

ABNORMAL TEST RESULT

OF MODEL DHS50A

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 : 2/20 ~ 17/20)

(Abnormal Test Result: 18/20 ~ 20/20)

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	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C12	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C52	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C53	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C102	Open	Normal operation.	AVR1:*
	Short	External Fuse opened, No hazard.	AVR1:0 [V]
C103	Open	Normal operation.	AVR1:*
	Short	External Fuse opened, No hazard.	AVR1:0 [V]
C104	Open	Normal operation.	AVR1:*
	Short	External Fuse opened, No hazard.	AVR1:0 [V]
C111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C121	Open	Normal operation.	AVR1:*
	Short	See 18 Page.	
C131	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C132	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C142	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
C161	Open	See 18 Page.	
	Short	See 18 Page.	
C162	Open	See 18 Page.	
	Short	See 18 Page.	
C201	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C211	Open	No Hazard.	AVR1:0 [V]
	Short	Normal operation.	AVR1:*
C221	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C231	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C232	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C233	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C234	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C235	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C236	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C241	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0 [V]

F M E A

Component	Mode	Comment	Output Voltage (V)
C242	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C251	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C261	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C262	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C501	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C502	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C511	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C512	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C521	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C522	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C714	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C715	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]

F M E A

Component	Mode	Comment	Output Voltage (V)
C716	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C721	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0 [V]
C722	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C723	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0 [V]
C724	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C725	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C741	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
D111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D131	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D141	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D152	Open	See 18 Page.	
	Short	Normal operation.	AVR1:*
D161	Open	See 18 Page.	
	Short	See 18 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
D162	Open		See 18 Page.	
	Short		See 18 Page.	
D231	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D232	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D233	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0 [V]
D251	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D252	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased. No hazard.	AVR1:decreased
D253	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D254	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D721	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D722	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
IC201	Open	1	No Hazard.	AVR1:0 [V]
		2	External Fuse opened, No hazard.	AVR1:0 [V]
		3	External Fuse opened, No hazard.	AVR1:0 [V]
		4	Normal operation.	AVR1:*

F M E A

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

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Component	Mode		Comment	Output Voltage (V)
IC201	Short	9-10	No Hazard.	AVR1:0 [V]
		11-12	No Hazard.	AVR1:0 [V]
		12-13	No Hazard.	AVR1:0 [V]
		13-14	Normal operation.	AVR1:*
		14-15	Normal operation.	AVR1:*
		15-16	Normal operation.	AVR1:*
		16-17	Normal operation.	AVR1:*
		17-18	Normal operation.	AVR1:*
		18-19	Normal operation.	AVR1:*
		19-20	No Hazard.	AVR1:0 [V]
IC721	Open	K	No Hazard.	AVR1:0 [V]
		A	No Hazard.	AVR1:0 [V]
		R	No Hazard.	AVR1:0 [V]
	Short	A-K	No Hazard.	AVR1:0 [V]
		K-R	Output voltage decreased. No hazard.	AVR1:decreased
		R-A	No Hazard.	AVR1:0 [V]
L51	Open		See 18 Page.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
L101	Open		No Hazard.	AVR1:0 [V]
	Short		Normal operation.	AVR1:*
PC211	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0 [V]

F M E A

Component	Mode		Comment	Output Voltage (V)
PC231	Open	A, K	No Hazard.	AVR1:0 [V]
		C, E	No Hazard.	AVR1:0 [V]
	Short	A-K	No Hazard.	AVR1:0 [V]
		C-E	No Hazard.	AVR1:0 [V]
PTH11	Open		No Hazard.	AVR1:0 [V]
	Short		Normal operation.	AVR1:*
SS51	Open	T11-Pin8Side	See 18 Page.	
		T11-Pin9Side	See 18 Page.	
	Short	T11-Pin8Side	See 18 Page.	
		T11-Pin9Side	See 18 Page.	
T11	Open	1	See 18 Page.	
		2	See 18 Page.	
		5	Normal operation.	AVR1:0 [V]
		7	Normal operation.	AVR1:0 [V]
		8	Normal operation.	AVR1:0 [V]
		9	Normal operation.	AVR1:0 [V]
	Short	1-2	See 18 Page.	
		5-7	See 18 Page.	
		8-9	See 18 Page.	
TR11	Open	D	See 18 Page.	
		S	See 18 Page.	
		G	See 18 Page.	
	Short	D-S	See 18 Page.	
		S-G	See 19 Page.	

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Component	Mode		Comment	Output Voltage (V)
TR11	Short	G-D	See 19 Page.	
TR12	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	External Fuse opened, No hazard.	AVR1:0 [V]
		S-G	Normal operation.	AVR1:*
		G-D	External Fuse opened, No hazard.	AVR1:0 [V]
TR121	Open	C	No Hazard.	AVR1:0 [V]
		E	No Hazard.	AVR1:0 [V]
		B	No Hazard.	AVR1:0 [V]
	Short	C-E	External Fuse opened, No hazard.	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*
		B-C	External Fuse opened, No hazard.	AVR1:0 [V]
TR122	Open	C	Normal operation.	AVR1:*
		E	External Fuse opened, No hazard.	AVR1:0 [V]
		B	External Fuse opened, No hazard.	AVR1:0 [V]
	Short	C-E	No Hazard.	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0 [V]
TR131	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR131	Short	B-C	No Hazard.	AVR1:0 [V]
TR132	Open	C	No Hazard.	AVR1:0 [V]
		E	No Hazard.	AVR1:0 [V]
		B	No Hazard.	AVR1:0 [V]
	Short	C-E	Normal operation.	AVR1:*
		E-B	No Hazard.	AVR1:0 [V]
		B-C	No Hazard.	AVR1:0 [V]
TR133	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0 [V]
TR151	Open	C	See 19 Page.	
		E	See 19 Page.	
		B	See 19 Page.	
	Short	C-E	See 19 Page.	
		E-B	See 19 Page.	
		B-C	See 19 Page.	
TR152	Open	C	See 19 Page.	
		E	See 19 Page.	
		B	See 19 Page.	
	Short	C-E	Normal operation.	AVR1:*
		E-B	See 19 Page.	

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Component	Mode		Comment	Output Voltage (V)
TR152	Short	B-C	Normal operation.	AVR1:*
TR153	Open	C	See 19 Page.	
		E	See 19 Page.	
		B	See 19 Page.	
	Short	C-E	See 19 Page.	
		E-B	See 19 Page.	
		B-C	See 19 Page.	
TR221	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	No Hazard.	AVR1:0 [V]
		S-G	Normal operation.	AVR1:*
		G-D	No Hazard.	AVR1:0 [V]
TR222	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0 [V]
TR231	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR231	Short	B-C	Normal operation.	AVR1:*
VR241	Open	brush	Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD111	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD131	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD151	Open		See 19 Page.	
	Short		See 19 Page.	
ZD152	Open		See 19 Page.	
	Short		Normal operation.	AVR1:*
ZD153	Open		See 19 Page.	
	Short		Normal operation.	AVR1:*
ZD154	Open		See 19 Page.	
	Short		See 19 Page.	
ZD155	Open		See 20 Page.	
	Short		Normal operation.	AVR1:*
ZD251	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased. No hazard.	AVR1:decreased
ZD252	Open		Normal operation.	AVR1:*
	Short		See 20 Page.	
ZD761	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0 [V]
ZD762	Open		Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
ZD762	Short	No Hazard.	AVR1:0 [V]
R111	Open	Normal operation.	AVR1:*
R112	Open	Normal operation.	AVR1:*
R114	Open	Normal operation.	AVR1:*
R115	Open	Normal operation.	AVR1:*
R116	Open	Normal operation.	AVR1:*
R117	Open	Normal operation.	AVR1:*
R121	Open	No Hazard.	AVR1:0 [V]
R122	Open	No Hazard.	AVR1:0 [V]
R123	Open	Normal operation.	AVR1:*
R124	Open	Normal operation.	AVR1:*
R125	Open	No Hazard.	AVR1:0 [V]
R126	Open	Normal operation.	AVR1:*
R127	Open	Normal operation.	AVR1:*
R131	Open	Normal operation.	AVR1:*
R132	Open	Normal operation.	AVR1:*
R133	Open	Normal operation.	AVR1:*
R134	Open	Normal operation.	AVR1:*
R135	Open	Normal operation.	AVR1:*
R136	Open	Normal operation.	AVR1:*
R137	Open	Normal operation.	AVR1:*
R138	Open	Normal operation.	AVR1:*
R141	Open	Output voltage decreased. No hazard.	AVR1:decreased
R142	Open	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
R143	Open	Normal operation.	AVR1:*
R144	Open	Output voltage decreased. No hazard.	AVR1:decreased
R146	Open	Output voltage decreased. No hazard.	AVR1:decreased
R151	Open	See 20 Page.	
R152	Open	See 20 Page.	
R153	Open	See 20 Page.	
R154	Open	Normal operation.	AVR1:*
R155	Open	Normal operation.	AVR1:*
R156	Open	See 20 Page.	
R157	Open	See 20 Page.	
R161	Open	Normal operation.	AVR1:*
R162	Open	Normal operation.	AVR1:*
R163	Open	See 20 Page.	
R201	Open	No Hazard.	AVR1:0 [V]
R211	Open	Normal operation.	AVR1:*
R213	Open	Normal operation.	AVR1:*
R221	Open	Normal operation.	AVR1:*
R222	Open	Normal operation.	AVR1:*
R224	Open	Normal operation.	AVR1:*
R231	Open	Normal operation.	AVR1:*
R232	Open	Normal operation.	AVR1:*
R233	Open	Normal operation.	AVR1:*
R234	Open	Normal operation.	AVR1:*
R235	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
R236	Open	Normal operation.	AVR1:*
R237	Open	Normal operation.	AVR1:*
R238	Open	Normal operation.	AVR1:*
R241	Open	No Hazard.	AVR1:0 [V]
R242	Open	No Hazard.	AVR1:0 [V]
R243	Open	Output voltage decreased. No hazard.	AVR1:decreased
R244	Open	Output voltage decreased. No hazard.	AVR1:decreased
R245	Open	Normal operation.	AVR1:*
R251	Open	Normal operation.	AVR1:*
R252	Open	Normal operation.	AVR1:*
R253	Open	Normal operation.	AVR1:*
R254	Open	Normal operation.	AVR1:*
R255	Open	Normal operation.	AVR1:*
R256	Open	Normal operation.	AVR1:*
R501	Open	Normal operation.	AVR1:*
R502	Open	Normal operation.	AVR1:*
R503	Open	Normal operation.	AVR1:*
R504	Open	Normal operation.	AVR1:*
R511	Open	Normal operation.	AVR1:*
R512	Open	Normal operation.	AVR1:*
R513	Open	Normal operation.	AVR1:*
R514	Open	Normal operation.	AVR1:*
R515	Open	Normal operation.	AVR1:*
R516	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
R517	Open	Normal operation.	AVR1:*
R518	Open	Normal operation.	AVR1:*
R521	Open	Normal operation.	AVR1:*
R525	Open	Normal operation.	AVR1:*
R714	Open	Output voltage decreased. No hazard.	AVR1:decreased
R721	Open	No Hazard.	AVR1:0 [V]
R722	Open	No Hazard.	AVR1:0 [V]
R724	Open	Normal operation.	AVR1:*
R725	Open	Output voltage decreased. No hazard.	AVR1:decreased
R726	Open	Normal operation.	AVR1:*
R727	Open	Normal operation.	AVR1:*
R728	Open	No Hazard.	AVR1:0 [V]
R729	Open	Output voltage decreased. No hazard.	AVR1:decreased
R740	Open	No Hazard.	AVR1:0 [V]
R741	Open	No Hazard.	AVR1:0 [V]
R742	Open	No Hazard.	AVR1:0 [V]
R743	Open	Output voltage decreased. No hazard.	AVR1:decreased
R750	Open	Normal operation.	AVR1:*
R761	Open	Normal operation.	AVR1:*
R762	Open	Normal operation.	AVR1:*
R763	Open	Normal operation.	AVR1:*

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C121	Short		External Fuse opened, No hazard.	AVR1:0 [V]
C161	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
C162	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
D152	Open		No Hazard.	AVR1:0 [V]
D161	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
D162	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
L51	Open		No Hazard.	AVR1:0 [V]
SS51	Open	T11-Pin8Side	No Hazard.	AVR1:0 [V]
		T11-Pin9Side	No Hazard.	AVR1:0 [V]
	Short	T11-Pin8Side	No Hazard.	AVR1:0 [V]
		T11-Pin9Side	No Hazard.	AVR1:0 [V]
T11	Open	1	No Hazard.	AVR1:0 [V]
		2	No Hazard.	AVR1:0 [V]
	Short	1-2	No Hazard.	AVR1:0 [V]
		5-7	No Hazard.	AVR1:0 [V]
		8-9	No Hazard.	AVR1:0 [V]
TR11	Open	D	No Hazard.	AVR1:0 [V]
		S	No Hazard.	AVR1:0 [V]
		G	External Fuse opened, No hazard.	AVR1:0 [V]
	Short	D-S	External Fuse opened, No hazard.	AVR1:0 [V]

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR11	Short	S-G	No Hazard.	AVR1:0 [V]
		G-D	External Fuse opened, No hazard.	AVR1:0 [V]
TR151	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR152	Open	C	No Hazard.	AVR1:0 [V]
		E	No Hazard.	AVR1:0 [V]
		B	No Hazard.	AVR1:0 [V]
	Short	E-B	No Hazard.	AVR1:0 [V]
TR153	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
ZD151	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0 [V]
ZD152	Open		No Hazard.	AVR1:0 [V]
ZD153	Open		No Hazard.	AVR1:0 [V]
ZD154	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0 [V]

ABNORMAL TEST RESULT

Component	Mode	Comment	Output Voltage (V)
ZD155	Open	No Hazard.	AVR1:0 [V]
ZD252	Short	No Hazard.	AVR1:0 [V]
R151	Open	No Hazard.	AVR1:0 [V]
R152	Open	No Hazard.	AVR1:0 [V]
R153	Open	No Hazard.	AVR1:0 [V]
R156	Open	Normal operation.	AVR1:*
R157	Open	Normal operation.	AVR1:*
R163	Open	No Hazard.	AVR1:0 [V]