

## ABNORMAL TEST RESULT

OF MODEL DHS250B12, 15, 24, 28, 48

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 : 2/30 ~ 28/30)

( Abnormal Test Result: 29/30 ~ 30/30)

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)
C11	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C12	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C21	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C22	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C23	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C24	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C31	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C32	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C33	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C34	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C51	Open	Output voltage decreased.No hazard. (except 12V, 15V)	AVR1:decreased
	Short	Output voltage decreased.No hazard. (except 12V, 15V)	AVR1:decreased
C52	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
C53	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C61	Open	Normal operation. (except 12V, 15V)	AVR1:*
	Short	Normal operation. (except 12V, 15V)	AVR1:*
C62	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C63	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C81	Open	Normal operation. (except 12V, 15V)	AVR1:*
	Short	Output voltage decreased. No hazard. (except 12V, 15V)	AVR1:decreased
C82	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C83	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C84	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C85	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C86	Short	Output voltage decreased. No hazard. (except 12V, 15V)	AVR1:decreased
	Open	Normal operation. (except 12V, 15V)	AVR1:*
C87	Short	Output voltage decreased. No hazard. (except 12V, 15V)	AVR1:decreased
	Open	Normal operation. (except 12V, 15V)	AVR1:*
C101	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
C102	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C103	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C104	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C105	Short	External Fuse opened, No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C111	Open	See 29 Page.	
	Short	See 29 Page.	
C112	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C113	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C114	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C115	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C131	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C132	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C151	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
C152	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C181	Open	No hazard.	AVR1:0[V]
	Short	No hazard.	AVR1:0[V]
C182	Open	No hazard.	AVR1:0[V]
	Short	No hazard.	AVR1:0[V]
C201	Short	See 29 Page.	
	Open	Normal operation.	AVR1:*
C221	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C222	Short	See 29 Page.	
	Open	Normal operation.	AVR1:*
C231	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
C251	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
C261	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C271	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C301	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C302	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
C303	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C304	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C305	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
C331	Short	No hazard.	AVR1:0[V]
	Open	Output voltage decreased.No hazard.	AVR1:decreased
C332	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C333	Short	See 29 Page.	
	Open	Normal operation.	AVR1:*
C351	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C352	Short	Output voltage decreased.No hazard. (only 48V)	AVR1:decreased
	Open	Normal operation. (only 48V)	AVR1:*
C531	Open	No hazard.	AVR1:0[V]
	Short	No hazard.	AVR1:0[V]
C532	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C541	Short	See 29 Page.	
	Open	Normal operation.	AVR1:*
C551	Short	Output voltage decreased.No hazard.	AVR1:decreased
	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
C552	Short	Output voltage decreased.No hazard.	AVR1:decreased
	Open	Normal operation.	AVR1:*
C562	Short	See 29 Page.	
	Open	Normal operation.	AVR1:*
C563	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C564	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C565	Short	Output voltage decreased.No hazard.	AVR1:decreased
	Open	Normal operation.	AVR1:*
C566	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C574	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C575	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C576	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C577	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C581	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
C582	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
C601	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C602	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C603	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C604	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
D11	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
D21	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D22	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
D23	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D24	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D31	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D32	Short	Normal operation.	AVR1:*
	Open	Normal operation.	AVR1:*
D33	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
D34	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D111	Open	No hazard.	AVR1:0[V]
	Short	No hazard.	AVR1:0[V]
D112	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
D113	Open	No hazard.	AVR1:0[V]
	Short	No hazard.	AVR1:0[V]
D151	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
D152	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D153	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
D154	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D181	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
D202	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D331	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*
D333	Short	No hazard.	AVR1:0[V]
	Open	Normal operation.	AVR1:*



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Component	Mode		Comment	Output Voltage (V)	
D351	Open		Normal operation. (only 48V)	AVR1:*	
	Short		Normal operation. (only 48V)	AVR1:*	
D352	Open		Normal operation. (only 48V)	AVR1:*	
	Short		Normal operation. (only 48V)	AVR1:*	
D531	Open		No hazard.	AVR1:0[V]	
	Short		No hazard.	AVR1:0[V]	
D532	Short		No hazard.	AVR1:0[V]	
	Open		Normal operation.	AVR1:*	
D561	Short		Output voltage decreased.No hazard.	AVR1:decreased	
	Open		Normal operation.	AVR1:*	
D562	Short		Output voltage decreased.No hazard.	AVR1:decreased	
	Open		Normal operation.	AVR1:*	
D563	Short		Output voltage decreased.No hazard.	AVR1:decreased	
	Open		Normal operation.	AVR1:*	
IC201	Short	6-7	No hazard.	AVR1:0[V]	
		11-12	Output voltage decreased.No hazard.	AVR1:decreased	
	Open	15	Normal operation.	AVR1:*	
		19	No hazard.	AVR1:0[V]	
		16	Normal operation.	AVR1:*	
	Short	9-10		No hazard.	AVR1:0[V]
		Open	12	Normal operation.	AVR1:*
	17		Normal operation.	AVR1:*	
	18		No hazard.	AVR1:0[V]	
	11		Output voltage decreased.No hazard.	AVR1:decreased	



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Component	Mode		Comment	Output Voltage (V)
IC201	Open	14	Normal operation.	AVR1:*
		7	No hazard.	AVR1:0[V]
		20	No hazard.	AVR1:0[V]
	Short	17-18	No hazard.	AVR1:0[V]
		16-17	No hazard.	AVR1:0[V]
		15-16	No hazard.	AVR1:0[V]
		14-15	No hazard.	AVR1:0[V]
	Open	1	No hazard.	AVR1:0[V]
		9	Normal operation.	AVR1:*
	Short	8-9	Normal operation.	AVR1:*
	Open	8	Normal operation.	AVR1:*
	Short	7-8	Normal operation.	AVR1:*
	Open	6	Normal operation.	AVR1:*
	Short	5-6	Normal operation.	AVR1:*
	Open	5	Normal operation.	AVR1:*
	Short	4-5	Normal operation.	AVR1:*
	Open	4	Normal operation.	AVR1:*
	Short	3-4	Normal operation.	AVR1:*
	Open	3	Normal operation.	AVR1:*
	Short	2-3	Normal operation.	AVR1:*
	Open	2	Normal operation.	AVR1:*
Short	19-20	Normal operation.	AVR1:*	
	18-19	Normal operation.	AVR1:*	
	13-14	Normal operation.	AVR1:*	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC201	Open	13	Normal operation.	AVR1:*
	Short	12-13	Normal operation.	AVR1:*
		1-2	Normal operation.	AVR1:*
	Open	10	Normal operation.	AVR1:*
IC202	Open	5	No hazard.	AVR1:0[V]
	Short	4-5	No hazard.	AVR1:0[V]
	Open	4	No hazard.	AVR1:0[V]
	Short	3-4	No hazard.	AVR1:0[V]
	Open	3	No hazard.	AVR1:0[V]
	Short	2-3	No hazard.	AVR1:0[V]
	Open	2	No hazard.	AVR1:0[V]
	Short	1-2	No hazard.	AVR1:0[V]
	Open	1	Normal operation.	AVR1:*
IC221	Open	5	See 29 Page.	
		4	See 29 Page.	
		3	See 29 Page.	
	Short	2-3	Normal operation.	AVR1:*
	Open	2	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
	Open	1	Normal operation.	AVR1:*
IC331	Short	2-3	No hazard.	AVR1:0[V]
	Open	8	No hazard.	AVR1:0[V]
	Short	7-8	No hazard.	AVR1:0[V]
		6-7	No hazard.	AVR1:0[V]



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Component	Mode		Comment	Output Voltage (V)
IC331	Open	6	No hazard.	AVR1:0[V]
	Short	5-6	No hazard.	AVR1:0[V]
	Open	4	No hazard.	AVR1:0[V]
	Short	3-4	No hazard.	AVR1:0[V]
	Open	3	No hazard.	AVR1:0[V]
		2	No hazard.	AVR1:0[V]
	Short	1-2	No hazard.	AVR1:0[V]
	Open	1	No hazard.	AVR1:0[V]
		7	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
	Short	4-5	Normal operation.	AVR1:*
	IC332	Short	4-5	See 29 Page.
1-2			No hazard.	AVR1:0[V]
Open		5	No hazard.	AVR1:0[V]
		4	No hazard.	AVR1:0[V]
Short		3-4	No hazard.	AVR1:0[V]
Open		3	No hazard.	AVR1:0[V]
Short		2-3	No hazard.	AVR1:0[V]
Open		2	No hazard.	AVR1:0[V]
		1	No hazard.	AVR1:0[V]
IC551		Open	R	No hazard.
	K		No hazard.	AVR1:0[V]
	A		No hazard.	AVR1:0[V]
	Short	R-A	Output voltage decreased.No hazard.	AVR1:decreased

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Component	Mode		Comment	Output Voltage (V)
IC551	Short	A-K	Output voltage decreased.No hazard.	AVR1:decreased
		K-R	Normal operation.	AVR1:*
IC561	Open	5	No hazard.	AVR1:0[V]
	Short	4-5	No hazard.	AVR1:0[V]
	Open	4	No hazard.	AVR1:0[V]
		2	No hazard.	AVR1:0[V]
	Short	1-2	No hazard.	AVR1:0[V]
	Open	1	No hazard.	AVR1:0[V]
	Short	3-4	Output voltage decreased.No hazard.	AVR1:decreased
	Open	3	Output voltage decreased.No hazard.	AVR1:decreased
IC581	Open	5	Normal operation.	AVR1:*
	Short	4-5	Normal operation.	AVR1:*
	Open	4	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
	Short	3-4	No hazard.	AVR1:0[V]
	Open	2	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
	Open	1	Normal operation.	AVR1:*
L51	Short		Output voltage decreased.No hazard.	AVR1:decreased
	Open		Output voltage decreased.No hazard.	AVR1:decreased
L101	Open		No hazard.	AVR1:0[V]
	Short		Normal operation.	AVR1:*
PC251	Open	C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
PC251	Open	A, K	Normal operation.	AVR1:*
	Short	C-E	No hazard.	AVR1:0[V]
PC351	Open	C, E	No hazard.	AVR1:0[V]
	Short	A-K	No hazard.	AVR1:0[V]
	Open	A, K	No hazard.	AVR1:0[V]
	Short	C-E	No hazard.	AVR1:0[V]
SS51	Open		See 29 Page.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
SS61	Open		See 29 Page.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
T11	Open	6	See 29 Page.	
		5	See 29 Page.	
	Short	3-4	See 29 Page.	
		1-2	External Fuse opened, No hazard.	AVR1:0[V]
		5-6	Output voltage decreased.No hazard.	AVR1:decreased
	Open	2	No hazard.	AVR1:0[V]
		1	No hazard.	AVR1:0[V]
		4	Normal operation.	AVR1:*
3		Normal operation.	AVR1:*	
T101	Short	1-3	No hazard.	AVR1:0[V]
		9-10	No hazard.	AVR1:0[V]
	Open	9	No hazard.	AVR1:0[V]
		3	No hazard.	AVR1:0[V]
		10	No hazard.	AVR1:0[V]



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Component	Mode		Comment	Output Voltage (V)
T101	Open	1	No hazard.	AVR1:0[V]
T151	Short	9-10	No hazard.	AVR1:0[V]
		6-7	No hazard.	AVR1:0[V]
		4-5	No hazard.	AVR1:0[V]
		1-2	No hazard.	AVR1:0[V]
	Open	9, 10	No hazard.	AVR1:0[V]
		6, 7	No hazard.	AVR1:0[V]
		4, 5	No hazard.	AVR1:0[V]
		1, 2	Normal operation.	AVR1:*
T181	Open	6	No hazard.	AVR1:0[V]
	Short	5-6	No hazard.	AVR1:0[V]
	Open	5	No hazard.	AVR1:0[V]
		4	No hazard.	AVR1:0[V]
	Short	3-4	No hazard.	AVR1:0[V]
	Open	3	No hazard.	AVR1:0[V]
TH11	Short		No hazard.	AVR1:0[V]
	Open		Normal operation.	AVR1:*
TR21	Short	G-D	See 29 Page.	
	Open	G	See 29 Page.	
	Short	D-S	See 29 Page.	
		S-G	No hazard.	AVR1:0[V]
	Open	S	No hazard.	AVR1:0[V]
		D	No hazard.	AVR1:0[V]
TR22	Short	E-B	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR22	Open	E	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
	Open	C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	B-C	No hazard.	AVR1:0[V]
TR31	Short	G-D	See 29 Page.	
	Open	G	See 29 Page.	
	Short	D-S	See 29 Page.	
		S-G	No hazard.	AVR1:0[V]
	Open	S	No hazard.	AVR1:0[V]
		D	No hazard.	AVR1:0[V]
TR32	Short	E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
	Open	C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	B-C	No hazard.	AVR1:0[V]
TR111	Short	G-D	No hazard.	AVR1:0[V]
	Open	G	No hazard.	AVR1:0[V]
	Short	D-S	No hazard.	AVR1:0[V]
		S-G	No hazard.	AVR1:0[V]
	Open	S	No hazard.	AVR1:0[V]
		D	No hazard.	AVR1:0[V]
TR112	Short	C-E	No hazard.	AVR1:0[V]

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Component	Mode		Comment	Output Voltage (V)
TR112	Short	B-C	No hazard.	AVR1:0[V]
		E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
		C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
TR113	Short	E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
	Open	C	Normal operation.	AVR1:*
	Short	B-C	Normal operation.	AVR1:*
	Open	B	Normal operation.	AVR1:*
TR151	Short	G-D	No hazard.	AVR1:0[V]
		D-S	No hazard.	AVR1:0[V]
		S-G	No hazard.	AVR1:0[V]
	Open	S	No hazard.	AVR1:0[V]
		G	No hazard.	AVR1:0[V]
		D	No hazard.	AVR1:0[V]
TR152	Short	G-D	No hazard.	AVR1:0[V]
		D-S	No hazard.	AVR1:0[V]
		S-G	Normal operation.	AVR1:*
	Open	S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
		D	Normal operation.	AVR1:*
TR181	Short	S-G	No hazard.	AVR1:0[V]

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Component	Mode		Comment	Output Voltage (V)
TR181	Open	S	No hazard.	AVR1:0[V]
	Short	G-D	No hazard.	AVR1:0[V]
	Open	G	No hazard.	AVR1:0[V]
	Short	D-S	No hazard.	AVR1:0[V]
	Open	D	No hazard.	AVR1:0[V]
TR182	Short	S-G	No hazard.	AVR1:0[V]
	Open	S	No hazard.	AVR1:0[V]
	Short	G-D	No hazard.	AVR1:0[V]
	Open	G	No hazard.	AVR1:0[V]
	Short	D-S	No hazard.	AVR1:0[V]
	Open	D	No hazard.	AVR1:0[V]
TR201	Short	G-D	No hazard.	AVR1:0[V]
		D-S	No hazard.	AVR1:0[V]
		S-G	Normal operation.	AVR1:*
	Open	S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
		D	Normal operation.	AVR1:*
TR221	Short	C-E	See 29 Page.	
		B-C	See 29 Page.	
		E-B	No hazard.	AVR1:0[V]
	Open	E	No hazard.	AVR1:0[V]
		C	No hazard.	AVR1:0[V]
		B	No hazard.	AVR1:0[V]
TR231	Short	E-B	Normal operation.	AVR1:*

F M E A

Component	Mode		Comment	Output Voltage (V)
TR231	Open	E	Normal operation.	AVR1:*
		C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No hazard.	AVR1:0[V]
		B-C	No hazard.	AVR1:0[V]
TR301	Short	C-E	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
		E-B	No hazard.	AVR1:0[V]
	Open	E	No hazard.	AVR1:0[V]
		C	No hazard.	AVR1:0[V]
		B	No hazard.	AVR1:0[V]
TR302	Short	E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
		C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No hazard.	AVR1:0[V]
		B-C	No hazard.	AVR1:0[V]
TR303	Short	E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
		C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No hazard.	AVR1:0[V]
		B-C	No hazard.	AVR1:0[V]
TR331	Short	S-G	No hazard.	AVR1:0[V]

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR331	Open	S	No hazard.	AVR1:0[V]
		G	No hazard.	AVR1:0[V]
		D	No hazard.	AVR1:0[V]
	Short	G-D	No hazard.	AVR1:0[V]
		D-S	No hazard.	AVR1:0[V]
TR332	Open	E	No hazard.	AVR1:0[V]
	Short	C-E	No hazard.	AVR1:0[V]
	Open	C	No hazard.	AVR1:0[V]
	Short	B-C	No hazard.	AVR1:0[V]
	Open	B	No hazard.	AVR1:0[V]
	Short	E-B	No hazard.	AVR1:0[V]
TR333	Short	C-E	No hazard.	AVR1:0[V]
		B-C	No hazard.	AVR1:0[V]
		E-B	No hazard.	AVR1:0[V]
	Open	E	No hazard.	AVR1:0[V]
		C	No hazard.	AVR1:0[V]
		B	No hazard.	AVR1:0[V]
TR541	Short	E-B	No hazard.	AVR1:0[V]
	Open	E	No hazard.	AVR1:0[V]
	Short	C-E	No hazard.	AVR1:0[V]
	Open	C	No hazard.	AVR1:0[V]
		B	No hazard.	AVR1:0[V]
	Short	B-C	See 30 Page.	
TR561	Short	E-B	No hazard.	AVR1:0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
TR561	Open	E	No hazard.	AVR1:0[V]
		C	No hazard.	AVR1:0[V]
		B	No hazard.	AVR1:0[V]
	Short	C-E	Output voltage decreased.No hazard.	AVR1:decreased
		B-C	Output voltage decreased.No hazard.	AVR1:decreased
TR581	Short	E-B	Normal operation.	AVR1:*
	Open	E	Normal operation.	AVR1:*
		C	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No hazard.	AVR1:0[V]
		B-C	No hazard.	AVR1:0[V]
ZD111	Short		No hazard.	AVR1:0[V]
	Open		Normal operation.	AVR1:*
ZD112	Short		No hazard.	AVR1:0[V]
	Open		Normal operation.	AVR1:*
ZD541	Short		No hazard.	AVR1:0[V]
	Open		See 30 Page.	
R11	Open		Output voltage decreased.No hazard.	AVR1:decreased
R21	Open		Normal operation.	AVR1:*
R22	Open		Normal operation.	AVR1:*
R23	Open		Normal operation.	AVR1:*
R24	Open		See 30 Page.	
R25	Open		Normal operation.	AVR1:*
R31	Open		Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R32	Open	Normal operation.	AVR1:*
R33	Open	Normal operation.	AVR1:*
R34	Open	See 30 Page.	
R35	Open	Normal operation.	AVR1:*
R36	Open	Normal operation.	AVR1:*
R51	Open	Normal operation.	AVR1:*
R52	Open	Normal operation.	AVR1:*
R53	Open	Normal operation.	AVR1:*
R54	Open	Normal operation.	AVR1:*
R55	Open	Normal operation. (only 12V, 15V)	AVR1:*
R61	Open	Normal operation.	AVR1:*
R62	Open	Normal operation.	AVR1:*
R63	Open	Normal operation.	AVR1:*
R64	Open	Normal operation.	AVR1:*
R65	Open	Normal operation.	AVR1:*
R66	Open	Normal operation.	AVR1:*
R67	Open	Normal operation.	AVR1:*
R68	Open	Normal operation.	AVR1:*
R69	Open	Normal operation.	AVR1:*
R70	Open	Normal operation.	AVR1:*
R71	Open	Normal operation.	AVR1:*
R72	Open	Normal operation.	AVR1:*
R73	Open	Normal operation.	AVR1:*
R74	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R75	Open	Normal operation.	AVR1:*
R76	Open	Normal operation.	AVR1:*
R77	Open	Normal operation. (only 12V, 15V)	AVR1:*
R81	Open	Normal operation.	AVR1:*
R82	Open	Normal operation.	AVR1:*
R111	Open	No hazard.	AVR1:0[V]
R112	Open	No hazard.	AVR1:0[V]
R113	Open	No hazard.	AVR1:0[V]
R114	Open	No hazard.	AVR1:0[V]
R115	Open	Normal operation.	AVR1:*
R116	Open	Normal operation.	AVR1:*
R117	Open	Normal operation.	AVR1:*
R118	Open	Normal operation.	AVR1:*
R119	Open	Normal operation.	AVR1:*
R120	Open	Normal operation.	AVR1:*
R121	Open	No hazard.	AVR1:0[V]
R122	Open	No hazard.	AVR1:0[V]
R123	Open	Normal operation.	AVR1:*
R131	Open	No hazard.	AVR1:0[V]
R132	Open	No hazard.	AVR1:0[V]
R133	Open	No hazard.	AVR1:0[V]
R134	Open	No hazard.	AVR1:0[V]
R135	Open	No hazard.	AVR1:0[V]
R136	Open	No hazard.	AVR1:0[V]

F M E A

Component	Mode	Comment	Output Voltage (V)
R137	Open	No hazard.	AVR1:0[V]
R138	Open	Normal operation.	AVR1:*
R151	Open	Normal operation.	AVR1:*
R152	Open	Normal operation.	AVR1:*
R153	Open	Normal operation.	AVR1:*
R154	Open	No hazard.	AVR1:0[V]
R155	Open	Normal operation.	AVR1:*
R156	Open	Normal operation.	AVR1:*
R181	Open	Normal operation.	AVR1:*
R182	Open	Normal operation.	AVR1:*
R183	Open	No hazard.	AVR1:0[V]
R201	Open	No hazard.	AVR1:0[V]
R202	Open	Normal operation.	AVR1:*
R221	Open	No hazard.	AVR1:0[V]
R222	Open	See 30 Page.	
R223	Open	No hazard.	AVR1:0[V]
R231	Open	Normal operation.	AVR1:*
R232	Open	Normal operation.	AVR1:*
R233	Open	Normal operation.	AVR1:*
R234	Open	Normal operation.	AVR1:*
R235	Open	No hazard.	AVR1:0[V]
R251	Open	Normal operation.	AVR1:*
R252	Open	Normal operation.	AVR1:*
R261	Open	No hazard.	AVR1:0[V]

## F M E A

Component	Mode	Comment	Output Voltage (V)
R262	Open	Normal operation.	AVR1:*
R265	Open	Normal operation.	AVR1:*
R271	Open	No hazard.	AVR1:0[V]
R301	Open	No hazard.	AVR1:0[V]
R302	Open	No hazard.	AVR1:0[V]
R303	Open	No hazard.	AVR1:0[V]
R304	Open	No hazard.	AVR1:0[V]
R305	Open	No hazard.	AVR1:0[V]
R306	Open	Normal operation.	AVR1:*
R307	Open	Normal operation.	AVR1:*
R331	Open	No hazard.	AVR1:0[V]
R332	Open	No hazard.	AVR1:0[V]
R333	Open	No hazard.	AVR1:0[V]
R334	Open	Normal operation.	AVR1:*
R335	Open	Normal operation.	AVR1:*
R336	Open	No hazard.	AVR1:0[V]
R351	Open	No hazard.	AVR1:0[V]
R352	Open	Normal operation.	AVR1:*
R353	Open	Normal operation.	AVR1:*
R354	Open	Normal operation.	AVR1:*
R355	Open	Normal operation. (only 48V)	AVR1:*
R356	Open	Normal operation. (only 48V)	AVR1:*
R357	Open	No hazard.	AVR1:0[V]
R541	Open	No hazard.	AVR1:0[V]

## F M E A

Component	Mode	Comment	Output Voltage (V)
R551	Open	Output voltage decreased.No hazard.	AVR1:decreased
R552	Open	Output voltage decreased.No hazard.	AVR1:decreased
R553	Open	No hazard.	AVR1:0[V]
R554	Open	Output voltage decreased.No hazard.	AVR1:decreased
R555	Open	Normal operation.	AVR1:*
R561	Open	No hazard.	AVR1:0[V]
R562	Open	Output voltage decreased.No hazard.	AVR1:decreased
R563	Open	Normal operation.	AVR1:*
R564	Open	Normal operation.	AVR1:*
R565	Open	Output voltage decreased.No hazard.	AVR1:decreased
R566	Open	Output voltage decreased.No hazard. (except 48V)	AVR1:decreased
R567	Open	Output voltage decreased.No hazard.	AVR1:decreased
R568	Open	Output voltage decreased.No hazard.	AVR1:decreased
R569	Open	Output voltage decreased.No hazard.	AVR1:decreased
R570	Open	Output voltage decreased.No hazard.	AVR1:decreased
R571	Open	Output voltage decreased.No hazard.	AVR1:decreased
R572	Open	Normal operation.	AVR1:*
R573	Open	Normal operation.	AVR1:*
R574	Open	No hazard.	AVR1:0[V]
R581	Open	Normal operation.	AVR1:*
R582	Open	Normal operation.	AVR1:*
R583	Open	Normal operation.	AVR1:*
R584	Open	Normal operation.	AVR1:*
R585	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
R586	Open	Normal operation.	AVR1:*
R587	Open	Normal operation.	AVR1:*
R588	Open	No hazard.	AVR1:0[V]
R589	Open	Normal operation. (only 48V)	AVR1:*
R590	Open	Normal operation. (only 48V)	AVR1:*
R591	Open	Normal operation.	AVR1:*
R601	Open	Normal operation.	AVR1:*

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C111	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
C201	Short		No hazard.	AVR1:0[V]
C222	Short		No hazard.	AVR1:0[V]
C333	Short		No hazard.	AVR1:0[V]
C541	Short		Output voltage increased.No hazard.	AVR1:increased
C562	Short		Output voltage increased.No hazard.	AVR1:increased
IC221	Open	3	No hazard.	AVR1:0[V]
		4	No hazard.	AVR1:0[V]
		5	No hazard.	AVR1:0[V]
IC332	Short	4-5	No hazard.	AVR1:0[V]
SS51	Open		External Fuse opened, No hazard.	AVR1:0[V]
SS61	Open		External Fuse opened, No hazard.	AVR1:0[V]
T11	Open	5	External Fuse opened, No hazard.	AVR1:0[V]
		6	External Fuse opened, No hazard.	AVR1:0[V]
	Short	3-4	External Fuse opened, No hazard.	AVR1:0[V]
TR21	Open	G	Normal operation.	AVR1:*
	Short	D-S	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR31	Open	G	Normal operation.	AVR1:*
	Short	D-S	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR221	Short	C-E	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR541	Short	B-C	Output voltage decreased.No hazard.	AVR1:decreased
ZD541	Open		Output voltage decreased.No hazard.	AVR1:decreased
R24	Open		Normal operation.	AVR1:*
R34	Open		Normal operation.	AVR1:*
R222	Open		No hazard.	AVR1:0[V]