

DRA-40 Series

40W Single Output Switching Power Supply



Case No: 8914EW
100 x 90 x 40 mm

Features

- Universal AC input / Full range
- Protections: Short Circuit / Overload / Over voltage
- Can be installed on DIN rail TS-35/7.5 or 15
- Built-in 3 in 1 dimming function (1-10Vdc PWM signal or resistance)
- Cooling by free air convection
- Led indicator for power on
- 100% full load burn-in test
- 3 years warranty



Specification

	Voltage	90V ~ 264VAC 127 ~ 370VDC (DC input operation possible by connecting AC/L (+), AC/N (-))
	Frequency	47 ~ 63 Hz
INPUT	Efficiency	85% 87%
	AC Current (Typ.)	0.8A/115VAC 0.6A/230VAC
	Inrush Current (Typ.)	Cold Start 30A/115VAC 60A/230VAC
	MODEL No.	DRA-40-12 DRA-40-24
OUTPUT	Voltage	12V 24V
	Rated Current	3.34A 1.7A
	Current Range	0~3.34A 0~1.7A
	Rated Power	40.08W 40.08W
	Ripple Noise MAX.	120mVp-p 150mVp-p
	Voltage Adjustment Range	12~15V 24~30V
	Voltage Tolerance	± 1.0% ± 1.0%
	Line Regulation	± 0.5% ± 0.5%
	Load Regulation	± 0.5% ± 0.5%
	Setup Rise Time	400ms, 50ms / 230VAC 800ms, 50ms / 115VAC at full load
	Holdup Time (Typ.)	50ms / 230VAC 10ms / 115VAC at full load
PROTECTION	Over Load	95~108% rated output power Protection Type: Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	14.49 ~ 18.63 28.98 ~ 37.26V Protection Type: Shut down o/p voltage, re-power on to recover
ENVIRONMENT	Working Temp	-30~+70°C (Refer to "Derating Curve")
	Working Humidity	20~90% RH non-condensing
	Storage Temp., Humidity	-40~ +85°C, 10~95%RH
	Temp. Co-efficient	±0.03% / °C (0~55°C) on CH1 output
	Vibration	10~500Hz, 2G 10min./1cycle, 60 min. each along X, Y, Z axes
SAFETY & EMC	Safety Standards	UL60950-1, TUV EN60950-1 approved
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500Vdc/25°C/70% RH
	EMC Emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2, -3
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61204-3, light industry level, criteria A
OTHERS	M.T.B.F.	386.1K hrs min. MIL-HDBK-217F (25°C)
	Packaging	0.3Kg, 42pcs/13.6Kg/0.82CUFT

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Length of setup time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
5. The power supply is considered as a component which will be installed with final equipment. The final equipment must re-confirmed that it still meets EMC Directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

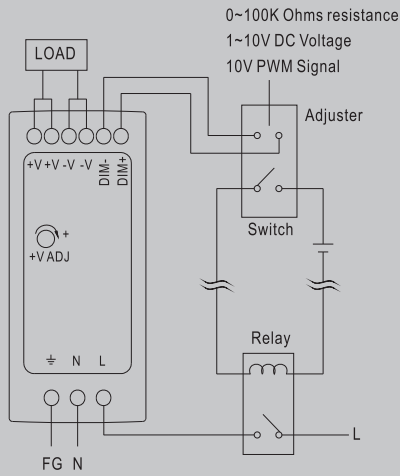
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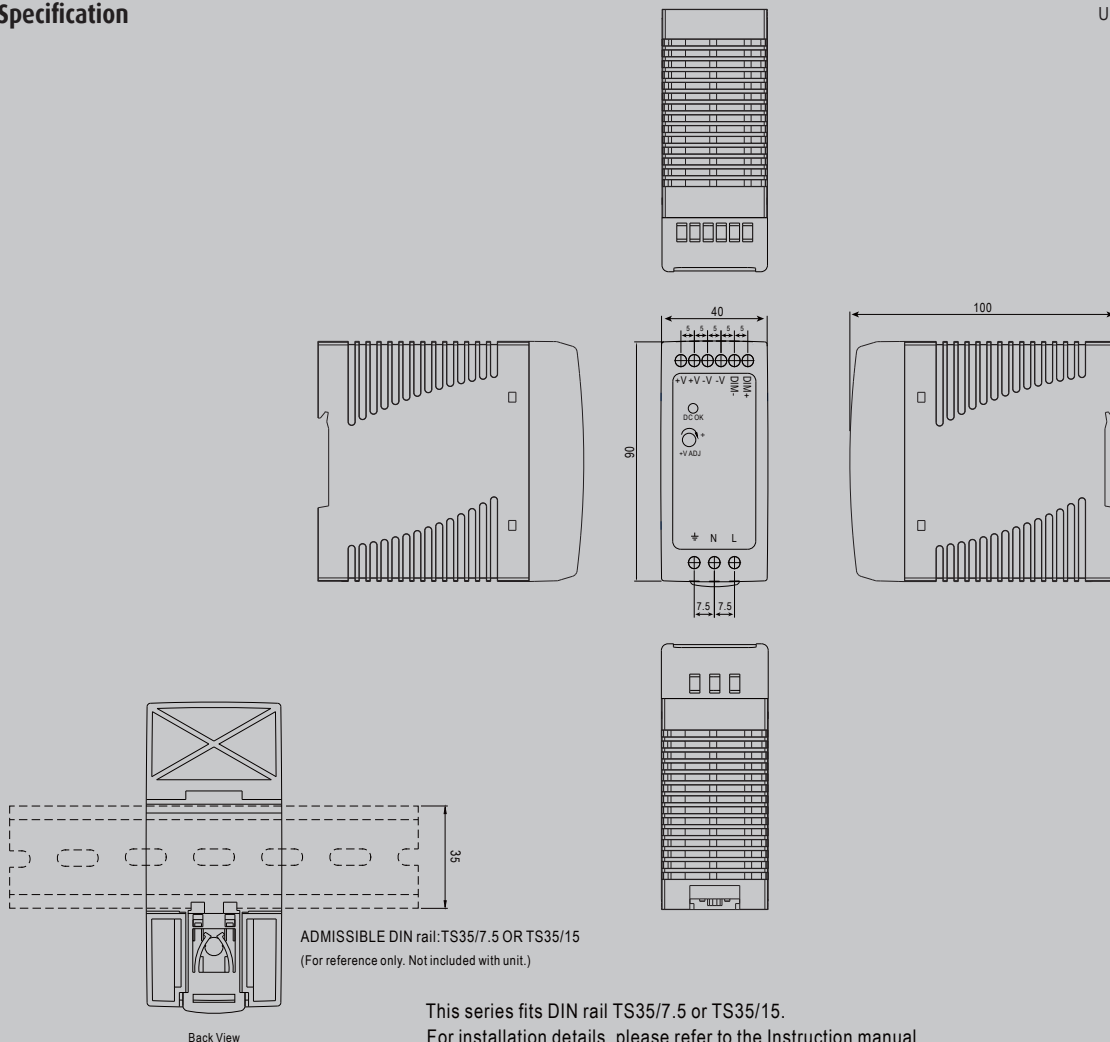
Using the built-in dimming function can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

Using a switch and relay can turn ON/OFF the lighting fixture.



Mechanical Specification

Unit:mm



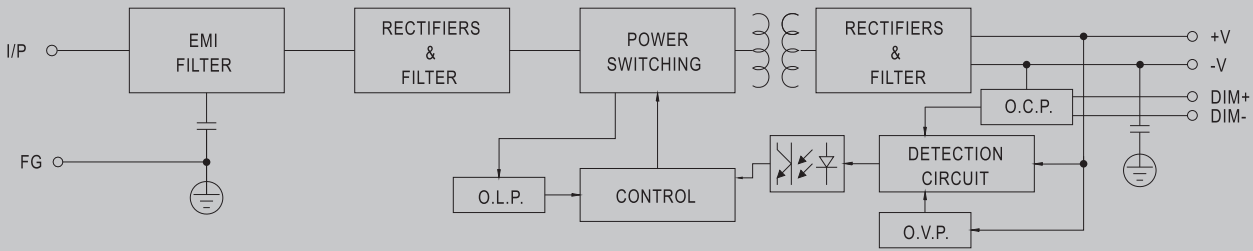
This series fits DIN rail TS35/7.5 or TS35/15.
For installation details, please refer to the Instruction manual.

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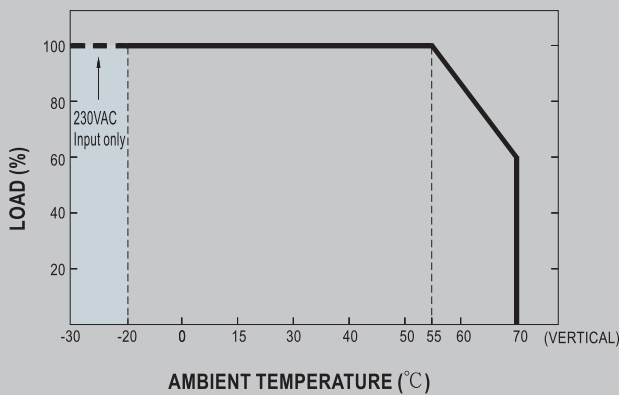
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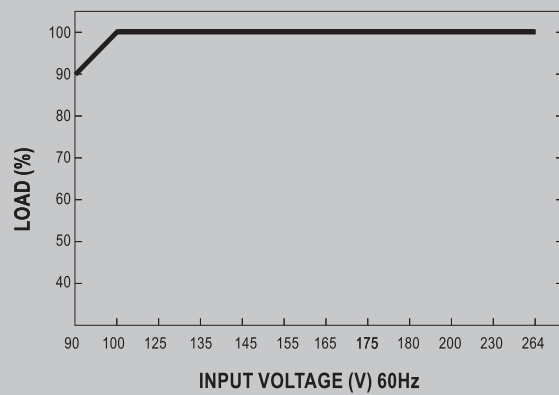
Block Diagram



Derating Curve



Static Characteristics



Output current adjustment operation

Built-in 3 in 1 dimming function or I_o trim function. Output constant current level can be adjusted connecting a resistance or 1 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

Please DO NOT connect "DIM-" to "-V".

Reference resistance value for output current adjustment (Typical)

Resistance value	Single driver	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90K Ω	100K Ω	OPEN
	Multiple drivers (N=driver quantity for synchronized dimming operation)	10K Ω /N	20K Ω /N	30K Ω /N	40K Ω /N	50K Ω /N	60K Ω /N	70K Ω /N	80K Ω /N	90K Ω /N	100K Ω /N	-----
Percentage of rated current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

1 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

10V PWM signal for output current adjustment (Typical): Frequency range : 100Hz ~ 3KHz

Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.