



- Universal AC Input
- Protections: Short Circuit/Overload/Over voltage
- Cooling by Free Air Convection
- Can be Installed on DIN Rail TS-35/7.5 or 15
- LED Indicator for Power On
- DC Okay Relay Contact
- No Load Power Consumption <0.75W
- 100% Full Load Burn-In Test



Model Number	Output Volts	Output Amps	Ripple & Noise	Efficiency	OVP	DC Volt Adjust	Min Load
SINGLE OUTPUT							
MDR60-5	5 Volts(DC)	10 Amps	80mV pk-pk	78%	6.25~7.25V	5~6V	0 ~ 10Amps
MDR60-12	12 Volts(DC)	5 Amps	120mV pk-pk	86%	15.6~18V	12~15V	0 ~ 5Amps
MDR60-24	24 Volts(DC)	2.5 Amps	150mV pk-pk	88%	31.2~36V	24~30V	0 ~ 2.5Amps
MDR60-48	48 Volts(DC)	1.25 Amps	200mV pk-pk	87%	57.6~64.8V	48~56V	0 ~ 1.25Amps

60W Single Output Industrial DIN Rail Power Supply

MDR60 series

INPUT SPECIFICATIONS

Input Voltage Range	85-264VAC / 120-370 Volts (DC)
Frequency Range	47-63 Hz
Inrush Current, typ: (cold start)	30 Amps @ 115VAC Input
	60 Amps @ 230VAC Input
Input Current	1.8 Amps. @ 115VAC
	1.0 Amps. @ 230VAC
Leakage current	< 1mA / 240VAC
DC Voltage Adjust	See Selection Chart

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±1% max
Load Regulation	±1.5%: 5Volts(DC) only
	± 1%: 12~48Volts(DC)
Voltage Tolerance (Note 2)	±2% 5Volts(DC) only
	±1%: 12~48Volts(DC)
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	50ms @ 230VAC
	20ms @115VAC
Setup, Rise Time @ FL (Note 4)	500ms, 30ms/230VAC
	500mS, 30mS/115VAC
Over Current Protection	105~150% rated output power
	Constant current limit, auto-recover
Over Voltage Protection	See Selection Chart
	Shut down o/p voltage, re-power

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20°C to +70°C (See Derate Curve)
Storage Temperature	-40°C to +85°C, 10 ~ 95% RH
Relative Humidity	20 to +90% RH non cond
Temperature Coefficient	± 0.03% / °C (0-50°C)
MTBF	MIL-HDBK-217F, 25°C;
	489.9KHrs min
Vibration Component:	10~500Hz, 2G 10min./1cycle,
	period for 60min. each along
	X, Y, Z axes
Mounting:	Compliance to IEC60068-2-6

GENERAL SPECIFICATIONS

Safety	UL508, UL60950-1
	TUV EN60950-1 Approved
Insulation Resistance	100MΩ / 500VDC / 25°C / 70% RH
EMC Emissions (Note 3)	Compliance to EN55011, EN55022
	(CISPR22), EN61204-3 Class B
	EN61000-3-2,-3
EMC Immunity (Note 3)	Compliance to EN61000-4-2,3,4,5,6,8,11;
	EN55024, EN61000-6-2,
	EN61204-3, light industry level,
	criteria A
Isolation	3000VAC Input - Output
	2000VAC Input - Ground
	500VAC Output - Ground

PHYSICAL SPECIFICATIONS

Size	
Millimeters	40 x 90 x 100
Inches	1.57" x 3.54" x 3.94"
Weight	11.64 oz (330g)
DC OK Active Signal	Relay Contact Rating max.:
	30V/1A Resistive

NOTES

1. Ripple & Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regulation.
3. The Power Supply is considered a component. It must be re-confirmed that the equipment it is installed into meets required EMC Directives
4. Set Up Time is measured at first cold start. Turning the Power Supply on and off may lead to increased Set Up Time

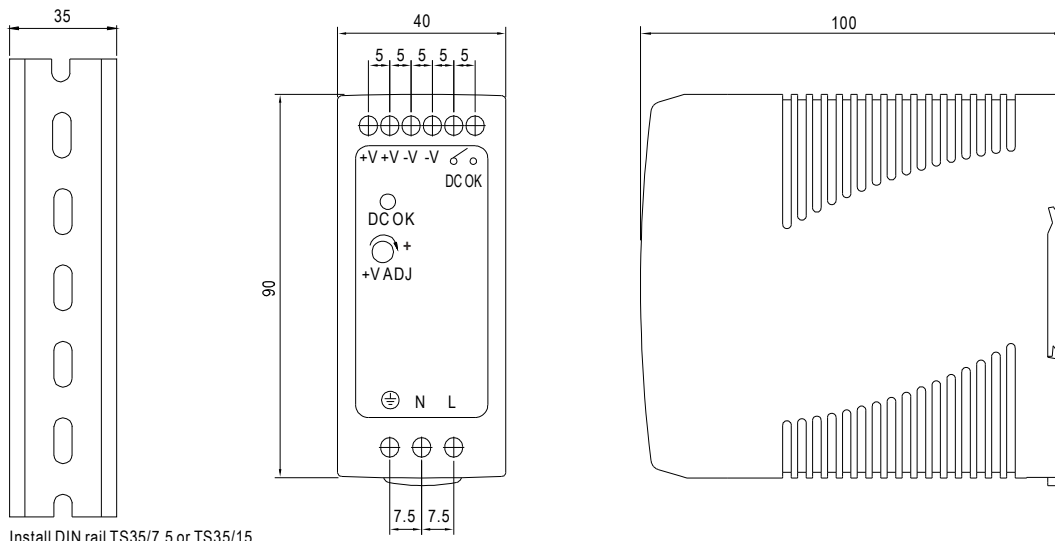
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

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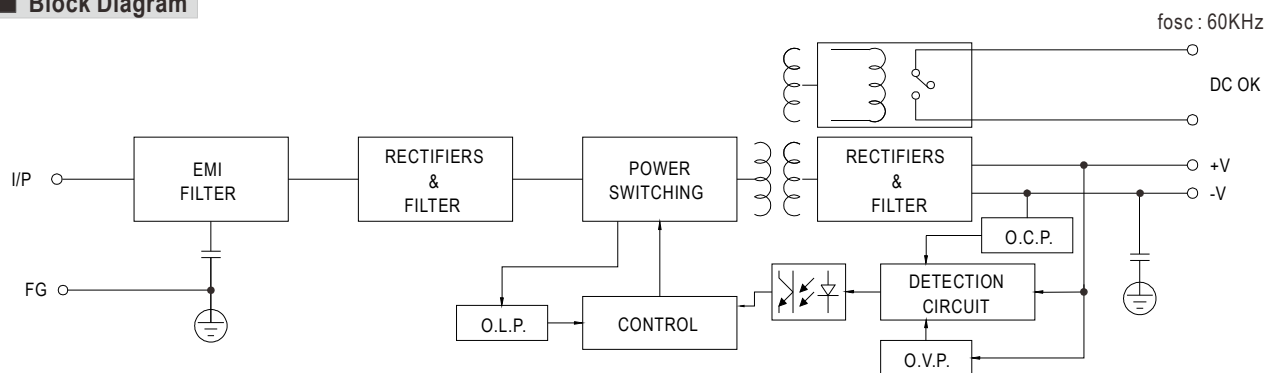
MDR60 series

Mechanical Specification

Case No.962A Unit:mm



Block Diagram



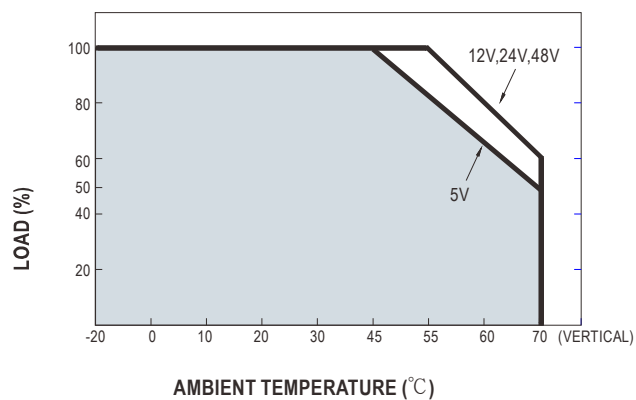
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MDR60 series

■ 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.

■ Derating Curve



■ Output Derating VS Input Voltage

