



(Applying)



(Applying)



LISTED



LISTED



BS EN/EN62368-1



BS EN/EN61558-1



BS EN/EN61010



IEC62368-1



IEC61558-1



IEC61010



AS/NZS 61558-1



AS/NZS 62368-1

IS13252



KC62368-1



CNS15598-1



GB4943.1



(Applying)



EAC



CE



UKCA



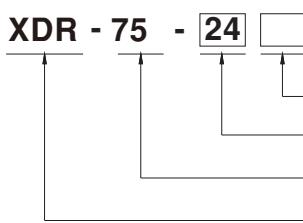
■ Features

- 85~305Vac input (277Vac available)
- Global certificates in multi-fields(ITE 62368-1, Industrial 61558-1/2-16,61010) & Marine DNV,SEMI47,CID2 HazLoc approved
- 30mm ultra slim width
- High efficiency up to 91% and no load power dissipation 0.7W~1W by R.C.
- 200% peak power capability
- 600% pulse current capability
- 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 remote ON/OFF control and DC OK relay contact
- Ultra low inrush current <6~15A
- Tool free terminal block (LA Type)
- Conformal coating
- Can be installed on DIN rail TS-35/75 or 15
- 5 years warranty

■ 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 0.7W~1W 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 <6~15A, and includes DC OK and remote ON/OFF 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-years warranty, the XDR-75 series is a compact, high-performance, and highly reliable DIN rail power supply.

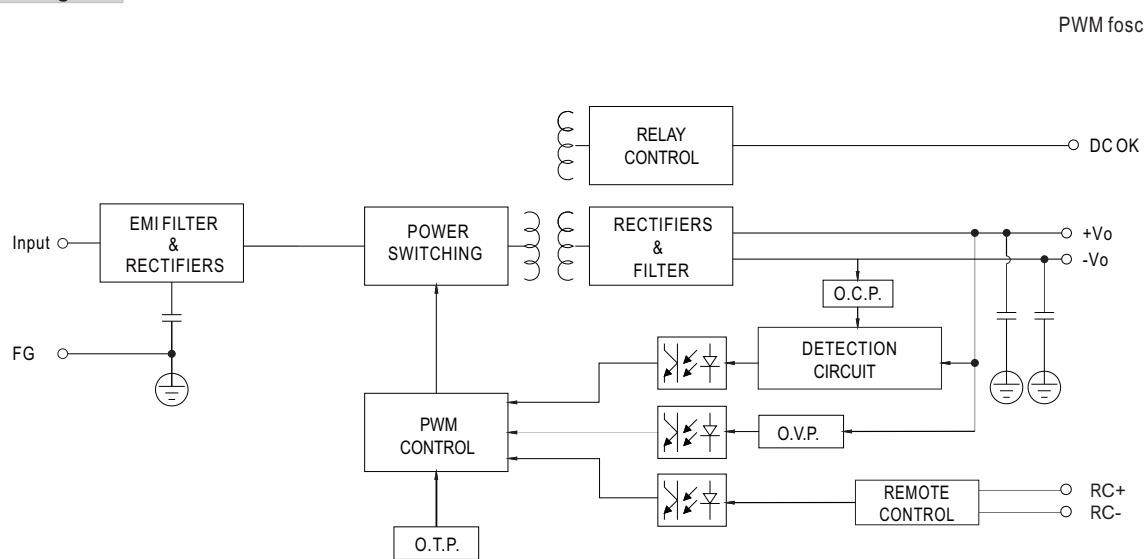
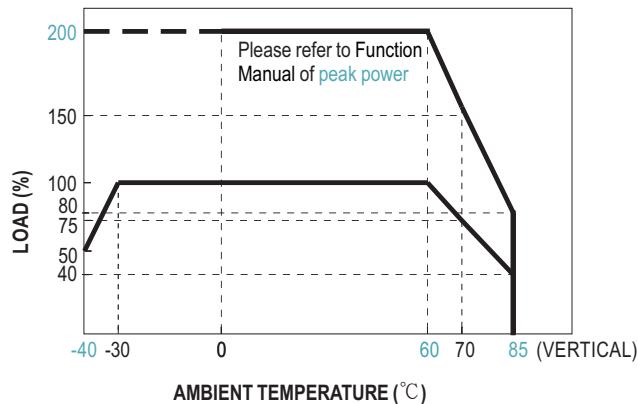
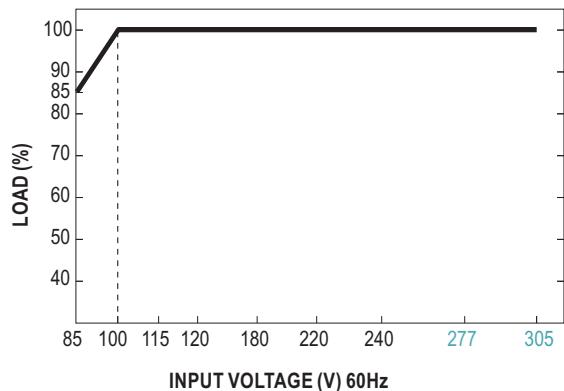
■ Model Encoding



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

SPECIFICATION	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 ~ 6.24A	0 ~ 3.12A	0 ~ 2.08A	0 ~ 1.56A
RATED POWER	74.88W	74.88W	74.88W	74.88W
PEAK	CURRENT (5sec.)	12.5A	6.25A	4.17A
	POWER (5sec.)	150W		3.13A
RIPPLE & NOISE (max.)	Note.2	100mVp-p	100mVp-p	120mVp-p
VOLTAGE ADJ. RANGE		12 ~ 15V	24 ~ 29V	36 ~ 42V
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		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 CONSUMPTION(Typ.)	Remote Power OFF	0.7W @115Vac & 230Vac	1W @115Vac & 230Vac	
	Remote Power ON	1.5W @115Vac & 230Vac		
FREQUENCY RANGE		47 ~ 63Hz		
EFFICIENCY (Typ.)		89%	90%	91%
AC CURRENT (Typ.)		1.5A/115Vac	0.9A/230Vac	0.8A/277Vac
INRUSH CURRENT (Typ.)		COLD START	6A/115Vac	10A/230Vac
LEAKAGE CURRENT		<1mA / 240Vac	<1.5mA / 277Vac	
PROTECTION				
OVERLOAD	105%~200% rated output power for more than 5 sec then constant current limiting at rate current without shutdown when Vo=10%~100%; Constant current limiting or Latch mode when Vo<10% rated voltage.			
OVER VOLTAGE	16 ~ 19V	30 ~ 34V	43 ~ 50V	57 ~ 66V
	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	Relay Contact Ratings (max.):30Vdc/1A, 30Vac/0.5A resistive load			
REMOTE CONTROL	Power ON :RC + ~ RC- keep<0.5Vdc			
	Power OFF:RC + ~ RC- keep 4~5Vdc			
PULSE CURRENT CAPABILITY	12V: 500% rated current for 4ms; 24V/36V/48V: 600% rated current for 4ms			
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			

SPECIFICATION	XDR-75-12	XDR-75-24	XDR-75-36	XDR-75-48						
	□ =Blank, LA, PI									
SAFETY & EMC										
SAFETY STANDARDS	CB DEKRA UL RCM CCC BSMI EAC KC	IEC62368-1, IEC61558-1, IEC61010; BS EN/EN62368-1,BS EN/EN61558-1/-2-16,BS EN/EN61010 UL121201/CSA C22.2 NO.213.17 Class I, DIV2 Group A,B,C,D Hazardous Locations T4 ;UL61010 AS/NZS 62368-1, AS/NZS 61558-1/-2-16; GB4943.1; CNS15598-1; EAC TPTC004 approved; KC62368-1 and BIS IS13252 (Part 1):2010 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°C / 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 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							
OTHERS										
MTBF	1907.3K hrs min. Telcordia SR-332 (Bellcore); 333.9K hrs min. MIL-HDBK-217F (25°C)									
DIMENSION	30*125.2*116mm (W*H*D)									
PACKING	496g; 24pcs/12.9Kg/1.27CUFT									
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 μF & 47 μF parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 5. 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). 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. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx										

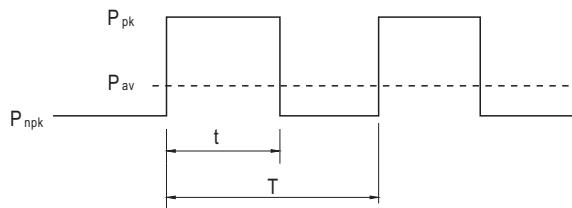
Block Diagram

Derating Curve

Output derating VS input voltage


■ Peak Power

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

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

$t \leq 5 \text{ sec}$



P_{av} : Average output power (W)

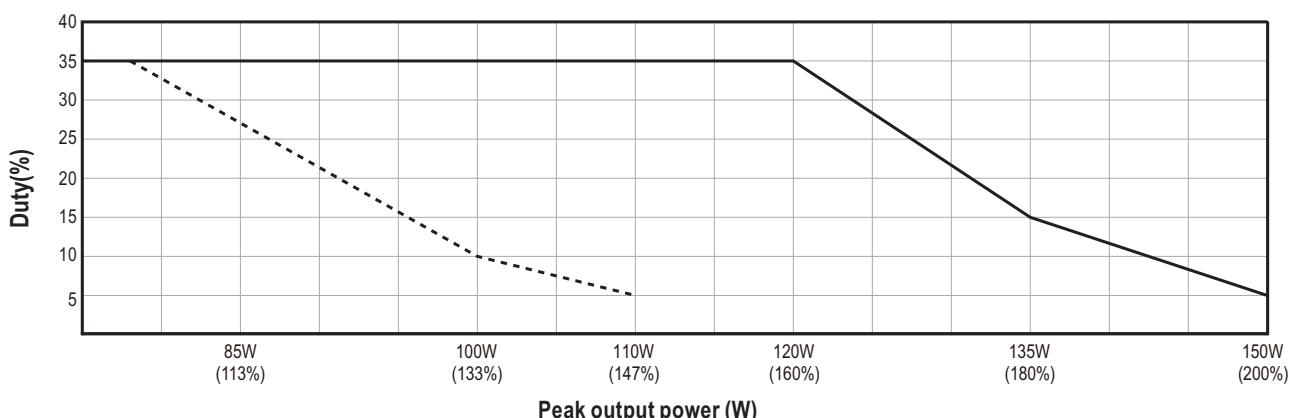
P_{pk} : Peak output power (W)

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) :

$V_{in} = 200\text{Vac}$ Duty_max = 5%

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

$$P_{pk} = 150\text{W}$$

$t \leq 5 \text{ sec}$

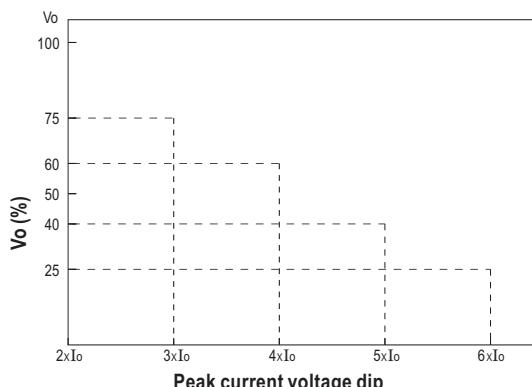
$$T \geq \frac{5 \text{ sec}}{5\%} \geq 100\text{sec}$$

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

$$P_{npk} \leq 71\text{W}$$

■ Transient peak current Capability

The device can deliver peak currents over $2xI_o$ capacity, sustained for several milliseconds.

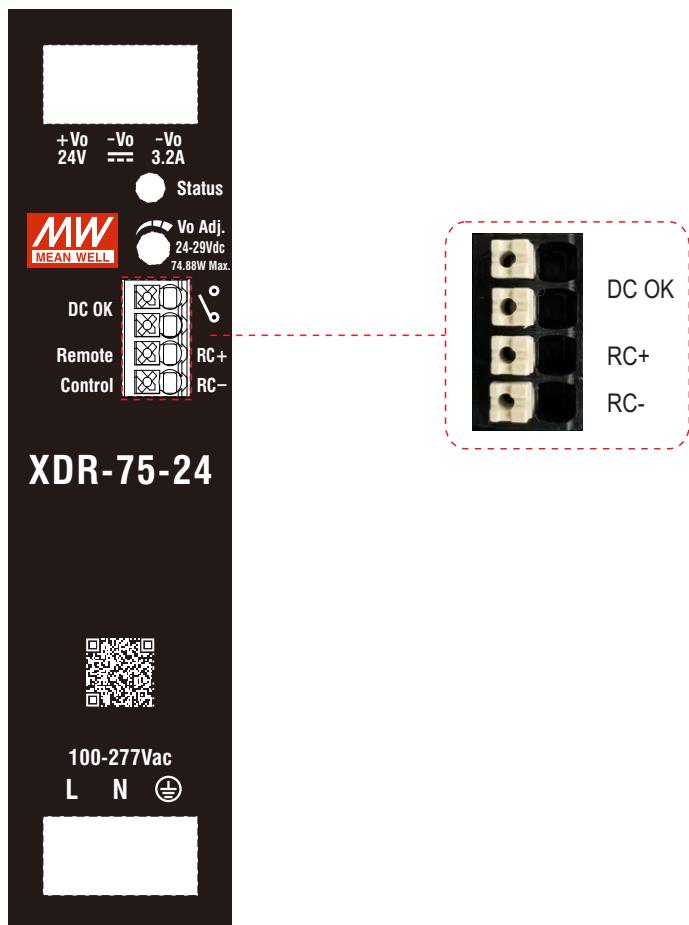


Load	Vo(%)	12V	24V/36V/48V
		Time	Time
3xI _o	75	6ms	8ms
4xI _o	60	3ms	6ms
5xI _o	40	2ms	5ms
6xI _o	25	--	4ms

Note: The time indicated in the table refers to Power on AC for more than 3 seconds before applying load.

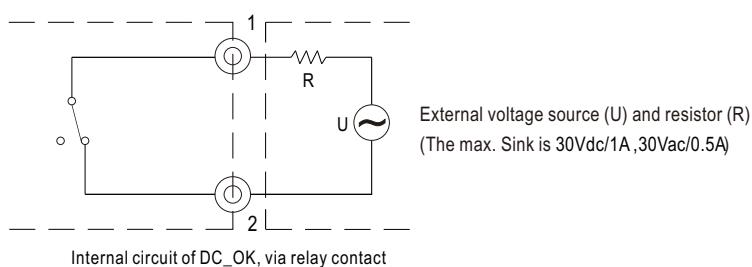
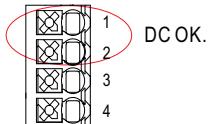
■ Function Manual

Pin No.	Function	Description
1,2	DC OK Relay Contact	Contact close : PSU turns ON/DC_OK ; Contact open : PSU turns OFF/DC_fail; Contact ratings (max.): 30Vdc/1A,30Vac/0.5A resistive load.
3	RC+	Turns the output ON and OFF by electrical signal Remote power ON : keep <0.5Vdc
4	RC-	Remote power OFF: keep 4~5Vdc



1.DC OK Relay Contact

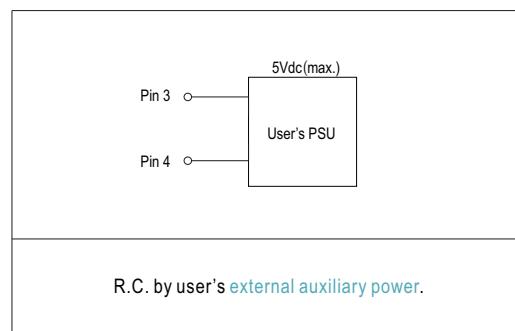
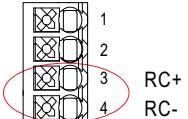
Contact Close	PSU turns ON / DC OK.
Contact Open	PSU turns OFF / DC Fail.
Contact Ratings (max.)	30Vdc/1A,30Vac/0.5A resistive load.



2.Remote ON/OFF Control

The PSU can be turned ON/OFF by using the "Remote Control" function.

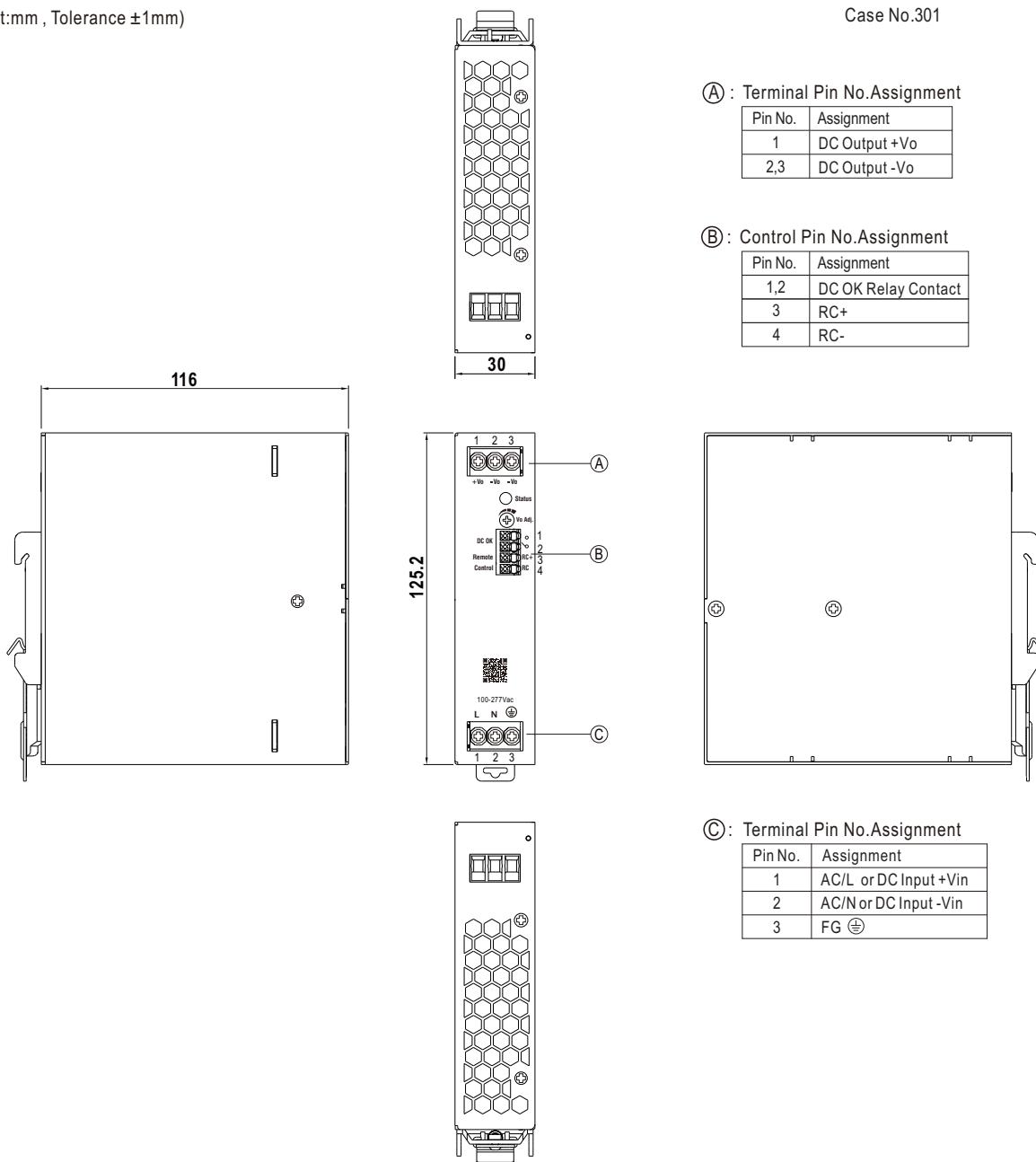
PSU Vo Status	Between RC+(Pin3) and RC-(Pin 4)
Remote power ON	Keep <0.5Vdc
Remote power OFF	Keep 4~5Vdc



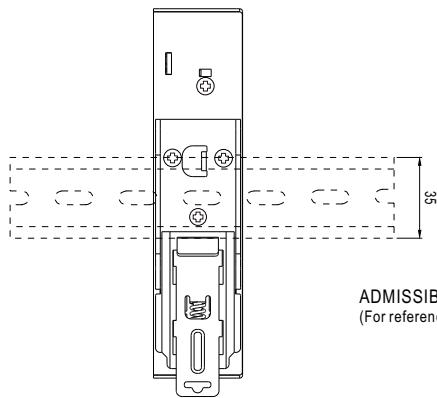
■ Mechanical Specification

 (Unit:mm , Tolerance ± 1 mm)

Case No.301


■ 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	18~10 AWG	24~16 AWG
Wire Stripping Length	7~8mm	7~8mm	8~9mm
Screw Terminal Torque	5 Lb-In	5 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>