TEST REPORT

MODEL NAME : UPF100S24WQ2

1. DESIGN VERIFY TEST

1-1. INPUT FUNCTION TEST

1-2. OUTPUT FUNCTION TEST

1-3. PROTECTION FUNCTION TEST

2. SAFETY&EMC TEST

3. RELIABILITY TEST

1. DESIGN VERIFY TEST

1-1. INPUT FUNCTION TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
VOLTAGE RANGE	160~305VAC	I/P: testing O/P:full load Ta:25℃	test ok	P
FREQUENCY RANGE	47~63Hz no damage osc	I/P:160~305VAC O/P:full~min. load Ta:25℃	test ok	P
POWER FACTOR	0.95 min.	I/P:230VAC O/P:full load	PF=0.97/230VAC	P
EFFICIENCY	88% typ.	I/P:230VAC O/P:full load Ta:25℃	88.2%	P
AC CURRENT	0.43A/230VAC typ.	I/P:230VAC O/P:full load Ta:25℃	0.43A/230VAC	P
INRUSH CURRENT	40A typ.	I/P:230VAC O/P:full load Ta:25℃	33A	P
LEAKAGE CURRENT	2.5mA max.	I/P:230VAC O/P:min. load Ta:25℃	0.7mA	P

1-2. OUTPUT FUNCTION TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
VOLTAGE Tolerance	24V±3%	I/P:230VAC O/P:CV mode Ta:25℃ No variable resistance	test ok	P
RIPPLE&NOISE	150mVp-p max.	I/P:230VAC O/P:full load Ta:25℃	100mV p-p	P
LINE REGULATION	24V±1%	I/P:90~305VAC O/P:full load Ta:25℃	±0.1%	P

LOAD REGULATION	24V±2%	I/P:230VAC O/P:full load Ta:25℃	±0.89%	**P**
SETUP TIME	3000ms/230VAC max.	I/P:230VAC O/P:full load Ta:25℃	530ms/230VAC	**P**
RISE TIME	100ms/230VAC max.	I/P:230VAC O/P:full load Ta:25	20ms/230VAC	**P**
HOLD UP TIME	50ms/230VAC typ.	I/P:230VAC O/P:full load Ta:25	65ms/230VAC	**P**

1-3. PROTECTION FUNCTION TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
SHORT PROTECTION	short every output 1 hour no damage	I/P:277VAC O/P:full load Ta:25℃	no damge, recovers automatically after fault removed	**P**
OVER LOAD PROTECTION	110~150%	I/P:230VAC O/P:testing Ta:25℃	130%/230VAC recovers automatically after fault removed	**P**
OVER VOLTAGE PROTECTION	110~140%	I/P:230VAC O/P:min. load Ta:25℃	130%/230VAC recovers automatically after fault removed	**P**

2. SAFETY & EMC TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC/1min<10mA I/P-F/G:2KVAC/1min<10mA O/P-F/G:1.5KVAC/1min<10mA	I/P-O/P:3.75KVAC/1min I/P-F/G:2KVAC/1min O/P-F/G:1.5KVAC/1min Ta:25℃	I/P-O/P:3.7mA I/P-F/G:4.1mA O/P-F/G:1.8mA no damage	**P**

ISOLATION RESISTANCE	I/O-O/P:500VDC>100MΩ I/O-F/G:500VDC>100MΩ O/P-F/G:500VDC>100MΩ	I/P-O/P:500VDC I/P-F/G:500VDC O/P-F/G:500VDC Ta:25℃	I/P-O/P: ∞ I/P-F/G: ∞ O/P-F/G: ∞ no damage	**P**
SURGE	IEC61000-4-5 industry L-N:4KV L,N-PE:6KV	I/P:230VAC/50Hz O/P:full load Ta:25℃	criteria A	**P**

3. RELIABILITY TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
LOW TEMP. TURN ON TEST	turn on after 2hour	I/P:230VAC O/P:full load Ta:--40℃	test ok	**P**
STORAGE TEMP. TEST	no damage	1.thermal shock temp.:-40~+80℃ 2.test time low & high temp.:30min/each 3.total cycle:5cycle 4.input/output condition:static	test ok	**P**
HIGH VOLT. HIGH TEMP. HIGH HUMI. TEST	no damage after 12hour	I/P:305VAC O/P:full load Ta:25℃ HUMI.:95%RH	test ok	**P**
THERMAL SHOCK TEST	no damage	1.thermal shock temp.: -40~+70℃ 2.test time low & high temp.:30min/each 3.total cycle:10cycle 4.input/output condition: 230VAC 60% load, AC on/off test (turn on 58sec,turn off 2sec)	test ok	**P**
VIBRATION TEST	no damage	1CATON&1SET 1.wave form:sine wave 2.frequency:10~500Hz 3.sweep time:12min./sweep cycle 4.acceleration:5G 5.test time:72min. in each(X,Y,Z) 6.Ta:25℃	test ok	**P**