

■ Features

- 85~305Vac input (277Vac available)
- 30mm ultra slim width
- High efficiency up to 91% and low power dissipation<2W
- 200% peak power capability
- 600% pulse current capability @2ms
- 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~+85°C wide range operation temperature(>+60°C derating)
- Operating altitude up to 5000 meters
- Built-in DC OK relay contact
- Ultra low inrush current <10A
- Tool free terminal block (LA Type)
- Conformal coating
- Can be installed on DIN rail TS-35/75 or 15
- 5 years warranty

■ Applications

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

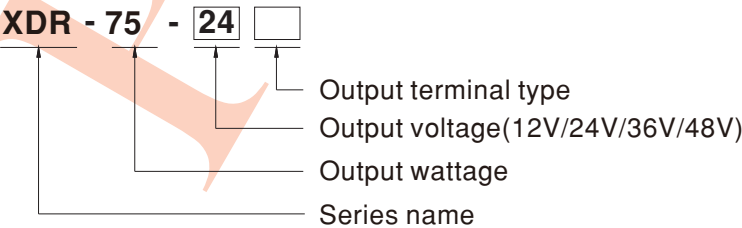
■ GTIN CODE

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

■ Description

The XDR-75 series is a 75W AC/DC high-end 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 85~305Vac suitable for global use. It boasts a maximum efficiency of 91% and a low standby power consumption of <2W for energy savings and carbon reduction. It provides constant current with up to 200% peak power, and can handle instantaneous peak current of 600%. It has a fanless design, ultra-wide operating temperature range of -40 to +85°C (up to +60°C at full load); OVCIII compliance; ultra-low inrush current of <10A, and includes DC OK functions. the internal PCB has a coating for basic moisture and dust protection, and it has multiple terminal blocks for selection. With comprehensive protection functions, complete safety certifications, and a 5-year warranty, the XDR-75 series is a compact, high-performance, and highly reliable DIN rail power supply.

■ Model Encoding

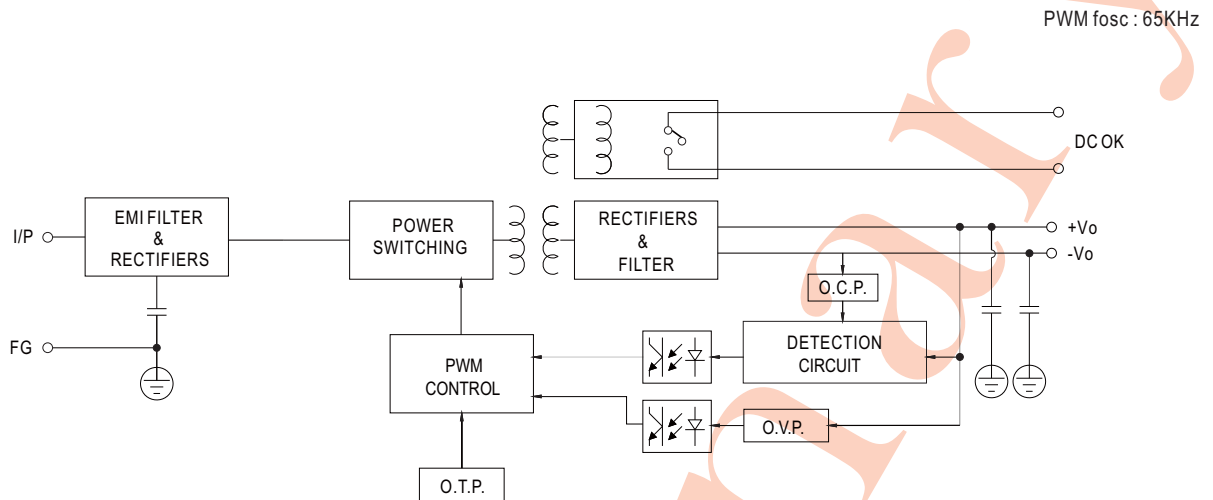


Terminal Type Options		Note
Blank	Screw Terminal	In stock
LA	Lever Actuated	In stock
PI	Push In	In stock

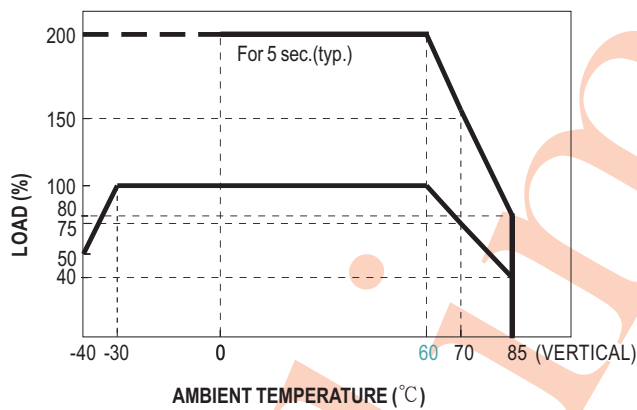
SPECIFICATION

MODEL		XDR-75-12 □	XDR-75-24 □	XDR-75-36 □	XDR-75-48 □	
		□ =Blank, LA, PI				
OUTPUT	DC VOLTAGE	12V	24V	36V	48V	
	LOAD CURRENT RANGE	0 ~ 6.3A	0 ~ 3.2A	0 ~ 2.1A	0 ~ 1.6A	
	RATED POWER	75.6W	76.8W	75.6W	76.8W	
	PEAK	CURRENT (5sec.)	12.5A	6.25A	4.17A	3 13A
		POWER (5sec.)	150W			
	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	± 1.0%	± 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 ~ 305Vac				
	DC VOLTAGE RANGE	80 ~ 431Vdc (Derating 50% Load @80Vdc)				
	NO LOAD POWER CONSUMPTION	2W @115Vac & 230Vac				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	89%	91%	91%	91%	
	AC CURRENT (Typ.)	0.8A/115Vac 0.4A/230Vac				
	INRUSH CURRENT (Typ.)	COLD START 6A/115Vac 10A/230Vac				
	LEAKAGE CURRENT	<1mA / 240Vac				
PROTECTION	OVERLOAD	Normally works within 110 ~ 200% rated output power for more than 5 seconds and then constant current limiting without shutdown, recovers automatically after fault condition is removed >200% rated power, constant current limiting with auto-recovery 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 temperature goes down					
FUNCTION	DC OK	Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load				
	PULSE CURRENT CAPABILITY	6 times rated current for 2ms				
ENVIRONMENT	WORKING TEMP.	-40 ~ +85°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 ~ 60°C) on Load output				
	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6				
	OPERATING ALTITUDE Note.4	5000 meters / OVC II				
	OVER VOLTAGE CATEGORY	III ; altitude up to 2000 meters				
SAFETY & EMC (Note.6)	SAFETY STANDARDS	CSA Class I, DIV2 Group A, B, C, D Hazardous Locations T4; UL61010; DEKRA 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; KC KC62368-1; BSMI CNS15598-1; CCC GB4943.1; EAC TPTC004 approved				
	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°C / 70%RH				
	EMC EMISSION	Parameter	Standard	Test Level / Note		
		Conducted	BS EN/EN55032 (CISPR32)	Class B		
		Radiated	BS EN/EN55032 (CISPR32)	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 4, 15KV air ; Level 4, 8KV contact; criteria A		
		Radiated	BS EN/EN61000-4-3	Level 3, 10V/m ; criteria A		
		EFT / Burst	BS EN/EN61000-4-4	Level 4, 4KV ; 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°C)		
DIMENSION	30*125.2*116mm (W*H*D)					
PACKING	Kg; pcs/ Kg / CUFT					
NOTE	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 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°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					

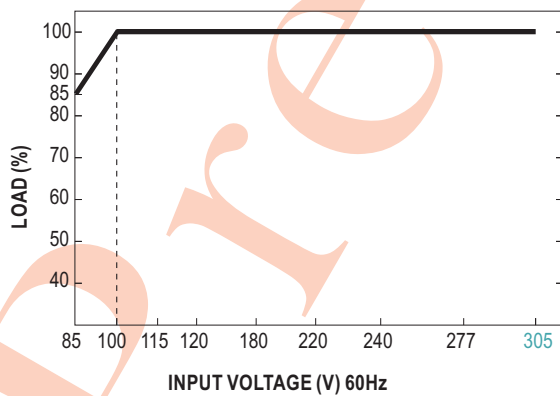
Block Diagram



Derating Curve



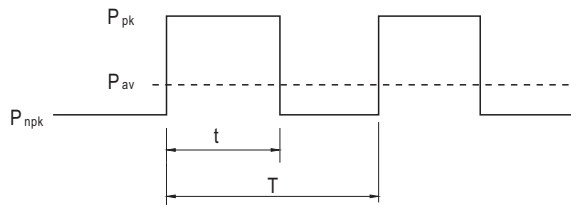
Output derating VS input voltage



■ Peak Power ($\leq 2 \cdot I_o$)

$$P_{av} = \frac{P_{pk} \times t + P_{npk} \times (T-t)}{T} \leq P_{rated}$$

$$Duty = \frac{t}{T} \times 100\% \leq 35\%$$



P_{av} : Average output power (W)

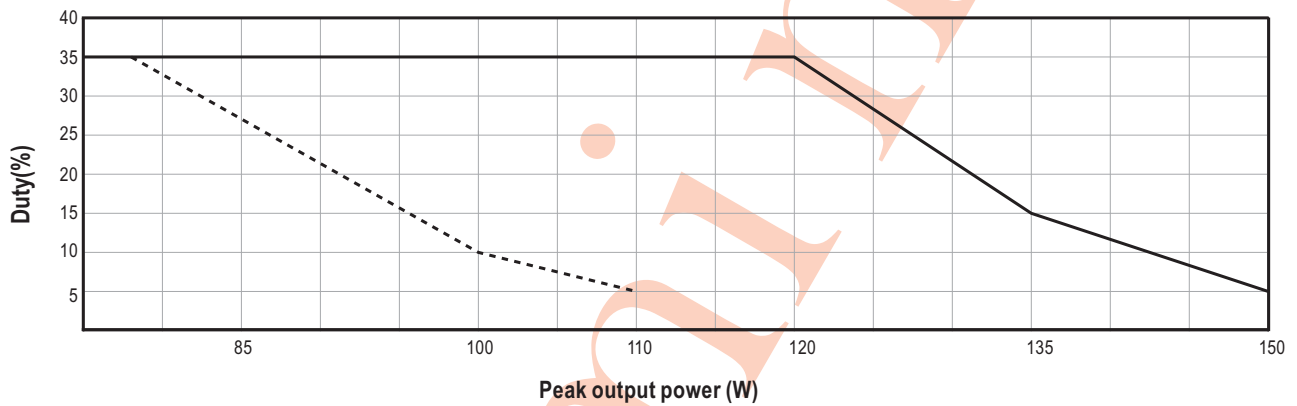
P_{pk} : Peak output power (W)

P_{npk} : Non-peak output power(W)

P_{rated} : Rated output power(W)

t : Peak power width(sec)

T : Period(sec)



For example (24V model) :

$V_{in} = 200V$ $Duty_max = 5\%$

$P_{av} = P_{rated} = 75W$

$P_{pk} = 150W$

$t \leq 5 \text{ sec}$

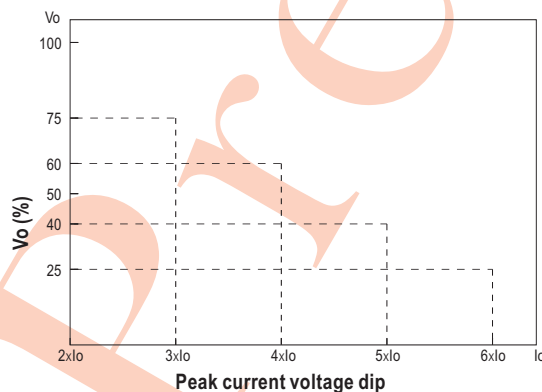
$T \geq \frac{5 \text{ sec}}{5\%} \geq 100 \text{ sec}$

$$P_{npk} \leq \frac{T P_{av} - t P_{pk}}{T-t}$$

$P_{npk} \leq 71W$

■ Peak Current Capability ($> 2 \cdot I_o$)

The device can deliver peak currents (up to several milliseconds) which are higher than the specified short term currents.

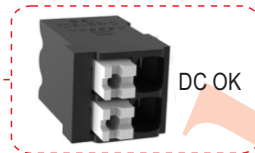


Load	Vo(%)	Time
3xIo	75	25ms
4xIo	60	15ms
5xIo	40	10ms
6xIo	25	2ms

Function Manual

1. DC OK Relay Contact

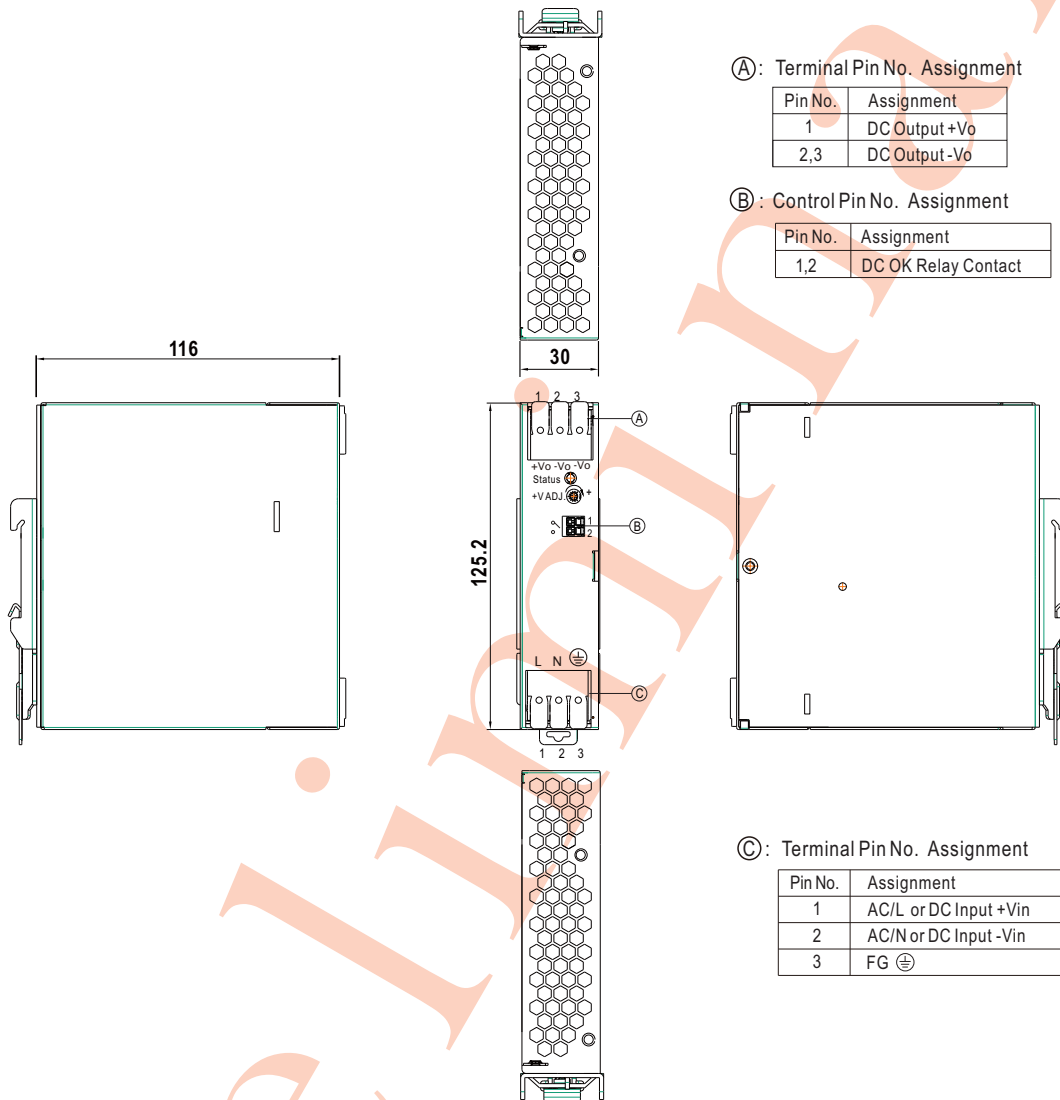
Contact Close	PSU turns ON / DC OK.
Contact Open	PSU turns OFF / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.



Mechanical Specification

(Unit:mm , Tolerance $\pm 1\text{mm}$)

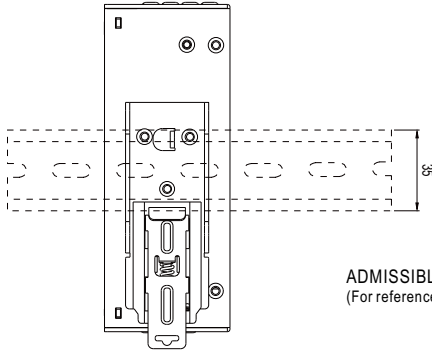
Case No. Unit:mm



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

■ Installation Instruction



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

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

■ Installation Manual

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