

DRJ100/C2

EVALUATION DATA

型式データ

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※他項目の測定方法、特性データは標準品を参照ください。

Other evaluation method and characteristics refer to EVALUATION DATA standard model DRJ100.

使用記号 Terminology used

	定義 Definition
V _{in}	入力電圧 Input voltage
V _{out}	出力電圧 Output voltage
I _{in}	入力電流 Input current
I _{out}	出力電流 Output current
T _a	周囲温度 Ambient temperature
f	周波数 Frequency

※ 試験結果は、当社測定条件における結果であり、参考値としてお考え願います。

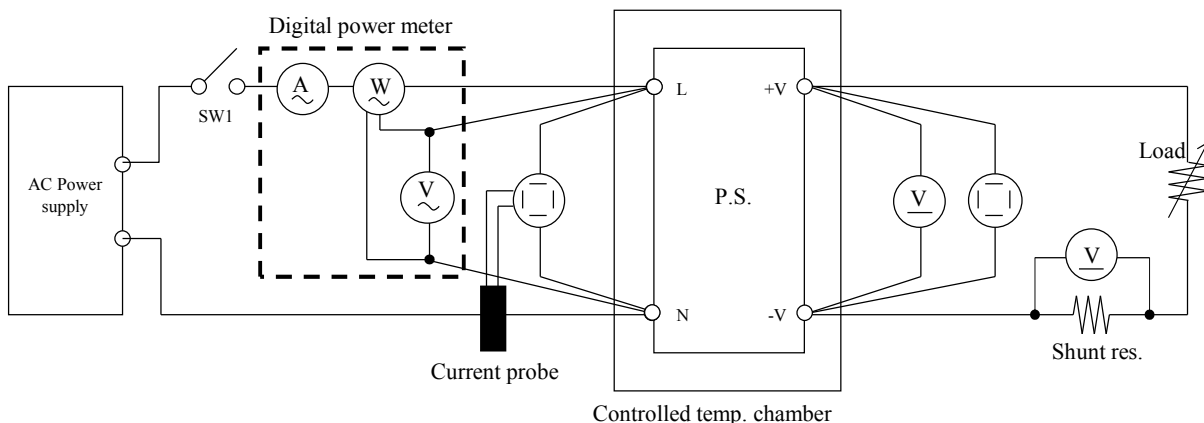
Test results are reference data based on our measurement condition.

1. 測定方法 Evaluation Method

1.1 測定回路 Circuit used for determination

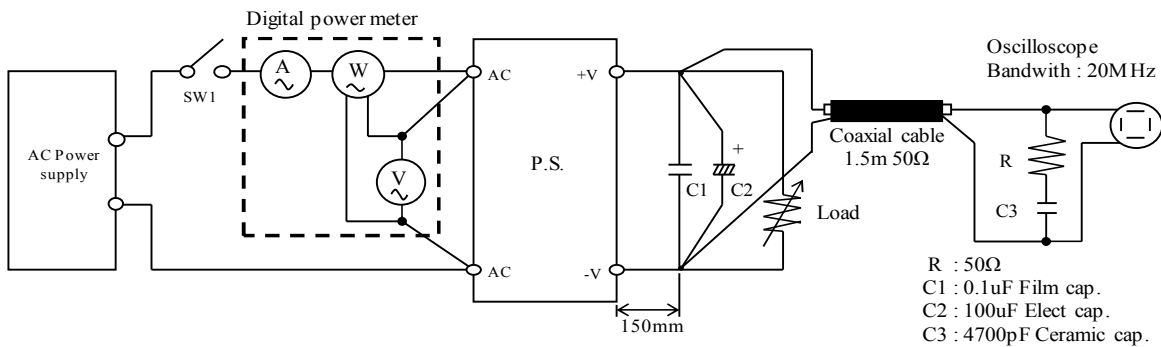
測定回路1 Circuit 1 used for determination

- 静特性 Steady state data
- 出力保持時間特性 Hold up time characteristics
- 過電流保護特性 Over current protection (OCP) characteristics
- 入力電圧瞬停特性 Response to brown out characteristics



測定回路2 Circuit 2 used for determination

- リプルノイズ電圧 Ripple noise voltage



1.2 使用測定機器 List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	DIGITAL STORAGE OSCILLOSCOPE	YOKOGAWA ELECT.	DLM2054 / DL1740EL
2	DIGITAL MULTIMETER	AGILENT	34970A
3	DIGITAL POWER METER	YOKOGAWA ELECT.	WT210
4	CURRENT PROBE	YOKOGAWA ELECT.	701928
5	DYNAMIC DUMMY LOAD	TAKASAGO	FK-200L / FK-400L
6	DYNAMIC DUMMY LOAD	KIKUSUI	PLZ150U
7	CVCF	TAKASAGO	AA2000XG
8	CVCF	KIKUSUI	PCR4000L
9	CONTROLLED TEMP. CHAMBER	ESPEC	PL-1KP / SH-240

1.3 評価負荷条件 Load conditions

*入力電圧が100VAC未満の場合、下記のとおり出力ディレーティングが必要です。

Output derating is required for DC input voltage less than 100VDC.

Output voltage : 24V

Vin	Iout : Full load	24V
100 - 265VAC	100%	3.75A
85VAC	80%	3.0A

2. 特性データ Characteristics

2.1 静特性 Steady state data

(1) 入力・負荷・温度変動／出力起動・遮断電圧

Regulation - line and load, Temperature drift / Start up voltage and Drop out voltage

24V

1. Regulation - line and load

Condition Ta : 25 °C

Iout \ Vin	90VAC	100VAC	230VAC	265VAC	line regulation	
0%	24.072V	24.070V	24.072V	24.072V	2mV	0.008%
50%	24.024V	24.028V	24.025V	24.025V	4mV	0.017%
Full load	23.992V	23.986V	23.979V	23.979V	13mV	0.054%
load regulation	80mV	84mV	93mV	93mV		
	0.333%	0.350%	0.388%	0.388%		

2. Temperature drift

Conditions Vin : 100 VAC

Iout : 100 %

Ta	-10°C	+25°C	+55°C	temperature stability	
Vout	23.986V	23.986V	23.945V	41mV	0.171%

3. Start up voltage and Drop out voltage

Conditions Ta : 25 °C

Iout : 100 %

Start up voltage (Vin)	77VAC
Drop out voltage (Vin)	66VAC

(2) リプルノイズ電圧対入力電圧

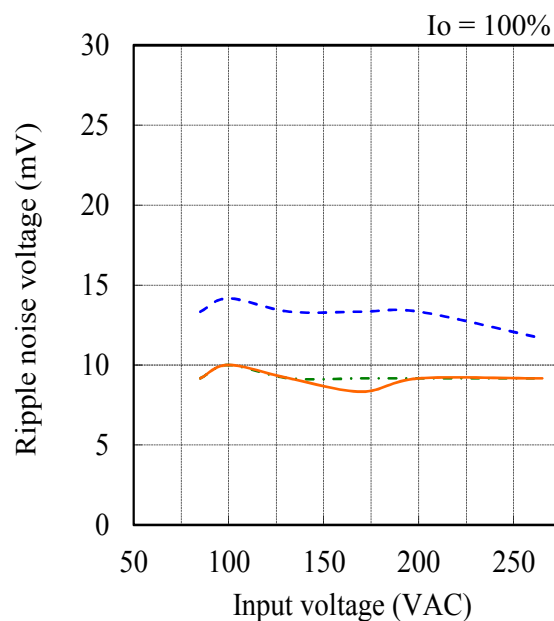
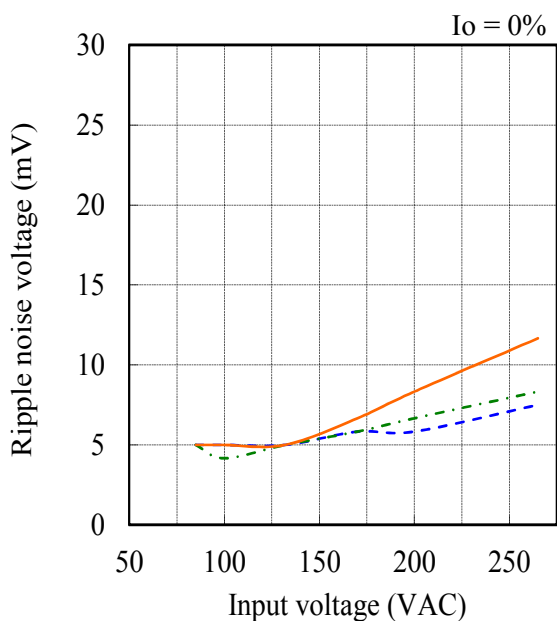
Ripple noise voltage vs. Input voltage

Conditions Ta : -10 °C

25 °C

55 °C

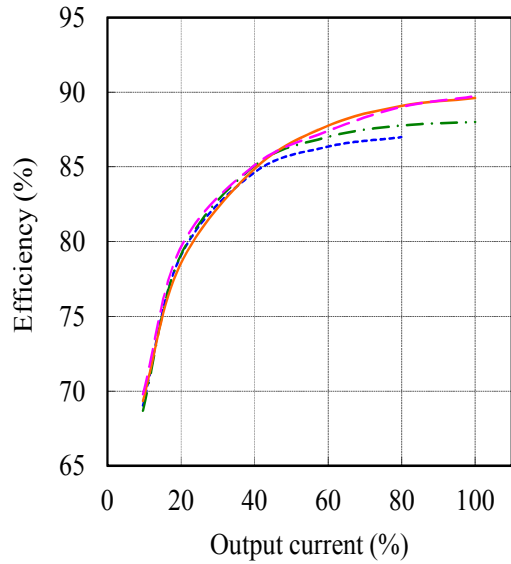
24V



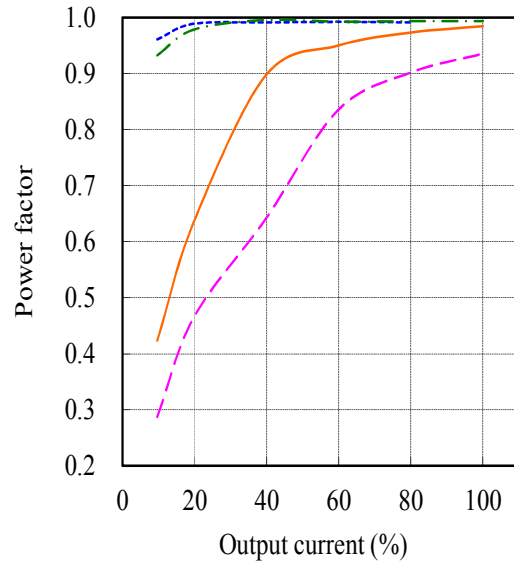
(3) 効率・力率対出力電流

Efficiency and Power factor vs. Output current

24V



Conditions Vin : 85 VAC (blue dashed)
 100 VAC (green dash-dot)
 200 VAC (red solid)
 265 VAC (magenta long-dash)
 Ta : 25 °C



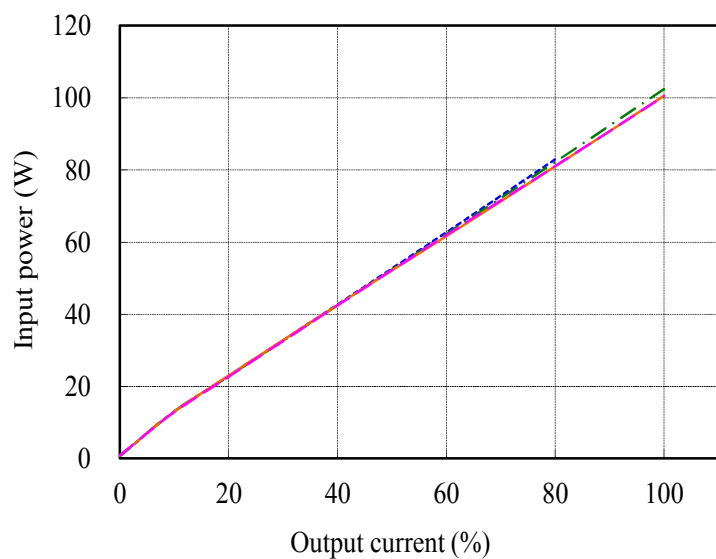
(4) 入力電力対出力電流

Input power vs. Output current

24V

Vin	Input power
	Iout : 0%
85VAC	0.66W
100VAC	0.67W
230VAC	0.75W
265VAC	0.86W

Conditions Vin : 85 VAC (blue dashed)
 100 VAC (green dash-dot)
 200 VAC (red solid)
 265 VAC (magenta long-dash)
 Ta : 25 °C

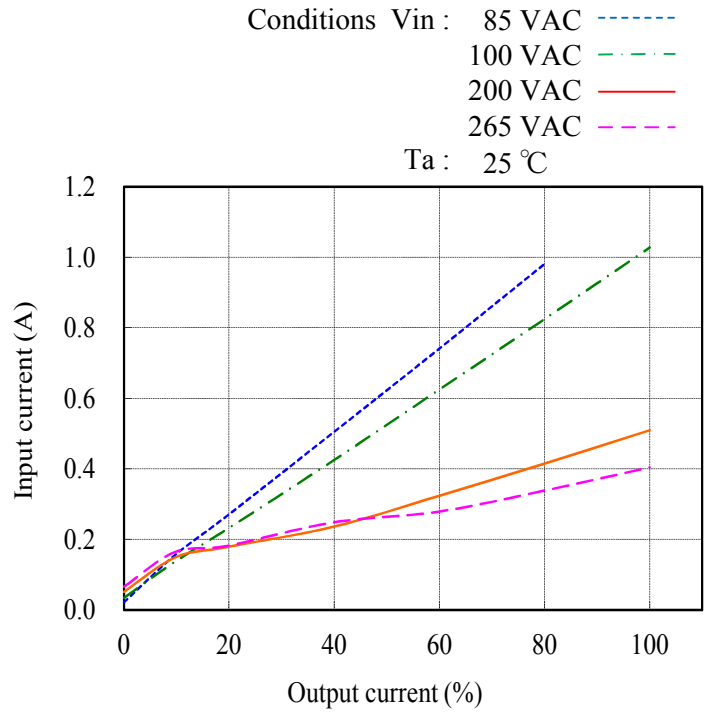


(5) 入力電流対出力電流

Input current vs. Output current

24V

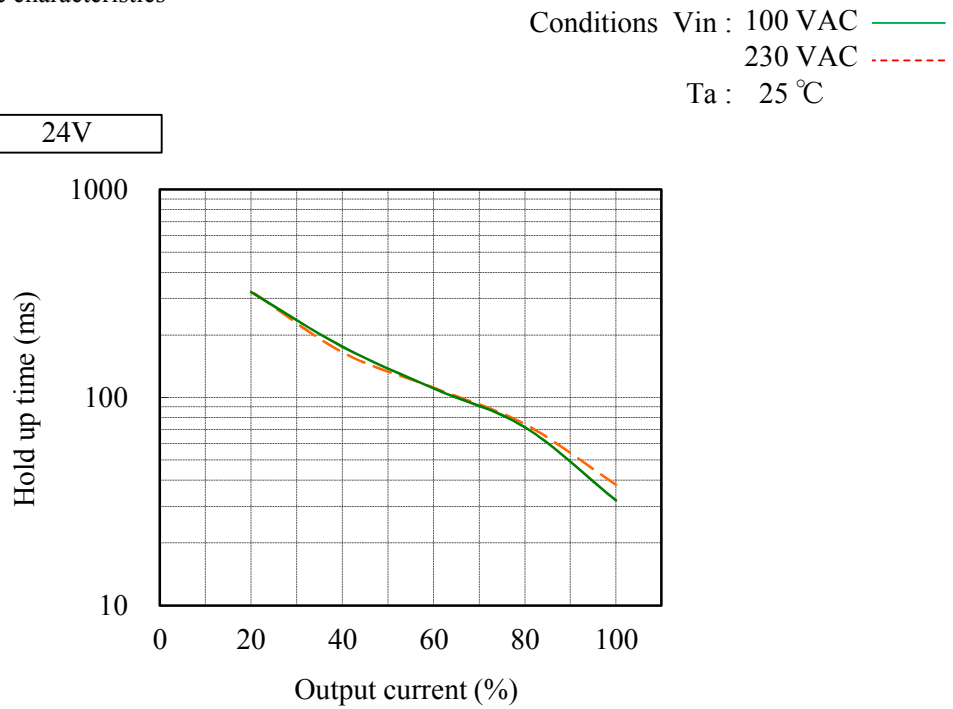
V _{in}	Input current
	I _{out} : 0%
85VAC	0.021A
100VAC	0.034A
230VAC	0.051A
265VAC	0.066A



2.2 出力保持時間特性

Hold up time characteristics

24V



2.3 過電流保護特性

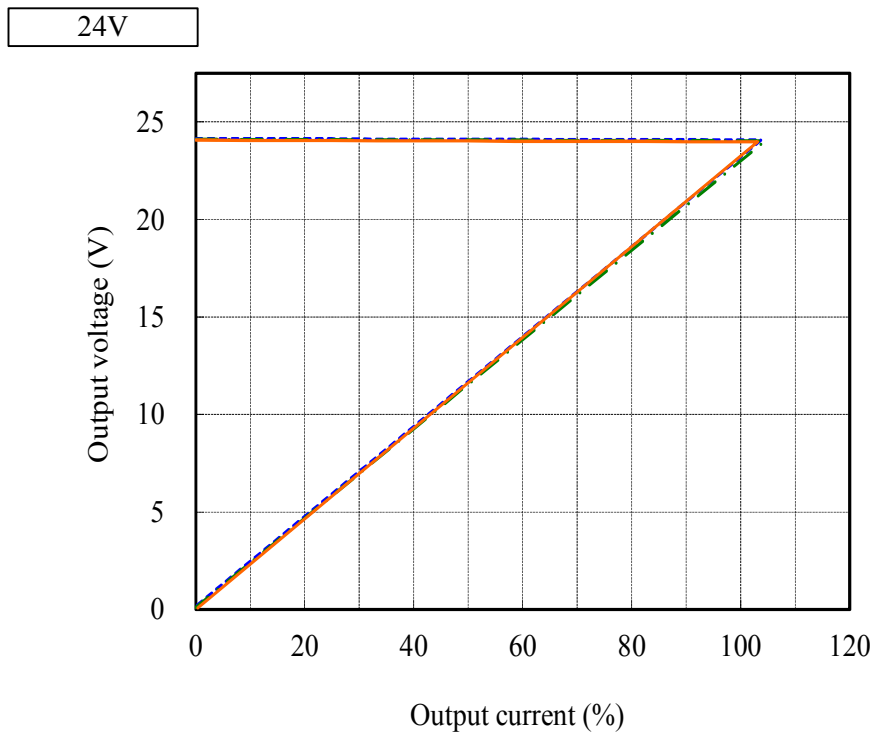
Over current protection (OCP) characteristics

Conditions V_{in} : 100 VAC

T_a : -10 °C

25 °C

55 °C



2.4 入力電圧瞬停特性

Response to brown out characteristics

Conditions I_{out} : 100 %

T_a : 25 °C

瞬停時間

Interruption time

A : 出力電圧が低下なし

Output voltage does not drop.

B : 出力電圧が0Vまで低下しない

Output voltage drop down not reaching 0V.

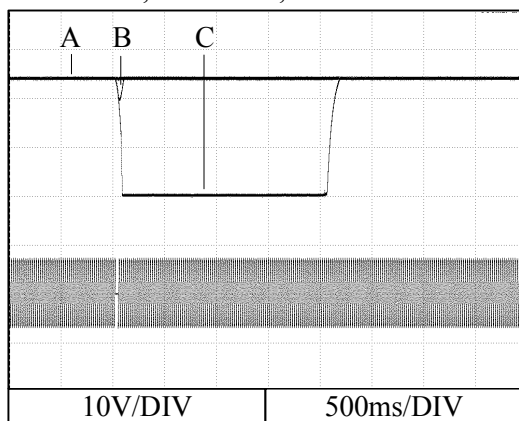
C : 出力電圧が0Vまで低下

Output voltage drops until 0V.

24V

V_{in} : 100VAC

A = 23ms, B = 48ms, C = 77ms



V_{in} : 230VAC

A = 25ms, B = 57ms, C = 83ms

