

ABNORMAL TEST RESULT

OF MODEL DHS50B

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 ~ 18/20)

(Abnormal Test Result: 19/20 ~ 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:*
C51	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
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
C54	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C101	Open	Normal operation.	AVR1:*
	Short	External Fuse opened, No hazard.	AVR1:0 [V]
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 19 Page.	

F M E A

Component	Mode	Comment	Output Voltage (V)
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:*
C161	Open	See 19 Page.	
	Short	See 19 Page.	
C162	Open	See 19 Page.	
	Short	See 19 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:*

F M E A

Component	Mode	Comment	Output Voltage (V)
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]
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:*

F M E A

Component	Mode	Comment	Output Voltage (V)
C522	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C711	Open	No Hazard.	AVR1:0 [V]
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C712	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C714	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
C721	Open	Normal operation.	AVR1:*
	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	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0 [V]
D111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D131	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
D141	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D152	Open	See 19 Page.	
	Short	Normal operation.	AVR1:*
D161	Open	See 19 Page.	
	Short	See 19 Page.	
D162	Open	See 19 Page.	
	Short	See 19 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:*
D711	Open	No Hazard.	AVR1:0 [V]
	Short	No Hazard.	AVR1:0 [V]

F M E A

Component	Mode		Comment	Output Voltage (V)
D712	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
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:*
		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:*

F M E A

Component	Mode		Comment	Output Voltage (V)
IC201	Open	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:*
		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]

F M E A

Component	Mode		Comment	Output Voltage (V)
IC721	Short	K-R	Output voltage decreased. No hazard.	AVR1:decreased
		R-A	No Hazard.	AVR1:0 [V]
L51	Open		See 19 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]
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		See 19 Page.	
	Short		See 19 Page.	
SS52	Open		See 19 Page.	
	Short		See 19 Page.	
T11	Open	1	See 19 Page.	
		2	See 19 Page.	
		5	No Hazard.	AVR1:0 [V]
		7	No Hazard.	AVR1:0 [V]

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Component	Mode		Comment	Output Voltage (V)
T11	Open	8	External Fuse opened, No hazard.	AVR1:0 [V]
		9	External Fuse opened, No hazard.	AVR1:0 [V]
	Short	1-2	See 19 Page.	
		5-7	See 19 Page.	
		8-9	See 19 Page.	
TR11	Open	D	See 19 Page.	
		S	See 19 Page.	
		G	See 19 Page.	
	Short	D-S	See 19 Page.	
		S-G	See 20 Page.	
		G-D	See 20 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:*

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Component	Mode		Comment	Output Voltage (V)
TR122	Open	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:*
		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	No Hazard.	AVR1:0 [V]
		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 20 Page.	

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Component	Mode		Comment	Output Voltage (V)
TR151	Open	E	See 20 Page.	
		B	See 20 Page.	
	Short	C-E	See 20 Page.	
		E-B	See 20 Page.	
		B-C	See 20 Page.	
TR152	Open	C	See 20 Page.	
		E	See 20 Page.	
		B	See 20 Page.	
	Short	C-E	Normal operation.	AVR1:*
		E-B	See 20 Page.	
		B-C	Normal operation.	AVR1:*
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:*

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Component	Mode		Comment	Output Voltage (V)
TR231	Open	E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR711	Open	C	No Hazard.	AVR1:0 [V]
		E	No Hazard.	AVR1:0 [V]
		B	No Hazard.	AVR1:0 [V]
	Short	C-E	No Hazard.	AVR1:0 [V]
		E-B	No Hazard.	AVR1:0 [V]
		B-C	No Hazard.	AVR1:0 [V]
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 20 Page.	
	Short		See 20 Page.	
ZD152	Open		See 20 Page.	
	Short		Normal operation.	AVR1:*
ZD153	Open		See 20 Page.	
	Short		Normal operation.	AVR1:*
ZD154	Open		See 20 Page.	

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Component	Mode	Comment	Output Voltage (V)
ZD154	Short	See 20 Page.	
ZD155	Open	See 20 Page.	
	Short	Normal operation.	AVR1:*
ZD251	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
ZD711	Open	No Hazard.	AVR1:0 [V]
	Short	No Hazard.	AVR1:0 [V]
ZD761	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
ZD762	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0 [V]
R111	Open	Normal operation.	AVR1:*
R112	Open	Normal operation.	AVR1:*
R113	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]
R127	Open	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
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:*
R143	Open	Normal operation.	AVR1:*
R144	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	Normal operation.	AVR1:*
R157	Open	Normal operation.	AVR1:*
R161	Open	Normal operation.	AVR1:*
R162	Open	Normal operation.	AVR1:*
R201	Open	No Hazard.	AVR1:0 [V]
R211	Open	Normal operation.	AVR1:*
R213	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
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:*
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:*
R501	Open	Normal operation.	AVR1:*
R502	Open	Normal operation.	AVR1:*
R503	Open	Normal operation.	AVR1:*
R504	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
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:*
R517	Open	Normal operation.	AVR1:*
R518	Open	Normal operation.	AVR1:*
R521	Open	Normal operation.	AVR1:*
R522	Open	Normal operation.	AVR1:*
R523	Open	Normal operation.	AVR1:*
R524	Open	Normal operation.	AVR1:*
R525	Open	Normal operation.	AVR1:*
R526	Open	Normal operation.	AVR1:*
R711	Open	No Hazard.	AVR1:0 [V]
R712	Open	No Hazard.	AVR1:0 [V]
R713	Open	No Hazard.	AVR1:0 [V]
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]

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Component	Mode	Comment	Output Voltage (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		Normal operation.	AVR1:*
C162	Open		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
D152	Open		Normal operation.	AVR1:*
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		No Hazard.	AVR1:0 [V]
	Short		No Hazard.	AVR1:0 [V]
SS52	Open		No Hazard.	AVR1:0 [V]
	Short		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	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	No Hazard.	AVR1:0 [V]
TR151	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	No Hazard.	AVR1:0 [V]
	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]
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]
ZD155	Open		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]