



Test Report: XTR-480-12

480W AC/DC Three-Phase Input Ultra Slim Industrial DIN Rail Power

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Control Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

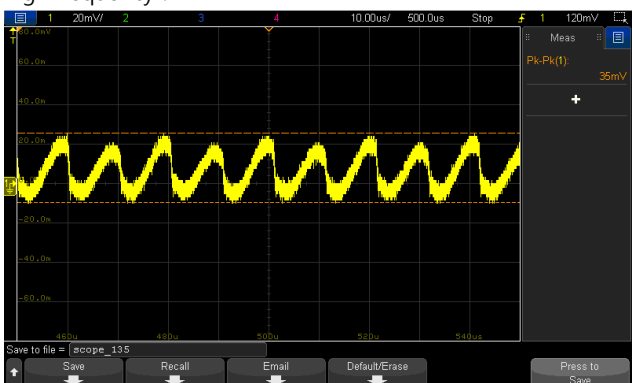
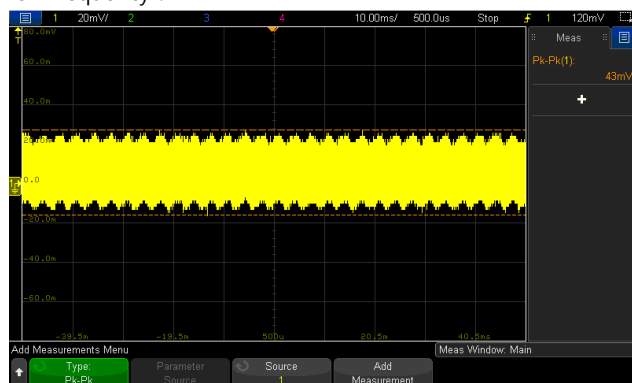
E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 12V~15V	I/P : 400 VAC I/P : 500 VAC O/P : MIN LOAD Ta : 25°C	11.05V~15.357V/400VAC 11.05V~15.357V/500VAC
2	OUTPUT VOLTAGE TOLERANCE	V1: -2% ~ +2%	I/P: 320VAC ~ 600VAC O/P: FULL / MIN. LOAD Ta: 25°C	V1: -0.45 % ~ 0.46%
3	LINE REGULATION	V1: -0.5% ~ +0.5%	I/P: 320VAC ~ 600VAC O/P: FULL LOAD Ta: 25°C	V1: -0.001 % ~ 0%
4	LOAD REGULATION	V1: -1% ~ +1%	I/P: 400VAC O/P: FULL ~ MIN LOAD Ta: 25°C	V1: -0.45 % ~ 0.46%
5	OVER/UNDERSHOOT TEST	<±5%	I/P: 400VAC O/P: FULL LOAD/NO LOAD Ta: 25°C	4.96% → FULL LOAD 4.42% → NO LOAD 4.49% → PEAK LOAD
6	RIPPLE & NOISE (Max)	V1: 120mVp-p	I/P: 400VAC O/P: FULL LOAD Ta: 25°C	35mVp-p / high frequency 43mVp-p / low frequency
high frequency :  low frequency : 				
7	SET UP TIME (Max)	400VAC/1200ms 500VAC/600ms	I/P : 400 VAC I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	101.2ms/400VAC 83.4ms/500VAC
INPUT=400VAC/50HZ @ FULL LOAD CH1: Output Voltage CH3: AC Input Voltage			INPUT=500VAC/60HZ @ FULL LOAD CH1: Output Voltage CH3: AC Input Voltage	

8	RISE TIME (Max) 400VAC/60ms 500VAC/60ms	I/P : 400 VAC I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	6.13ms/400VAC 6.03ms/500VAC
	INPUT=400VAC/50HZ @ FULL LOAD CH1: Output Voltage 	INPUT=500VAC/60HZ @ FULL LOAD CH1: Output Voltage 	
9	HOLD UP TIME (Typ.) 400VAC/20ms 500VAC/20ms	I/P : 400 VAC I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	43.2ms/400VAC 42.4ms/500VAC
	INPUT=400VAC/50HZ @ FULL LOAD CH1: Output Voltage CH3: AC Input Voltage 	INPUT=500VAC/60HZ @ FULL LOAD CH1: Output Voltage CH3: AC Input Voltage 	
10	DYNAMIC LOAD V1: 1200mVp-p	I/P: 400VAC O/P: (1) FULL / MIN LOAD 50%DUTY / 120HZ (2) FULL / MIN LOAD 50%DUTY / 1KHZ	664mVp-p 402mVp-p



480W AC/DC Three-Phase Input Ultra Slim
Industrial DIN Rail Power

XTR-480 series

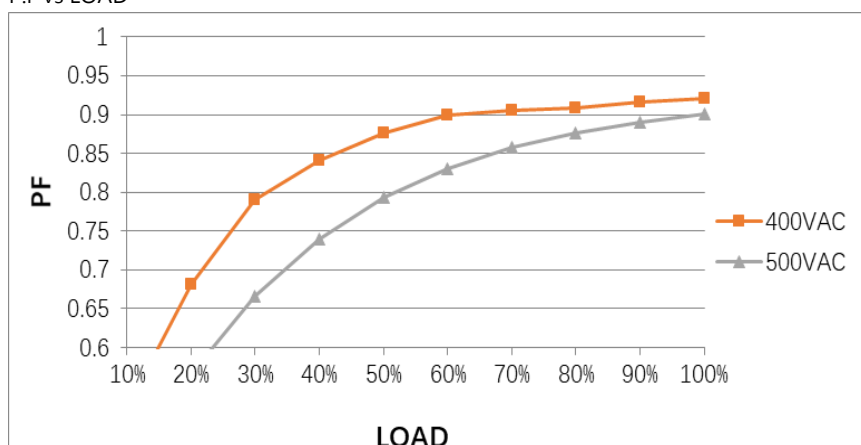
			Ta:25°C	
	FULL /MIN LOAD 50%DUTY / 120HZ		FULL / MIN LOAD 50%DUTY / 1KHZ	
11	TRANSIENT RECOVERY TIME	V1: 1200mVp-p <500us	I/P: 400VAC O/P:40% LOAD CHANGE 50%DUTY/120HZ 1.25A/us	231mVp-p
12	PEAK LOAD 开机&循环	1) PEAK LOAD@5S 2) PEAK LOAD 循环 	I/P: 600VAC I/P: 400VAC I/P: 320VAC O/P: PEAK LOAD	TEST : I/P: 600VAC OK I/P: 400VAC OK I/P: 320VAC OK

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	Three-Phase 320VAC~600VAC (Dual phase operation possible) 450VDC~800VDC/ FULL LOAD	(1) I/P: TESTING O/P: FULL LOAD	(1) 311Vac~600Vac/ FULL LOAD
			Dual phase DC Input : (2) I/P: DC TESTING O/P: FULL LOAD Ta:25°C	Dual phase DC Input : (2) 425Vdc~800Vdc/FULL LOAD
			I/P: LOW-LINE-3V=317V HIGH-LINE+10V=610V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST: OK
			Dual phase operation: I/P: TESTING O/P: FULL LOAD / 85% LOAD/80% LOAD	331Vac~600Vac/ FULL LOAD 329Vac~600Vac/ 85% LOAD 327Vac~600Vac/ 80% LOAD
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P: 320VAC~ 600VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK

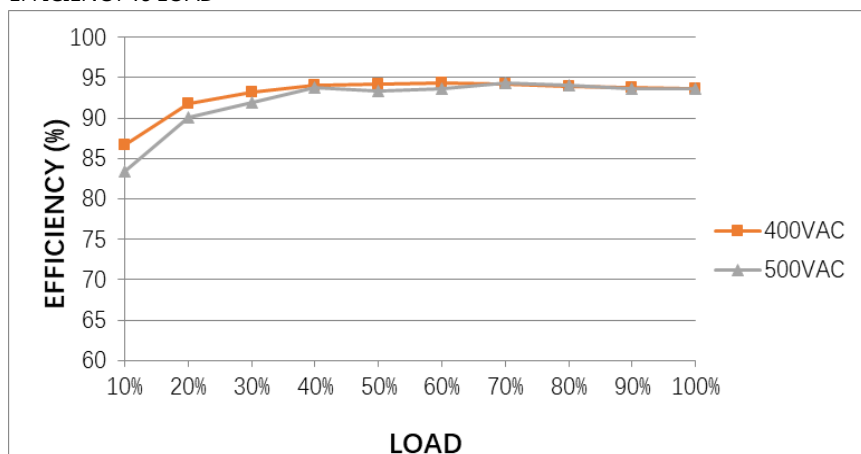
3	INPUT CURRENT (Typ.)	400V/ 0.85 A 500V/ 0.7 A	I/P : 400 VAC I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	TEST: <table><tr><td></td><td>400VAC</td><td>500VAC</td></tr><tr><td>L1</td><td>0.608A</td><td>0.490A</td></tr><tr><td>L2</td><td>0.608A</td><td>0.491A</td></tr><tr><td>L3</td><td>0.608A</td><td>0.490A</td></tr></table>		400VAC	500VAC	L1	0.608A	0.490A	L2	0.608A	0.491A	L3	0.608A	0.490A
	400VAC	500VAC														
L1	0.608A	0.490A														
L2	0.608A	0.491A														
L3	0.608A	0.490A														
4	LEAKAGE CURRENT	< 3.5mA / 530 VAC	I/P : 530 VAC O/P : Min LOAD Ta : 25°C	L1,L2,L3-FG : 1.254mA(Peak)→62368												
5	NO LOAD CONSUMPTION	3.1 W/400VAC/RC OFF 5.0 W/400VAC/RC ON	I/P : 400 VAC O/P : NO LOAD Ta : 25°C	2.208W→ RC OFF 4.495W→ RC ON												
6	POWER FACTOR (Typ.)	PF=0.92 /400VAC PF=0.88 /500VAC	I/P : 400 VAC I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	TEST: <table><tr><td></td><td>400VAC</td><td>500VAC</td></tr><tr><td>L1</td><td>0.9228</td><td>0.9110</td></tr><tr><td>L2</td><td>0.9230</td><td>0.9114</td></tr><tr><td>L3</td><td>0.9230</td><td>0.9112</td></tr></table>		400VAC	500VAC	L1	0.9228	0.9110	L2	0.9230	0.9114	L3	0.9230	0.9112
	400VAC	500VAC														
L1	0.9228	0.9110														
L2	0.9230	0.9114														
L3	0.9230	0.9112														

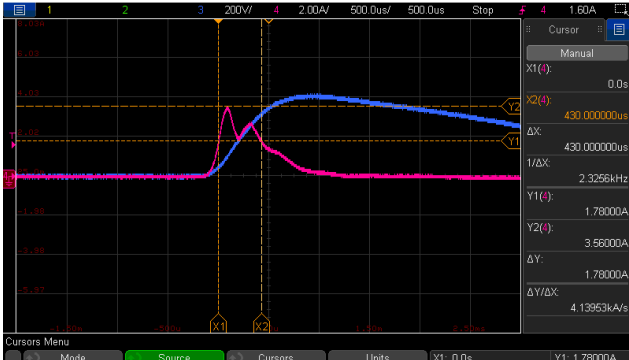
P.F vs LOAD



7	EFFICIENCY(Typ.)	93.0%	I/P: 400 VAC O/P:FULL LOAD Ta:25°C	93.1%
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EFFICIENCY vs LOAD



8	INRUSH CURRENT(Typ.)	500V/10A COLD START	I/P : 500 VAC O/P : FULL LOAD Ta : 25°C	I =3.56A/ 500VAC@ FULL LOAD T50=430us/500V@ FULL LOAD
INPUT=500VAC/50HZ @ FULL LOAD CH3: AC Input Voltage CH4: Input current  				

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105%~ 200% rated power Protection type: Normally works within 105 ~ 200% rated output power for more than 5 seconds then constant current limiting without shut down at rate current when Vo=30%~100% Hiccup mode when Vo<30% rate voltage	I/P: 600VAC I/P: 400VAC I/P: 320VAC O/P:TESTING Ta:25°C	119.7%/600VAC 120.0%/400VAC 120.1%/320VAC Protection type: Normally works within 105 ~ 200% rated output power for more than 5 seconds then constant current limiting without shut down at rate current when Vo=30%~100% Hiccup mode when Vo < 30% rate voltage
2	OVER VOLTAGE PROTECTION	15V~18V Protection type: Shut down o/p voltage, re-power on to recover	I/P: 600VAC I/P: 320VAC O/P:MIN LOAD Ta:25°C	16.5V/ 600VAC 16.5V/ 320VAC Protection type: Shut down o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type: Shut down o/p voltage or hiccup mode, recovers automatically after temperature goes down	I/P: 600VAC I/P: 320VAC O/P:FULL LOAD	TEST: <u>OK</u>
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Protection type: Hiccup mode when Vo<30% rate voltage	I/P: 600VAC I/P: 320VAC O/P: FULL LOAD Ta:25°C	NO DAMAGE Protection type: Hiccup mode when Vo < 30% rate voltage



CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	DC OK CONTACT RATINGS	30VDC/1A , 30VAC/0.5A RESISTIVE LOAD	I/P:400VAC O/P:FULL LOAD Ta:25°C	TEST: <u>OK</u>
2	PS-ON INPUT SIGNAL (optional)	Power on: PS-ON = "Hi" or " > 2 ~ 5V" ; Power off: PS-ON = "Low" or " < 0 ~ 0.5V";	I/P:400VAC O/P:FULL LOAD Ta:25°C	PS-ON = <u>1.6</u> V Power on; PS-ON = <u>1.2</u> V Power off;
3	PARALLEL(optional)	Up to 1920W (3+1), please refer to the Instruction manual	I/P: TESTING O/P: TESTING LOAD Ta:25°C	TEST: <u>OK</u>

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q1/Q2 : Rated: 600 V/24A	AC ON/OFF I/P: High-Line +3V =603V VDS: O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8) Peak Load Ta:25°C	Q1 VDS: (1) 455V (2) 519V (3) 450V (4) 446V (5) 450V (6) 442V (7) 495V (8) 475V Q2 VDS: (1) 438V (2) 467V (3) 434V (4) 434V (5) 438V (6) 430V (7) 475V (8) 455V
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q909/910 : Rated: 1200V/17A	AC ON/OFF I/P: High-Line +3V =603V VDS: O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/	Q909 VDS: (1) 845V (2) 853V (3) 845V (4) 845V (5) 837V (6) 845V (7) 837V (8) 804V Q910 VDS: (1) 1006V (2) 957V (3) 957V (4) 989V (5) 973V (6) 933V (7) 941V (8) 941V

			Min. Load 50%Duty/120Hz (7)0%→400% Load. (8) Peak Load Ta:25°C	
3	P.F.C DIODE	D34 : Rated: 10 A/ 1200 V	I/P: High-Line +3V =603 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (4) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (5) Peak Load Ta:25°C	(1) 877V (2) 977V (3) 877V (4) 877V (5) 885V
4	Diode Peak Voltage	Q101/Q104: Rated: 60V/192A	AC ON/OFF I/P: High-Line +3V =603 V <u>VO=Vomax</u> O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8).NO LOAD (9) burst Mode (10) Peak Load <u>VO=Vnormal</u> O/P: (1) Full Load Ta:25°C	Q101: <u>VO=Vomax</u> VDS: (1) 43.7V (2) 45.7V (3) 43.7V (4) 43.7V (5) 43.0V (6) 52.7V (7) 44.1V (8) 36.5V (9) 38.6V (10) 49V <u>VO=Vnormal</u> (1) 39.8V Q104: <u>VO=Vomax</u> VDS: (1) 39.4V (2) 43.7V (3) 39.7V (4) 39.4V (5) 39.4V (6) 39.4V (7) 54.6V (8) 36.1V (9) 36.5V (10) 42.3V <u>VO=Vnormal</u> (1) 36.2V
5	Input Capacitor Voltage	C5 : Rated: 150u/450V	I/P: High-Line +3V =603V O/P: (1)Full Load input on/off (2) Min load input on /Off (3) Full Load /Min load Change (4) Full load continue (5) Peak Load on/off (6) Peak Load continue Ta:25°C	(1) 422V (2) 430V (3) 430V (4) 410V (5) 422V (6) 414V
6	Control IC Voltage Test	PWM IC U4: Rated :8.9~15.5V PFC IC U2: Rated:11.4~20V	AC ON/OFF I/P: High-Line +3V =603 V O/P: (1) Full Load (2) Output Short (3) O.L.P	U4 (1) 12.13V (2) 12.13V (3) 12.13V (4) 12.13V

		IC U1 : Rated VDDI to GNDI :3V~ 18V VDDA to GNDA, VDDDB to GNDB: 7V~ 25V O/P IC U101 : Rated : 4.75V~38V IC U105: Rated:3 V ~30 V IC U103: Rated :3.3V~36V IC U102: Rated:3V~ 32 V	(4) O.V.P. (5) No Load VR min (Low Line) Ta:25°C	(5) 12.13V U2/U1 (1) 17.6V (2) 17.9V (3) 17.3V (4) 17.3V (5) 15.6V U101/ U105/U103 (1) 18.1V (2) 19.2V (3) 14.5V (4) 17.3V (5) 13.8V U102 (1) 10.95V (2) 12.25V (3) 13.39V (4) 11.0V (5) 11.68V
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■ SAFETY& E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 4.87KVAC/min I/P-FG :2.5KVAC/min O/P-FG:0.5KVAC/min O/P-DC OK: 0.5KVAC/min	I/P-O/P: 5.357KVAC/min I/P-FG: 3 KVAC/min O/P-FG:0.6 KVAC/min O/P-DC OK: 0.6 KVAC/min Ta:25°C	I/P-O/P: 8.95 mA I/P-FG: 9.79 mA O/P-FG: 4.19 mA O/P-DC OK: 0.009 mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG:500VDC>100MΩ	I/P-O/P: 600 VDC I/P-FG: 600 VDC O/P-FG: 600 VDC Ta:25°C	I/P-O/P: 50 GΩ I/P-FG: 35621 MΩ O/P-FG: 50 GΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100mΩ	40A /2min Ta:25°C	7 mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	BS EN/EN61000-3-2 ■ CLASS A	I/P:400VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS
2	CONDUCTION	BS EN/EN55032(CISPR32) / BS EN/EN61204-3 / CNS15936 CLASS B	I/P : 400 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C	PASS Test by certified Lab
3	RADIATION	BS EN/EN55032(CISPR32) / BS EN/EN61204-3 / CNS15936 CLASS B	I/P : 400 VAC (50HZ) O/P : FULL LOAD Ta : 25°C	PASS Test by certified Lab
4	E.S.D	BS EN/ EN61000-4-2 AIR : 15KV / Contact : 8KV	I/P : 400 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
5	E.F.T	BS EN/ EN61000-4-4 INPUT : 4KV	I/P : 400 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
6	SURGE	BS EN/ EN61000-4-5 Line-Line : 2KV Line-Earth : 4KV	I/P : 400 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
7	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT																																				
1	TEMPERATURE RISE TEST	MODEL : XTR-480-12 1. ROOM AMBIENT BURN-IN : 2HRS I/P : 400VAC O/P : FULL LOAD Ta=24.8 °C 2. HIGH AMBIENT BURN-IN : 2HRS I/P : 400VAC O/P : FULL LOAD Ta= 59.3°C <table><tr><th>NO</th><th>Position</th><th>ROOM AMBIENT Ta=24.8°C</th><th>HIGH AMBIENT Ta=59.3°C</th></tr><tr><td>1</td><td>U9</td><td>50.5°C</td><td>92.6°C</td></tr><tr><td>2</td><td>T1coil</td><td>80.8°C</td><td>122.4°C</td></tr><tr><td>3</td><td>T1core</td><td>77.1°C</td><td>118.9°C</td></tr><tr><td>4</td><td>C93</td><td>59.4°C</td><td>102.5°C</td></tr><tr><td>5</td><td>Q2</td><td>63.4°C</td><td>106.2°C</td></tr><tr><td>6</td><td>C103</td><td>68.3°C</td><td>110.8°C</td></tr><tr><td>7</td><td>U105</td><td>65.8°C</td><td>107°C</td></tr><tr><td>8</td><td>U103</td><td>58.2°C</td><td>99.4°C</td></tr></table>			NO	Position	ROOM AMBIENT Ta=24.8°C	HIGH AMBIENT Ta=59.3°C	1	U9	50.5°C	92.6°C	2	T1coil	80.8°C	122.4°C	3	T1core	77.1°C	118.9°C	4	C93	59.4°C	102.5°C	5	Q2	63.4°C	106.2°C	6	C103	68.3°C	110.8°C	7	U105	65.8°C	107°C	8	U103	58.2°C	99.4°C
NO	Position	ROOM AMBIENT Ta=24.8°C	HIGH AMBIENT Ta=59.3°C																																					
1	U9	50.5°C	92.6°C																																					
2	T1coil	80.8°C	122.4°C																																					
3	T1core	77.1°C	118.9°C																																					
4	C93	59.4°C	102.5°C																																					
5	Q2	63.4°C	106.2°C																																					
6	C103	68.3°C	110.8°C																																					
7	U105	65.8°C	107°C																																					
8	U103	58.2°C	99.4°C																																					



480W AC/DC Three-Phase Input Ultra Slim
Industrial DIN Rail Power

XTR-480 series

			NO	Position	ROOM AMBIENT Ta=24.8°C	HIGH AMBIENT Ta=59.3°C
			9	U3	66.3°C	108.7°C
			10	U4	57.5°C	99.7°C
			11	D5	68.4°C	109.6°C
			12	D7	67.6°C	109.2°C
			13	U2	68.1°C	108.5°C
			14	D52	56.6°C	97.3°C
			15	R943	62.3°C	106°C
			16	Q910	69.2°C	110.6°C
			17	Q909	65.5°C	107.6°C
			18	U1	67.2°C	108.3°C
			19	ZNR6	48.8°C	92.5°C
			20	C28	52.6°C	94.3°C
			21	D46	65.4°C	107.7°C
			22	C116	83.1°C	114°C
			23	C67	53.4°C	96.6°C
			24	LF900	65.5°C	108.6°C
			25	LF1	62.7°C	108.4°C
			26	C2	58.5°C	103.8°C
			27	ZNR1	49.8°C	94.1°C
			28	L1	60°C	112.5°C
			29	Q103	75.3°C	117.9°C
			30	Q104	74.6°C	117.4°C
			31	U101	70.9°C	112.5°C
			32	C13	58°C	101.7°C
			33	L4	57°C	102.6°C
			34	C6	47.4°C	90.5°C
			35	LF2	67.6°C	109.6°C
			36	LF4	55.3°C	100°C
			37	D34	60.9°C	101.9°C
			38	Q13	51.7°C	91.7°C
			39	L5	58.9°C	100.8°C
			40	Q1	60.3°C	103.3°C
			41	T2	57.3°C	100.5°C
			42	Q908	66.9°C	107.4°C
			43	Q902	65.1°C	105.7°C
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)	I/P : 400 VAC O/P : 119%LOAD Ta : 25°C		TEST : OK	
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 600VAC/340VAC O/P : 100 %LOAD Ta= -45 °C		TEST : OK	
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 60°C/95 %R.H NO DAMAGE	I/P : 610 VAC O/P : FULL LOAD Ta= 60°C HUMIDITY= 95 %R.H		TEST : OK	



480W AC/DC Three-Phase Input Ultra Slim
Industrial DIN Rail Power

XTR-480 series

5	TEMPERATURE COEFFICIENT	± 0.03%/°C(0~60°C)	I/P : 400 VAC O/P : FULL LOAD	± 0.002 %/°C(0~60°C)
6	STORAGE TEMPERATURE TEST	-40~85°C	1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : STATIC	
7	THERMAL SHOCK TEST	-40~60°C	1. Thermal shock Temperature : -45°C~ +65°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 16 CYCLE 5. Input/Output condition : 15cycle:400V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:400V/ FULL LOAD Burn In Test	
8	VIBRATION TEST	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 10min/sweep cycle (4) Acceleration : 3G (5) Test Time : 180min in each axis (X.Y.Z) (6) Ta : 25°C	
9	CAPACITOR LIFE CYCLE	SUPPOSE C109 IS THE MOST CRITICAL COMPONENT (1) I/P : 400VAC O/P : FULL LOAD Ta= 25°C LIFE TIME (2) I/P : 400VAC O/P : FULL LOAD Ta= 60°C LIFE TIME (3) I/P : 400VAC O/P : 75% LOAD Ta= 60°C LIFE TIME (4) I/P : 400VAC O/P : 50% LOAD Ta= 60°C LIFE TIME		(1) 67211HRS (2) 24426HRS (3) 44685HRS (4) 74092HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 1267.7K hrs min. Telcordia SR-332 (Bellcore); 167.4K hrs min. MIL-HDBK-217F (25°C)		
11	Ongoing Reliability Test	I/P : 400VAC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 50,000 hours		

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	Hanxr	Liutt	Wangzd

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