

## SPECIFICATIONS

No. ISM1280C

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Checked by

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SWITCHING POWER SUPPLY

TYPE PS5R-VG24

-Output Voltage

UL508(UL Listing) 1. Applicable standard

CSA C22.2 No 107.1,

EN50178,IEC/EN60950-1,EN62477-1,IEC/EN62368-1 (TUV Approved)

ANSI/ISA 12.12.01

SELV(EN60950-1,EN62368-1)

2. EMC applicable

(1) EMI EN 61204-3 (Class B) (2) EMS EN61204-3 (industrial)

3. Operating conditions

(1) Operating temperature -25 to +65°C (See derating characteristics, No freezing)

(2) Storage temperature -25 to +75°C (No freezing) (3) Operating humidity 20 to 90%RH (No condensation)

(4) Altitude Operation:2000m maximum, Transport:3000m maximum

(5) Pollution degree 2

4. Constructions

(1) Outside view See attached sheet.

(2) Degree of protection IP20

(3) Over current protection 105% minimum (auto reset)

(4) Operation indicator LED (Green) (5) Body case color Dark gray (6) Body terminal style M3.5

(7) Weight Approx. 960g

5. Characteristics

5. 1 Input

(1) Input voltage(1-phase,2-wire) 100 to 240V AC(Voltage range: 85 to 264V AC/100 to 370V DC)

> (At less than 100V AC, the derating is 1.3%/V At less than 140V DC, the derating is 0.5%/V) \*DC input voltage is not subject to safety standards.

(2) Frequency 50/60Hz

(3) Input current 100V AC: 2.7A typ.(At rated output)

230V AC: 1.2A typ. (At rated output)

14A typ. (Ta=25°C at cold start,100V AC) (4) Inrush current

30A typ. (Ta=25°C at cold start,230V AC)

120V AC: 0.5mA maximum, 230V AC: 1.0mA maximum (5) Leakage current

(6) Efficiency (Typ.) 100V AC:89%(at rated output)

230V AC:90%(at rated output)

5. 2 Output

(1) Output voltage-24V DC 10.0A (2) Output current

**IDEC CORPORATION** 

(3) Adjustable voltage range

±10%

(4) Output holding time

100V AC 30ms typ. (at rated output) 230V AC 40ms typ. (at rated output)

(5) Rise time

200ms maximum (at rated input and output)

Start-up time

100V AC: 800ms maximum (at rated output) 230V AC: 800ms maximum (at rated output)

(7) Regulation

(a) Input fluctuation 0.4% maximum (b) Load fluctuation 1.0% maximum

(c) Temperature change

0.05% °C maximum (-25 to +50°C)

(d) Ripple voltage (including noise)

 $1.0\%_{P-P}$  maximum (0 to +50°C),

 $1.5\%_{P-P}$  maximum (-10 to  $0^{\circ}$ C)

4.0%<sub>P-P</sub> maximum (-25 to -10°C)

## 6. Characteristics

(1) Dielectric strength

(a) Between input and output terminals

3000V AC,1 minute (detected current 25mA) 2000V AC,1 minute (detected current 25mA)

(b) Between input and ground terminals (c) Between output and ground terminals

500V AC,1 minute (detected current 100mA)

(2) Insulation resistance

(a) Between input and output terminals

(b) Between input and ground terminals

 $100M\Omega$  minimum (500V DC megger)

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(3) Vibration resistance

10 to 55Hz, Amplitude 0.375mm 2 hours each in 3 axes(with BNL6)

(4) Shock resistance

300 m/s<sup>2</sup>, 3 shocks each in 6 axes

(5) Overvoltage Category

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## ☐ Output current vs. Operating temperature characteristics



















