

#### Features

• Single output to 180W

• Input voltage range: 90-264V

Output current(3800mA-7500mA)

• Efficiency to 91%

• Protections: OVP, SCP, OTP and OCP

Single phase input

• LED indicator for DC power on

LED indicator for DC low

• 3-year warranty

# **■** Applications

- Process control
- Factory automation
- Traffic & Transportation system
- Other industrial applications

# ■ **Model List**\*(See part number scheme for model number details)



\*Product images are for illustrative purposes only and may vary from actual design.

Model Number	Input Voltage	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Ripple	Certificates
DR-180-24	90–264Vac	180W	24V	0	7.5A	90%	1%Vo Mvp-p	UL/cUL/FCC/CE/CB
DR-180-48	90–264Vac	180W	48V	0	3.8A	91%	1%Vo Mvp-p	UL/cUL/FCC/CE/CB

#### Note:

- 1. The ripple values are measured at 20MHz of bandwidth by using 12" twisted pair-wire terminated with 0.1uF & parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.
- 2. The efficiency values are measured under ambient temperature 25°C at rated input voltage and rated load.

### **■** Technical Data

Input voltage	90-264Vac
Input frequency	47-63Hz
Input current	115Vac: 1.8A, 230Vac: 0.9A Full load
Inrush current (note 1)	115Vac: 35A, 230Vac: 65A cold start
Power factor	115Vac: 0.98, 230Vac: 0.96 Full load
Stand-by power	230Vac: 7W
consumption	250 VaC. 7 VV
Surge voltage	L-N: 2KV
Output voltage accuracy	±2%
Output voltage	24V model 21-28V
adjustment range (note 2)	48V model 44-54V
Minimum load	0%
Line regulation	1%

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# ■ Technical Data(cont.)

Load Regulation	1%					
Turn-on delay time	3600ms					
Hold up time	20ms					
Short circuit protection	Hiccup mode, it will recover automatically after fault condition is removed					
	24V: over voltage protection value 33V					
	48V: over voltage protection value 66V					
Over voltage protection	When output voltage exceeds above over voltage protection value or reversal voltage					
	occurs, the protection will be started and the output voltage will be cut off in order to					
	protect the power supply; The power supply will recover after the power is turned on again					
	24V: over current protection value 8.3A					
	48V: over current protection value 4.2A					
Over current protection	When output current exceeds above over current protection value, the protection will be					
	started and the output voltage will be cut off in order to protect the power supply; the					
	power supply will recover automatically after the fault condition is removed					
	100±10°C					
Over temperature	When the ambient temperature exceeds above over temperature protection value, the					
protection	protection will be started and the output voltage will be cut off in order to protect the power					
	supply; The power supply will recover automatically after the fault condition is removed.					
Operating temperature	-25-+70°C					
Operating relative	20-95% non-condensing					
humidity	<u> </u>					
Storage temperature	Humidity 5-95% RH -40-+85°C					
MTBF	230,000 hours full load, 220Vac input, 25°C ambient temperature					
DC-OK led	LED (Green) DC OK LED light will be on when the power supply is properly operated					
	LED(Red) DC Low LED light will be on when output voltage is below 85%(±2.5%) from the					
DC-Low led	rated output voltage; when over voltage, over current, over temperature and short circuit					
	fault					
Cooling	Free air convection					
Mounting method	Vertical					
Dimension(WxHxD)	50x130x125mm (1.57x5.12x4.92in)					
Weight	950g					
Packing	13pcs/13.5kg/0.7cuft/carton; Carton size 620x260x175mm(LxWxH)					

#### Note:

- 1. This product has built-in inrush limiting circuit to protect the circuit from surge current damages when the power is turned on. Malfunction can occur by repeating the input voltage on and off rapidly. Therefore, sufficient interval should be given between cycling the power on and off; To avoid connecting the switch or fuse to input terminal (outside of the power supply), more the consideration should be given when selecting the parts that can endure the inrush current.
- 2. Output Voltage can be adjusted within above range by V-ADJ. variable resistance inside of the power supply. When output voltage exceeds the range, the power supply will be in failure or get into over voltage protection mode. To avoid the case that the output voltage is higher than rated voltage, output current should be used under rated current.

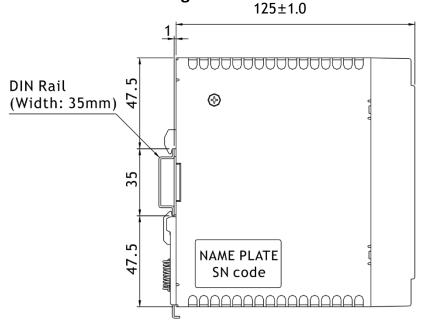


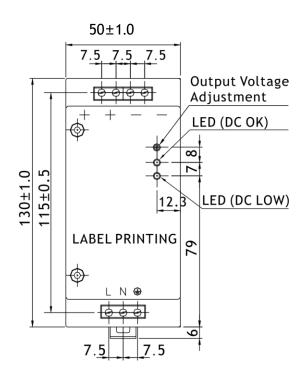
# ■ Safety and EMC Approval

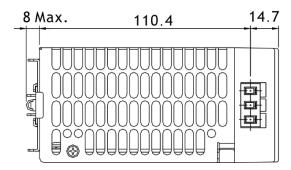
Isolation Voltage	I/P-O/P: 3KVac, I/P-FG: 1.5KVac, O/P-FG: 0.5KVac
Insulation resistance	100mΩ Max./500Vdc
Safety	Design refer to UL60950-1, EN60950-1
EMC	EN55022:2010+AC:2011 (CISPR22:2088) Class B
	EN61000-3-2:2014 (IEC 61000-3-2:2014)
	EN 6100-3-3:2013 (IEC 61000-3-3:2013)
	EN55024:2010 (CISPR 24:2010)

Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of  $25^{\circ}\text{C}$  and Vin=100Vac to 240Vac

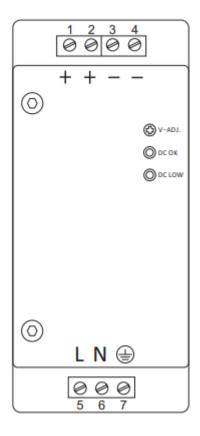
# **■** Mechanical Diagram



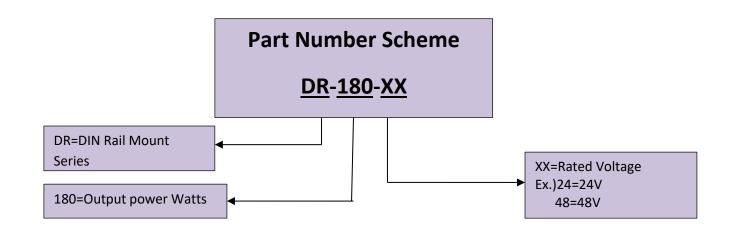








Label	No.	Assignment	
+	1	DC(+) Output Terminal	
+	2		
3		50() 0 5	
	4	DC(-) Output Terminal	
L	5	AC(L) Input Terminal	
N	6	AC(N) Input Terminal	
<b>(</b>	7	AC Grounding Terminal	
V-ADJ.	/	DC Output voltage adjustment trimmer	
DC OK	/	DC Output OK indication LED (Green)	
DC Low	/	DC Output Low indication LED (Red)	



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<sup>\*</sup>Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.