



No. CHD40004-001A00

参考資料
Reference data

TECHNICAL DATA

MODEL: C300

SANKEN ELECTRIC CO.,LTD.

CHD40004-001A00
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内容 (CONTENTS)

| | |
|---|--------|
| 1.入力特性 (Input Characteristics) |3 |
| 入力電流 (Input Current) |3 |
| 入力電力 (Input Power) |3 |
| 力率(Power Factor) |3 |
| 効率 (Efficiency) |3 |
| 突入電流 (Inrush Current) |3 |
| 漏洩電流 (Leakage Current) |3 |
| 入力瞬断時間 (Hold up time) |3 |
| 2.環境試験 (Environment Test) |4 |
| 振動試験 (Vibration) |4 |
| 高温スタート (Power on at high temp) |4 |
| 低温スタート (Power on at low temp) |4 |
| 耐衝撃 (Shock) |4 |
| 3.耐ノイズ特性 (Noise Tolerance Characteristics) |4 |
| 注入ノイズ耐量 (AC Line Noise) |4 |
| 雷サージ耐量 (Lightning Surge) |4 |
| 静電気耐量 (ESD) |4 |
| 4.その他の特性 (Other Characteristics) |4 |
| 絶縁耐圧 (Withstand Voltage) |4 |
| 絶縁抵抗 (Insulation Resistance) |4 |
| 図1(Fig.1):入力電流特性(負荷率に対して) Input Current Characteristics (vs. Load Rate) |5 |
| 図2(Fig.2):力率特性(負荷率に対して) Power Factor Characteristics (vs. Load Rate) |5 |
| 図3(Fig.3):効率特性(負荷率に対して) Efficiency Characteristics (vs. Load Rate) |5 |
| 図4(Fig.4):突入電流特性(入力電圧に対して) Inrush Current Characteristics (vs. Input Voltage) |6 |
| 図5(Fig.5):漏洩電流(入力電圧に対して) Leakage Current Characteristics (vs. Load Current) |6 |
| 図6(Fig.6):起動時間特性(入力電圧に対して) Start-Up Time Characteristics (vs. Input Voltage) |6 |
| 図7(Fig.7):入力瞬断時間(負荷率に対して) Holduptime Characteristics (vs. Load Rate) |7 |
| 図8(Fig.8):突入電流波形 Inrush Current Waveform |7 |
| 図9(Fig.9):雑音端子電圧波形(Vin=100V) Conduction Noise Waveform(Vin=100V) |7 |
| 図10(Fig.10):雑音端子電圧波形(Vin=240V) Conduction Noise Waveform(Vin=240V) |8 |
| 試験回路図 : Test Circuit |9 |

Model: C300

| | | |
|--------------------------|------|------|
| 入力電圧 Input Voltage | MIN | 85V |
| | NOM | 100V |
| | | 240V |
| MAX | 264V | |

| | | | | | |
|----------------------|-----|-----|--|--|--|
| 出力 Output Circuit | | | | | |
| 負荷電流 Load Current | MIN | --- | | | |
| | NOM | --- | | | |
| | MAX | --- | | | |
| | | | | | |

1.入力特性 Input Characteristics

Ta=25°C

| 試験項目 Test Item | 条件 Condition | | 試験結果 Test Results | | | 仕様 SPEC | 備考 Remarks |
|-------------------------|-----------------|------------|-----------------------|----------|---------------------|---------------|---------------|
| | 入力 Vin | 負荷 Load | Vin=100V | Vin=240V | | | |
| | | | 入力電流 Input Current | NOM | NOM | 3.1A | 1.5A |
| 入力電力 Input Power | NOM | NOM | 310W | 360W | | --- | --- |
| 力率 Power Factor | NOM | NOM | 0.994 | 0.986 | | --- | 図2 Fig.2 |
| 効率 Efficiency | NOM | NOM | 82.6% | 85.5% | | --- | 図3 Fig.3 |
| 突入電流 Inrush Current | NOM | NOM | 12A | 29A | | 20/40A | 図4 Fig.4 |
| 漏洩電流 Leakage Current | NOM | NOM | 0.03mA | 0.10mA | R=1.5kΩ · C=0.15μ F | 0.30mA/0.50mA | 図5 Fig.5 |
| 入力瞬断時間 Hold up time | --- | NOM | | | 74ms · (Ta=25°C) | 10ms | 図7 Fig.7 |

2.環境試験 Environment Test

Ta=25°C

| 試験項目 Test Item | 条件 Condition | | 試験結果 Test Results | 仕様 SPEC | 備考 Remarks |
|--|-----------------|------------|--|---|---------------|
| | 入力 Vin | 負荷 Load | | | |
| 振動試験(非動作時) Vibration (Non-Operating) | --- | --- | 周波数10Hz~55Hz,周期3分,加速度2G X・Y・Z方向に各60分,にて試験後外観・特性に問題なし Frequency 10~55Hz, Sweep cycle 3min., Acceleration 19.6m/s ² , Direction X/Y/Z 60 minutes par each axis | 正常に起動 Normal Operation | -- |
| 高温スタート Power on at high temp | NOM | MAX | POW OFFにて65°Cに1時間放置後POWER ON Left the power supply at 65°Cfor one hour and turned on. | 正常に起動 Normal Operation | -- |
| 低温スタート Power on at low temp | NOM | MAX | POW OFFにて-15°Cに1時間放置後POWER ON Left the power supply at -15°Cfor one hour and turned on. | 正常に起動 Normal Operation | -- |
| 耐衝撃 Shock | --- | --- | 床面から50mmの高さより各辺3回自然落下後 外観・特性に問題なし 98m/s ² . Conduct this test on an oak board with a flat surface and a thickness of 10mm or more. Lift one side of surface of the unit 50mm and drop it on the board. Drop 3 times for each side. | 98m/s ² 正常に起動 Normal Operation | -- |

3.耐ノイズ特性 Noise Tolerance Characteristics

Ta=25°C

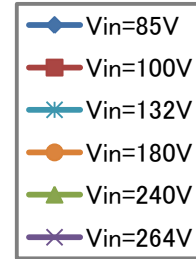
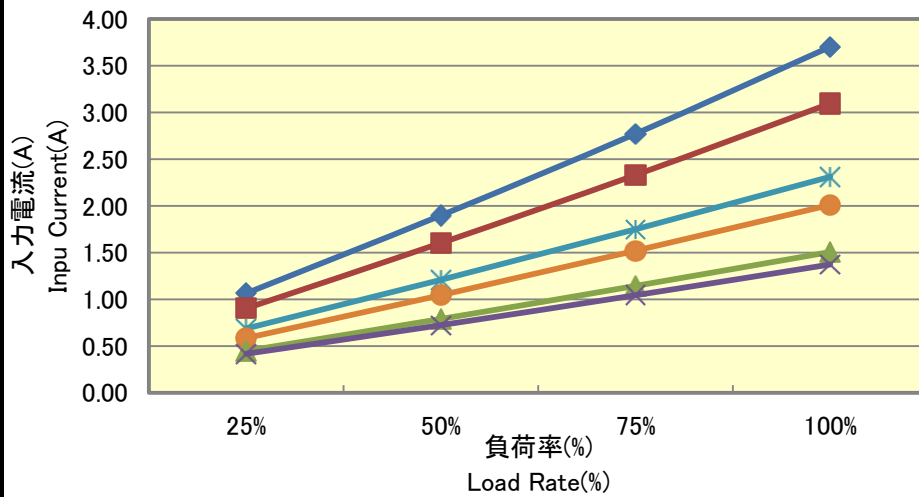
| 試験項目 Test Item | 条件 Condition | | 試験結果 Test Results | 仕様 SPEC | 備考 Remarks |
|---|-----------------|-----------------|--------------------------|------------|---------------|
| | 入力 Vin | 負荷 Load | | | |
| 注入ノイズ耐量 ACLineNoise (50ns~1000ns) | MIN | MIN | LINE-LINE ±2.2kV OK | L-L;2.0KV | --- |
| | MAX | MAX | LINE-FG ±2.2kV OK | L-FG;2.0KV | |
| 雷サージ耐量 LightningSurge (1.2×50μ S) | NOM | MIN | LINE-LINE ±2.4kV OK | L-L;2.0KV | --- |
| | | MAX | LINE-FG ±2.4kV OK | L-FG;2.0KV | |
| 静電気耐量ESD | MIN ~ MAX | MIN ~ MAX | ±8.4kV OK R=330Ω C=150pF | 6.0kV | --- |

4.その他の特性 Other Characteristics

Ta=25°C

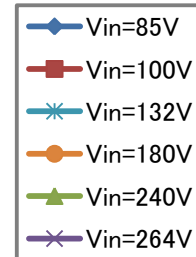
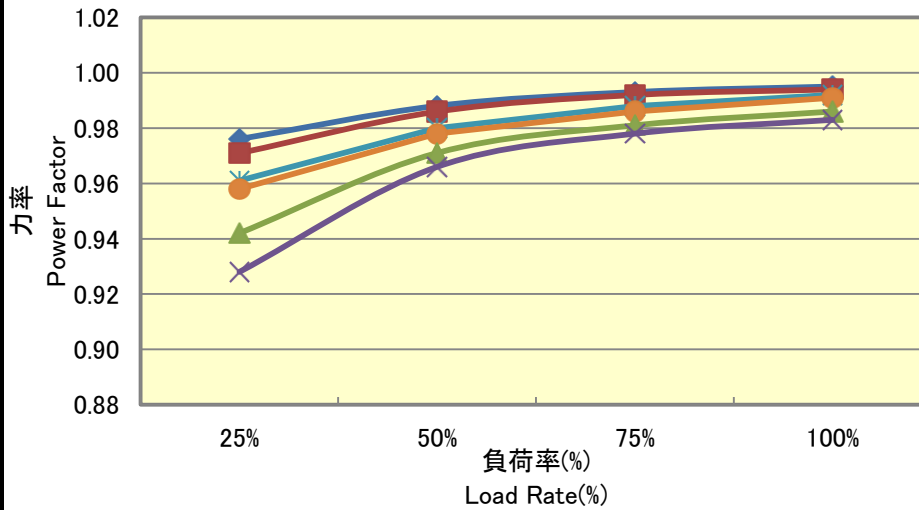
| 試験項目 Test Item | 条件 Condition | | 試験結果 Test Results | 仕様 SPEC | 備考 Remarks | | |
|-------------------------------|-----------------|------------|--|--|--|---|----|
| | 入力 Vin | 負荷 Load | | | | | |
| 絶縁耐圧 Withstand Voltage | --- | --- | P-S 4.0kV (漏電流) Leakage Current 2.29mA | P-E 2.4kV (漏電流) Leakage Current 1.65mA | S-E 0.6kV (漏電流) Leakage Current 1.71mA | P-S:4.0kV 1m P-E:2.0kV 1m, 2.4kV 1s S-E:500V 1m, 600V 1s (漏電流15mA以下) Leakage Current 15mA or less | -- |
| 絶縁抵抗 Insulation Resistance | --- | --- | P-S1000MΩ 以上 (or more) | P-E1000MΩ 以上 (or more) | S-E1000MΩ 以上 (or more) | P-S 100MΩ 以上(DC500V μ g ⁻¹) P-S50MΩ or more (DC500VMegger) | -- |

図1 入力電流特性(負荷率に対して)
Fig.1 Input Current Characteristics (vs. Load Rate)



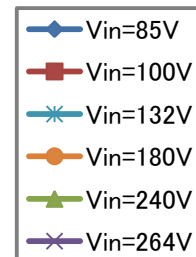
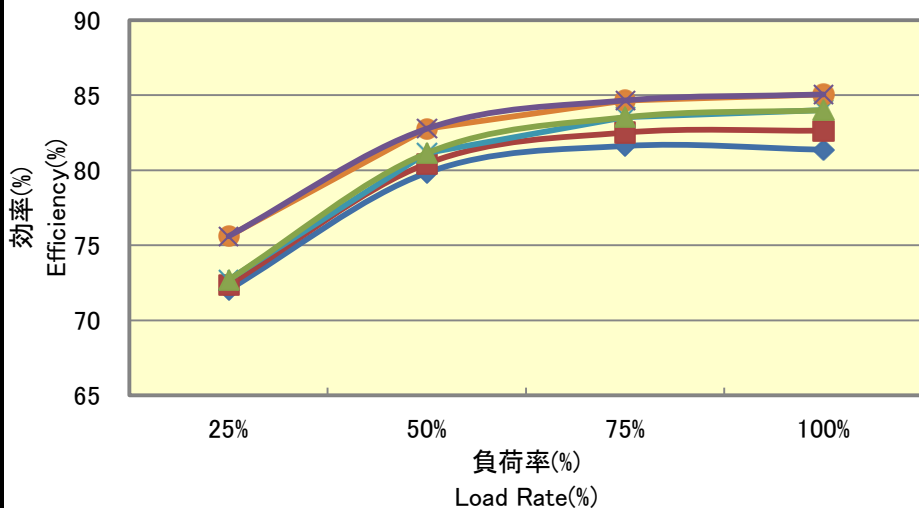
| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | AC85~264V |
| 出力:Output | 250W @85~132V 300W @180~264V |
| 温度:Temperature | 25°C |
| 備考:Remarks | DCセルモジュール構成 Formation of DC cell module |
| | C150S05 C150S12 C130X24 C130X24 |

図2 力率特性(負荷率に対して)
Fig.2 Power Factor Characteristics (vs. Load Rate)



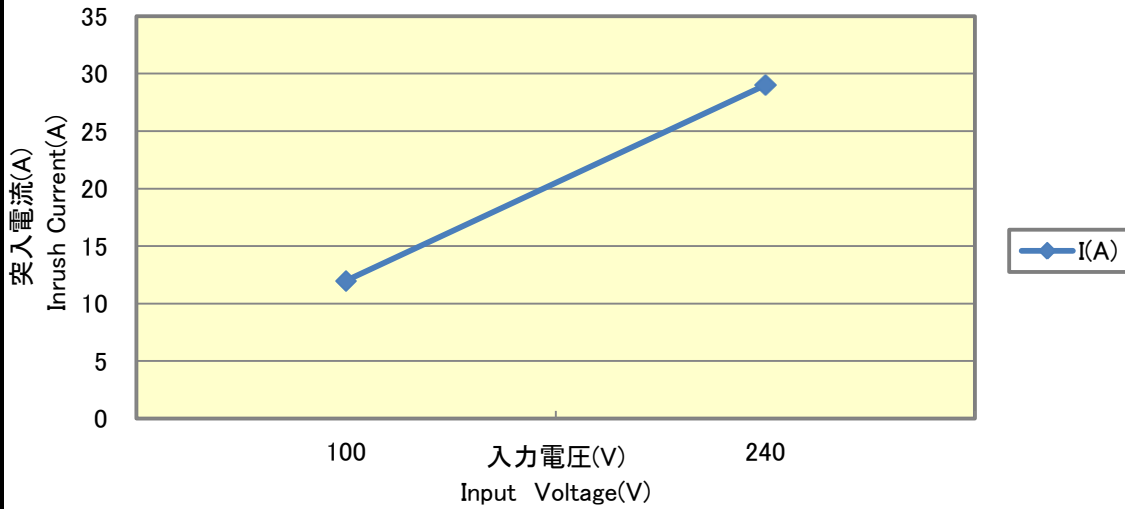
| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | AC85~264V |
| 出力:Output | 250W @85~132V 300W @180~264V |
| 温度:Temperature | 25°C |
| 備考:Remarks | DCセルモジュール構成 Formation of DC cell module |
| | C150S05 C150S12 C130X24 C130X24 |

図3 効率特性(負荷率に対して)
Fig.3 Efficiency Characteristics (vs. Load Rate)



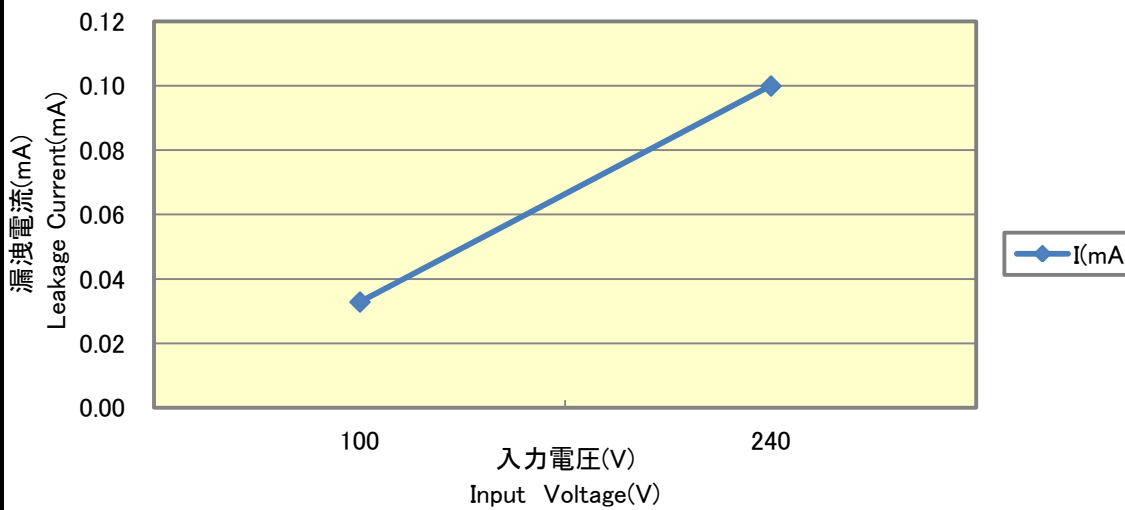
| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | AC85~264V |
| 出力:Output | 250W @85~132V 300W @180~264V |
| 温度:Temperature | 25°C |
| 備考:Remarks | DCセルモジュール構成 Formation of DC cell module |
| | C150S05 C150S12 C130X24 C130X24 |

図4 突入電流特性(入力電圧に対して)
Fig.4 Inrush Current Characteristics (vs. Input Voltage)



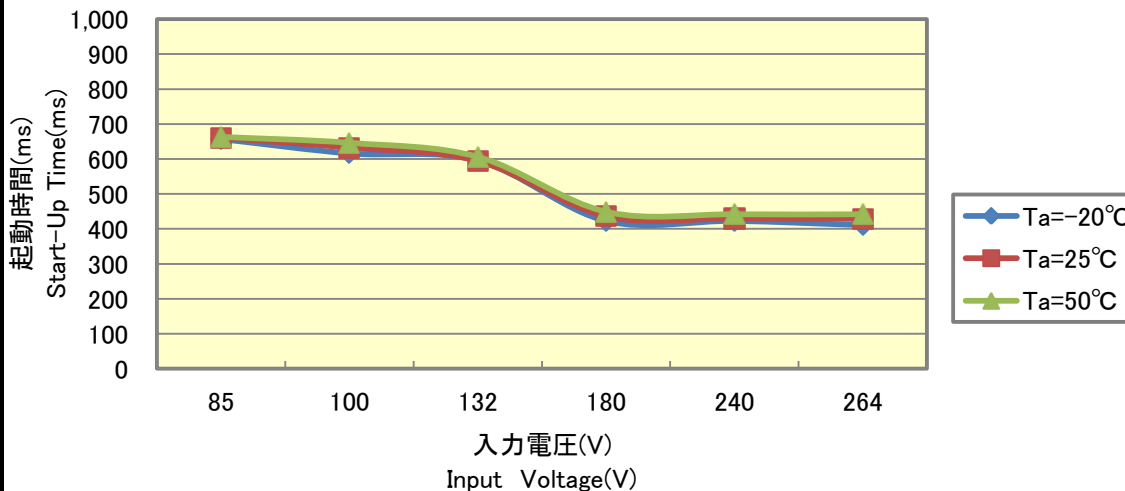
| |
|---|
| 型名:Model C300 |
| 入力:Input AC100~240V |
| 出力:Output 250W @120V 300W @240V |
| 温度:Temperature 25°C |
| 備考:Remarks コールドスタート時 Cold Start |

図5 漏洩電流特性(入力電圧に対して)
Fig.5 Leakage Current Characteristics (vs. Load Current)



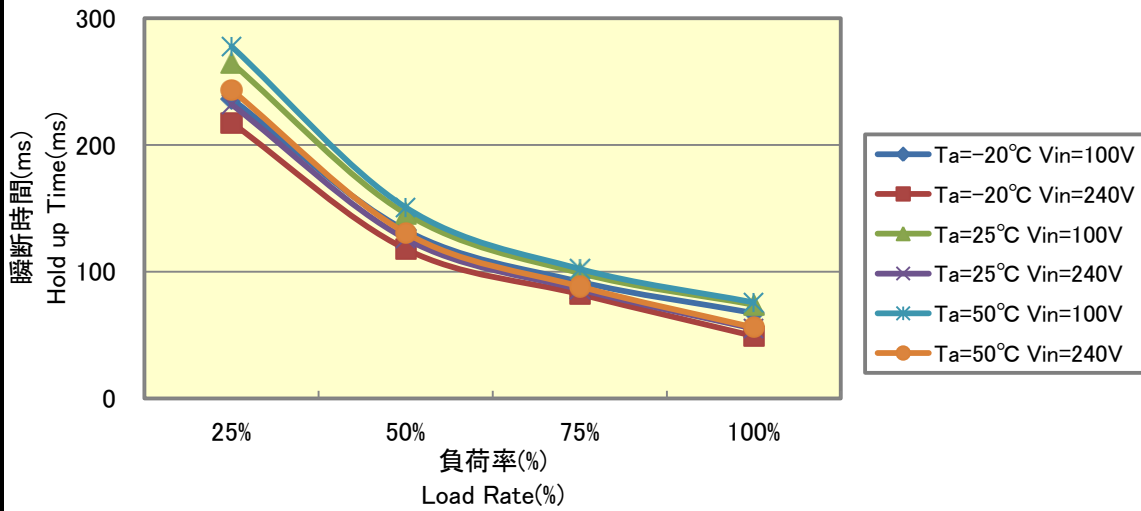
| |
|--|
| 型名:Model C300 |
| 入力:Input AC100~240V |
| 出力:Output 250W @100V 300W @240V |
| 温度:Temperature 25°C |
| 備考:Remarks R=1.5kΩ C=0.15μ F |

図6 起動時間特性(入力電圧に対して)
Fig.6 Start-Up Time Characteristics (vs. Input Voltage)



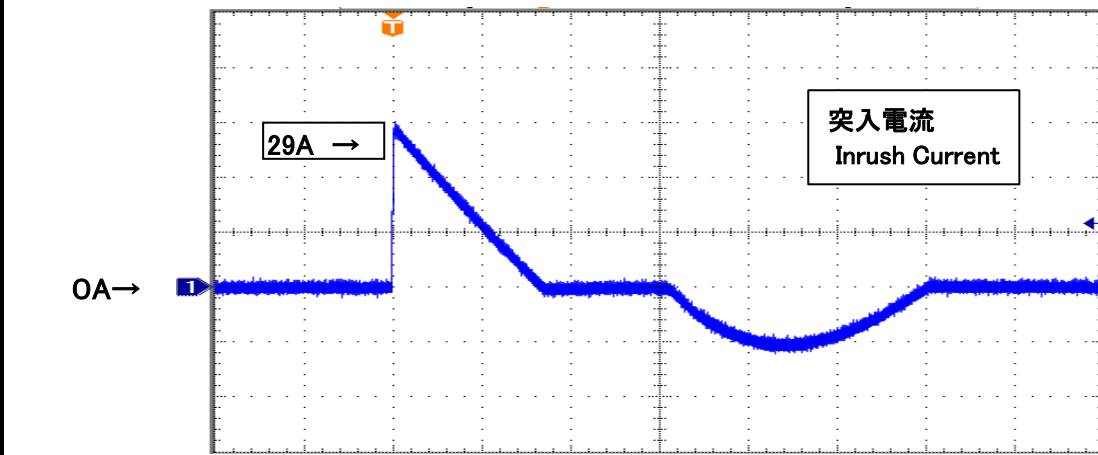
| |
|---|
| 型名:Model C300 |
| 入力:Input AC85~264V |
| 出力:Output 250W @85~132V 300W @180~264V |
| 温度:Temperature Ta=-20~Ta=50 |
| 備考:Remarks DCセルモジュール構 成 Formation of DC cell module C150S05 C150S12 C130X24 C130X24 |

図7 入力瞬断時間(負荷率に対して)
Fig.7 Hold up time Characteristics (vs. Load Rate)



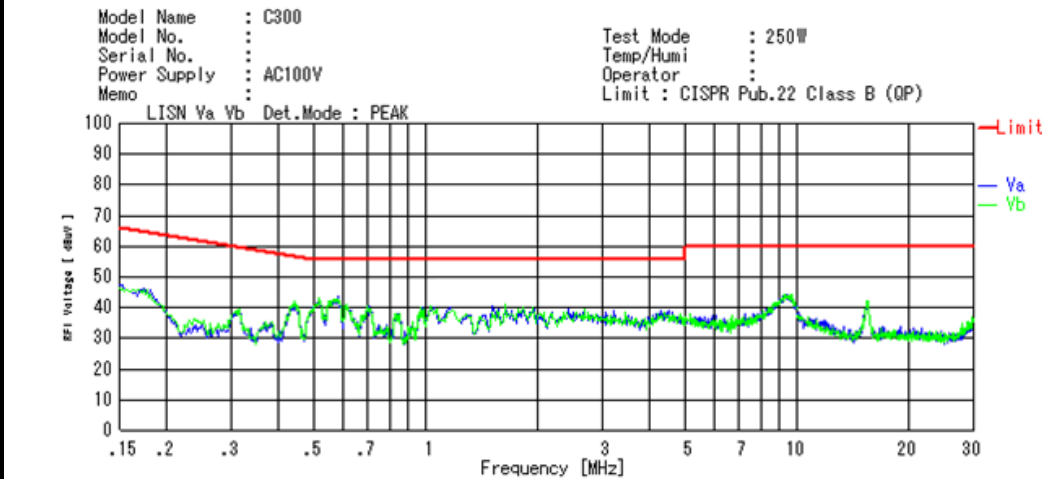
| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | AC100~240V |
| 出力:Output | 250W @100V 300W @240V |
| 温度:Temperature | Ta=-20~Ta=50 |
| 備考:Remarks | DCセルモジュール構成 Formation of DC cell module C150S05 C150S12 C130X24 C130X24 |

図8 突入電流波形
Fig.8 Inrush Current Waveform



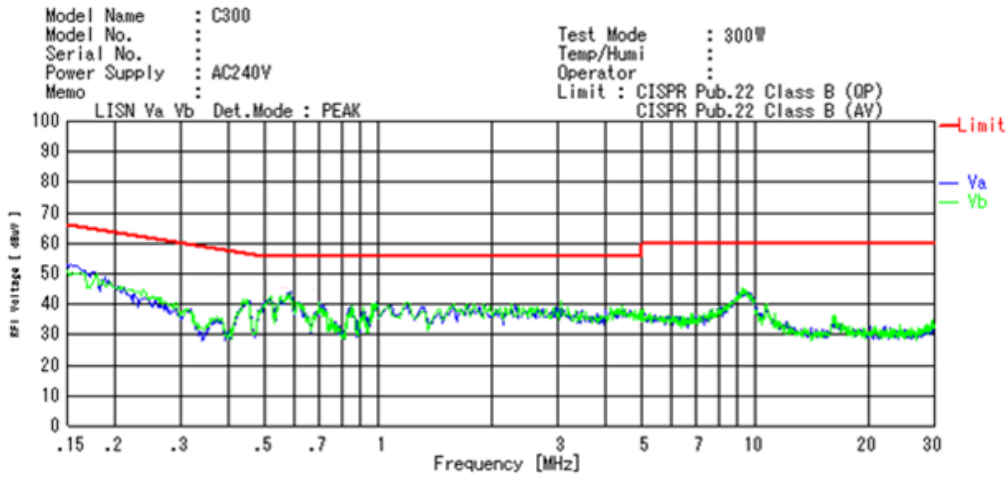
| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | Vin=240V |
| 出力:Output | 300W |
| 温度:Temperature | Ta=25°C |
| 備考:Remarks | 出力電圧 InrushCurrenteVertical: 10A/div 時間 TimeHorizontal: 2ms/div |

図9 雑音端子電圧波形
Fig.9 Conduction Noise Waveform



| | |
|----------------|--|
| 型名:Model | C300 |
| 入力:Input | Vin=100V |
| 出力:Output | 250W |
| 温度:Temperature | Ta=25°C |
| 備考:Remarks | DCセルモジュール構成 Formation of DC cell module C150S05 C150S12 C130X24 C130X24 |

図10 雑音端子電圧
Fig.10 Conduction Noise Waveform



型名:Model
C300

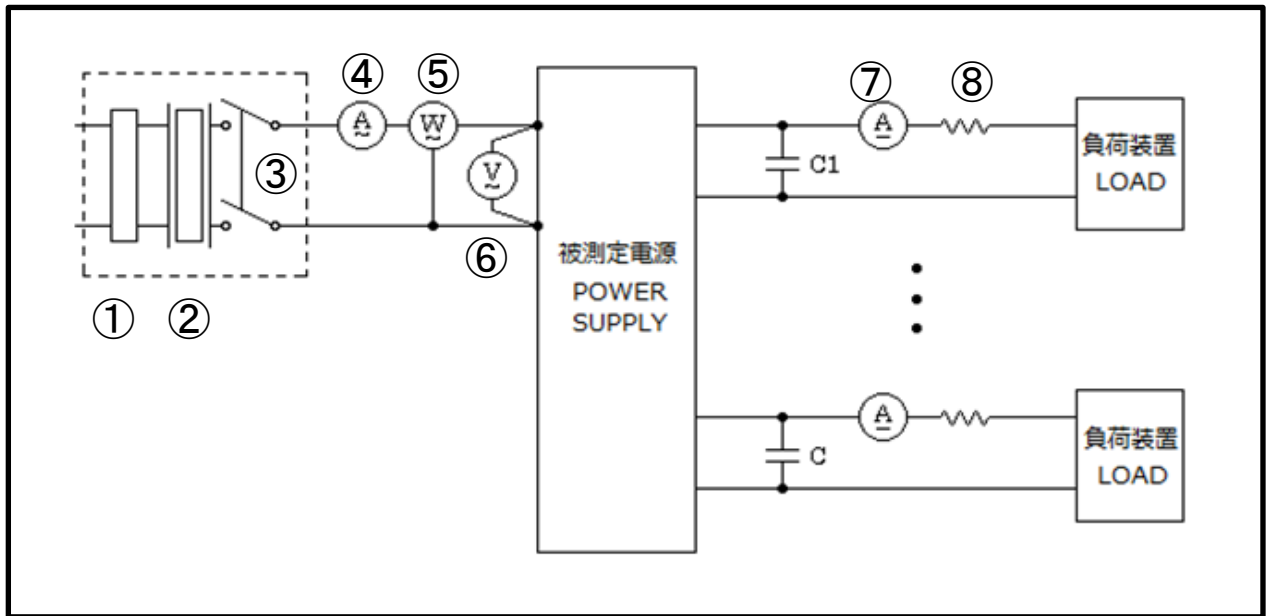
入力:Input
Vin=240V

出力:Output
300W

温度:Temperature
Ta=25°C

備考:Remarks
DCセルモジュール構
成
Formation of DC cell
module
C150S05
C150S12
C130X24
C130X24

試験回路図 Test Circuit



使用計測機器

- ①スライダック
- ②絶縁トランス
- ③ブレーカー
- ④電流計
- ⑤電力計
- ⑥電圧計
- ⑦電流計
- ⑧シャント抵抗

- Measuring instruments
- Variable autotransformer
- Isolation transformer
- A circuit breaker
- Ammeter
- Wattmeter
- Voltmeter
- Ammeter
- Shunt resistor

2次側出力電圧はDMMで測定
Output voltage is measured with DMM

- 負荷コンデンサ Load capacitor
- Circuit C1: Electrolytic Capacitor 47 μ F
- Film Capacitor 0.1 μ F