



ABNORMAL TEST RESULT

OF MODEL PBA600F

1. Did Cheese Cloth or Paper Glow?

No.

2. Did Ground Fuse Open?

No.

3. Dielectric breakdown?

No.

4. Other Results?

See the following pages .

(FMEA : 2/41 ~ 39/41)

(Abnormal Test Result: 40/41 ~ 41/41)

There was no emission of flame, molten metal, ignition of cheesecloth, dielectric breakdown, opening of the ground fuse, other indication of a shock or fire hazard.

F M E A

Component	Mode		Comment	Output Voltage (V)
C101	Open		Normal operation.	
	Short		F101 opened, No hazard.	AVR1:0
C102	Open		Normal operation.	
	Short		F101 opened, No hazard.	AVR1:0
C106	Open		Normal operation.	
	Short		R114 opened, No hazard.	AVR1:0
C109	Open		Normal operation.	
	Short		F101 R114 opened, No hazard.	AVR1:0
C110	Open		Normal operation.	
	Short		Normal operation.	
C111	Open		Normal operation.	
	Short		Normal operation.	
C115	Open	only 12, 15, 24V	Normal operation.	
	Short	only 12, 15, 24V	Normal operation.	
C116	Open	only 12, 15, 24V	Normal operation.	
	Short	only 12, 15, 24V	Normal operation.	
C119	Open		See 40 Page.	
	Short		R114 opened, No hazard.	AVR1:0
C120	Open	only36, 48V	Normal operation.	
	Short	only36, 48V	Normal operation.	
C121	Open	only36, 48V	Normal operation.	
	Short	only36, 48V	Normal operation.	
C126	Open		R114 opened, No hazard.	AVR1:0
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C128	Open	only24V	Normal operation.	
	Short	only24V	Normal operation.	
C129	Open	only24V	Normal operation.	
	Short	only24V	Normal operation.	
C202	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C203	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C204	Open		Normal operation.	
	Short		R114 opened, No hazard.	AVR1:0
C205	Open		Normal operation.	
	Short		Normal operation.	
C206	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C207	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C208	Open		Normal operation.	
	Short		R114 opened, No hazard.	AVR1:0
C209	Open		Normal operation.	
	Short		Normal operation.	
C210	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
C212	Open		Normal operation.	
	Short		Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
C216	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C217	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C218	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C301	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C302	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C303	Open	Normal operation.	
	Short	Normal operation.	
C304	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C305	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C306	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
C307	Open	Normal operation.	
	Short	Normal operation.	
C310	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C311	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
C319	Open	Normal operation.	
	Short	Normal operation.	
C321	Open	Normal operation.	
	Short	Normal operation.	
C322	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C323	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0
C324	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C326	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C330	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C402	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C403	Open	Normal operation.	
	Short	Normal operation.	
C404	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C405	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C406	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C407	Open		Normal operation.	
	Short		Normal operation.	
C408	Open		Normal operation.	
	Short		Normal operation.	
C409	Open		Normal operation.	
	Short		Normal operation.	
C504	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
C505	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C506	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C507	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C508	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C512	Open		See 40 Page.	
	Short		No Hazard.	AVR1:0
C516	Open	except7.5V	Normal operation.	
	Short	except7.5V	Normal operation.	
C517	Open	except7.5V	Normal operation.	
	Short	except7.5V	Normal operation.	
C522	Open		Normal operation.	
	Short		No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
C523	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C526	Open	except 3.3, 5, 7.5V	Normal operation.	
	Short	except 3.3, 5, 7.5V	Normal operation.	
C527	Open	except 3.3, 5, 7.5V	Normal operation.	
	Short	except 3.3, 5, 7.5V	Normal operation.	
C528	Open	except 3.3, 5, 7.5V	Normal operation.	
	Short	except 3.3, 5, 7.5V	Normal operation.	
C529	Open	except 3.3, 5, 7.5V	Normal operation.	
	Short	except 3.3, 5, 7.5V	Normal operation.	
C532	Open		Normal operation.	
	Short		Normal operation.	
C533	Open		Normal operation.	
	Short		Normal operation.	
C534	Open		Normal operation.	
	Short		Normal operation.	
C535	Open		Normal operation.	
	Short		Normal operation.	
C539	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C601	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C602	Open		Normal operation.	
	Short		No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C604	Open	Normal operation.	
	Short	Normal operation.	
C605	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C606	Open	Normal operation.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C607	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C608	Open	Normal operation.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C609	Open	Normal operation.	
	Short	Normal operation.	
C610	Open	Normal operation.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C611	Open	Normal operation.	
	Short	Normal operation.	
C612	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C613	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C615	Open	Normal operation.	
	Short	Normal operation.	
C620	Open	Normal operation.	
	Short	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
C621	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C624	Open		Normal operation.	
	Short		Normal operation.	
C625	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C626	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C627	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C628	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C629	Open		Normal operation.	
	Short		Normal operation.	
C631	Open		Normal operation.	
	Short		Normal operation.	
C632	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C633	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C634	Open	only 15, 24, 36, 48V	Normal operation.	
	Short	only 15, 24, 36, 48V	Normal operation.	
C701	Open		Normal operation.	
	Short		No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C702	Open	Normal operation.	
	Short	Normal operation.	AUX:0
C703	Open	Normal operation.	
	Short	Normal operation.	AUX:0
C704	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C705	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C709	Open	Normal operation.	
	Short	Normal operation.	
C710	Open	Normal operation.	
	Short	Normal operation.	
C711	Open	Normal operation.	
	Short	Normal operation.	
C712	Open	Normal operation.	
	Short	Normal operation.	
C713	Open	Normal operation.	
	Short	Normal operation.	
C714	Open	Normal operation.	
	Short	Normal operation.	
C715	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C716	Open	Normal operation.	
	Short	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
C750	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D101	Open		R114 opened, No hazard.	AVR1:0
	Short		R114 opened, No hazard.	AVR1:0
D102	Open		Normal operation.	
	Short		F101 opened, No hazard.	AVR1:0
D103	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D104	Open		Normal operation.	
	Short		Normal operation.	
D105	Open		Normal operation.	
	Short		Normal operation.	
D109	Open		R114 opened, No hazard.	AVR1:0
	Short		R114 opened, No hazard.	AVR1:0
D201	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
D202	Open		Normal operation.	
	Short		Normal operation.	
D209	Open		Normal operation.	
	Short		Normal operation.	
D301	Open		Normal operation.	
	Short		Normal operation.	
D302	Open	only3.3, 15V	Normal operation.	
	Short	only3.3, 15V	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
D303	Open	Normal operation.	
	Short	Normal operation.	
D304	Open	Normal operation.	
	Short	Normal operation.	
D305	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
D309	Open	See 40 Page.	
	Short	See 40 Page.	
D401	Open	No Hazard.	AVR1:0
	Short	R401 opened, No hazard.	AVR1:0
D402	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D403	Open	Normal operation.	
	Short	See 40 Page.	
D404	Open	Normal operation.	
	Short	Normal operation.	
D405	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
D501	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D502	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
D601	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
D603	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
D605	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
D607	Open	Normal operation.	
	Short	Normal operation.	
D608	Open	Normal operation.	
	Short	Normal operation.	
D609	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
D610	Open	Normal operation.	
	Short	Normal operation.	
D611	Open	Normal operation.	
	Short	Normal operation.	
D612	Open	Normal operation.	
	Short	Normal operation.	
D614	Open	Normal operation.	
	Short	Normal operation.	
D615	Open	Normal operation.	
	Short	Normal operation.	
D623	Open	Normal operation.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
D701	Open	Normal operation.	
	Short	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
D702	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D706	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D707	Open		Normal operation.	
	Short		Normal operation.	
IC201	Open	1	Normal operation.	
		2	Normal operation.	
		3	No Hazard.	AVR1:0
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	R114 opened, No hazard.	AVR1:0
		8	R114 opened, No hazard.	AVR1:0
		9	No Hazard.	AVR1:0
		10	No Hazard.	AVR1:0
		11	Normal operation.	
		12	No Hazard.	AVR1:0
		13	R114 opened, No hazard.	AVR1:0
		14	Normal operation.	
		15	R114 opened, No hazard.	AVR1:0
		16	R114 opened, No hazard.	AVR1:0
	Short	1-2	R114 opened, No hazard.	AVR1:0
		2-3	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC201	Short	3-4	Normal operation.	
		4-5	R114 opened, No hazard.	AVR1:0
		5-6	R114 opened, No hazard.	AVR1:0
		6-7	Normal operation.	
		7-8	R114 opened, No hazard.	AVR1:0
		9-10	Normal operation.	
		10-11	R114 opened, No hazard.	AVR1:0
		11-12	Normal operation.	
		12-13	Normal operation.	
		13-14	R114 opened, No hazard.	AVR1:0
		14-15	No Hazard.	AVR1:0
		15-16	R114 opened, No hazard.	AVR1:0
IC301	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	F101 opened, No hazard.	AVR1:0
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
		9	Normal operation.	
		10	No Hazard.	AVR1:0
		11	No Hazard.	AVR1:0
		12	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC301	Open	13	Output voltage decreased. No hazard.	AVR1:decreased
		14	Normal operation.	
		15	Normal operation.	
		16	Normal operation.	
		17	No Hazard.	AVR1:0
		18	Output voltage decreased. No hazard.	AVR1:decreased
		19	Output voltage decreased. No hazard.	AVR1:decreased
		20	No Hazard.	AVR1:0
	Short	1-2	See 40 Page.	
		2-3	No Hazard.	AVR1:0
		3-4	Normal operation.	
		4-5	Normal operation.	
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	Normal operation.	
		8-9	Normal operation.	
		9-10	No Hazard.	AVR1:0
		11-12	No Hazard.	AVR1:0
		12-13	No Hazard.	AVR1:0
		13-14	Normal operation.	
		14-15	Normal operation.	
		15-16	Normal operation.	
		16-17	Normal operation.	
		17-18	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC301	Short	18-19	Normal operation.	
		19-20	R328 opened, No hazard.	AVR1:0
IC401	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		2-3	R401 opened, No hazard.	AVR1:0
IC601	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
IC603	Open	K	No Hazard.	AVR1:0
		A	No Hazard.	AVR1:0
		R	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		K-R	Output voltage decreased. No hazard.	AVR1:decreased
		R-A	Output voltage decreased. No hazard.	AVR1:decreased
IC604	Open	1	No Hazard.	AVR1:0
		2	Normal operation.	
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC604	Short	2-3	No Hazard.	AVR1:0
		3-4	No Hazard.	AVR1:0
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	Normal operation.	
IC605	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
		4	No Hazard.	AVR1:0
		5	Normal operation.	
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
		3-4	Normal operation.	
		5-6	No Hazard.	AVR1:0
		6-7	No Hazard.	AVR1:0
		7-8	No Hazard.	AVR1:0
IC606	Open	1	Normal operation.	
		2	No Hazard.	AVR1:0
		3	Normal operation.	
		4	Normal operation.	
		5	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC606	Open	6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
	Short	1-2	No Hazard.	AVR1:0
		2-3	Normal operation.	
		3-4	No Hazard.	AVR1:0
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	Normal operation.	
IC701	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
L101	Open		No Hazard.	AVR1:0
	Short		F101 opened, No hazard.	AVR1:0
L102	Open		No Hazard.	AVR1:0
	Short		F101 opened, No hazard.	AVR1:0
L103	Open	5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		8, 9	No Hazard.	AVR1:0
		10, 11	No Hazard.	AVR1:0
	Short	6-8, 9	R114 opened, No hazard.	AVR1:0
		8, 9-10, 11	F101 opened, No hazard.	AVR1:0
L104	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
L105	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	
L301	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	
L302	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	
L501	Open	1, 3	No Hazard.	AVR1:0
		2, 4	No Hazard.	AVR1:0
	Short	1-3	No Hazard.	AVR1:0
		2-4	No Hazard.	AVR1:0
L502	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
LED601	Open		Normal operation.	
	Short		Normal operation.	
PC301	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0
PC302	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
		D	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	Output voltage decreased. No hazard.	AVR1:decreased
		D-E	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
PC302	Short	C-D	No Hazard.	AVR1:0
PC601	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	Normal operation.	
PC602	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0
PC603	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	Normal operation.	
PC702	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	Normal operation.	
SCR101	Open	K	R114 opened, No hazard.	AVR1:0
		A	R114 opened, No hazard.	AVR1:0
		G	R114 opened, No hazard.	AVR1:0
	Short	K-A	Normal operation.	
		K-G	R114 opened, No hazard.	AVR1:0
		A-G	R114 opened, No hazard.	AVR1:0
SS101	Open	+	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
SS101	Open	-	No Hazard.	AVR1:0
		AC	No Hazard.	AVR1:0
	Short	+AC	F101 opened, No hazard.	AVR1:0
		--AC	F101 opened, No hazard.	AVR1:0
SS103	Open		No Hazard.	AVR1:0
	Short		R114 opened, No hazard.	AVR1:0
SS501	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
SS502	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
SS505	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
SS506	Open	except36, 48V	Normal operation.	
	Short	except36, 48V	No Hazard.	AVR1:0
SS507	Open	except24V	Normal operation.	
	Short	except24V	No Hazard.	AVR1:0
T104	Open	1	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	Output voltage increased. No hazard.	AVR1:increased
		7	Output voltage increased. No hazard.	AVR1:increased
	Short	1-3	Normal operation.	
		4-7	Normal operation.	
T301	Open	1	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
T301	Open	A	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
		C only5V	Normal operation.	
		D only5V	Normal operation.	
	Short	1-2	F101 opened, No hazard.	AVR1:0
		2-3	F101 opened, No hazard.	AVR1:0
		A-B	F101 opened, No hazard.	AVR1:0
T401	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		9	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		3-4	No Hazard.	AVR1:0
		5-6	No Hazard.	AVR1:0
		7-9	R401 opened, No hazard.	AVR1:0
THSW301	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
TR101	Open	D	See 40 Page.	
		S	See 40 Page.	
		G	See 40 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Short	D-S	See 40 Page.	
		S-G	See 40 Page.	
		G-D	See 40 Page.	
TR102	Open	D	See 40 Page.	
		S	See 40 Page.	
		G	See 40 Page.	
	Short	D-S	See 40 Page.	
		S-G	See 40 Page.	
		G-D	See 40 Page.	
TR109	Open	C	R114 opened, No hazard.	AVR1:0
		E	Normal operation.	
		B	R114 opened, No hazard.	AVR1:0
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	R114 opened, No hazard.	AVR1:0
TR201	Open	C	R114 opened, No hazard.	AVR1:0
		E	R114 opened, No hazard.	AVR1:0
		B	R114 opened, No hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	R114 opened, No hazard.	AVR1:0
		B-C	Normal operation.	
TR202	Open	C	R114 opened, No hazard.	AVR1:0
		E	R114 opened, No hazard.	AVR1:0
		B	R114 opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR202	Short	C-E	Normal operation.	
		E-B	R114 opened, No hazard.	AVR1:0
		B-C	Normal operation.	
TR204	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR301	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	No Hazard.	AVR1:0
TR302	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR303	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR303	Short	C-E	F101 opened, No hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	Normal operation.	
TR305	Open	C	F101 opened, No hazard.	AVR1:0
		E	F101 opened, No hazard.	AVR1:0
		B	F101 opened, No hazard.	AVR1:0
	Short	C-E	No Hazard.	AVR1:0
		E-B	F101 opened, No hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR308	Open	D	See 40 Page.	
		S	See 40 Page.	
		G	See 40 Page.	
	Short	D-S	See 40 Page.	
		S-G	See 40 Page.	
		G-D	See 40 Page.	
TR309	Open	D	See 41 Page.	
		S	See 41 Page.	
		G	See 41 Page.	
	Short	D-S	See 41 Page.	
		S-G	See 41 Page.	
		G-D	See 41 Page.	
TR401	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR401	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR601	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	Normal operation.	
TR610	Open	C	Output voltage increased. No hazard.	AVR1:increased
		E	Output voltage increased. No hazard.	AVR1:increased
		B	Output voltage increased. No hazard.	AVR1:increased
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR611	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR620	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR620	Short	C-E	Output voltage decreased. No hazard.	AVR1:decreased
		E-B	Normal operation.	
		B-C	No Hazard.	AVR1:0
TR622	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR623	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR704	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR705	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR705	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	Normal operation.	
TR706	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
VR301	Open	brush only24V	Normal operation.	
		only24V	Normal operation.	
	Short	only24V	Normal operation.	
VR601	Open	brush	Output voltage increased. No hazard.	AVR1:increased
			No Hazard.	AVR1:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased
VR602	Open	brush only48V	Output voltage decreased. No hazard.	AVR1:decreased
		only48V	Output voltage decreased. No hazard.	AVR1:decreased
	Short	only48V	Output voltage increased. No hazard.	AVR1:Increased
ZD201	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
ZD301	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
ZD303	Open		Normal operation.	
	Short		No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
ZD401	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
ZD402	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD403	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
ZD501	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD502	Open	only 24, 36, 48V	Normal operation.	
	Short	only 24, 36, 48V	No Hazard.	AVR1:0
ZD601	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
R101	Open		Normal operation.	
R102	Open		Normal operation.	
R103	Open		Normal operation.	
R104	Open		Normal operation.	
R105	Open		Normal operation.	
R106	Open		Normal operation.	
R107	Open		Normal operation.	
R108	Open		Normal operation.	
R110	Open		R114 opened, No hazard.	AVR1:0
R111	Open		R114 opened, No hazard.	AVR1:0
R114	Open		Normal operation.	
R116	Open		Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R118	Open	F101 opened, No hazard.	AVR1:0
R119	Open	F101 opened, No hazard.	AVR1:0
R121	Open	Normal operation.	
R122	Open	Normal operation.	
R123	Open	Normal operation.	
R125	Open	Normal operation.	
R126	Open	Normal operation.	
R130	Open	Normal operation.	
R201	Open	No Hazard.	AVR1:0
R202	Open	No Hazard.	AVR1:0
R203	Open	No Hazard.	AVR1:0
R204	Open	No Hazard.	AVR1:0
R205	Open	No Hazard.	AVR1:0
R206	Open	No Hazard.	AVR1:0
R207	Open	No Hazard.	AVR1:0
R208	Open	Normal operation.	
R209	Open	Normal operation.	
R212	Open	Normal operation.	
R213	Open	No Hazard.	AVR1:0
R214	Open	No Hazard.	AVR1:0
R215	Open	Normal operation.	
R216	Open	No Hazard.	AVR1:0
R217	Open	Normal operation.	
R218	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R219	Open	No Hazard.	AVR1:0
R220	Open	Normal operation.	
R221	Open	Normal operation.	
R222	Open	Normal operation.	
R226	Open	No Hazard.	AVR1:0
R227	Open	No Hazard.	AVR1:0
R228	Open	R114 opened, No hazard.	AVR1:0
R229	Open	No Hazard.	AVR1:0
R230	Open	No Hazard.	AVR1:0
R231	Open	Normal operation.	
R232	Open	Normal operation.	
R233	Open	Normal operation.	
R234	Open	Normal operation.	
R235	Open	Normal operation.	
R236	Open	Normal operation.	
R237	Open	Normal operation.	
R238	Open	Normal operation.	
R239	Open	No Hazard.	AVR1:0
R240	Open	Normal operation.	
R241	Open	Normal operation.	
R242	Open	Normal operation.	
R243	Open	Normal operation.	
R244	Open	Normal operation.	
R247	Open	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
R249	Open		No Hazard.	AVR1:0
R250	Open		No Hazard.	AVR1:0
R251	Open		No Hazard.	AVR1:0
R252	Open		No Hazard.	AVR1:0
R253	Open		No Hazard.	AVR1:0
R301	Open		Normal operation.	
R302	Open		Normal operation.	
R303	Open		No Hazard.	AVR1:0
R304	Open		No Hazard.	AVR1:0
R305	Open		Normal operation.	
R306	Open		No Hazard.	AVR1:0
R307	Open		No Hazard.	AVR1:0
R308	Open		No Hazard.	AVR1:0
R309	Open		Output voltage decreased. No hazard.	AVR1:decreased
R310	Open		Normal operation.	
R311	Open	only24V	Output voltage decreased. No hazard.	AVR1:decreased
R313	Open	only3.3, 15V	Normal operation.	
R314	Open		No Hazard.	AVR1:0
R315	Open		No Hazard.	AVR1:0
R316	Open		Output voltage decreased. No hazard.	AVR1:decreased
R317	Open		Output voltage decreased. No hazard.	AVR1:decreased
R318	Open		No Hazard.	AVR1:0
R319	Open		No Hazard.	AVR1:0
R320	Open		F101 opened, No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
R321	Open	F101 opened, No hazard.	AVR1:0
R322	Open	No Hazard.	AVR1:0
R325	Open	No Hazard.	AVR1:0
R327	Open	Normal operation.	
R328	Open	No Hazard.	AVR1:0
R329	Open	Normal operation.	
R331	Open	Normal operation.	
R332	Open	Output voltage decreased. No hazard.	AVR1:decreased
R333	Open	Output voltage decreased. No hazard.	AVR1:decreased
R335	Open	Normal operation.	
R336	Open	Normal operation.	
R337	Open	Normal operation.	
R338	Open	Normal operation.	
R346	Open	Normal operation.	
R347	Open	Normal operation.	
R401	Open	No Hazard.	AVR1:0
R402	Open	R114 opened, No hazard.	AVR1:0
R403	Open	No Hazard.	AVR1:0
R404	Open	Normal operation.	
R405	Open	Normal operation.	
R406	Open	Normal operation.	
R407	Open	Normal operation.	
R408	Open	Normal operation.	
R409	Open	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
R410	Open		No Hazard.	AVR1:0
R413	Open		Normal operation.	
R414	Open		Normal operation.	
R415	Open		Normal operation.	
R416	Open		Normal operation.	
R417	Open		No Hazard.	AVR1:0
R418	Open		No Hazard.	AVR1:0
R504	Open	except 3.3, 5, 7.5V	Normal operation.	
R505	Open	except 3.3, 5, 7.5V	Normal operation.	
R506	Open		No Hazard.	AVR1:0
R507	Open		Normal operation.	
R508	Open		Normal operation.	
R509	Open		Normal operation.	
R510	Open		Normal operation.	
R515	Open		Normal operation.	
R516	Open		Normal operation.	
R517	Open	except 24, 36, 48V	Normal operation.	
R518	Open		No Hazard.	AVR1:0
R531	Open		Normal operation.	
R532	Open		Normal operation.	
R560	Open		Normal operation.	
R561	Open		Normal operation.	
R562	Open		Normal operation.	
R563	Open		Normal operation.	

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Component		Mode		Comment	Output Voltage (V)
R564	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R565	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R566	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R567	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R568	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R569	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R570	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R571	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R572	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R573	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R574	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R575	only	Open	only3.3, 5, 7.5, 36V	Normal operation.	
R601		Open		Normal operation.	
R602		Open		No Hazard.	AVR1:0
R603		Open		No Hazard.	AVR1:0
R604		Open		Normal operation.	
R605		Open		Normal operation.	
R606		Open		No Hazard.	AVR1:0
R607		Open		No Hazard.	AVR1:0
R608		Open		Normal operation.	
R609		Open		No Hazard.	AVR1:0
R610		Open		No Hazard.	AVR1:0
R611		Open		No Hazard.	AVR1:0
R612		Open		Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R613	Open	Normal operation.	
R614	Open	Normal operation.	
R615	Open	Normal operation.	
R616	Open	No Hazard.	AVR1:0
R617	Open	Output voltage decreased. No hazard.	AVR1:decreased
R618	Open	No Hazard.	AVR1:0
R619	Open	No Hazard.	AVR1:0
R620	Open	Output voltage decreased. No hazard.	AVR1:decreased
R621	Open	Normal operation.	
R622	Open	No Hazard.	AVR1:0
R623	Open	No Hazard.	AVR1:0
R624	Open	No Hazard.	AVR1:0
R625	Open	Output voltage decreased. No hazard.	AVR1:decreased
R626	Open	Output voltage decreased. No hazard.	AVR1:decreased
R627	Open	No Hazard.	AVR1:0
R628	Open	No Hazard.	AVR1:0
R629	Open	Normal operation.	
R630	Open	No Hazard.	AVR1:0
R632	Open	Normal operation.	
R633	Open	Normal operation.	
R634	Open	Normal operation.	
R635	Open	Normal operation.	
R636	Open	Normal operation.	
R637	Open	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
R638	Open		Normal operation.	
R647	Open		No Hazard.	AVR1:0
R648	Open		No Hazard.	AVR1:0
R650	Open		Output voltage decreased. No hazard.	AVR1:decreased
R651	Open		Output voltage decreased. No hazard.	AVR1:decreased
R652	Open		Output voltage decreased. No hazard.	AVR1:decreased
R653	Open		Output voltage decreased. No hazard.	AVR1:decreased
R654	Open		Normal operation.	
R655	Open		Normal operation.	
R656	Open		Normal operation.	
R657	Open		Normal operation.	
R658	Open		Normal operation.	
R661	Open		Normal operation.	
R662	Open		Normal operation.	
R663	Open	except48V	Output voltage decreased. No hazard.	AVR1:decreased
R665	Open		Normal operation.	
R667	Open		Normal operation.	
R668	Open		Normal operation.	
R669	Open		Normal operation.	
R670	Open		Normal operation.	
R671	Open		Normal operation.	
R673	Open		Normal operation.	
R674	Open		No Hazard.	AVR1:0
R701	Open		Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R702	Open	Normal operation.	
R707	Open	No Hazard.	AVR1:0
R709	Open	Normal operation.	
R710	Open	Normal operation.	
R711	Open	No Hazard.	AVR1:0
R713	Open	Normal operation.	
R718	Open	Normal operation.	
R719	Open	Normal operation.	
R723	Open	Normal operation.	
R724	Open	Normal operation.	
R725	Open	Normal operation.	
R726	Open	Normal operation.	
R727	Open	Normal operation.	
R730	Open	Normal operation.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C119	Open		No Hazard.	AVR1:0
C512	Open		Output voltage decreased. No hazard.	AVR1:decreased
D309	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D403	Short		No Hazard.	AVR1:0
IC301	Short	1-2	No Hazard.	AVR1:0
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0
TR102	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0
TR308	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR309	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0