# KWS15 Specifications

*NEMIC-LAMBDA*

*: For delivery, contact to our sales office.

PA768-01-01A

| | ITEMS \ MODEL | | | KWS15-5 | KWS15-12 | KWS15-15 |
|---|---|---|---|---|---|---|
| 1 | Nominal Output Voltage | | V | 5 | 12 | 15 |
| 2 | Minimum Output Current | | A | 0 | 0 | 0 |
| 3 | Maximum Output Current | | A | 3.0 | 1.3 | 1 |
| 4 | Maximum Output Power | | W | 15.0 | 15.6 | 15 |
| 5 | Efficiency (typ) | (*1) | % | 74 | 77 | 77 |
| 6 | Input Voltage Range | (*2) | - | 85 ~ 265VAC ( 47~440Hz ) or 110 ~ 340VDC | | |
| 7 | Input Current (typ) | (*1) | A | 0.4A at 100VAC | | |
| 8 | Inrush Current (typ) | | A | 20A at 100VAC, 40A at 200VAC | | |
| 9 | Output Voltage Range | | - | FIXED ±5% (Max) | | |
| 10 | Maximum Ripple & Noise | (*3) | mV | 120 | 150 | 150 |
| 11 | Maximum Line Regulation | (*3,*4) | mV | 20 | 48 | 60 |
| 12 | Maximum Load Regulation | (*3,*5) | mV | 40 | 96 | 120 |
| 13 | Maximum Temperature Drift | (*3,*6) | mV | 50 | 120 | 150 |
| 14 | Over Current Protection | (*7) | - | 105% ~ | | |
| 15 | Over Voltage Protection | (*8) | - | 110% ~ | | |
| 16 | Parallel Operation | | - | ——— | | |
| 17 | Series Operation | | - | Possible | | |
| 18 | Hold-Up Time (typ) | | - | 17mS at 15W, 100VAC, Ta = 25°C | | |
| 19 | Operating Temperature | | - | -10°C ~ +70°C ( -10°C : 80%, 0~+50°C : 100%, +70°C : 25%) | | |
| 20 | Operating Humidity | | - | 30 ~ 90%RH (No dewdrop) | | |
| 21 | Storage Temperature | | - | -30 ~ +85°C | | |
| 22 | Storage Humidity | | - | 20%RH ~ 95%RH (No dewdrop) | | |
| 23 | Cooling | | - | Convection Cooling | | |
| 24 | Withstand Voltage | | - | Input-Output : 3kVAC (20mA), Input-FG : 2kVAC (20mA)<br>Output-FG : 500VAC(100mA) for 1minute each. | | |
| 25 | Isolation Resistance | | - | More than100MΩ at 25°C and 70%RH Output-FG 500VDC | | |
| 26 | Vibration | | - | 10~55Hz, Constant Amplitude 1.65mm p-p (Max 10G),<br>sweep 1 Minute X,Y,Z 1 hour each | | |
| 27 | Shock | | - | Less than 50G for 11±5mS on ± (X, Y, Z) axis each 3 times | | |
| 28 | Safety | | - | Approved by UL1950, CSA950, EN60950 | | |
| 29 | Conducted Radio Noise | (*9) | - | Built to meet VCCI-Class A, FCC-class B, VDE-classB | | |
| 30 | Weight | | g | 150g | | |
| 31 | Size (WxHxD) | | mm | 48 x 23.5 x 70 (Refer to Outline Drawing) | | |

* Read Instruction manual carefully, before using the power supply unit.

= NOTES =

*1. At 100VAC and Maximum Output Power, Ta=25C.

*2. For cases where conformance to various safety specs (UL, CSA & TUV) are required to be described as 100-240VAC, 50/60Hz on name plate.

*3. Please refer to Fig. A for measurement determination of line & load regulation and output ripple & noise voltage.

*4. From 85~265VAC, constant load.

*5. From Min load - Full load (Maximum power), constant input Voltage.

*6. From 0~50°C, constant input voltage and load.

*7. Current limiting with automatic recovery. Avoid to operate over load or dead short for more than 30seconds.

*8. Over Voltage Clamping by Zener Diode.

*9. VDE class-B with external capacitor.

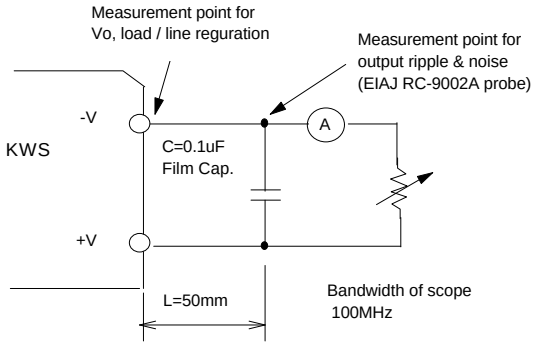


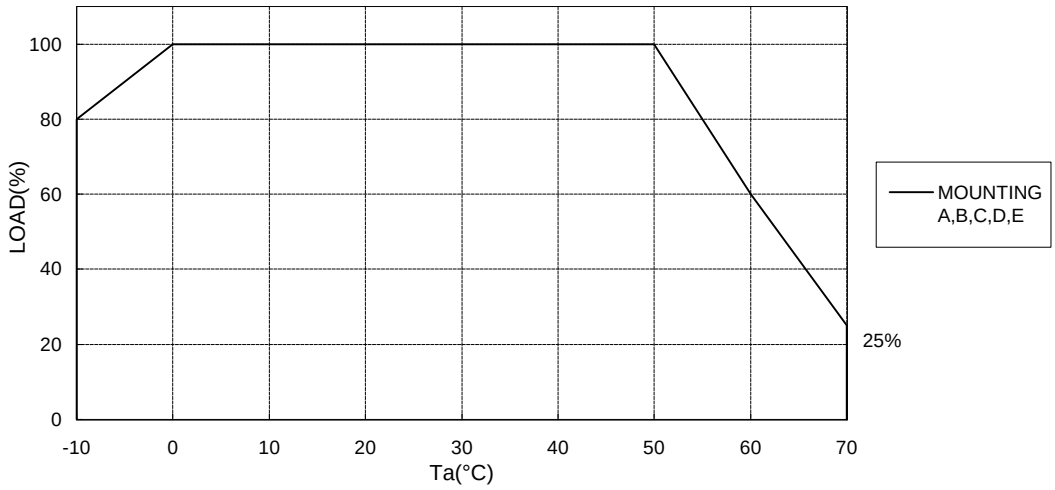

Fig.A

# KWS15 OUTPUT DERATING

*NEMIC-LAMBDA*

| Ta (°C) | LOAD (%) | | | | |
|---|---|---|---|---|---|
| | MOUNTING : A | MOUNTING : B | MOUNTING : C | MOUNTING : D | MOUNTING : E |
| -10 | 80 | 80 | 80 | 80 | 80 |
| 0 ~ +20 | 100 | 100 | 100 | 100 | 100 |
| 25 | 100 | 100 | 100 | 100 | 100 |
| 40 | 100 | 100 | 100 | 100 | 100 |
| 50 | 100 | 100 | 100 | 100 | 100 |
| 60 | 60 | 60 | 60 | 60 | 60 |
| 70 | 25 | 25 | 25 | 25 | 25 |

**OUTPUT DERATING CURVE**




MOUNTING : A (STANDARD MOUNTING) | MOUNTING : B | MOUNTING : C | MOUNTING : D | MOUNTING : E