


GEN-2U 3300W

RELIABILITY DATA

DWG: IA626-79-01		
APPD	CHK	DWG
Alex Gu Nov-12-06	Alex Gu Nov-12-06	 12/11/06



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The above data is typical value. As all units have nearly the same characteristics, the data to be considered as ability value.

M.T.B.F.

MODEL: GEN8-400-1P230

1. Method of calculation according to EIAJ (RCR-9102) based on part count reliability projection of MIL-HDBK-217F. Individual failure rates is given to each part and M.T.B.F. is calculated by the count of each part.

$$\begin{aligned} \text{MTBF} &= \frac{1}{\lambda_{\text{equip}}} = \\ &= \frac{1}{\sum_{i=1}^n N_i (\lambda_G \pi_{Q_i})} \times 10^6 \text{ (Hours)} \end{aligned}$$

Where:

λ_{equip} = Total Equipment Failure Rate (Failures / 10^6 Hours)

λ_G = Generic Failure Rate For The ith Generic Part (Failure / 10^6 Hours)

N_i = Quantity of ith Generic Part

n = Number of Different Generic Part Categories

π_Q = Generic Quality factor for the ith Generic Part ($\pi_Q = 1$)

2.M.T.B.F. Values

G_F (GROUND, FIXED)

$$\underline{\text{M.T.B.F.} = 43195 \text{ (HOURS)}}$$

2.COMPONENTS DERATING

GEN3300 SERIES

(1) Calculation method

(a) Conditions

Input:	Nominal
Output:	Vout - 100%, Iout - 100%
Ambient temperature:	50°C
Mounting Method:	Standard Mounting

(b) Semiconductors

Compared with maximum junction temperature and actual one which is calculated on case temperature, power dissipation and thermal impedance.

(c) IC, Resistors, Capacitors, etc.

Ambient temperature, operating conditions, power dissipation and so on are within derating criteria.

(d) Calculation method of thermal impedance:

$$\Theta_{j-c} = \frac{T_j(\max) - T_c}{P_c(\max)}$$

$$\Theta_{j-a} = \frac{T_j(\max) - T_a}{P_c(\max)}$$

$$\Theta_{j-l} = \frac{T_j(\max) - T_l}{P_c(\max)}$$

T_c: Case Temperature at Start Point of Derating; 25°C in General

T_a: Ambient Temperature at Start Point of Derating; 25°C in General

P_c(max): Maximum Power Dissipation

T_j(max): Maximum Junction temperature

Θ_{j-c}: Thermal Impedance between Junction and Case

Θ_{j-a}: Thermal Impedance between Junction and Air

Θ_{j-l}: Thermal Impedance between Junction and Lead

Vin = 230Vac

Load = 100%

Ta=50°C

INPUT 1-PHASE 200V

D301	Tjmax= 150 °C	$\theta_{j-c} = 1.0$ °C/W	Pmax = 60.0 W
D25XB60-7000	Pd = 12.5 W	$\Delta T_c = 29.5$ °C	Tc = 79.5 °C
SHINDENGEN	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 92.0 °C	D.F. = 61.3 %
D302	Tjmax= 150 °C	$\theta_{j-c} = 1.0$ °C/W	Pmax = 60.0 W
D25XB60-7000	Pd = 12.5 W	$\Delta T_c = 33.6$ °C	Tc = 83.6 °C
SHINDENGEN	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 96.1 °C	D.F. = 64.1 %

Vin = 208Vac

Load = 100%

Ta=50°C

INPUT 3-PHASE 200V

D321	Tjmax= 150 °C	$\theta_{j-c} = 1.0$ °C/W	Pmax = 60.0 W
D25XB60-7000	Pd = 12.5 W	$\Delta T_c = 35.8$ °C	Tc = 85.8 °C
SHINDENGEN	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 98.3 °C	D.F. = 65.5 %
D322	Tjmax= 150 °C	$\theta_{j-c} = 1.0$ °C/W	Pmax = 60.0 W
D25XB60-7000	Pd = 12.5 W	$\Delta T_c = 40.0$ °C	Tc = 90.0 °C
SHINDENGEN	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 102.5 °C	D.F. = 68.3 %

Vin = 400Vac

Load = 100%

Ta=50°C

INPUT 3-PHASE 400V

D651	Tjmax= 150 °C	$\theta_{j-c} = 0.5$ °C/W	Pmax = --- W
D45XT160	Pd = 12.8 W	$\Delta T_c = 15.0$ °C	Tc = 65.0 °C
SHINDENGEN	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 71.4 °C	D.F. = 47.6 %
Q653	Tjmax= 125 °C	$\theta_{j-c} = 0.9$ °C/W	Pmax = 50.0 W
BTW69-1200	Pd = 11 W	$\Delta T_c = 19.7$ °C	Tc = 69.7 °C
ST	$T_j = T_c + (\theta_{j-c} \times Pd) \Rightarrow$	Tj = 79.6 °C	D.F. = 63.7 %

Vin = 230Vac

Load = 100%

Ta=50°C

PFC BOOST

A601 E-L4981AD ST	Tjmax= 150 °C Pd = 0.23 W Tj = Ta + (θj-a x Pd) =>	θj-a = 120.0 °C/W ΔTc = 33.6 °C Tj = 111.2 °C	Pmax = 0.6 W Tc = 83.6 °C D.F. = 74.1 %
D601 U05NU44(TE12L,Q) TOSHIBA	Tjmax= 150 °C Pd = 0.1 W Tj = Ta + (θj-a x Pd) =>	θj-a = 105.0 °C/W ΔTc = 38.4 °C Tj = 98.9 °C	Pmax = 0.8 W Tc = 88.4 °C D.F. = 65.9 %
D604 STTH806DTI ST	Tjmax= 150 °C Pd = 6.3 W Tj = Tc + (θj-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 42.6 °C Tj = 109.0 °C	Pmax = --- W Tc = 92.6 °C D.F. = 72.7 %
D605 STTH806DTI ST	Tjmax= 150 °C Pd = 6.3 W Tj = Tc + (θj-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 43.1 °C Tj = 109.5 °C	Pmax = --- W Tc = 93.1 °C D.F. = 73.0 %
D607 STTH806DTI ST	Tjmax= 150 °C Pd = 6.3 W Tj = Tc + (θj-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 37.8 °C Tj = 104.2 °C	Pmax = --- W Tc = 87.8 °C D.F. = 69.5 %
D610 STTH806DTI ST	Tjmax= 150 °C Pd = 6.3 W Tj = Tc + (θj-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 30.6 °C Tj = 97.0 °C	Pmax = --- W Tc = 80.6 °C D.F. = 64.7 %
D612 U05NU44(TE12L,Q) TOSHIBA	Tjmax= 150 °C Pd = 0.1 W Tj = Ta + (θj-a x Pd) =>	θj-a = 105.0 °C/W ΔTc = 25.6 °C Tj = 86.1 °C	Pmax = 0.8 W Tc = 75.6 °C D.F. = 57.4 %
Q601 2SD1624S/T-TD-E SANYO	Tjmax= 150 °C Pd = 0.01 W Tj = Ta + (θj-a x Pd) =>	θj-a = 250.0 °C/W ΔTc = 22.9 °C Tj = 75.4 °C	Pmax = 0.5 W Tc = 72.9 °C D.F. = 50.3 %
Q603 SPW32N50C3 INFINEON	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θj-c x Pd) =>	θj-c = 0.4 °C/W ΔTc = 27.6 °C Tj = 85.6 °C	Pmax = 284.0 W Tc = 77.6 °C D.F. = 57.0 %
Q604 SPW32N50C3 INFINEON	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θj-c x Pd) =>	θj-c = 0.4 °C/W ΔTc = 33.6 °C Tj = 91.6 °C	Pmax = 284.0 W Tc = 83.6 °C D.F. = 61.0 %
Q607 SPW32N50C3 INFINEON	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θj-c x Pd) =>	θj-c = 0.4 °C/W ΔTc = 33.6 °C Tj = 91.6 °C	Pmax = 284.0 W Tc = 83.6 °C D.F. = 61.0 %
Q608 SPW32N50C3 INFINEON	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θj-c x Pd) =>	θj-c = 0.4 °C/W ΔTc = 33.6 °C Tj = 91.6 °C	Pmax = 284.0 W Tc = 83.6 °C D.F. = 61.0 %

Vin = 400Vac

Load = 100%

Ta=50°C

PFC BUCK

A701 E-L4981AD ST	Tjmax= 150 °C Pd = 0.23 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 120.0 °C/W ΔTc = 34.2 °C Tj = 111.8 °C	Pmax = 0.6 W Tc = 84.2 °C D.F. = 74.5 %
A704 UPC24M18AHF-AZ NEC	Tjmax= 150 °C Pd = 0.9 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 7.0 °C/W ΔTc = 16.2 °C Tj = 72.5 °C	Pmax = 15.0 W Tc = 66.2 °C D.F. = 48.3 %
D701 S1NB60-7101 SHINDENGEN	Tjmax= 150 °C Pd = 0.15 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 68.0 °C/W ΔTc = 15.1 °C Tj = 75.3 °C	Pmax = 2.5 W Tc = 65.1 °C D.F. = 50.2 %
D703 STTH806DTI ST	Tjmax= 150 °C Pd = 6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 33.2 °C Tj = 98.8 °C	Pmax = --- W Tc = 83.2 °C D.F. = 65.9 %
D704 STTH806DTI ST	Tjmax= 150 °C Pd = 6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 39.3 °C Tj = 104.9 °C	Pmax = --- W Tc = 89.3 °C D.F. = 69.9 %
D707 STTH806DTI ST	Tjmax= 150 °C Pd = 6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 37.2 °C Tj = 102.8 °C	Pmax = --- W Tc = 87.2 °C D.F. = 68.5 %
D708 STTH806DTI ST	Tjmax= 150 °C Pd = 6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 2.6 °C/W ΔTc = 35.9 °C Tj = 101.5 °C	Pmax = --- W Tc = 85.9 °C D.F. = 67.7 %
Q701 2SK2488-A NEC	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 49.9 °C Tj = 115.0 °C	Pmax = 150.0 W Tc = 99.9 °C D.F. = 76.7 %
Q702 2SK2488-A NEC	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 47.1 °C Tj = 112.2 °C	Pmax = 150.0 W Tc = 97.1 °C D.F. = 74.8 %
Q703 2SK2488-A NEC	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 47.8 °C Tj = 112.9 °C	Pmax = 150.0 W Tc = 97.8 °C D.F. = 75.3 %
Q707 2SK2488-A NEC	Tjmax= 150 °C Pd = 18.1 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 43.4 °C Tj = 108.5 °C	Pmax = 150.0 W Tc = 93.4 °C D.F. = 72.3 %

Vin = 230Vac

Load = 100%

Ta=50°C

CONTROL BOARD

A101 UCC2806PWTRG4 TI	Tjmax= 150 °C Pd = 0.165 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 62.5 °C/W ΔTc = 29.0 °C Tj = 89.3 °C	Pmax = 1.0 W Tc = 79.0 °C D.F. = 59.5 %
A102 UCC2806PWTRG4 TI	Tjmax= 150 °C Pd = 0.165 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 62.5 °C/W ΔTc = 32.8 °C Tj = 93.1 °C	Pmax = 1.0 W Tc = 82.8 °C D.F. = 62.1 %
A114 OP2177ARZ ANALOG DEVICES	Tjmax= 125 °C Pd = 0.008 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 43.0 °C/W ΔTc = 32.0 °C Tj = 82.3 °C	Pmax = 0.5 W Tc = 82.0 °C D.F. = 65.9 %
A117 MAX489EESD+ MAXIM	Tjmax= 150 °C Pd = 0.0006 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 100.0 °C/W ΔTc = 27.8 °C Tj = 77.9 °C	Pmax = 0.8 W Tc = 77.8 °C D.F. = 51.9 %
A119 P89C51RD2FA PHILIPS	Tjmax= 150 °C Pd = 0.275 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 43.0 °C/W ΔTc = 29.5 °C Tj = 91.3 °C	Pmax = 1.5 W Tc = 79.5 °C D.F. = 60.9 %
A124 MC14013BDG ON SEMI	Tjmax= 150 °C Pd = 0.0002 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 143.0 °C/W ΔTc = 29.3 °C Tj = 79.3 °C	Pmax = 0.5 W Tc = 79.3 °C D.F. = 52.9 %
A128 ADR431ARZ ANALOG DEVICES	Tjmax= 150 °C Pd = 0.0053 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 43.0 °C/W ΔTc = 27.1 °C Tj = 77.3 °C	Pmax = 0.1 W Tc = 77.1 °C D.F. = 51.6 %
A132 AD7705BRZ ANALOG DEVICES	Tjmax= 150 °C Pd = 0.0065 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 75.0 °C/W ΔTc = 27.6 °C Tj = 78.1 °C	Pmax = 0.5 W Tc = 77.6 °C D.F. = 52.1 %
A135 SN74HC541DWRE4 TI	Tjmax= 150 °C Pd = 0.0011 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 58.0 °C/W ΔTc = 33.6 °C Tj = 83.7 °C	Pmax = 1.3 W Tc = 83.6 °C D.F. = 55.8 %

Vin = 230Vac

Load = 100%

Ta=50°C

BIAS

A403 UPC24A05HF-AZ NEC	Tjmax= 150 °C Pd = 1.59 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 5.0 °C/W ΔTc = 25.2 °C Tj = 83.2 °C	Pmax = 20.0 W Tc = 75.2 °C D.F. = 55.4 %
A405 LM78L15ACM NOPB NATIONAL	Tjmax= 150 °C Pd = 0.16 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 180.0 °C/W ΔTc = 23.3 °C Tj = 102.1 °C	Pmax = 0.75 W Tc = 73.3 °C D.F. = 68.1 %
A406 MIP0224SY MATSUSHITA	Tjmax= 150 °C Pd = 2.56 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 15.1 °C Tj = 72.8 °C	Pmax = --- W Tc = 65.1 °C D.F. = 48.5 %
A407 KA78R15CTU FAIRCHILD	Tjmax= 150 °C Pd = 1.6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 4.3 °C/W ΔTc = 31.3 °C Tj = 88.2 °C	Pmax = 15.0 W Tc = 81.3 °C D.F. = 58.8 %
A409 LM79L15ACM NOPB NATIONAL	Tjmax= 150 °C Pd = 0.08 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 180.0 °C/W ΔTc = 29.6 °C Tj = 94.0 °C	Pmax = 0.4 W Tc = 79.6 °C D.F. = 62.7 %
D405 D1FL20U-7063 SHINDENGEN	Tjmax= 150 °C Pd = 0.1 W Tj = Ta + (θ j-a x Pd) =>	θj-a = 157.0 °C/W ΔTc = 29.1 °C Tj = 94.8 °C	Pmax = 0.8 W Tc = 79.1 °C D.F. = 63.2 %
D407 S3L20U-5004P15 SHINDENGEN	Tjmax= 150 °C Pd = 1.3 W Tj = Tl + (θ j-l x Pd) =>	θj-l = 6.5 °C/W ΔTl = 49.1 °C Tj = 107.6 °C	Pmax = 1.6 W Tl = 99.1 °C D.F. = 71.7 %
D409 SFPB-56VMRP SANKEN	Tjmax= 150 °C Pd = 0.05 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 20.0 °C/W ΔTl = 19.6 °C Tj = 70.6 °C	Pmax = --- W Tc = 69.6 °C D.F. = 47.1 %
D412 SFPB-56VMRP SANKEN	Tjmax= 150 °C Pd = 0.05 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 20.0 °C/W ΔTl = 28.3 °C Tj = 79.3 °C	Pmax = --- W Tc = 78.3 °C D.F. = 52.9 %
Q409 (8V) 2SK2611(F) TOSHIBA	Tjmax= 150 °C Pd = 5.6 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 20.5 °C Tj = 75.2 °C	Pmax = 150.0 W Tc = 70.5 °C D.F. = 50.1 %
Q408 (60V) 2SK2611(F) TOSHIBA	Tjmax= 150 °C Pd = 6.8 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 40.0 °C Tj = 95.7 °C	Pmax = 150.0 W Tc = 90.0 °C D.F. = 63.8 %
Q408 (150V) 2SK2611(F) TOSHIBA	Tjmax= 150 °C Pd = 12.1 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 49.7 °C Tj = 109.8 °C	Pmax = 150.0 W Tc = 99.7 °C D.F. = 73.2 %
Q409 (600V) 2SK2611(F) TOSHIBA	Tjmax= 150 °C Pd = 13.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 59.3 °C Tj = 120.5 °C	Pmax = 150.0 W Tc = 109.3 °C D.F. = 80.4 %

Vin = 230Vac

Load = 100%

Ta=50°C

DC/DC-8V

Q501 2SK2372-A NEC	Tjmax= 150 °C Pd = 15.7 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 45.2 °C Tj = 107.4 °C	Pmax = 160.0 W Tc = 95.2 °C D.F. = 71.6 %
Q502 2SK2372-A NEC	Tjmax= 150 °C Pd = 15.7 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 37.5 °C Tj = 99.7 °C	Pmax = 160.0 W Tc = 87.5 °C D.F. = 66.5 %
Q503 2SK2372-A NEC	Tjmax= 150 °C Pd = 15.7 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 48.2 °C Tj = 110.4 °C	Pmax = 160.0 W Tc = 98.2 °C D.F. = 73.6 %
Q504 2SK2372-A NEC	Tjmax= 150 °C Pd = 15.7 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 51.1 °C Tj = 113.3 °C	Pmax = 160.0 W Tc = 101.1 °C D.F. = 75.6 %
D509 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 63.0 °C Tj = 118.0 °C	Pmax = --- W Tc = 113.0 °C D.F. = 78.7 %
D510 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 63.6 °C Tj = 118.6 °C	Pmax = --- W Tc = 113.6 °C D.F. = 79.1 %
D511 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 65.0 °C Tj = 120.0 °C	Pmax = --- W Tc = 115.0 °C D.F. = 80.0 %
D512 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 70.3 °C Tj = 125.3 °C	Pmax = --- W Tc = 120.3 °C D.F. = 83.5 %
D513 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 66.2 °C Tj = 121.2 °C	Pmax = --- W Tc = 116.2 °C D.F. = 80.8 %
D514 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 62.8 °C Tj = 117.8 °C	Pmax = --- W Tc = 112.8 °C D.F. = 78.5 %
D515 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 54.5 °C Tj = 109.5 °C	Pmax = --- W Tc = 104.5 °C D.F. = 73.0 %
D516 S60SC4M-7100 SHINDENGEN	Tjmax= 150 °C Pd = 10 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.5 °C/W ΔTc = 51.9 °C Tj = 106.9 °C	Pmax = --- W Tc = 101.9 °C D.F. = 71.3 %

Vin = 230Vac

Load = 100%

Ta=50°C

DC/DC-60V

Q501 2SK2372-A NEC	Tjmax= 150 °C Pd = 19 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 40.1 °C Tj = 104.9 °C	Pmax = 160.0 W Tc = 90.1 °C D.F. = 69.9 %
Q502 2SK2372-A NEC	Tjmax= 150 °C Pd = 19 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 41.9 °C Tj = 106.7 °C	Pmax = 160.0 W Tc = 91.9 °C D.F. = 71.1 %
Q503 2SK2372-A NEC	Tjmax= 150 °C Pd = 19 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 46.5 °C Tj = 111.3 °C	Pmax = 160.0 W Tc = 96.5 °C D.F. = 74.2 %
Q504 2SK2372-A NEC	Tjmax= 150 °C Pd = 19 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 58.7 °C Tj = 123.5 °C	Pmax = 160.0 W Tc = 108.7 °C D.F. = 82.3 %
D512 20DL2C41A(F) TOSHIBA	Tjmax= 150 °C Pd = 4 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 1.5 °C/W ΔTc = 28.9 °C Tj = 84.9 °C	Pmax = --- W Tc = 78.9 °C D.F. = 56.6 %
D513 20DL2C41A(F) TOSHIBA	Tjmax= 150 °C Pd = 4 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 1.5 °C/W ΔTc = 28.9 °C Tj = 84.9 °C	Pmax = --- W Tc = 78.9 °C D.F. = 56.6 %
D514 20DL2C41A(F) TOSHIBA	Tjmax= 150 °C Pd = 4 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 1.5 °C/W ΔTc = 26.9 °C Tj = 82.9 °C	Pmax = --- W Tc = 76.9 °C D.F. = 55.3 %

Vin = 230Vac

Load = 100%

Ta=50°C

DC/DC-150V

Q601 2SK2372-A NEC	Tjmax= 150 °C Pd = 17 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 43.3 °C Tj = 106.6 °C	Pmax = 160.0 W Tc = 93.3 °C D.F. = 71.0 %
Q602 2SK2372-A NEC	Tjmax= 150 °C Pd = 17 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 44.5 °C Tj = 107.8 °C	Pmax = 160.0 W Tc = 94.5 °C D.F. = 71.8 %
Q603 2SK2372-A NEC	Tjmax= 150 °C Pd = 17 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 48.6 °C Tj = 111.9 °C	Pmax = 160.0 W Tc = 98.6 °C D.F. = 74.6 %
Q604 2SK2372-A NEC	Tjmax= 150 °C Pd = 17 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 55.1 °C Tj = 118.4 °C	Pmax = 160.0 W Tc = 105.1 °C D.F. = 78.9 %
D606 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 39.9 °C Tj = 100.4 °C	Pmax = --- W Tc = 89.9 °C D.F. = 66.9 %
D607 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 41.2 °C Tj = 101.7 °C	Pmax = --- W Tc = 91.2 °C D.F. = 67.8 %
D609 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 29.4 °C Tj = 89.9 °C	Pmax = --- W Tc = 79.4 °C D.F. = 59.9 %
D610 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 35.8 °C Tj = 96.3 °C	Pmax = --- W Tc = 85.8 °C D.F. = 64.2 %
D612 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 41.9 °C Tj = 102.4 °C	Pmax = --- W Tc = 91.9 °C D.F. = 68.3 %
D613 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 39.8 °C Tj = 100.3 °C	Pmax = --- W Tc = 89.8 °C D.F. = 66.9 %
D615 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 39.3 °C Tj = 99.8 °C	Pmax = --- W Tc = 89.3 °C D.F. = 66.5 %
D616 YG911S3R FUJI	Tjmax= 150 °C Pd = 3 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.5 °C/W ΔTc = 37.1 °C Tj = 97.6 °C	Pmax = --- W Tc = 87.1 °C D.F. = 65.1 %

Vin = 230Vac

Load = 100%

Ta=50°C

DC/DC-600V

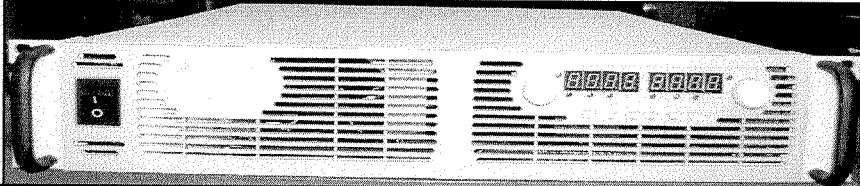
Q601 2SK2372-A NEC	Tjmax= 150 °C Pd = 22.05 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 45.8 °C Tj = 113.0 °C	Pmax = 160.0 W Tc = 95.8 °C D.F. = 75.3 %
Q602 2SK2372-A NEC	Tjmax= 150 °C Pd = 22.96 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 57.1 °C Tj = 125.0 °C	Pmax = 160.0 W Tc = 107.1 °C D.F. = 83.3 %
Q603 2SK2372-A NEC	Tjmax= 150 °C Pd = 14.07 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 47.2 °C Tj = 108.2 °C	Pmax = 160.0 W Tc = 97.2 °C D.F. = 72.1 %
Q604 2SK2372-A NEC	Tjmax= 150 °C Pd = 17.65 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 0.8 °C/W ΔTc = 40.1 °C Tj = 103.9 °C	Pmax = 160.0 W Tc = 90.1 °C D.F. = 69.2 %
D605 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 34.5 °C Tj = 92.0 °C	Pmax = --- W Tc = 84.5 °C D.F. = 61.3 %
D607 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 30.2 °C Tj = 87.7 °C	Pmax = --- W Tc = 80.2 °C D.F. = 58.5 %
D608 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 32.0 °C Tj = 89.5 °C	Pmax = --- W Tc = 82.0 °C D.F. = 59.7 %
D610 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 27.4 °C Tj = 84.9 °C	Pmax = --- W Tc = 77.4 °C D.F. = 56.6 %
D611 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 32.6 °C Tj = 90.1 °C	Pmax = --- W Tc = 82.6 °C D.F. = 60.1 %
D613 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 29.8 °C Tj = 87.3 °C	Pmax = --- W Tc = 79.8 °C D.F. = 58.2 %
D614 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 31.5 °C Tj = 89.0 °C	Pmax = --- W Tc = 81.5 °C D.F. = 59.3 %
D616 STTH506DTI ST	Tjmax= 150 °C Pd = 2.5 W Tj = Tc + (θ j-c x Pd) =>	θj-c = 3.0 °C/W ΔTc = 29.1 °C Tj = 86.6 °C	Pmax = --- W Tc = 79.1 °C D.F. = 57.7 %

3.MAIN COMPONENTS TEMPERATURE RISE

GEN8-400 1Φ

Location No.		Parts Name	ΔT Temperature Rise (°C)
			Standard Mounting
DC-DC	C501	ELEC. CAPACITOR	7.5
	C514	ELEC. CAPACITOR	34.7
	D512	DIODE	70.3
	L501	CHOKE	57.4
	Q504	MOSFET	51.1
	T501	TRANSFORMER	73.6
	T502	TRANSFORMER	11.3
	T503	TRANSFORMER	12.5
PFC200	A601	IC	33.6
	C618	FILM CAPACITOR	10.9
	C621	FILM CAPACITOR	23.9
	C623	FILM CAPACITOR	6.8
	D601	DIODE	30.9
	D604	DIODE	42.6
	L601	CHOKE	43.5
	L603	CHOKE	48.9
	Q601	TRANSISTOR	22.4
	Q604	MOSFET	34.6
R602	RESISTOR	42.1	
CONTROL	A101	IC	29.0
	A114	IC	32.0
	A117	IC	27.8
	A119	IC	29.5
	A124	IC	29.3
	A128	IC	27.1
	A132	IC	27.6
	A135	IC	28.3
OUT. FILTER	C43	ELEC. CAPACITOR	23.1
	R41	SHUNT	57.9
	L41	CHOKE	33.3
BIAS	A403	IC	24.2
	A405	IC	23.3
	A406	IC	33.9
	A407	IC	30.2
	A408	IC	28.7
	A409	IC	23.3
	C426	ELEC. CAPACITOR	17.6
	C432	ELEC. CAPACITOR	18.9
	C437	ELEC. CAPACITOR	21.6
	C442	ELEC. CAPACITOR	21.7
	D405	DIODE	29.1
	D407	DIODE	41.0
	D409	DIODE	19.6
	D412	DIODE	24.6
	Q409	MOSFET	20.5
	T401	TRANSFORMER	31.2
INPUT	D301	DIODE BRIDGE	33.6
	L301	CHOKE	17.2
	RL301	RELAY	11.2

Conditions:

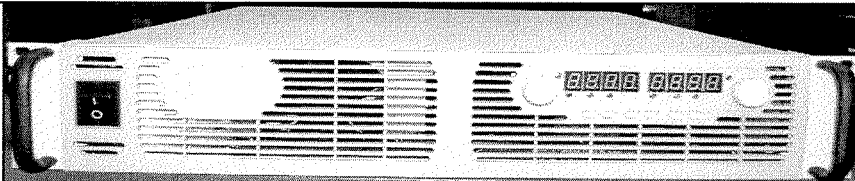
Standard Mounting	
Input Voltage	230V
Output Voltage	8V
Output Current	400A

3.MAIN COMPONENTS TEMPERATURE RISE

GEN8-400 3Φ 200

Location No.		Parts Name	ΔT Temperature Rise (°C)
			Standard Mounting
DC-DC	C501	ELEC. CAPACITOR	7.5
	C514	ELEC. CAPACITOR	34.7
	D512	DIODE	70.3
	L501	CHOKE	57.4
	Q504	MOSFET	51.1
	T501	TRANSFORMER	73.6
	T502	TRANSFORMER	11.3
	T503	TRANSFORMER	12.5
PFC200	A601	IC	33.6
	C618	FILM CAPACITOR	10.9
	C621	FILM CAPACITOR	23.9
	C623	FILM CAPACITOR	6.8
	D601	DIODE	30.9
	D605	DIODE	45.7
	L601	CHOKE	35.8
	L603	CHOKE	49.3
	Q601	TRANSISTOR	22.4
	Q604	MOSFET	38.2
R602	RESISTOR	42.1	
CONTROL	A101	IC	29.0
	A114	IC	32.0
	A117	IC	27.8
	A119	IC	29.5
	A124	IC	29.3
	A128	IC	27.1
	A132	IC	27.6
	A135	IC	28.3
OUT. FILTER	C43	ELEC. CAPACITOR	23.1
	R41	SHUNT	57.9
	L41	CHOKE	33.3
BIAS	A403	IC	24.2
	A405	IC	23.3
	A406	IC	33.9
	A407	IC	30.2
	A408	IC	28.7
	A409	IC	23.3
	C426	ELEC. CAPACITOR	17.6
	C432	ELEC. CAPACITOR	18.9
	C437	ELEC. CAPACITOR	21.6
	C442	ELEC. CAPACITOR	21.7
	D405	DIODE	29.1
	D407	DIODE	41.0
	D409	DIODE	19.6
	D412	DIODE	24.6
	Q409	MOSFET	20.5
T401	TRANSFORMER	31.2	
INPUT	D322	DIODE BRIDGE	40.0
	L322	CHOKE	11.4
	RL301	RELAY	15.2

Conditions:

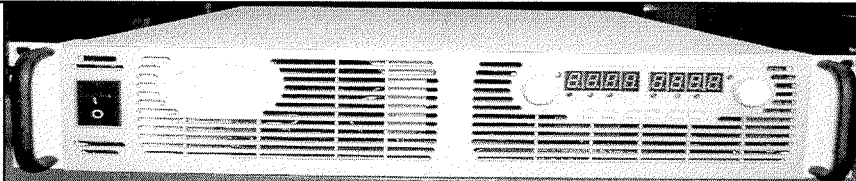
Standard Mounting	
Input Voltage	230V
Output Voltage	8V
Output Current	400A

3.MAIN COMPONENTS TEMPERATURE RISE

GEN8-400 3Φ 400

Location No.		Parts Name	ΔT Temperature Rise (°C)
			Standard Mounting
DC-DC	C501	ELEC. CAPACITOR	7.5
	C514	ELEC. CAPACITOR	34.7
	D512	DIODE	70.3
	L501	CHOKE	57.4
	Q504	MOSFET	51.1
	T501	TRANSFORMER	73.6
	T502	TRANSFORMER	11.3
	T503	TRANSFORMER	12.5
PFC400	A701	IC	31.0
	A704	IC	16.2
	C701	FILM CAPACITOR	15.2
	C720	ELEC. CAPACITOR	3.4
	C735	ELEC. CAPACITOR	20.5
	D701	DIODE BRIDGE	15.1
	D704	DIODE	34.8
	L701	CHOKE	51.2
	Q701	MOSFET	47.3
	R711	RESISTOR	32.2
CONTROL	A101	IC	29.0
	A114	IC	32.0
	A117	IC	27.8
	A119	IC	29.5
	A124	IC	29.3
	A128	IC	27.1
	A132	IC	27.6
	A135	IC	28.3
OUT. FILTER	C43	ELEC. CAPACITOR	23.1
	R41	SHUNT	57.9
	L41	CHOKE	33.3
BIAS	A403	IC	24.2
	A405	IC	23.3
	A406	IC	33.9
	A407	IC	30.2
	A408	IC	28.7
	A409	IC	23.3
	C426	ELEC. CAPACITOR	17.6
	C432	ELEC. CAPACITOR	18.9
	C437	ELEC. CAPACITOR	21.6
	C442	ELEC. CAPACITOR	21.7
	D405	DIODE	29.1
	D407	DIODE	41.0
	D409	DIODE	19.6
	D412	DIODE	24.6
	Q409	MOSFET	20.5
	T401	TRANSFORMER	31.2
INPUT	D651	DIODE BRIDGE	20.1
	L651	CHOKE	15.9
	L654	RELAY	8.8
	Q653	SCR	19.7

Conditions:

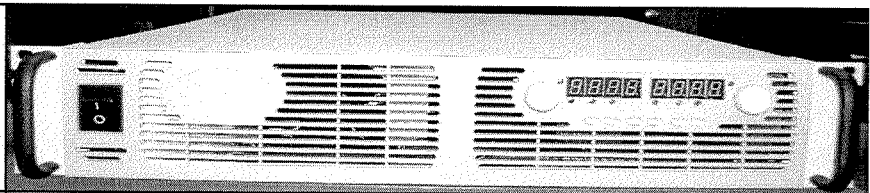
Standard Mounting	
Input Voltage	400V
Output Voltage	8V
Output Current	400A

3.MAIN COMPONENTS TEMPERATURE RISE

GEN600-5.5 1Φ

Location No.		Parts Name	ΔT Temperature Rise (°C)
			Standard Mounting
DC-DC	C601	ELEC. CAPACITOR	1.6
	C620	ELEC. CAPACITOR	11.7
	D605	DIODE	34.5
	L601	CHOKE	69.7
	Q601	MOSFET	62.5
	T601	TRANSFORMER	55.1
	T602	TRANSFORMER	7.7
PFC200	A601	IC	32.0
	C618	FILM CAPACITOR	12.1
	C621	FILM CAPACITOR	22.0
	C623	FILM CAPACITOR	4.7
	D601	DIODE	38.4
	D605	DIODE	43.1
	L603	CHOKE	49.9
	L604	CHOKE	9.1
	Q601	TRANSISTOR	22.9
	Q604	MOSFET	37.1
	R602	RESISTOR	42.4
CONTROL	A101	IC	16.2
	A114	IC	16.0
	A117	IC	14.9
	A119	IC	18.3
	A124	IC	14.7
	A128	IC	14.5
	A132	IC	14.8
	A135	IC	14.6
OUT. FILTER	C83	ELEC. CAPACITOR	7.1
	L81	CHOKE	7.2
	R85	RESISTOR	8.6
BIAS	A403	IC	25.2
	A405	IC	22.0
	A406	IC	32.1
	A407	IC	31.3
	A408	IC	34.8
	A409	IC	29.6
	C426	ELEC. CAPACITOR	26.8
	C432	ELEC. CAPACITOR	13.5
	C437	ELEC. CAPACITOR	25.4
	C442	ELEC. CAPACITOR	27.0
	D405	DIODE	28.3
	D407	DIODE	49.1
	D409	DIODE	13.8
	D412	DIODE	28.3
	Q408	MOSFET	59.3
	T401	TRANSFORMER	38.0
INPUT	D301	DIODE BRIDGE	27.2
	L301	CHOKE	21.7
	RL301	RELAY	12.5

Conditions:

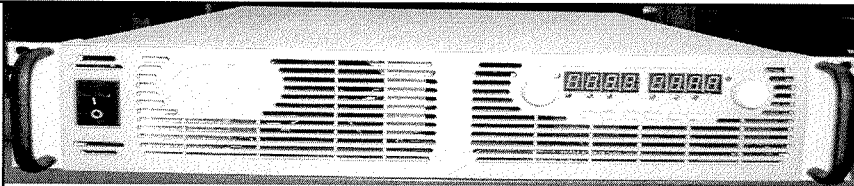
Standard Mounting	
Input Voltage	230V
Output Voltage	600V
Output Current	5.5A

3.MAIN COMPONENTS TEMPERATURE RISE

GEN600-5.5 3Φ 200

Location No.	Parts Name	ΔT Temperature Rise (°C)	
		Standard Mounting	
DC-DC	C601	ELEC. CAPACITOR	1.6
	C620	ELEC. CAPACITOR	11.7
	D605	DIODE	34.5
	L601	CHOKE	69.7
	Q601	MOSFET	62.5
	T601	TRANSFORMER	55.1
	T602	TRANSFORMER	7.7
	PFC200	A601	IC
C618		FILM CAPACITOR	12.1
C621		FILM CAPACITOR	22.0
C623		FILM CAPACITOR	4.7
D601		DIODE	38.4
D605		DIODE	43.1
L603		CHOKE	49.9
L604		CHOKE	9.1
Q601		TRANSISTOR	22.9
Q604		MOSFET	37.1
R602		RESISTOR	42.4
CONTROL	A101	IC	16.2
	A114	IC	16.0
	A117	IC	14.9
	A119	IC	18.3
	A124	IC	14.7
	A128	IC	14.5
	A132	IC	14.8
	A135	IC	14.6
OUT. FILTER	C83	ELEC. CAPACITOR	7.1
	L81	CHOKE	7.2
	R85	RESISTOR	8.6
BIAS	A403	IC	25.2
	A405	IC	22.0
	A406	IC	32.1
	A407	IC	31.3
	A408	IC	34.8
	A409	IC	29.6
	C426	ELEC. CAPACITOR	26.8
	C432	ELEC. CAPACITOR	13.5
	C437	ELEC. CAPACITOR	25.4
	C442	ELEC. CAPACITOR	27.0
	D405	DIODE	28.3
	D407	DIODE	49.1
	D409	DIODE	13.8
	D412	DIODE	28.3
	Q408	MOSFET	59.3
	T401	TRANSFORMER	38.0
INPUT	D322	DIODE BRIDGE	34.4
	L321	CHOKE	8.2
	RL301	RELAY	12.9

Conditions:

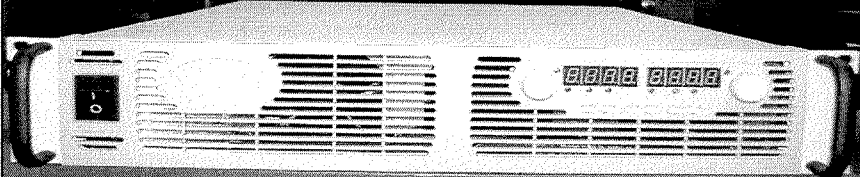
Standard Mounting	
Input Voltage	230V
Output Voltage	600V
Output Current	5.5A

3.MAIN COMPONENTS TEMPERATURE RISE

GEN600-5.5 3Φ 400

Location No.		Parts Name	ΔT Temperature Rise (°C) Standard Mounting
DC-DC	C601	ELEC. CAPACITOR	1.6
	C614	ELEC. CAPACITOR	11.7
	D512	DIODE	34.5
	L601	CHOKE	69.7
	Q604	MOSFET	62.5
	T601	TRANSFORMER	55.1
	T602	TRANSFORMER	7.7
PFC400	A701	IC	34.2
	A704	IC	14.6
	C701	FILM CAPACITOR	18.3
	C720	ELEC. CAPACITOR	3.1
	C735	ELEC. CAPACITOR	21.6
	D701	DIODE BRIDGE	14.2
	D704	DIODE	39.3
	L701	CHOKE	49.3
	Q701	MOSFET	49.9
R711	RESISTOR	33.2	
CONTROL	A101	IC	16.2
	A114	IC	16.0
	A117	IC	14.9
	A119	IC	18.3
	A124	IC	14.7
	A128	IC	14.5
	A132	IC	14.8
	A135	IC	14.6
OUT. FILTER	C83	ELEC. CAPACITOR	7.1
	L81	CHOKE	7.2
	R85	RESISTOR	8.6
BIAS	A403	IC	25.2
	A405	IC	22.0
	A406	IC	32.1
	A407	IC	31.3
	A408	IC	34.8
	A409	IC	29.6
	C426	ELEC. CAPACITOR	26.8
	C432	ELEC. CAPACITOR	13.5
	C437	ELEC. CAPACITOR	25.4
	C442	ELEC. CAPACITOR	27.0
	D405	DIODE	28.3
	D407	DIODE	49.1
	D409	DIODE	13.8
	D412	DIODE	28.3
	Q408	MOSFET	59.3
T401	TRANSFORMER	38.0	
INPUT	D651	DIODE BRIDGE	18.9
	L651	CHOKE	17.0
	L654	RELAY	8.3
	Q653	SCR	21.9

Conditions:

Standard Mounting	
Input Voltage	400V
Output Voltage	600V
Output Current	5.5A

4.ELECTROLYTIC CAPACITORS LIFE TIME ESTIMATION

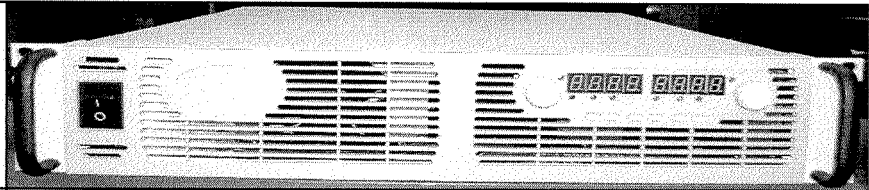
MODEL	COMPUTED LIFE (year) at Tambient		
	30°C	40°C	50°C
GEN2U-3300W	13.87	6.93	3.47

FORMULA: $L = L_o \times 2^{\frac{105 - T_c}{10}}$ (years)

L: Elec.capacitor computed life (24 hours per day,365 days operation)

Lo: Guarantee life for Elec.capacitor

Tc: Case temperature of Elec.capacitor

Standard Mounting		
Input Voltage	Nom.	
Output Voltage	100%	
Output Current	100%	

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P < O	P O O	No Output	No Change	Others	
1	D651	1-2	●								●			●			F651,F652
2		1-3	●								●			●			F651,F652
3		1-4	●								●			●			F651,F652
4		1-5	●								●			●			F651,F652
5		2-3	●								●			●			F651,F652
6		2-4	●								●			●			F651,F652
7		2-5	●								●			●			F651,F652
8		3-4	●								●			●			F651,F652
9		3-5	●								●			●			F651,F652
10		4-5	●								●			●			F651,F652
11		2		●												●	OUTPUT NOT STABLE
12		3		●												●	OUTPUT NOT STABLE
13		4		●												●	OUTPUT NOT STABLE
14	Q651	D-S	●						●	●				●			F651,F652,ZD651,ZD652,ZD653,ZD654,Q651
15		D-G	●						●	●				●			F651,F652,ZD651,ZD652,ZD653,ZD654,Q651
16		G-S	●													●	
17		D		●												●	
18		S		●												●	
19		G		●												●	
20	Q652	1-2	●							●				●			F651,F652
21		1-3	●											●			
22		2-3	●							●				●			F651,F652
23		1		●												●	
24		2		●												●	
25		3		●												●	
26	Q653	1-2	●													●	
27		1-3	●						●					●			R675-6-7,R680(After Switch ON->OFF->ON)
28		2-3	●													●	
29		1	●						●					●			R675-6-7,R680
30		2	●						●					●			R675-6-7,R680
31		3	●						●					●			R675-6-7,R680(After Switch ON->OFF->ON)
32	PC651	1-2	●													●	
33		4-5	●							●				●			F651,F652
34		4-6	●													●	
35		5-6	●							●				●			F651,F652
36		1		●												●	
37		2		●												●	
38		4		●												●	
39		5		●												●	
40		6		●												●	
41	T651	1-5	●						●	●				●			F651,F652,R670
42		6-10	●											●			
43		1		●										●			
44		6		●										●			
45	L654	3,4-9,10	●													●	
46		3,4		●										●			

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	V O	P C	No Output	No Change	Others	
1	A406	D-S	•														F402
2		D-G	•						•	•				•			F402, A406, ZD403
3		G-S	•											•			
4		D		•										•			
5		S		•										•			
6		G		•										•			
7	Q408	D-S	•						•	•	•			•			F401,ZD409,A3
8		D-G	•						•	•					•		F401,Q408,Q1
9		G-S	•												•		
10		D		•											•		
11		S		•											•		
12		G		•											•		
13	Q409	D-S	•						•	•	•			•			F401,ZD406,A3
14		D-G	•						•	•					•		F401,Q409,Q1
15		G-S	•												•		
16		D		•											•		
17		S		•											•		
18		G		•											•		
19	D406		•						•					•			A406
20				•											•		
21	D403		•						•					•			Q401
22				•											•		
23	D405		•											•			
24				•											•		
25	D407		•											•			
26				•							•			•			
27	D408		•											•			
28				•											•		
29	D411		•											•			
30				•											•		
31	D412		•											•			
32				•											•		
33	D414		•											•			
34				•											•		
35	D409		•											•			
36				•											•		
37	D410		•											•			
38				•											•		
39	C417		•											•			
40				•											•		
41	C411		•						•					•			R446,R447
42				•											•		
43	C419		•											•			
44				•											•		
45	C420		•											•			
46				•											•		

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P < O	P O O	No Output	No Change	Others	
47	C442		•											•			
48				•											•		
49	C422		•											•			
50				•											•		
51	C424		•											•			OTP
52				•											•		
53	C426		•													•	HICC-UP
54				•											•		
55	C437		•											•			
56				•											•		
57	C438		•											•			
58				•											•		
59	C440		•											•			
60				•											•		
61	C447		•													•	HICC-UP
62				•											•		
63	C448		•											•			
64				•											•		
65	C450		•												•		
66				•											•		
67	C439		•													•	HICC-UP
68				•											•		
69	C432		•											•			
70				•											•		
71	C433		•											•			
72				•											•		
73	PC405	1-2	•											•			DISPLAY INDICATES "AC"
74		3-4	•												•		
75		1		•										•			DISPLAY INDICATES "AC"
76		3		•											•		DISPLAY INDICATES "AC"
77	PC406	3-4	•												•		
78		1-2	•						•					•			
79		1		•					•					•			
80		3		•					•					•			DC/DC :Q601-Q604,Q609-Q612,R606,R616,R6...
81	PC407	1-2	•											•			
82		3-4	•												•		
83		1		•										•			
84		3		•										•			
85	T401	4-6	•											•			
86		1-2	•											•			
87		7-8	•											•			
88		10-11	•											•			
89		9-12	•											•			
90		C-D	•													•	HICC-UP
91		A-B	•													•	HICC-UP
92		4		•										•			
93		1		•										•			
94		11		•										•			
95		7		•										•			
96		12		•										•			
97		D		•											•		
98		B		•										•			SO

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P	V	O	P	O	
1	D701	1-2	●											●			
2		1-3	●											●			
3		1-4	●											●			
4		2-3	●											●			
5		2-4	●											●			
6		3-4	●												●	Output unstable	
7		1		●										●			
8		2		●										●			
9		3		●										●			
10		4		●										●			
11	A704	1-2	●											●			
12		1-3	●												●		
13		2-3	●											●			
14		1		●										●			
15		2		●											●		
16		3		●										●			
17	D702	A-K	●												●		
18		A		●											●		
19	D710	A-K	●						●	●				●		F651,F652,Q703	
20		A		●											●		
21	D703	A-K	●												●		
22		A		●											●		
23	D704	A-K	●												●		
24		A		●											●		
25	D707	A-K	●												●		
26		A		●											●		
27	D708	A-K	●												●		
28		A		●											●		
29	Q701	D-S	●							●				●		F651,F652	
30		D-G	●							●				●		F651,F652	
31		G-S	●											●			
32		D		●											●		
33		S		●											●		
34		G		●						●				●		F651,F652	
35	Q702	D-S	●							●				●		F651,F652	
36		D-G	●							●				●		F651,F652	
37		G-S	●											●			
38		D		●											●		
39		S		●											●		
40		G		●						●				●		F651,F652	
41	Q703	D-S	●							●				●		F651,F652	
42		D-G	●							●				●		F651,F652	
43		G-S	●											●			
44		D		●											●		
45		S		●											●		
46		G		●						●				●		F651,F652	

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	V P	O P	No Output	No Change	Others	
47	Q707	D-S	•								•			•			F651,F652
48		D-G	•								•			•			F651,F652
49		G-S	•											•			
50		D		•											•		
51		S		•											•		
52		G		•							•			•			F651,F652
53	C708		•											•			
54				•												•	Output is very low and unstable
55	C710		•											•			
56				•										•			
57	C735		•								•			•			F651,F652
58				•											•		
59	C736		•								•			•			F651,F652
60				•											•		
61	C737		•								•			•			F651,F652
62				•											•		
63	C738		•								•			•			F651,F652
64				•											•		
65	C720		•								•			•			Q703,D704,D707,R675-7,R680
66				•											•		
67	L701	3,4-9,10	•								•	•		•			F651,F652,Q703
68		3,4		•										•			
69		7-8	•											•			
70		7		•											•		
71	PC701	1-2	•											•		•	AC Fail Display
72		3-4	•												•		
73		1		•										•		•	AC Fail Display
74		3		•										•		•	AC Fail Display
75	PC702	1-2	•											•			
76		3-4	•												•		
77		1		•										•		•	AC Fail Display
78		3		•										•			

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P	V	O	P	C	
1	Q501	D-S	•						•					•			Q501-504,Q510-512,R508,R511,R514,R523,R525,D501,C510,C524
2		D-G	•						•	•				•			F651,Q501-503,Q512,R505,R508.
3		G-S	•						•	•				•			F651, Q502-504, Q510, 512, R505, R508, R511, R514, R525.
4		D		•					•	•				•			F651, Q509-512, Q501-504, D504-505, R505, R508, R511, R514,R523-526
5		S		•					•	•				•			Q501-502, Q509, Q512, R511, R514, R524, R526.
6		G		•					•					•			Q501-504,Q510-512,R508,R511,R514,R523,R525,D501,C510,C524
7	Q502	D-S	•						•					•			F651,Q501-503,Q512,R505,R508.
8		D-G	•						•	•				•			F651, Q502-504, Q510, 512, R505, R508, R511, R514, R525.
9		G-S	•						•	•				•			F651, Q509-512, Q501-504, D504-505, R505, R508, R511, R514,R523-526
10		D		•					•	•				•			Q501-502, Q509, Q512, R511, R514, R524, R526.
11		S		•					•	•				•			Q501-504,Q510-512,R508,R511,R514,R523,R525,D501,C510,C524
12		G		•					•					•			F651,Q501-503,Q512,R505,R508.
13	Q503	D-S	•						•					•			F651, Q502-504, Q510, 512, R505, R508, R511, R514, R525.
14		D-G	•						•	•				•			F651, Q509-512, Q501-504, D504-505, R505, R508, R511, R514,R523-526
15		G-S	•						•	•				•			Q501-502, Q509, Q512, R511, R514, R524, R526.
16		D		•					•	•				•			Q501-504,Q510-512,R508,R511,R514,R523,R525,D501,C510,C524
17		S		•					•	•				•			F651,Q501-503,Q512,R505,R508.
18		G		•					•					•			F651, Q502-504, Q510, 512, R505, R508, R511, R514, R525.
19	Q504	D-S	•						•					•			F651, Q509-512, Q501-504, D504-505, R505, R508, R511, R514,R523-526
20		D-G	•						•	•				•			Q501-502, Q509, Q512, R511, R514, R524, R526.
21		G-S	•						•	•				•			Q501-504,Q510-512,R508,R511,R514,R523,R525,D501,C510,C524
22		D		•					•	•				•			F651,Q501-503,Q512,R505,R508.
23		S		•					•	•				•			F651, Q502-504, Q510, 512, R505, R508, R511, R514, R525.
24		G		•					•					•			F651, Q509-512, Q501-504, D504-505, R505, R508, R511, R514,R523-526
25	D509		•											•			Q501-502, Q509, Q512, R511, R514, R524, R526.
26				•											•		
27	D510		•											•			
28				•											•		
29	D511		•											•			
30				•											•		
31	D512		•											•			
32				•											•		
33	D513		•											•			
34	D514		•											•			
35				•											•		
36	D515		•											•			
37				•											•		
38	D516		•											•			
39				•											•		

5. ABNORMAL TEST

Condition: Ta:25°C Input:380VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P	V	O	P	O	
40	T502	4-5	•						•					•			Q503-504, R515, R521,A109, R102, R143, R189, D505,508
41		1-2	•						•					•			Q503-504.
42		2-3	•						•					•			Q501-502.
43		5		•					•					•			Q503-504, R515, R521, A109, R102, R143, R189, D505,508
44		1		•					•					•			Q503-504.
45		3		•					•					•			Q501-502.
46	T503	3-4	•						•					•			R540,Q501-Q504.
47		9-10	•						•					•			Q501-504.
48		A-B	•						•					•			Q501-504.
49		13-14	•						•					•			Q501-504.
50		11-12	•						•					•			Q501-504.
51		3		•					•					•			R540,Q501-Q504.
52		10		•					•					•			Q501-504.
53		A		•					•					•			Q501-504.
54		13		•					•					•			Q501-504.
55		11		•					•					•			Q501-504.
56	PC501	1-2	•												•		
57		3-4	•											•			OTP.
58		1		•											•		
59		3		•											•		

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P	V	O	P	C	
1	D301	2-1	•								•				•		F301
2		3-4	•								•				•		F301
3		2		•											•		
4		1		•												•	lin=26.45A,Pin=3830W,PF=0.669
5		4		•												•	lin=26.45A,Pin=3830W,PF=0.669
6	D302	2-1	•								•				•		F301
7		3-4	•								•				•		F301
8		2		•												•	
9		1		•												•	lin=26.45A,Pin=3830W,PF=0.669
10		4		•												•	lin=26.45A,Pin=3830W,PF=0.669
11	D303		•							•					•		R303-R306
12				•												•	
13	D304		•							•	•				•		F301,F302,R303-R306,Q603,Q604,Q607,Q608
14				•												•	

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	V P	O P	No Output	No Change	Others	
1	A406	D-S	•											•			F402
2		D-G	•						•	•				•			F402, A406, ZD403
3		G-S	•														
4		D		•										•			
5		S		•										•			
6		G		•										•			
7	Q408	D-S	•						•	•	•			•			F401,ZD409,A3
8		D-G	•						•	•					•		F401,Q408,Q1
9		G-S	•												•		
10		D		•										•			
11		S		•										•			
12		G		•										•			
13	Q409	D-S	•						•	•	•			•			F401,ZD406,A3
14		D-G	•						•	•					•		F401,Q409,Q1
15		G-S	•												•		
16		D		•										•			
17		S		•										•			
18		G		•										•			
19	D406		•						•					•			A406
20				•											•		
21	D403		•						•					•			Q401
22				•											•		
23	D405		•											•			
24				•											•		
25	D407		•											•			
26				•							•			•			
27	D408		•											•			
28				•											•		
29	D411		•											•			
30				•											•		
31	D412		•											•			
32				•											•		
33	D414		•											•			
34				•											•		
35	D409		•											•			
36				•											•		
37	D410		•											•			
38				•											•		
39	C417		•											•			
40				•											•		
41	C411		•						•					•			R446,R447
42				•											•		
43	C419		•											•			
44				•											•		
45	C420		•											•			
46				•											•		
47	C442		•											•			
48				•											•		
49	C422		•											•			
50				•											•		

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P < O	P > O	No Output	No Change	Others	
51	C424		•											•			OTP
52				•											•		
53	C426		•													•	HICC-UP
54				•											•		
55	C437		•											•			
56				•											•		
57	C438		•											•			
58				•											•		
59	C440		•											•			
60				•											•		
61	C447		•													•	HICC-UP
62				•											•		
63	C448		•											•			
64				•											•		
65	C450		•												•		
66				•											•		
67	C439		•													•	HICC-UP
68				•											•		
69	C432		•											•			
70				•											•		
71	C433		•											•			
72				•											•		
73	PC405	1-2	•											•			DISPLAY INDICATES "AC"
74		3-4	•												•		
75		1		•										•			DISPLAY INDICATES "AC"
76		3		•											•		DISPLAY INDICATES "AC"
77	PC406	3-4	•												•		
78		1-2	•						•					•			
79		1		•					•					•			DC/DC Q601-Q604, Q609- Q612, R606, R616, R621.
80		3		•					•					•			
81	PC407	1-2	•											•			
82		3-4	•												•		
83		1		•										•			
84		3		•										•			
85	T401	4-6	•											•			
86		1-2	•											•			
87		10-11	•											•			
88		7-8	•											•			
89		9-12	•											•			
90		C-D	•													•	HICC-UP
91		A-B	•													•	HICC-UP
92		4		•										•			
93		1		•										•			
94		11		•										•			
95		7		•										•			
96		12		•										•			
97		D		•											•		
98		B		•										•			SO

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P < O	P > O	No Output	No Change	Others	
1	Q603	D-S	•														F301,F302
2		D-G	•							•	•			•			F301,F302,R651-R654,R642,ZD601,Q604,Q606
3		G-S	•														
4		D		•												•	Pin=3800W,lin=17.8A
5		S		•												•	
6		G		•						•	•			•			F301,F302,Q603
7	Q604	D-S	•								•			•			F301,F302
8		D-G	•							•	•			•			F301,F302,R651-R654,R642,ZD601,Q604,Q606
9		G-S	•														
10		D		•												•	Pin=3800W,lin=17.8A
11		S		•												•	
12		G		•						•	•			•			F301,F302,Q604
13	Q607	D-S	•								•			•			F301,F302
14		D-G	•							•	•			•			F301,F302,R645-R648,R639,ZD602,Q608,Q601
15		G-S	•														
16		D		•												•	Pin=3800W,lin=17.8A
17		S		•												•	
18		G		•						•	•			•			F301,F302,Q607
19	Q608	D-S	•								•			•			F301,F302
20		D-G	•							•	•			•			F301,F302,R651-R654,R642,ZD601,Q604,Q606
21		G-S	•														
22		D		•												•	Pin=3800W,lin=17.8A
23		S		•												•	
24		G		•						•	•			•			F301,F302,Q608
25	D604		•							•	•			•			F301,Q603,Q604
26				•												•	Pin=3800W,lin=17.8A
27	D605		•							•	•			•			F301,F302,Q604
28				•												•	Pin=3800W,lin=17.8A
29	D607		•							•	•			•			F301,F302,Q608
30				•												•	Pin=3800W,lin=17.8A
31	D610		•							•	•			•			F301,Q607,Q608
32				•												•	Pin=3800W,lin=17.8A
33	D601		•													•	
34				•												•	
35	D602		•													•	
36				•												•	
37	D611		•													•	
38				•												•	
39	D612		•													•	
40				•												•	
41	D613		•													•	
42				•												•	
43	D614		•													•	
44				•												•	
45	C619		•							•				•			F301,F302
46				•												•	

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	P	V	O	P	C	
47	C620		•								•			•			F301,F302
48				•											•		
49	C630		•								•			•			F301,F302
50				•											•		
51	L603		•							•	•			•			F301,Q603
52				•											•		
53	L605		•							•	•			•			F301,Q607
54				•											•		
55	L601		•													•	OUTPUT NOT STABLE
56				•											•		
57	L602		•													•	OUTPUT NOT STABLE
58				•											•		
59	R626			•							•			•			Pin=30W

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	V O	P C O	No Output	No Change	Others	
1	Q601	D-S	•							•				•			F601
2		D-G	•						•					•			R628, R617, D624, R616, Q604, R626, R622, D623, R621, Q611, Q612.
3		G-S	•						•					•			Q601-Q604, Q609-Q612, D621, D623, R606, R605, R629, R617, D626,R628, R622, R626, R657
4		D		•					•	•				•			Q601, Q602, Q604, D621, R610, R627, R606,
5		S		•					•	•				•			R605, D623, D626, R611, F301, D622, Q629, R657,
6		G		•					•	•				•			Q607, R622, Q611
7	Q602	D-S	•							•				•			F601
8		D-G	•						•					•			R628, R617, D624, R616, Q604, R626, R622, D623, R621, Q611, Q612.
9		G-S	•						•					•			Q601-Q604, Q609-Q612, D621, D623, R606, R605, R629, R617, D626,R628, R622, R626, R657
10		D		•					•	•				•			Q601, Q602, Q604, D621, R610, R627, R606,
11		S		•					•	•				•			R605, D623, D626, R611, F301, D622, Q629, R657,
12		G		•					•	•				•			Q607, R622, Q611
13	Q603	D-S	•							•				•			F601
14		D-G	•						•					•			R628, R617, D624, R616, Q604, R626, R622, D623, R621, Q611, Q612.
15		G-S	•						•					•			Q601-Q604, Q609-Q612, D621, D623, R606, R605, R629, R617, D626,R628, R622, R626, R657
16		D		•					•	•				•			Q601, Q602, Q604, D621, R610, R627, R606,
17		S		•					•	•				•			R605, D623, D626, R611, F301, D622, Q629, R657,
18		G		•					•	•				•			Q607, R622, Q611
19	Q604	D-S	•							•				•			F601
20		D-G	•						•					•			R628, R617, D624, R616, Q604, R626, R622, D623, R621, Q611, Q612.
21		G-S	•						•					•			Q601-Q604, Q609-Q612, D621, D623, R606, R605, R629, R617, D626,R628, R622, R626, R657
22		D		•					•	•				•			Q601, Q602, Q604, D621, R610, R627, R606,
23		S		•					•	•				•			R605, D623, D626, R611, F301, D622, Q629, R657,
24		G		•					•	•				•			Q607, R622, Q611

5. ABNORMAL TEST

Condition: Ta:25°C Input:200VAC Vout:100% Iout:100%

No.	Test Position		Test Mode		Test Result												Note
	Location No.	Test Point	Short	Open	1	2	3	4	5	6	7	8	9	10	11	12	
					Fire	Smoke	Burst	Smell	Red Hot	Damaged	Fuse Open	V	O	C	No Output	No Change	
25	D605		●												●		
26				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
27	D607		●												●		
28				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
29	D608		●												●		
30				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
31	D610		●												●		
32				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
33	D611		●												●		
34				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
35	D613		●												●		
36				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
37	D614		●												●		
38				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
39	D616		●												●		
40				●												●	Vo=368V,li=11.14A,Pi=2430W,PF=0.994
41	C601		●							●				●			F601
42				●												●	
43	C602		●							●				●			F601
44				●												●	
45	C620		●													●	OUTPUT NOT STABLE
46				●												●	
47	C621		●													●	OUTPUT NOT STABLE
48				●												●	
49	PC601	1-2	●												●		
50		3-4	●											●			OTP
51		1		●												●	
52		3		●												●	
53	T601	2,3-4,5,6	●							●				●			Q601-Q604,D621,Q609-Q612
54		9-10	●							●				●			Q601-Q604,D621,Q609-Q612
55		2,3		●						●				●			SLAVE:Q601-Q612,D621,Q609-Q612
56		9		●						●				●			SLAVE:Q601-Q612,D621,Q609-Q612
57	T602	4-5	●							●				●			Q603,Q604,R621,A109,R102,D601,D604,R143,R189
58		1-2	●							●				●			Q603,Q604
59		2-3	●							●				●			Q601,Q602
60		5		●						●				●			Q603,Q604,R621,A109,R102,D601,D604,R143,R189
61		1		●						●				●			Q603,Q604
62		3		●						●				●			Q601,Q602
63	T603	3-4	●							●				●			R657,Q601-Q604
64		9-10	●							●				●			Q601-Q604
65		A-B	●							●				●			Q601-Q604
66		13-14	●							●				●			Q601-Q604
67		11-12	●							●				●			Q601-Q604
68		3		●						●				●			R657,Q601-Q604
69		10		●						●				●			Q601-Q604
70		A		●						●				●			Q601-Q604
71		13		●						●				●			Q601-Q604
72		11		●						●				●			Q601-Q604
73	L601	3-10	●							●				●			Q601-Q604,D621,Q609-Q612
74		10		●						●				●			Q601-Q604

6.VIBRATION TEST

MODEL: GEN600-5.5-3P400

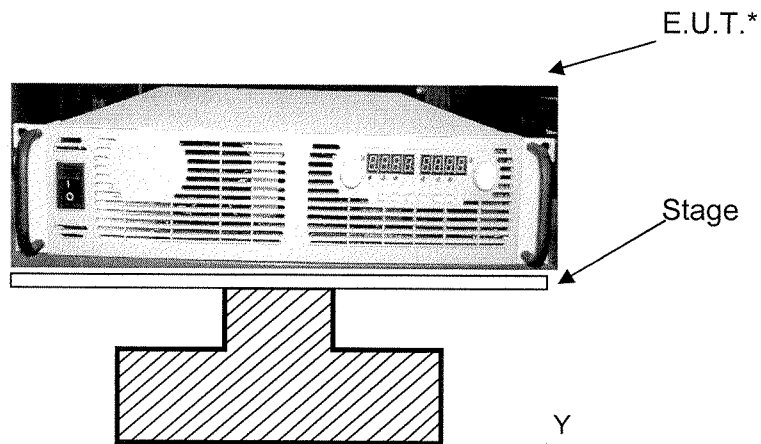
(1) Vibration test class

Frequency variable endurance test

(2) Equipment used

Name	Manufaturer	Model
HygroThermometer	Delta Trak	13301
Laser Shaker Control System	Dactron	Laser
Amplifier	Ling Dynamic Systems	SPA56K v3 V875SP
Vibrator	Ling Dynamic Systems	V875-440
Hydraulic Power unit	Ling Dynamic Systems	2190-6
Measuring tape	Stanley	33-443
Accelerometer, I-TEDS, 100 mV/g	Endevco	752A12
Precision Barometer 910 - 1060 hPa	LUFFT Mess- und Regeltechnik GmbH	2039.70392

(3) Testing method



Test condition:

Sweep frequency 10~500Hz
 Acceleration 1.04G const.
 Direction X,Y,Z
 Test time 1H.each

*E.U.T. is fixed to vibrator surface by mounting straps

(4)Test Result

OK NG

Vin=400Vac;Iout=5.5A

Check item	Vout	Ripple(mVp-p)	E.U.T.state
Directions \Initial	600	400	O.K.
X	600	400	O.K.
Y	600	400	O.K.
Z	600	400	O.K.

6.VIBRATION TEST

MODEL: GEN8-400-1P230

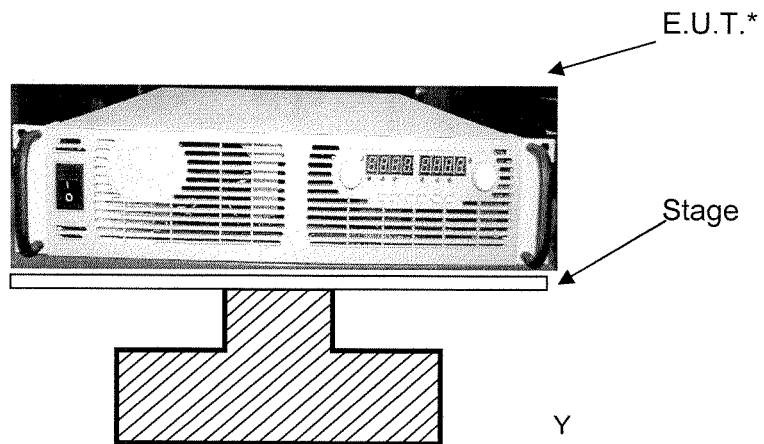
(1) Vibration test class

Frequency variable endurance test

(2) Equipment used

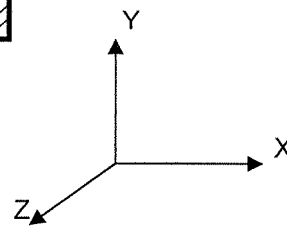
Name	Manufaturer	Model
HygroThermometer, Min/Max Memory	Delta Trak	13301
Laser Shaker Control System	Dactron	Laser
Amplifier	Ling Dynamic Systems	SPA56K v3 V875SP
Vibrator	Ling Dynamic Systems	V875-440
Hydraulic Power unit	Ling Dynamic Systems	2190-6
Measuring tape	Stanley	33-443
Accelerometer, I-TEDS, 100 mV/g	Endevco	752A12
Precision Barometer 910 - 1060 hPa	LUFFT Mess- und Regeltechnik GmbH	2039.70392

(3) Testing method



Test condition:

Sweep frequency 10~500Hz
 Acceleration 1.04G const.
 Direction X,Y,Z
 Test time 1H.each



*E.U.T. is fixed to vibrator surface by mounting straps

(4)Test Result

OK NG

Vin=230Vac;Iout=400A

Check item	Vout	Ripple(mVp-p)	E.U.T.state
Directions \Initial	8	30	O.K.
X	8	30	O.K.
Y	8	30	O.K.
Z	8	30	O.K.