



# TEST REPORT

**MODEL NAME : UPF30S36CQH**

1. DESIGN VERIFY TEST
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2. SAFETY&EMC TEST
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**1. DESIGN VERIFY TEST**

**1-1. INPUT FUNCTION TEST**

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
VOLTAGE RANGE	180~264VAC	I/P: testing O/P:full load Ta:25 °C	test ok	P
FREQUENCY RANGE	47~63Hz no damage osc	I/P:180~264VAC O/P:full~min. load Ta:25 °C	test ok	P
POWER FACTOR	0.9 min.	I/P:230VAC O/P:full load	PF=0.97/230VAC	P
EFFICIENCY	85% typ.	I/P:230VAC O/P:full load Ta:25 °C	85.2%	P
AC CURRENT	0.16A/230VAC typ.	I/P:230VAC O/P:full load Ta:25 °C	0.158A/230VAC	P
INRUSH CURRENT	5A typ. cold start	I/P:230VAC O/P:full load Ta:25 °C	1.2A	P
LEAKAGE CURRENT	2.5mA max.	I/P:230VAC O/P:min. load Ta:25 °C	0.9mA	P

**1-2. OUTPUT FUNCTION TEST**

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
OPERATING VOLTAGE RANGE	O/P:22~40V/0.8A	I/P:230VAC O/P:CV mode Ta:25 °C	O/P=22V:0.8A O/P=40V:0.7A	P
CURRENT ADJ. RANGE	0.8A-30%/+5%	I/P:230VAC O/P:full load Ta:25 °C	0.46-1.1A	P
RIPPLE&NOISE	2000mVp-p max.	I/P:230VAC O/P:full load Ta:25 °C	1500mV p-p	P

SETUP TIME	3000ms/230VAC max.	I/P:230VAC O/P:full load Ta:25 °C	1020ms/230VAC	P
RISE TIME	100ms/230VAC max.	I/P:230VAC O/P:full load Ta:25	48ms/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:264VAC O/P:full load Ta:25 °C	no damage, 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 °C	I/P-O/P:3.9mA I/P-F/G:2.7mA O/P-F/G:2.4mA 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 °C	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 °C	criteria A	P

### 3. RELIABILITY TEST

TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
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<b>LOW TEMP. TURN ON TEST</b>	turn on after 2hour	I/P:230VAC O/P:full load Ta:-40 °C	test ok	<b>P</b>
<b>STORAGE TEMP. TEST</b>	no damage	1.thermal shock temp.: -40~+80°C 2.test time low & high temp.:30min/each 3.total cycle:5cycle 4.input/output condition:static	test ok	<b>P</b>
<b>HIGH VOLT. HIGH TEMP. HIGH HUMI. TEST</b>	no damage after 12hour	I/P:264VAC O/P:full load Ta:70 °C HUMI.:95%RH	test ok	<b>P</b>
<b>THERMAL SHOCK TEST</b>	no damage	1.thermal shock temp.: -40~+70°C 2.test time low & high temp.:30min/each 3.total cycle:10cycle 4.input/output condition: 230VAC full load, AC on/off test (turn on 58sec,turn off 2sec)	test ok	<b>P</b>
<b>VIBRATION TEST</b>	no damage	1.CATON&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 °C	test ok	<b>P</b>