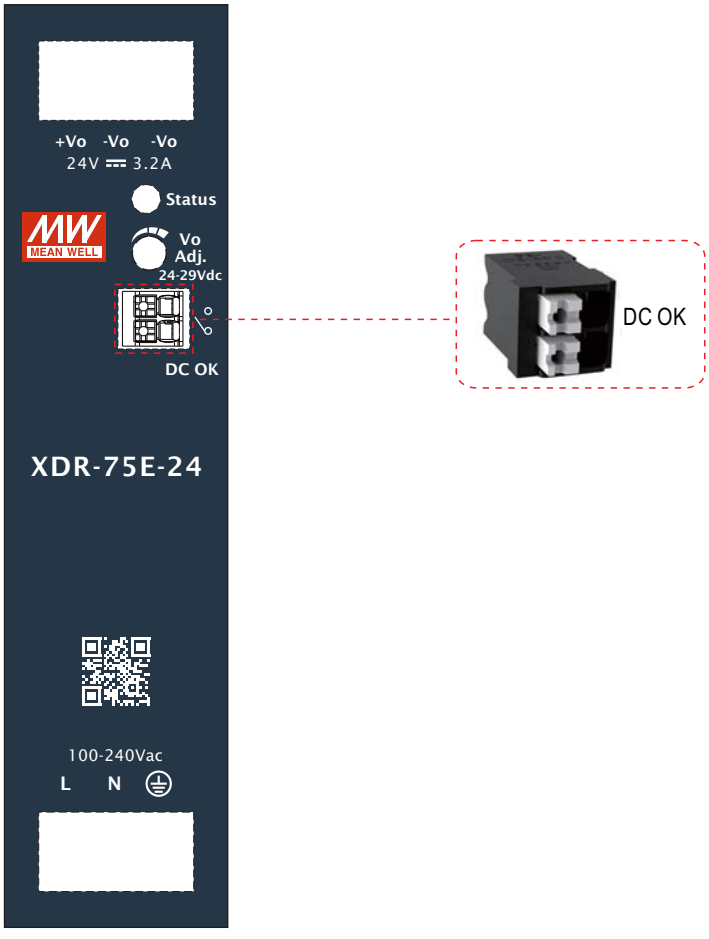
1.DC OK Relay Contact

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)

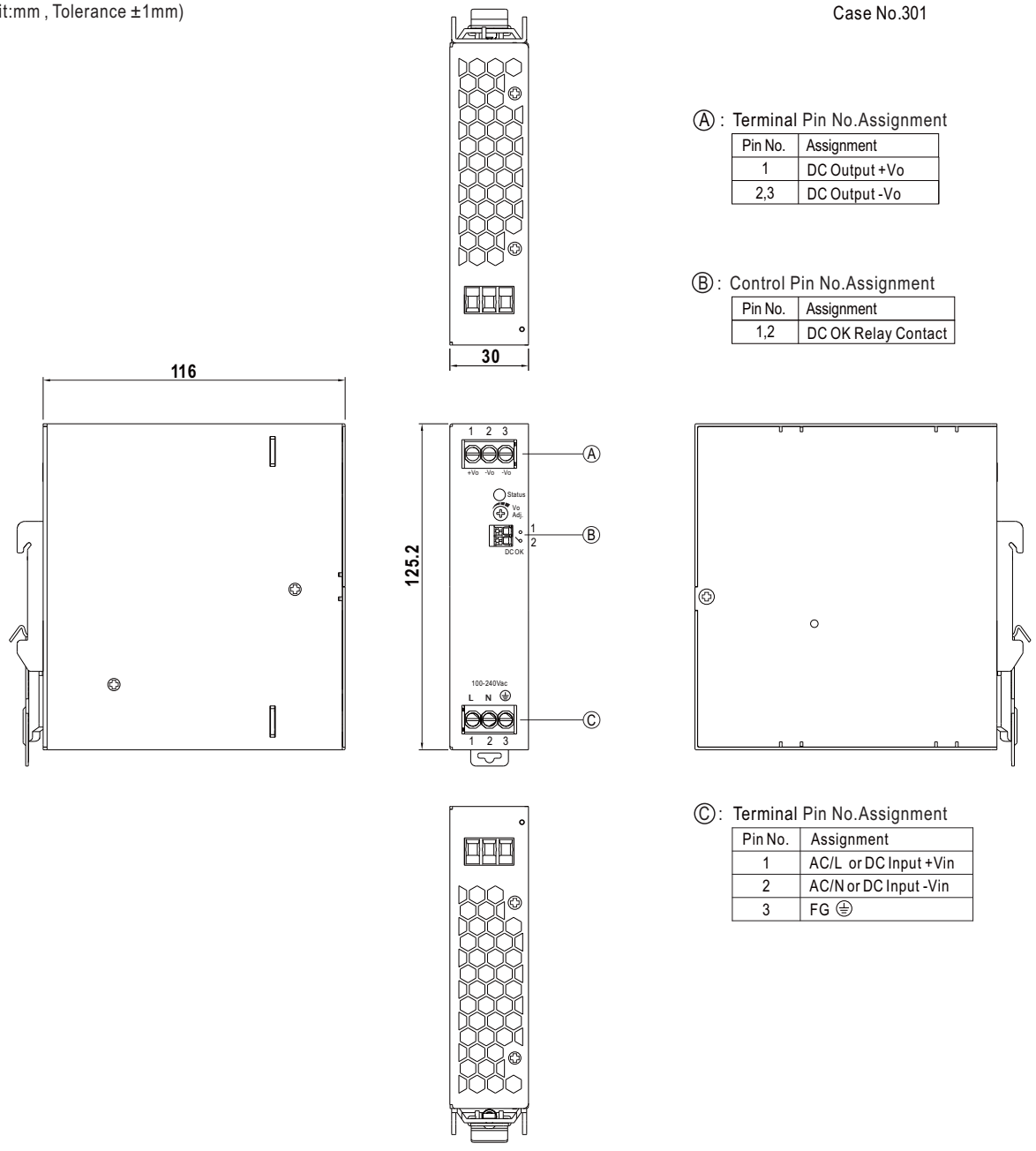
Internal circuit of DC_OK, via relay contact



■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No.301



Ⓐ: Terminal Pin No.Assignment

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

Ⓑ: Control Pin No.Assignment

Pin No.	Assignment
1,2	DC OK Relay Contact

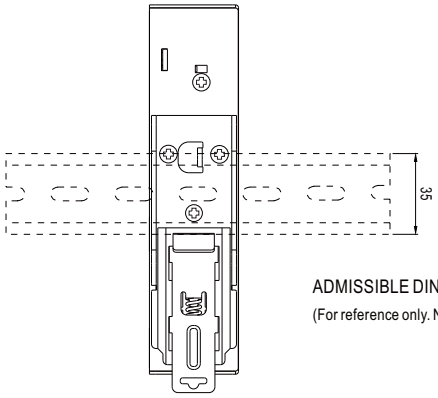
Ⓒ: Terminal Pin No.Assignment

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	22~10 AWG	22~10 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ 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

120W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-120E series

User's Manual

LISTED UL61010 | BS EN/EN62368-1 BS EN/EN61558-1 BS EN/EN61010 | IEC62368-1 IEC61558-1 IEC61010 | AS/NES61558-1 AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

Features

- 85~264Vac input range
- Global certificates in multi-fields (ITE 62368-1,Industrial 61558-1/-2-16,61010)
- 30mm slim width
- High efficiency up to 91% and no load power dissipation<1W
- 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℃ 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

Applications

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

GTIN CODE

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

Description

The XDR-120E series is a 120W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 30mm casing, optimizing system installation space, and an ultra-wide input range of 85~264Vac suitable for global use. It boasts a maximum efficiency of 91% and a low standby power consumption <1W for energy savings and carbon reduction. It has built-in constant current, fanless design, a wide operating temperature range of -40 to +70℃ (up to +50℃ at full load); OVCIII compliance; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-120E series is a compact, high-performance, and highly reliable DIN rail power supply.

Model Encoding

XDR - 120E - 24

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

120W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-120E series

SPECIFICATION

MODEL		XDR-120E-12	XDR-120E-24	XDR-120E-36	XDR-120E-48
OUTPUT	DC VOLTAGE	12V	24V	36V	48V
	RATED CURRENT	10A	5A	3.33A	2.5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 3.33A	0 ~ 2.5A
	RATED POWER	120W	120W	119.88W	120W
	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	1200ms, 60ms/230Vac 2500ms, 60ms/115Vac at full load			
	HOLD UP TIME (Typ.)	16ms/230Vac 8ms/115Vac at full load			
INPUT	AC VOLTAGE RANGE	85 ~ 264Vac			
	DC VOLTAGE RANGE	120 ~ 370Vdc			
	NO LOAD POWER CONSUMPTION (Typ.)	0.9W @115Vac & 230Vac	1W @115Vac & 230Vac		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	89%	91%	91%	91%
	AC CURRENT (Typ.)	2.25A/115Vac 1.3A/230Vac			
	INRUSH CURRENT (Typ.)	COLD START 20A/115Vac 40A/230Vac			
	LEAKAGE CURRENT	<1mA / 240Vac			
PROTECTION	OVERLOAD	105-130% rated output power, constant current limiting without shutdown, recovers automatically after fault condition is removed			
	OVER VOLTAGE	15 ~ 18V	30 ~ 34V	43 ~ 50V	56 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Protection type : Shut down o/p voltage,recovers automatically after fault condition is removed			
FUNCTION	DC OK RELAY CONTACT	Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load			
ENVIRONMENT	WORKING TEMP. Note.4	-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			
SAFETY & EMC (Note 7)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires			
	OVER VOLTAGE CATEGORY Note.5	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/EN61000-3-2		-----
	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 3, 4KV contact; criteria A
		Radiated	BS EN/EN61000-4-3		Level 3, 10V/m ; criteria A
		EFT / Burst	BS EN/EN61000-4-4		Level 2, 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	2223.1K hrs min. Telcordia SR-332 (Bellcore) ; 440.4K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	30*125.2*116mm (W*H*D)			
	PACKING	420g; 24pcs/11.1Kg/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 μF & 47 μF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. When the temperature is between -40 ° C and -20 ° C and the input voltage is between 85V and 90V, the temperature derating curve drops to 40% .
5. 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).
6. 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.
7. 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)

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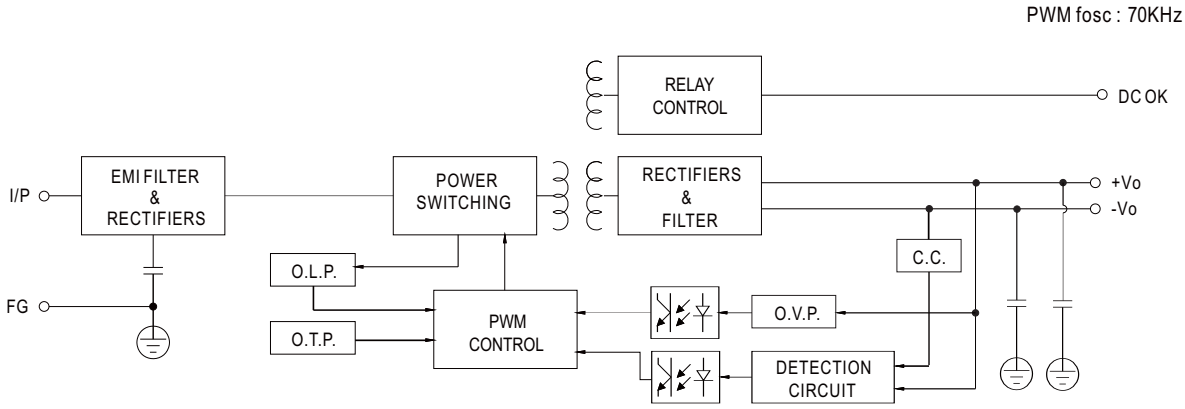
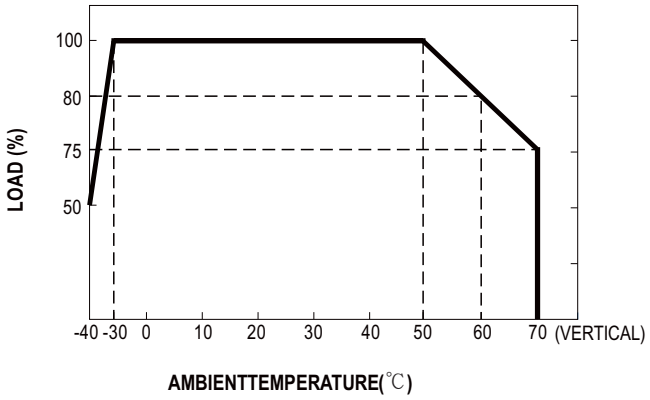
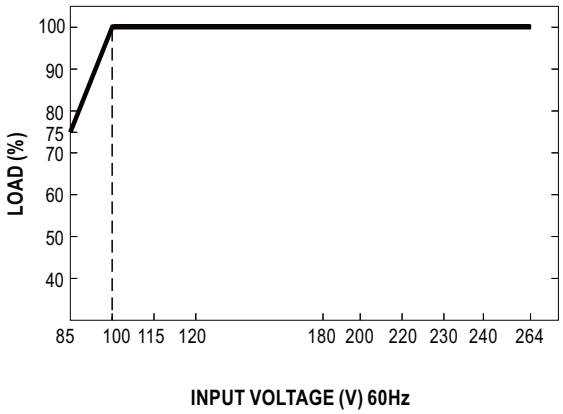
■ Block Diagram



■ Derating Curve



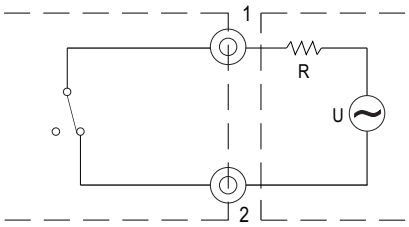
■ Static Characteristics



■ Function Manual

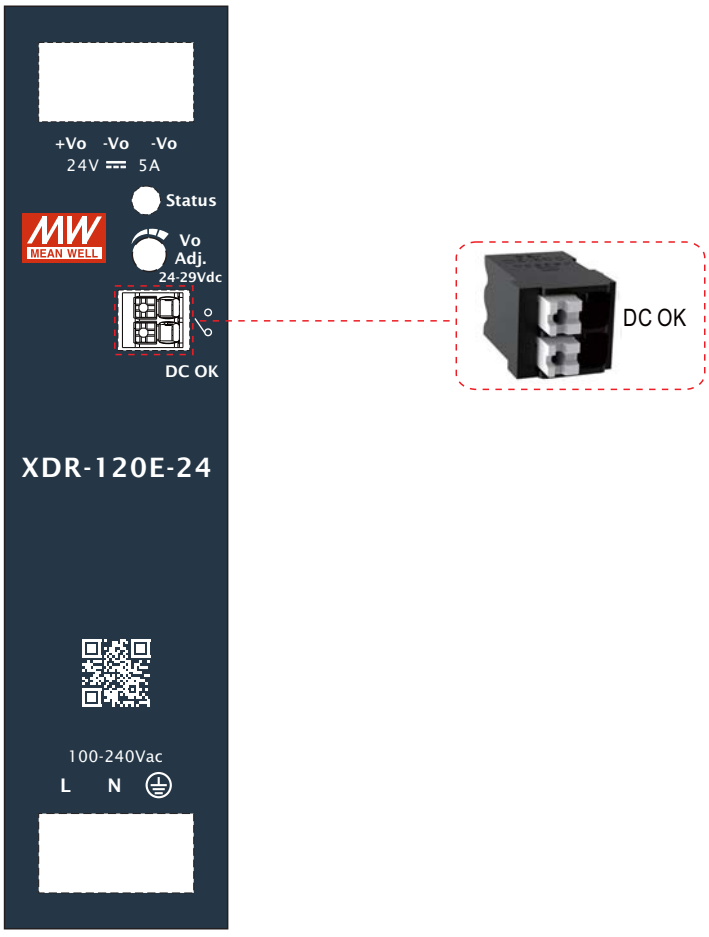
1.DC OK Relay Contact

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)

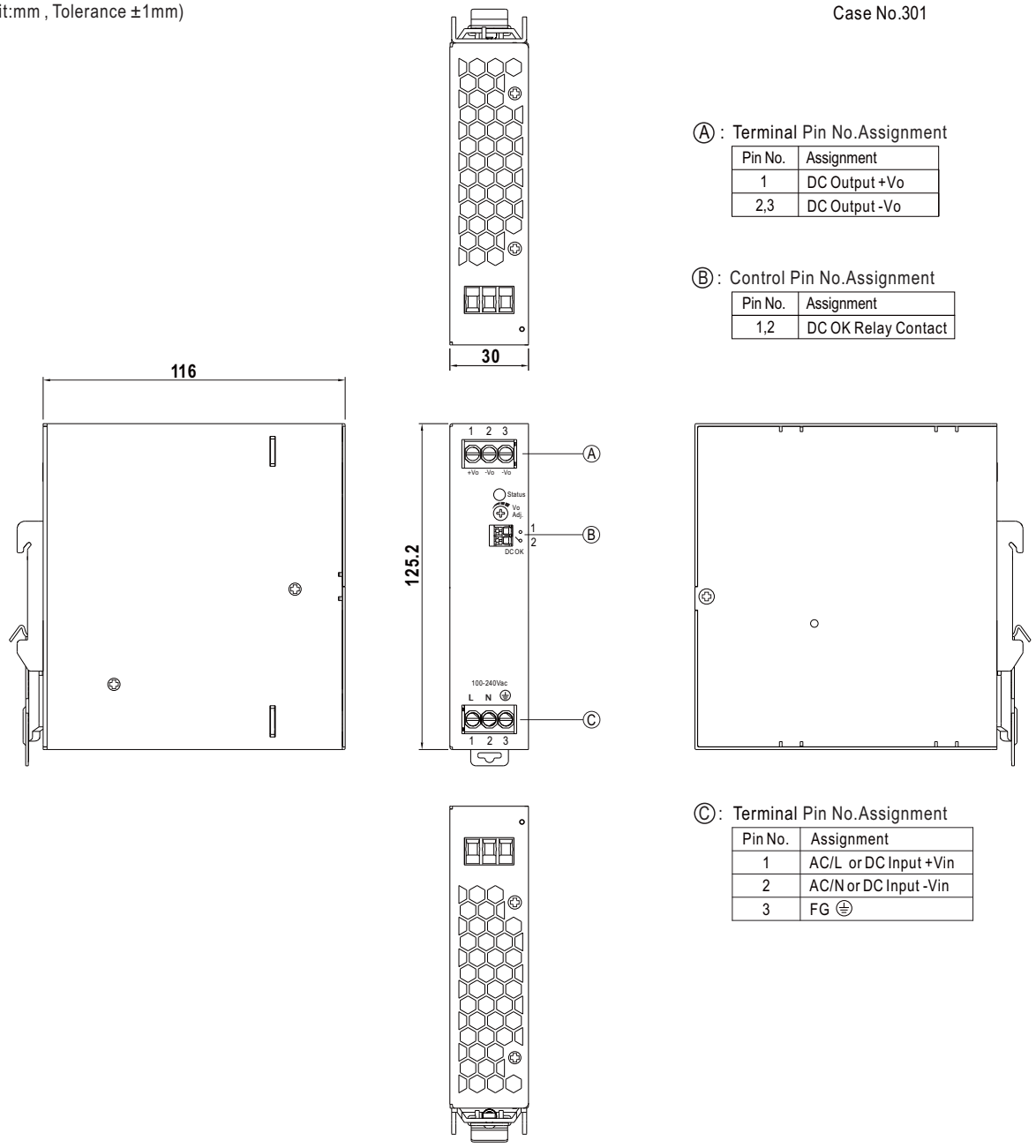
Internal circuit of DC_OK, via relay contact



■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No.301



Ⓐ: Terminal Pin No.Assignment

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

Ⓑ: Control Pin No.Assignment

Pin No.	Assignment
1,2	DC OK Relay Contact

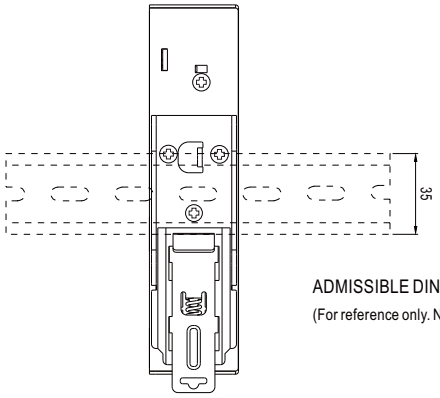
Ⓒ: Terminal Pin No.Assignment

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	22~10 AWG	22~10 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ Installation Instruction



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

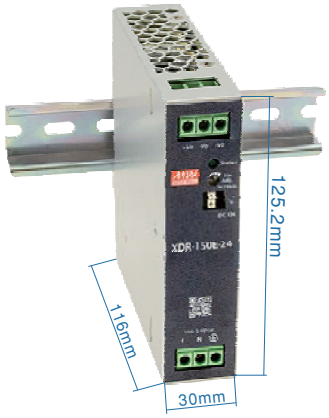
This series fits DIN rail TS35/7.5 or TS35/15.
For installation details, please refer to the Instruction manual.

■ Installation Manual

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

150W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-150E series

User's Manual



LISTED UL61010 | BS EN/EN62368-1, BS EN/EN61558-1, BS EN/EN61010 | IEC62368-1, IEC61558-1, IEC61010 | AS/NES61558-1, AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

Features

- 85~264Vac input range
- Global certificates in multi-fields (ITE 62368-1,Industrial 61558-1/-2-16,61010)
- 30mm slim width
- High efficiency up to 91% and no load power dissipation<1W
- 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℃ 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

Applications

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

GTIN CODE

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

Description

The XDR-150E series is a 150W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 30mm casing, optimizing system installation space, and an ultra-wide input range of 85~264Vac suitable for global use. It boasts a maximum efficiency of 91% and a low standby power consumption<1W for energy savings and carbon reduction. It has built-in constant current, fanless design, a wide operating temperature range of -40 to +70℃ (up to +50℃ at full load); OVCIII compliance; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-150E series is a compact, high-performance, and highly reliable DIN rail power supply.

Model Encoding

XDR - 150E - 24

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

MEAN WELL

150W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-150E series

SPECIFICATION

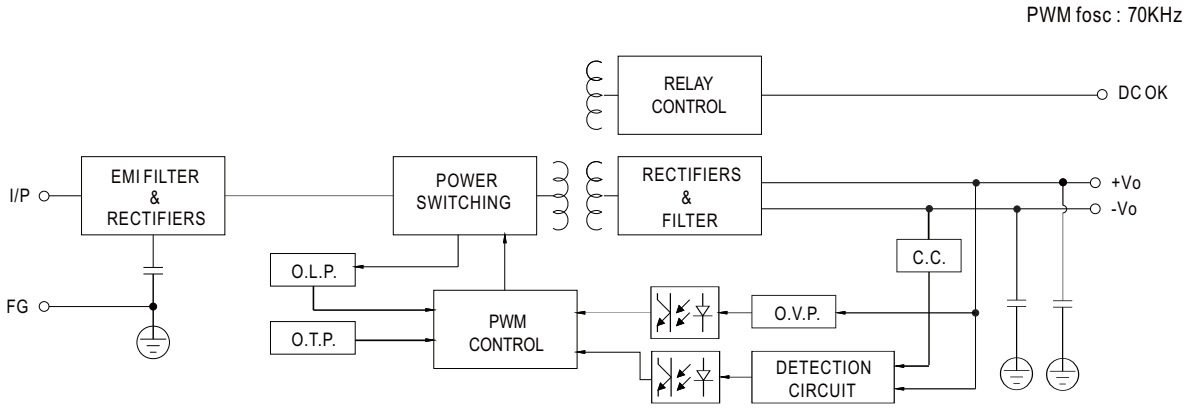
MODEL			XDR-150E-12	XDR-150E-24	XDR-150E-36	XDR-150E-48
OUTPUT	DC VOLTAGE		12V	24V	36V	48V
	RATED CURRENT	115VAC	10A	5.2A	3.46A	2.6A
		230VAC	11A	6.5A	4.33A	3.25A
	CURRENT RANGE	115VAC	0 ~ 10A	0 ~ 5.2A	0 ~ 3.46A	0 ~ 2.6A
		230VAC	0 ~ 11A	0 ~ 6.5A	0 ~ 4.33A	0 ~ 3.25A
	RATED POWER	115VAC	120W	124.8W	124.6W	124.8W
		230VAC	132W	156W	155.9W	156W
	RIPPLE & NOISE (max.) Note.2		100mVp-p	120mVp-p	150mVp-p	200mVp-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, 60ms/115Vac at full load			
	HOLD UP TIME (Typ.)		16ms/230Vac 8ms/115Vac at full load			
INPUT	AC VOLTAGE RANGE		85 ~ 264Vac			
	DC VOLTAGE RANGE		120 ~ 370Vdc			
	NO LOAD POWER CONSUMPTION (Typ.)		0.9W @115Vac & 230Vac	1W @115Vac & 230Vac		
	FREQUENCY RANGE		47 ~ 63Hz			
	EFFICIENCY (Typ.)		89%	91%	91%	91%
	AC CURRENT (Typ.)		2.6A/115Vac 1.6A/230Vac			
	INRUSH CURRENT (Typ.)		COLD START 20A/115Vac 40A/230Vac			
	LEAKAGE CURRENT		<1mA / 240Vac			
PROTECTION	OVERLOAD		105~130% rated output power ,constant current limiting without shutdown, recovers automatically after fault condition is removed /230Vac 105~150% rated output power ,constant current limiting without shutdown, recovers automatically after fault condition is removed/115Vac			
	OVER VOLTAGE		15 ~ 18V	30 ~ 34V	43 ~ 50V	56 ~ 65V
			Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE		Protection type : Shut down o/p voltage,recovers automatically after fault condition is removed			
FUNCTION	DC OK RELAY CONTACT		Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load			
ENVIRONMENT	WORKING TEMP. Note.4		-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			
SAFETY & EMC (Note 7)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires			
	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/EN61000-3-2		-----
	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 3, 4KV contact; criteria A
			Radiated	BS EN/EN61000-4-3		Level 3, 10V/m ; criteria A
			EFT / Burst	BS EN/EN61000-4-4		Level 2, 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		2201.7K hrs min. Telcordia SR-332 (Bellcore) ; 440.4K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION		**30*125.2*116mm (W*H*D)**			
	PACKING		430g; 24pcs/11.3Kg/1.27CUFT			

NOTE

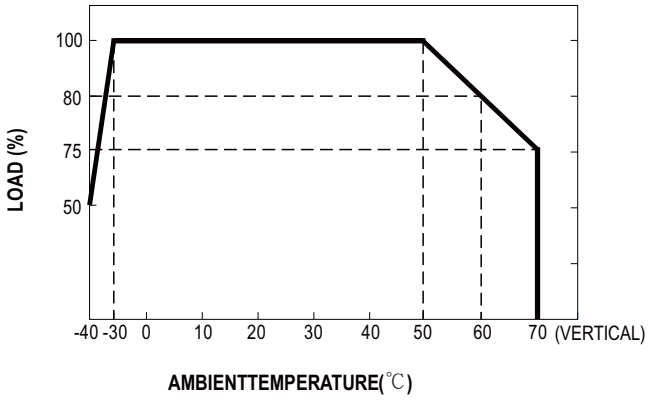
1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF & 47 μF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. When the temperature is between -40 ° C and -20 ° C and the input voltage is between 85V and 90V, the temperature derating curve drops to 40% .
5. 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).
6. 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.
7. 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

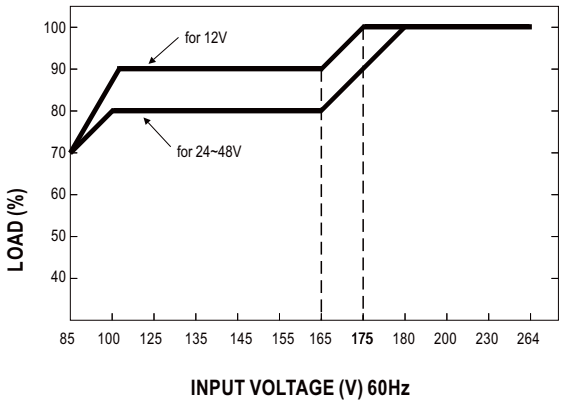
■ Block Diagram



■ Derating Curve



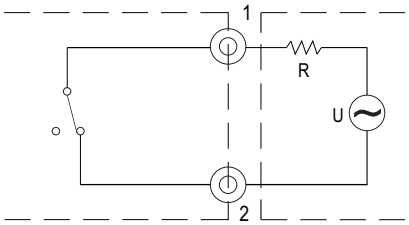
■ Static Characteristics



■ Function Manual

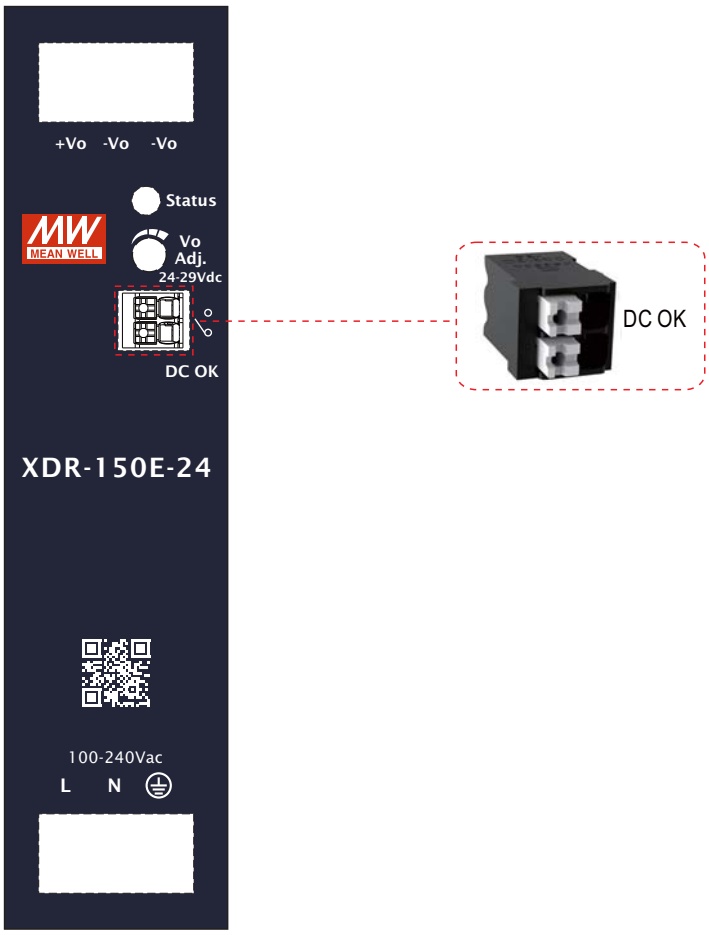
1.DC OK Relay Contact

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)

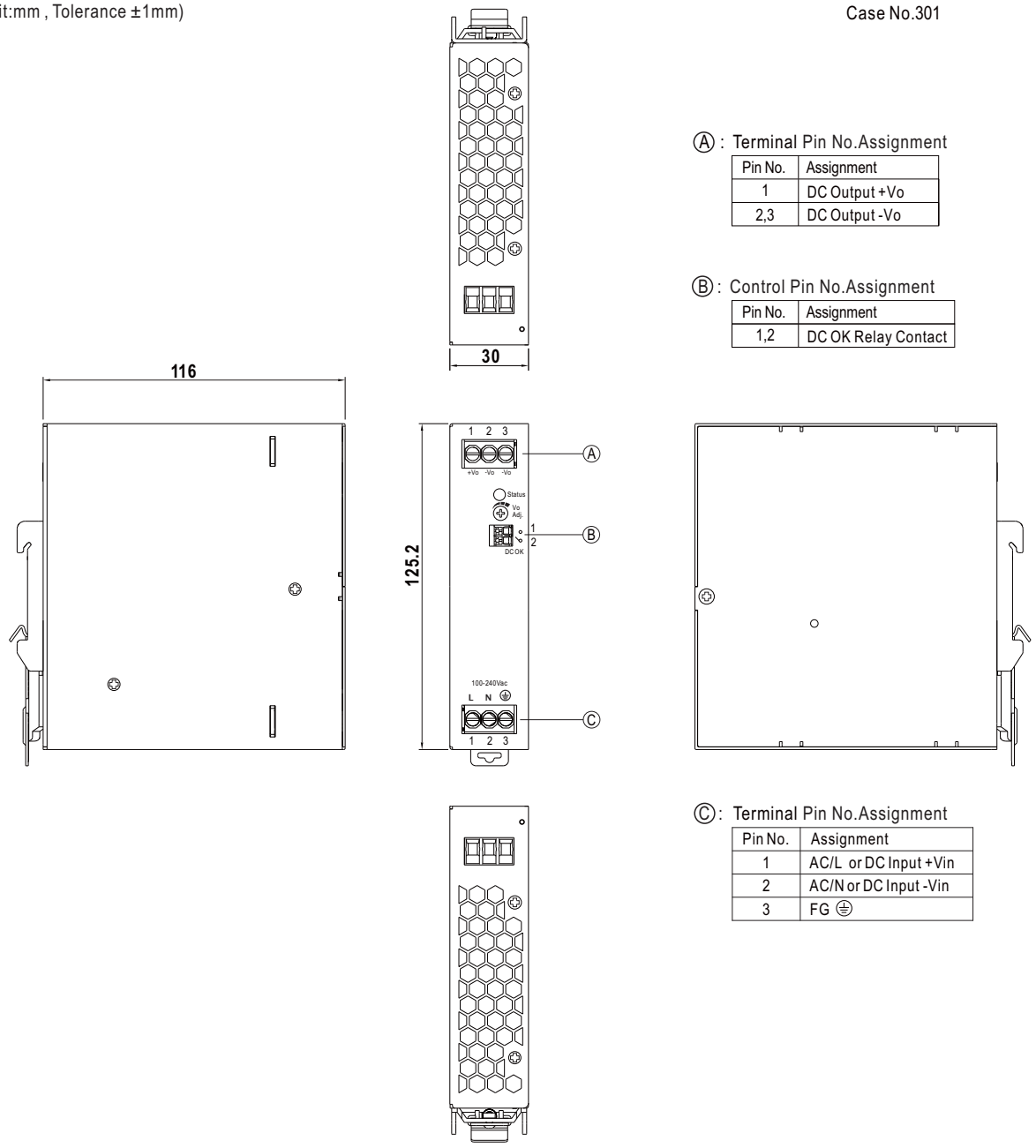
Internal circuit of DC_OK, via relay contact



■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No.301



Ⓐ: Terminal Pin No.Assignment

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

Ⓑ: Control Pin No.Assignment

Pin No.	Assignment
1,2	DC OK Relay Contact

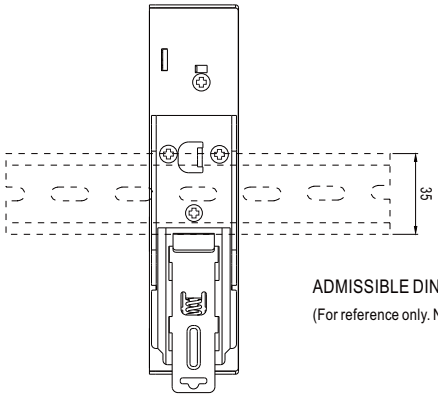
Ⓒ: Terminal Pin No.Assignment

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	22~10 AWG	22~10 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ 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

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

User's Manual

LISTED UL61010 | BS EN/EN62368-1, BS EN/EN61558-1, BS EN/EN61010 | IEC62368-1, IEC61558-1, IEC61010 | AS/NES61558-1, AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

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℃ 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

Applications

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

GTIN CODE

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

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℃ (up to +50℃ 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

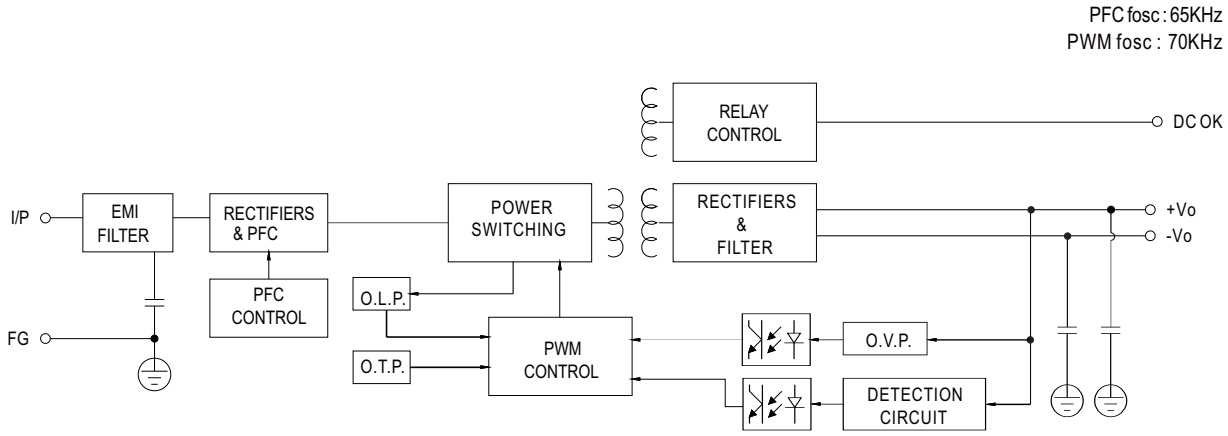
- 24 — Output voltage(12V/24V/36V/48V)
- E — Economical version
- 240 — Output wattage
- XDR — Series name

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

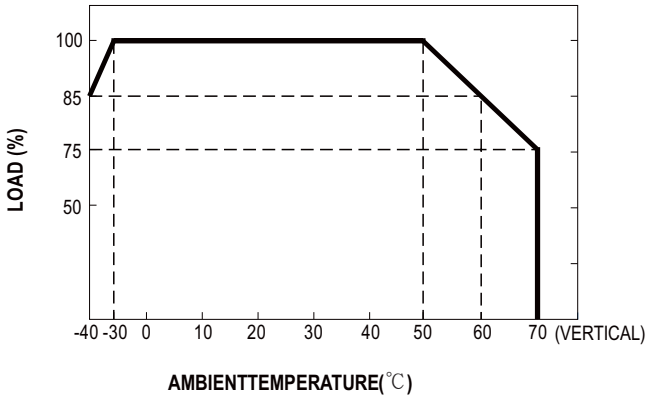
SPECIFICATION

MODEL		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			
SAFETY & EMC (Note 6)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires			
	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/EN61000-3-2		-----
	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 3, 4KV contact; criteria A
		Radiated	BS EN/EN61000-4-3		Level 3, 10V/m ; criteria A
		EFT / Burst	BS EN/EN61000-4-4		Level 2, 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/14.1Kg/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 μF & 47 μF 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				

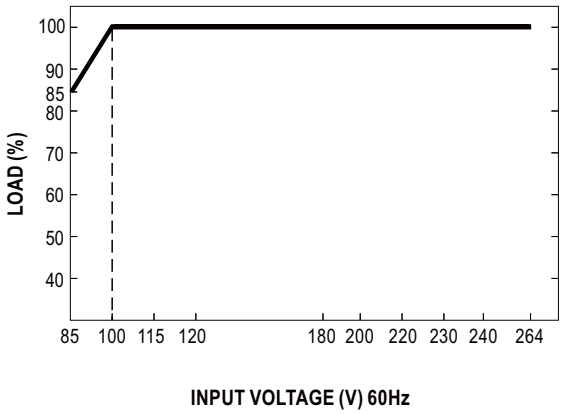
■ Block Diagram



■ Derating Curve



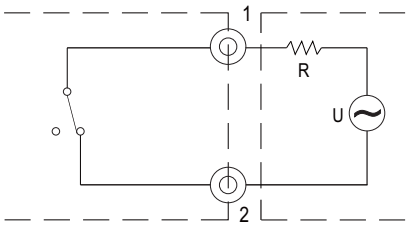
■ Static Characteristics



■ Function Manual

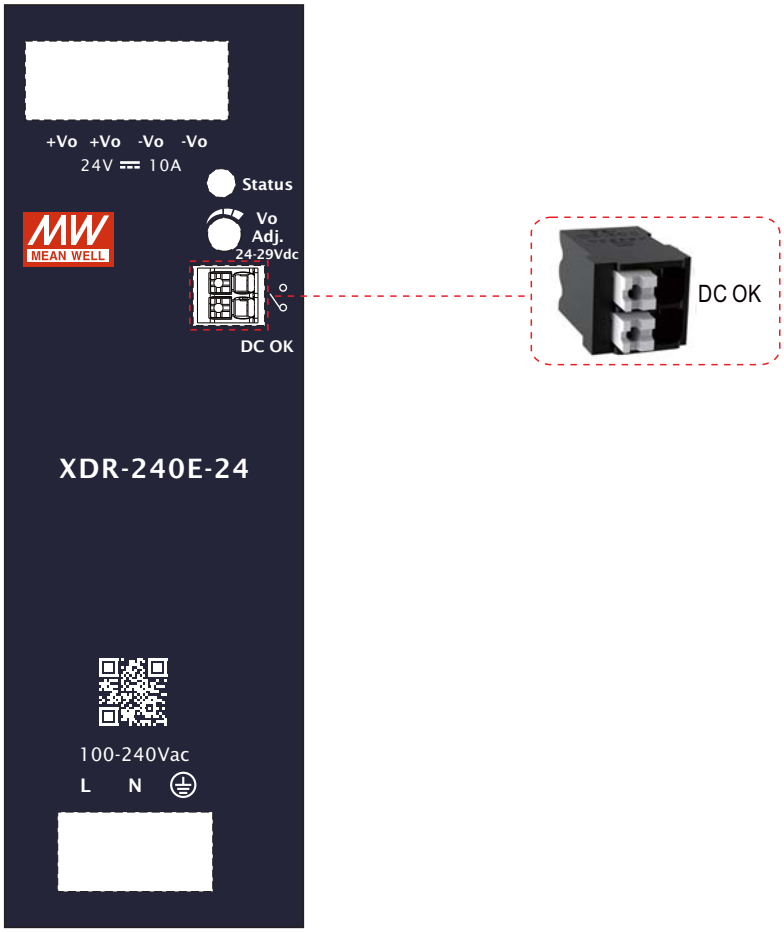
1.DC OK Relay Contact

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)

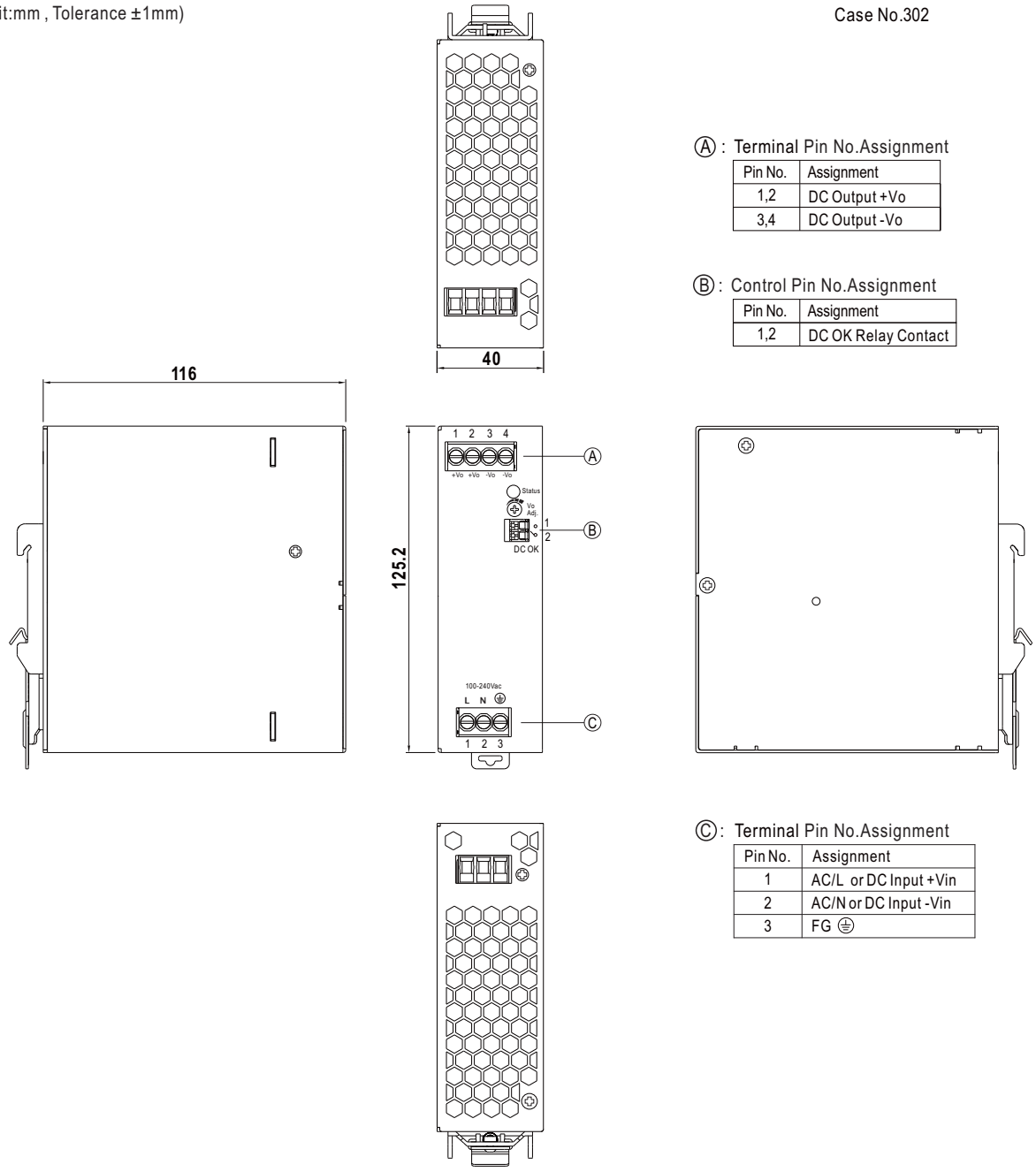
Internal circuit of DC_OK, via relay contact



■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No.302



Ⓐ: Terminal Pin No.Assignment

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

Ⓑ: Control Pin No.Assignment

Pin No.	Assignment
1,2	DC OK Relay Contact

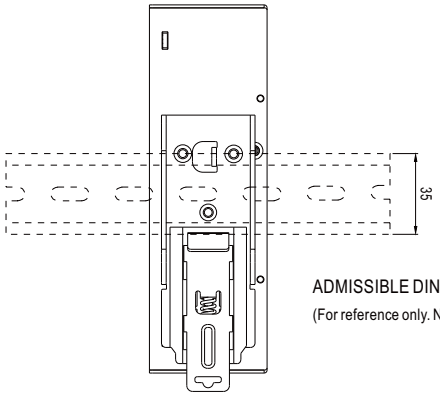
Ⓒ: Terminal Pin No.Assignment

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	6mm^2 max.	6mm^2 max.	1.5mm^2 max.
A.W.G	20~10 AWG	20~10 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ 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

480W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-480E series

User's Manual

LISTED UL61010 | BS EN/EN62368-1, BS EN/EN61558-1, BS EN/EN61010 | IEC62368-1, IEC61558-1, IEC61010 | AS/NES61558-1, AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

Features

- 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℃ 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

Applications

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

GTIN CODE

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

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℃ (up to +50℃ 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

XDR - 480E - 24

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

480W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-480E series

SPECIFICATION

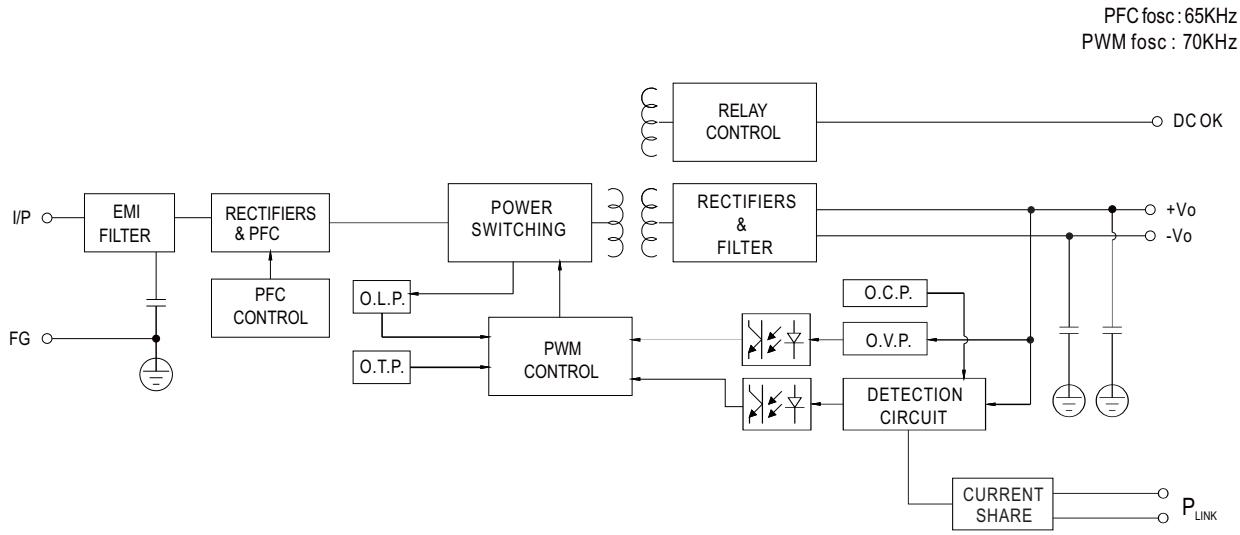
MODEL		XDR-480E-12	XDR-480E-24	XDR-480E-36	XDR-480E-48
OUTPUT	DC VOLTAGE	12V	24V	36V	48V
	RATED CURRENT	30A	20A	13.3A	10A
	CURRENT RANGE	0 ~ 30A	0 ~ 20A	0 ~ 13.3A	0 ~ 10A
	RATED POWER	360W	480W	478.8W	480W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 15V	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 3000ms, 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			
	POWDR FACTOR (Typ.)	PF>0.95/230Vac PF>0.98/115Vac at full load			
	EFFICIENCY (Typ.)	94%	95.5%	95.5%	96%
	AC CURRENT (Typ.)	6A/115Vac 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	PARALLEL (Droop Mode)	Up to 1920W Max (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℃ (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			
SAFETY & EMC (Note 6)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires			
	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/EN61000-3-2		-----
	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 3, 4KV contact; criteria A
		Radiated	BS EN/EN61000-4-3		Level 3, 10V/m ; criteria A
		EFT / Burst	BS EN/EN61000-4-4		Level 2, 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	1482.0K hrs min. Telcordia SR-332 (Bellcore) ; 258.3K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	48*125.2*125mm (W*H*D)			
	PACKING	890g; 12pcs/13Kg/1.16CUFT			

NOTE

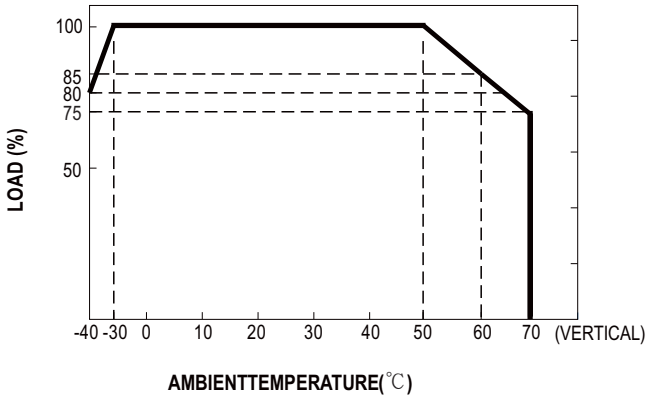
1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF & 47 μF parallel capacitor.
3. Tolerance : includes set up tolerance, line 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

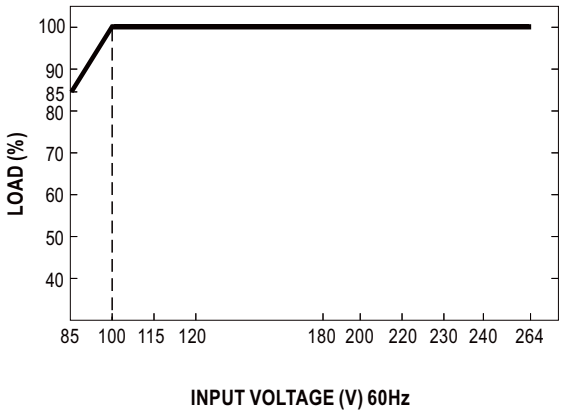
■ Block Diagram



■ Derating Curve



■ Static Characteristics

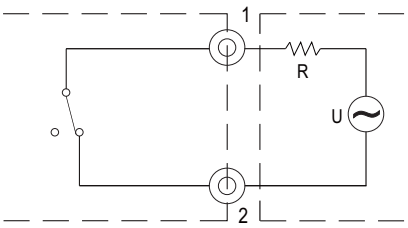


■ Function Manual

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

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)

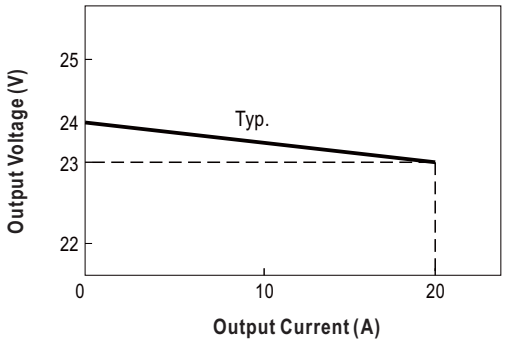
Internal circuit of DC_OK, via relay contact

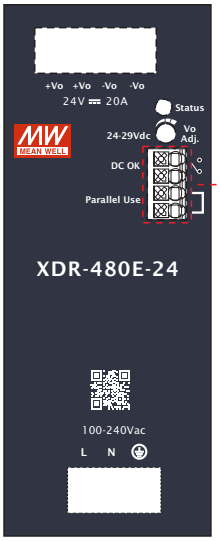
2.Parallel Use

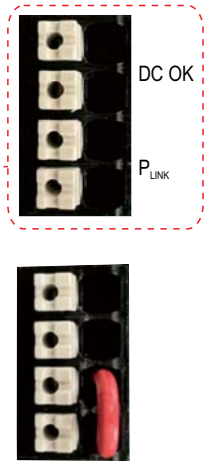
XDR-480E has the built-in droop mode current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below :

(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) P_{LINK} lines should be shorted locally.
(8) The "Parallel Use" mode regulates the output voltage in such a manner that the voltage at no load is approx. 4% higher than at normal load(12V:approx.7%).

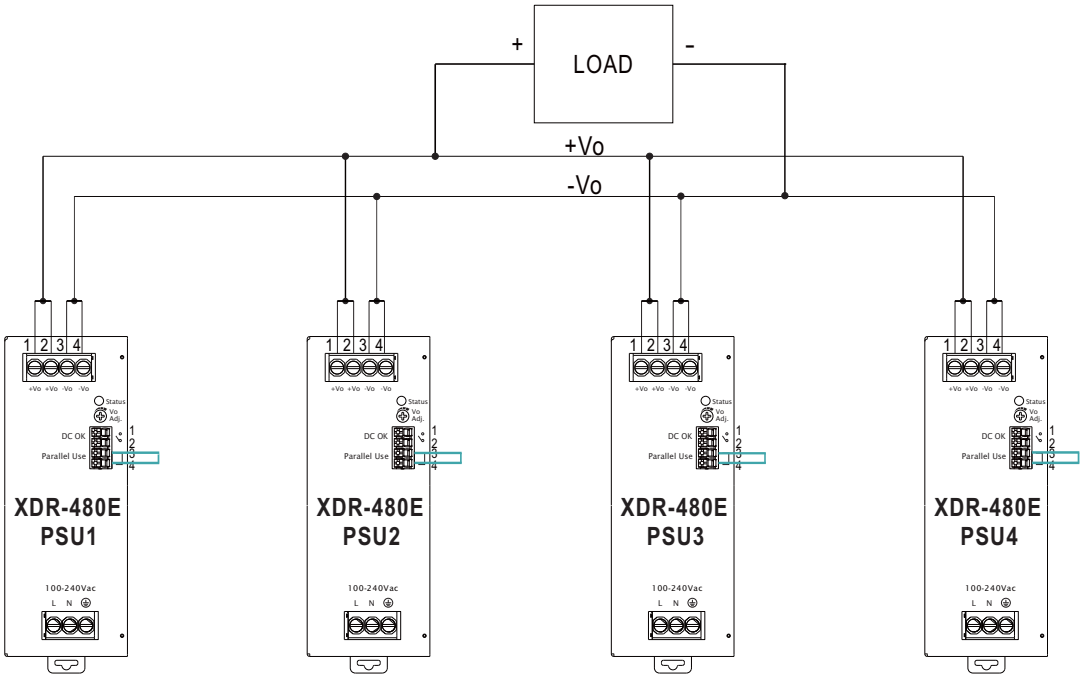
For example XDR-480E-24:
No load output voltage=24V
Normal load output current=20A
0~100% load output voltage=24V~23V







Enable : P_{LINK} should be short

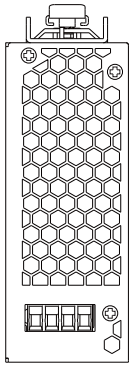


※ Please contact MEAN WELL for more details.

■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No.303

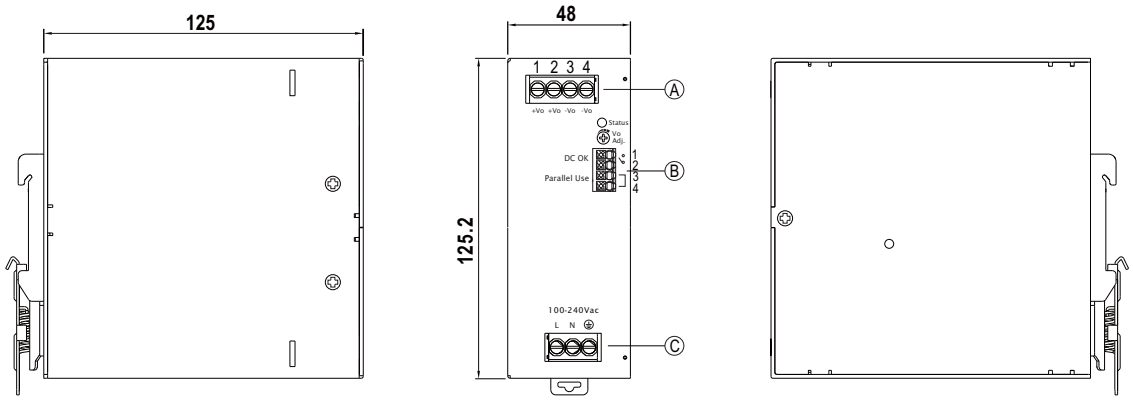


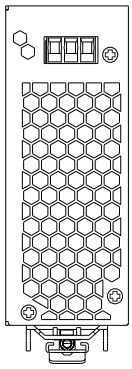
Ⓐ : Terminal Pin No.Assignment

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

Ⓑ : Control Pin No.Assignment

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





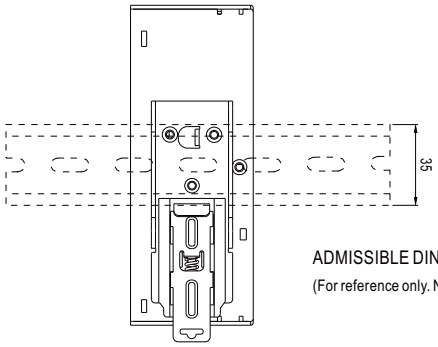
Ⓒ : Terminal Pin No.Assignment

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

■ 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	18~10 AWG	18~8 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ 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

960W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-960E series

User's Manual

LISTED UL61010 | BS EN/EN62368-1 BS EN/EN61558-1 BS EN/EN61010 | IEC62368-1 IEC61558-1 IEC61010 | AS/NES61558-1 AS/NES62368-1 | IS13252 | KC62368-1 (By request)

CNS15598-1 | GB4943.1 | TPTC004

Automate | Industrial | Security | Network | Telecom

Features

- 180~264Vac input with PFC
- Global certificates in multi-fields (ITE 62368-1,Industrial 61558-1/-2-16,61010)
- 96mm slim width
- High efficiency up to 95.5% and no load power dissipation<3.6W
- Built-in constant current limiting circuit
- Current sharing up to 3840W (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℃ 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

Applications

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

GTIN CODE

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

Description

The XDR-960E series is a 960W AC/DC economical ultra slim industrial DIN rail power. Key features of this series include a narrow 96mm casing, optimizing system installation space. It boasts a maximum efficiency of 95.5% and a low standby power consumption <3.6W for energy savings and carbon reduction. It has built-in constant current, fanless design, a wide operating temperature range of -40 to +70℃ (up to +50℃ at full load); OVCIII compliance; parallel function capability up to 3840W; built-in DC OK signal. With comprehensive protection functions, complete safety certifications, and a 3-years warranty, the XDR-960E series is a compact, high-performance, and highly reliable DIN rail power supply.

Model Encoding

XDR - 960E - 24

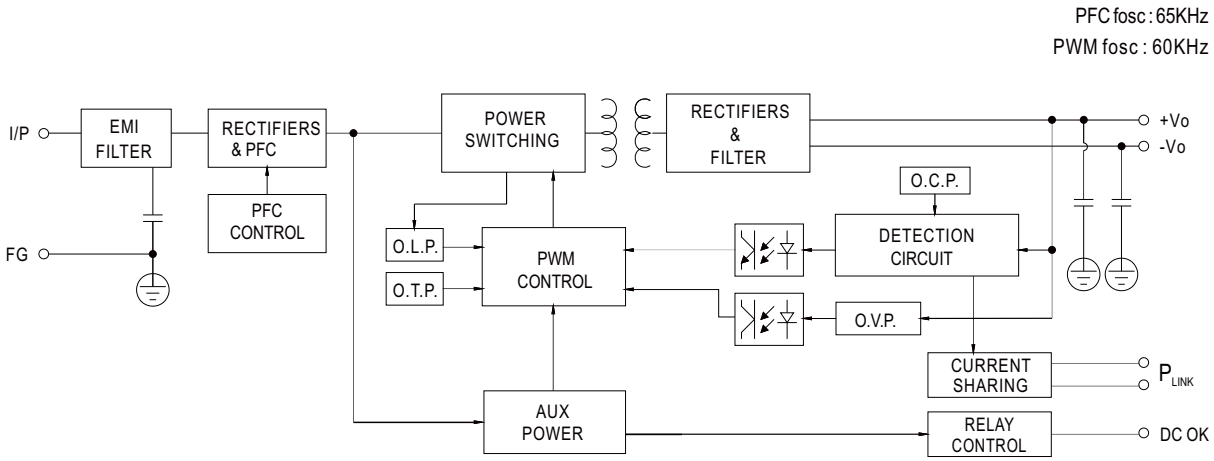
- 24 → Output voltage(24V/36V/48V)
- E → Economical version
- 960 → Output wattage
- XDR → Series name

960W AC/DC Economical Ultra Slim Industrial DIN Rail Power XDR-960E series

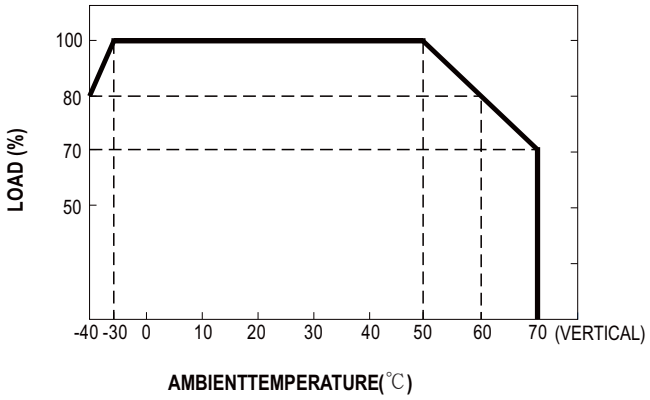
SPECIFICATION

MODEL		XDR-960E-24	XDR-960E-36	XDR-960E-48
OUTPUT	DC VOLTAGE	24V	36V	48V
	RATED CURRENT	40A	26.6A	20A
	CURRENT RANGE	0 ~ 40A	0 ~ 26.6A	0 ~ 20A
	RATED POWER	960W	957.6W	960W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 29V	36 ~ 42V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	500ms, 50ms/230Vac at full load		
	HOLD UP TIME (Typ.)	15ms/230Vac at full load		
INPUT	AC VOLTAGE RANGE	180 ~ 264Vac		
	DC VOLTAGE RANGE	254.5 ~ 370Vdc		
	NO LOAD POWER CONSUMPTION (Typ.)	2.7W @ 230Vac	3.6W @ 230Vac	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWDR FACTOR (Typ.)	PF>0.95/230Vac at full load		
	EFFICIENCY (Typ.)	94.5%	95%	95.5%
	AC CURRENT (Typ.)	4.5A/230Vac		
	INRUSH CURRENT (Typ.)	COLD START 30A/230Vac		
	LEAKAGE CURRENT	<3.5mA / 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	30 ~ 34V	43 ~ 50V	56 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down		
FUNCTION	PARALLEL(Droop Mode)	Up to 3840W or (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℃ (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		
SAFETY & EMC (Note 6)	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; BIS IS13252 (Part 1):2010; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 certified, no stock ,contact sale for inquires		
	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/EN61000-3-2	-----
	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 3, 4KV contact; criteria A
		Radiated	BS EN/EN61000-4-3	Level 3, 10V/m ; criteria A
		EFT / Burst	BS EN/EN61000-4-4	Level 2, 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	K hrs min. Telcordia SR-332 (Bellcore) ; K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	**96*125.2*132mm (W*H*D)**		
	PACKING	Kg; pcs/Kg/CUFT		
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 μF & 47 μF 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			

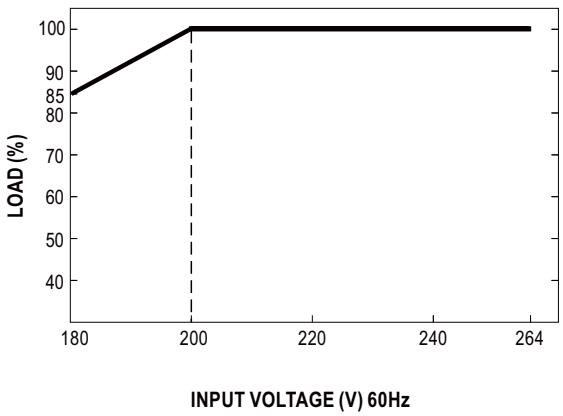
■ Block Diagram



■ Derating Curve



■ Static Characteristics

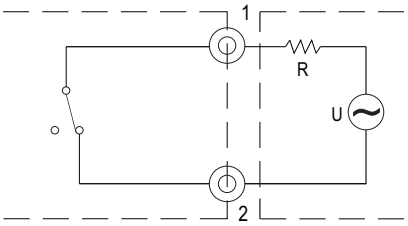


■ Function Manual

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

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)

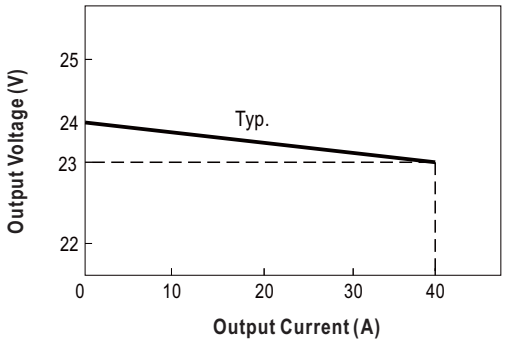
Internal circuit of DC_OK, via relay contact

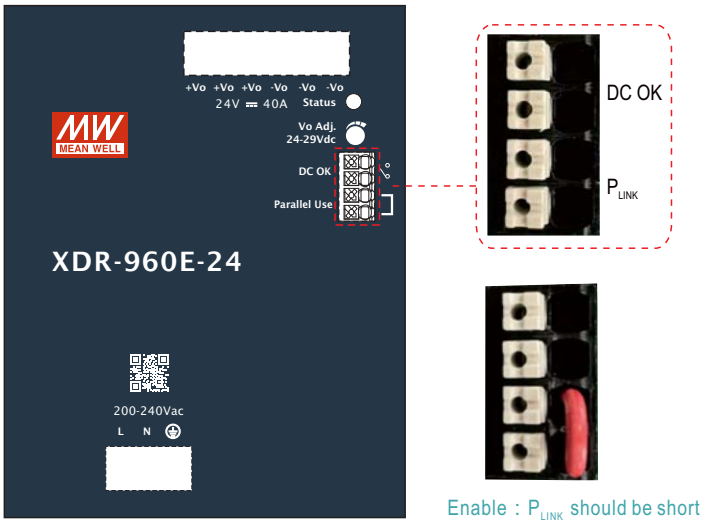
2.Parallel Use

XDR-960E 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 :

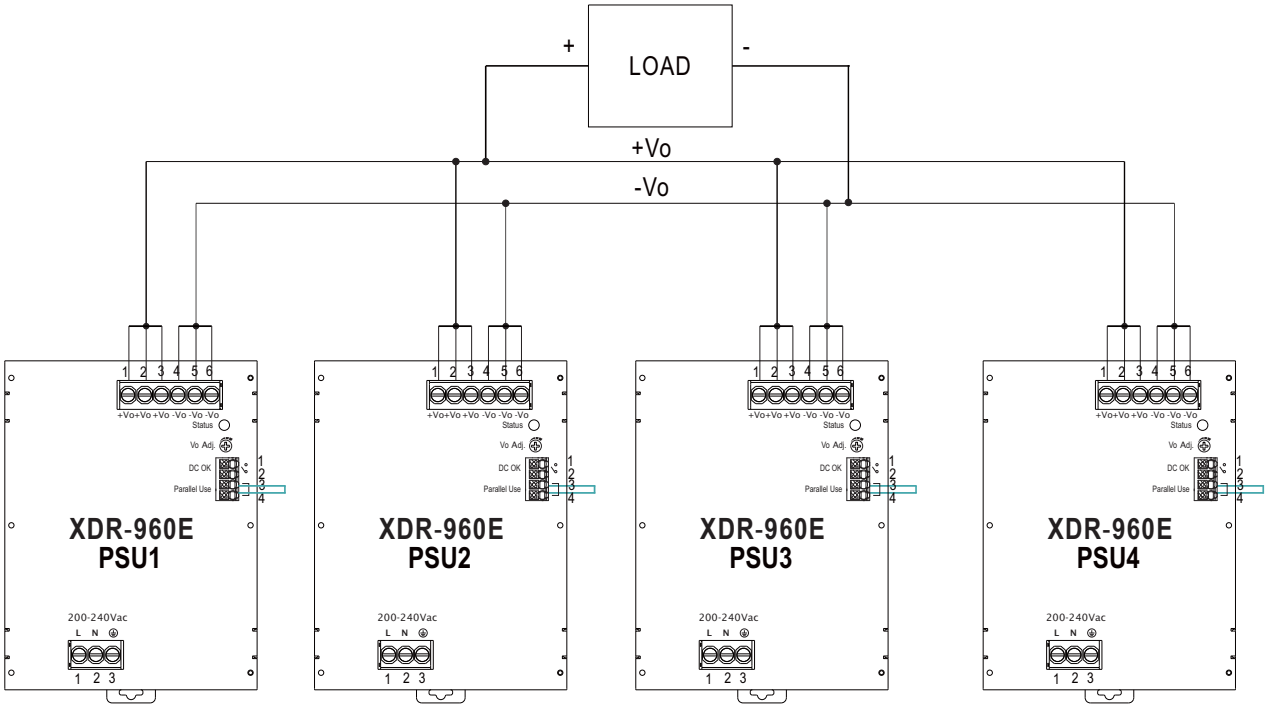
(1) Difference of output voltages among parallel units should be less than 0.1V.
(2) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)=(The rated current per unit) x (Number of unit) x 0.9.
(3) In parallel operation 4 units 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) P_{LINK} lines should be shorted locally.
(8) The "Parallel Use" mode regulates the output voltage in such a manner that the voltage at no load is approx. 4% higher than at normal load.

For example XDR-960E-24:
No load output voltage=24V
Normal load output current=40A
0~100% load output voltage=24V~23V





Enable : P_{LINK} should be short

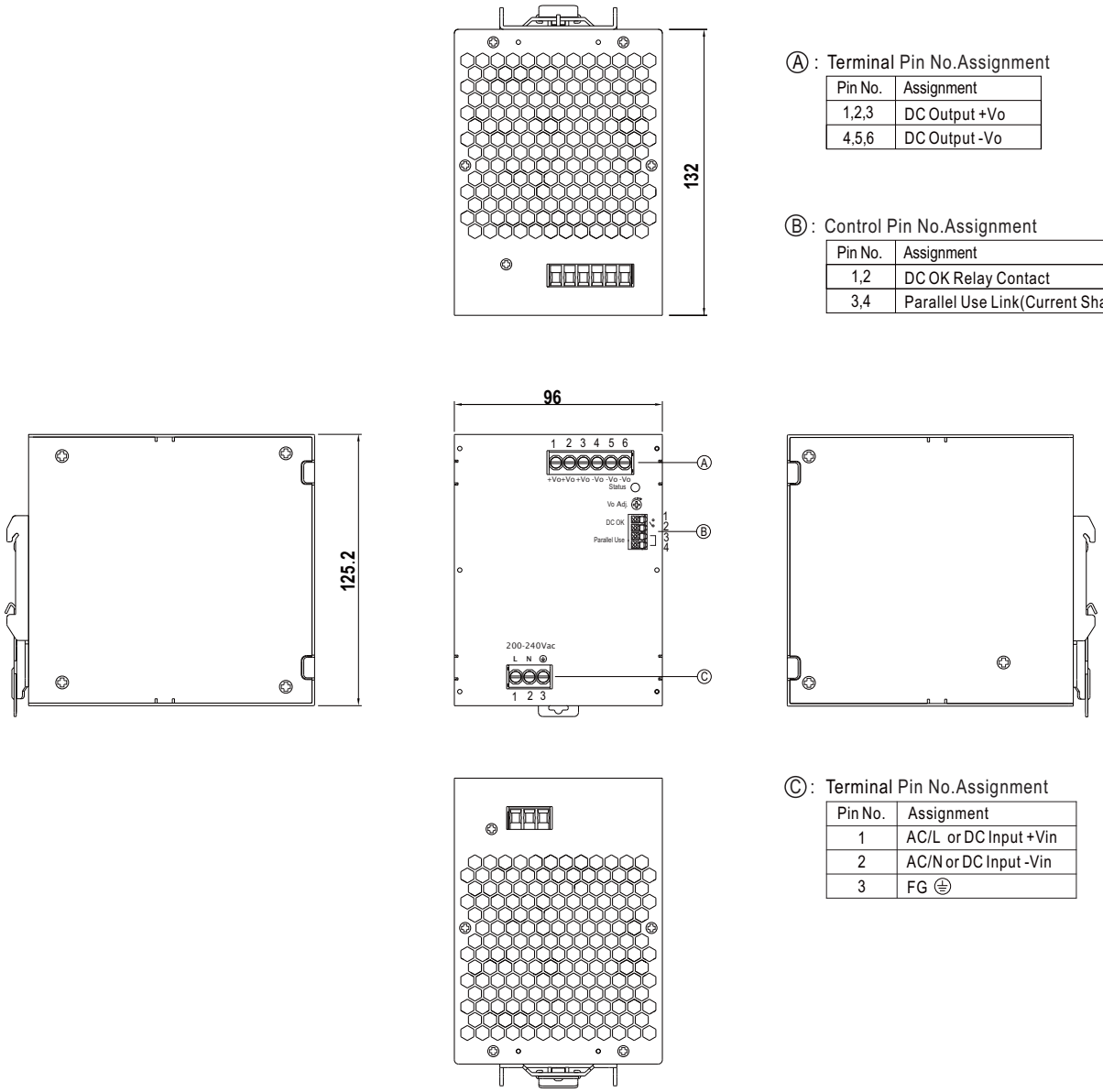


※ Please contact MEAN WELL for more details.

■ Mechanical Specification

(Unit:mm , Tolerance ±1mm)

Case No. 304



Ⓐ: Terminal Pin No.Assignment

Pin No.	Assignment
1,2,3	DC Output +Vo
4,5,6	DC Output -Vo

Ⓑ: Control Pin No.Assignment

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

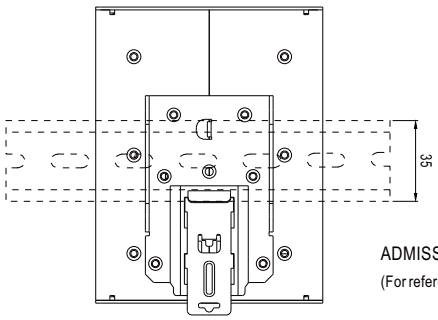
Ⓒ: Terminal Pin No.Assignment

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	6mm^2 max.	6mm^2 max.	1.5mm^2 max.
A.W.G	18~10 AWG	18~8 AWG	24~16 AWG
Screw Terminal Torque	9 Lb-In	9 Lb-In	/

■ 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