

DL2-100-U series

100W Constant Voltage class II plastic case DIN-Rail Power Supply



■ Features:

- Universal AC input / Full range: 85 – 264VAC and 120 – 370VDC
- High Dielectric Strength: IN/OUT up to 4000VAC
- Protections: Over current / Short circuit / Over Voltage
- Wide operating ambient temperature range: -40°C ÷ +70°C
- Over-voltage category OVC III (designed to meet EN61558-1)
- Low no load power consumption
- Isolation class II design
- Designed to install on TS35x7.5/TS35x15 Din Rail



MODEL NUMBERING

DL2	-	100	-	X	-	U
SERIES		RATED OUTPUT POWER		RATED OUTPUT VOLTAGE		INPUT VOLTAGE RANGE
DIN RAIL, PLASTIC CASE, CLASS II POWER SUPPLY, CONSTANT VOLTAGE DESIGN		100 MEANS 100W (NOT FOR ALL VOLTAGE VERSIONS, PLEASE CHECK DETAILS IN BELOW SPECIFICATION — OUTPUT SECTION)		X = 12	12V	U means 85~264VAC / 120~370VDC
				X = 15	15V	
				X = 24	24V	
				X = 48	48V	

ELECTRICAL SPECIFICATION

MODEL	DL2-100-12-U	DL2-100-15-U	DL2-100-24-U	DL2-100-48-U
OUTPUT				
RATED VOLTAGE	12V	15V	24V	48V
RATED CURRENT	7.5A	6.5A	4.2A	2.1A
ADJUSTABLE VOLTAGE RANGE (MIN.)	12.0V ÷ 13.8V	13.5V ÷ 18.0V	21.6V ÷ 29V	43.2V ÷ 55.2V
RATED POWER	90W	97.5W	100.8W	100.8W
LINE REGULATION	± 0.5%	± 0.5%	± 0.5%	± 0.5%
LOAD REGULATION	± 1.5%	± 1.5%	± 1.5%	± 1.5%
RIPPLE & NOISE (MAX.) [2]	120mV _{p-p}	120mV _{p-p}	150mV _{p-p}	240mV _{p-p}
SETUP TIME, HOLD UP TIME (TYP.)	3000ms, 30ms / 230VAC at full load			
CAPACITIVE LOAD (MAX.)	10000µF	6400µF	2500µF	1100µF
INPUT				
VOLTAGE RANGE	85 ÷ 264VAC			
	120 ÷ 370VDC			
FREQUENCY RANGE	47 ÷ 63Hz			
EFFICIENCY (TYP.)	88%	89%	90%	90%
AC CURRENT (MAX.)	1.6A / 230VAC; 3A / 115VAC			
INRUSH CURRENT (TYP.)	70A / 230VAC; 35A / 115VAC			
NO LOAD POWER CONSUMPTION (MAX.)	0.3W	0.3W	0.35W	0.4W

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PROTECTIONS

OVER CURRENT	Range: 110% ÷ 200% rated current			
	Type: hiccup mode, auto-recovery.			
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.			
OVER VOLTAGE	≤ 20VDC	≤ 25VDC	≤ 35VDC	≤ 60VDC

WORKING ENVIRONMENT

WORKING TEMPERATURE	-40°C ÷ 70°C (Refer to Derating Curve)
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 85°C, 10 ÷ 95% RH non-condensing
TEMPERATURE COEFFICIENT (TYP.)	± 0.03% / °C
OPERATING ALTITUDE (MAX.)	2000m

SAFETY AND EMC REGULATIONS

SAFETY STANDARDS	Compliance to EN62368-1; Designed to meet EN61558-1
WITHSTAND VOLTAGE	IN/OUT: 4000VAC (< 5mA / 1min)
EMC EMISSION	Compliance to EN55032
EMC IMMUNITY	Compliance to: EN55035; EN61000-4-2, -3, -4, -5, -6, -11
HARMONIC CURRENT	Compliance to: EN61000-3-2 class A, EN61000-3-3

OTHERS

MTBF (MIN.)	300 000h / 25°C per MIL-HDBK-217F
DIMENSIONS AND NET WEIGHT	92.66 x 70.00 x 58.00mm (L x W x H)
CASE MATERIAL	Black plastic heat-resistant (UL94V-0)
NET WEIGHT	0.235kg

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, 25°C of ambient temperature and humidity <75% RH.

2. Ripple & noise is measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.

3. Power supply is considered as component not intended to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-qualified to comply with EMC Directives.

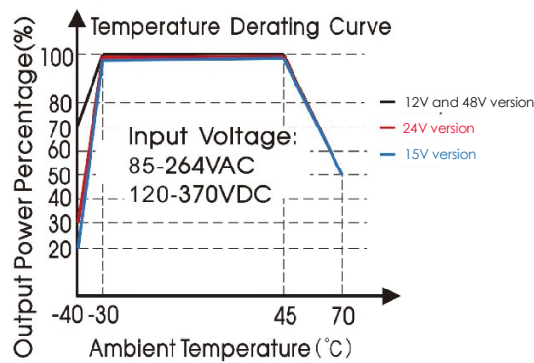
4. Specifications are subject to change without prior notice.

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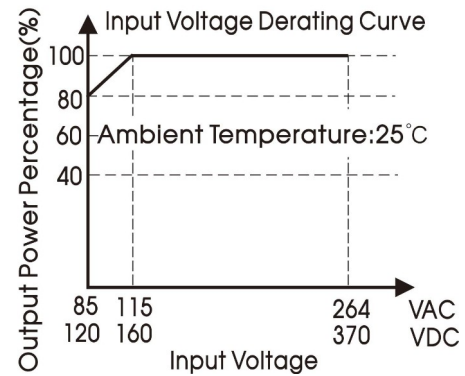
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DERATING CURVE

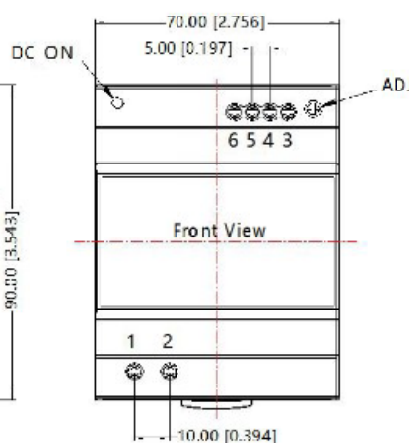
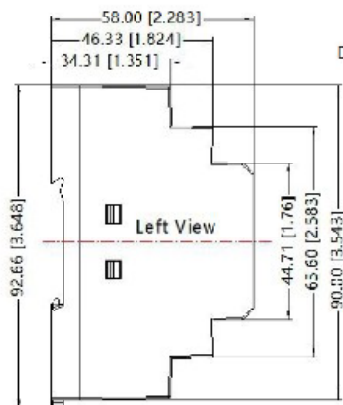


STATIC CHARACTERISTIC



MECHANICAL SPECIFICATION

THIRD ANGLE PROJECTION



Pin-Out	
Pin	DL2-100-U
1	AC(L)
2	AC(N)
3	+Vo
4	+Vo
5	-Vo
6	-Vo

Note:

Unit: mm[inch]

ADJ: adjustable resistance to change output voltage

Wire range: 24-12 AWG

Tightening torque: Max 0.4 N·m

Mounting rail: TS35

General tolerances: $\pm 1.00[\pm 0.039]$