COSEL

ABNORMAL TEST RESULT

OF MODEL ADA1000F

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   :   2/40 ～ 37/40)
       (Abnormal Test Result: 38/40 ～ 40/40)

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.

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<u>F　M　E　A</u>

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
C105	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C106	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C109	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C110	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C112	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C113	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C114	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C115	Open	Normal operation.	
	Short	Normal operation.	
C116	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C117	Open	R186, R187 opened, No hazard.	AVR1:0
	Short	F101 opened, No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C118	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C119	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C120	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C121	Open	Normal operation.	
	Short	Normal operation.	
C122	Open	Normal operation.	
	Short	Normal operation.	
C123	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C124	Open	See 38 Page.	
	Short	See 38 Page.	
C125	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
C126	Open	Normal operation.	
	Short	Normal operation.	
C127	Open	Normal operation.	
	Short	Normal operation.	
C129	Open	Normal operation.	
	Short	Normal operation.	
C130	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C132	Open	Normal operation.	
	Short	Normal operation.	
C133	Open	Normal operation.	
	Short	Normal operation.	
C134	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C135	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C136	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C138	Open	Normal operation.	
	Short	Normal operation.	
C139	Open	Normal operation.	
	Short	Normal operation.	
C151	Open	R186, R187 opened, No hazard.	AVR1:0
	Short	R186, R187 opened, No hazard.	AVR1:0
C152	Open	R186, R187 opened, No hazard.	AVR1:0
	Short	R186, R187 opened, No hazard.	AVR1:0
C201	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C202	Open	Normal operation.	
	Short	Normal operation.	
C203	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0

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<u>F M E A</u>

Component	Mode	Comment	Output Voltage (V)
C204	Open	Normal operation.	
	Short	Normal operation.	
C205	Open	No Hazard.	AVR1:Decreased
	Short	Normal operation.	
C206	Open	Normal operation.	
	Short	Normal operation.	
C207	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C208	Open	Normal operation.	
	Short	Normal operation.	
C209	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C210	Open	Normal operation.	
	Short	Normal operation.	
C213	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C214	Open	Normal operation.	
	Short	Normal operation.	
C215	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C216	Open	Normal operation.	
	Short	Normal operation.	
C217	Open	Normal operation.	
	Short	No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C218	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C220	Open	Normal operation.	
	Short	Normal operation.	
C221	Open	Normal operation.	
	Short	Normal operation.	
C222	Open	Normal operation.	
	Short	Normal operation.	
C223	Open	Normal operation.	
	Short	Normal operation.	
C301	Open	Normal operation.	
	Short	Normal operation.	
C306	Open	Normal operation.	
	Short	Normal operation.	
C501 Only 24,30	Open	Normal operation.	
	Short	Normal operation.	
C502 Only 24,30	Open	Normal operation.	
	Short	Normal operation.	
C503	Open	Normal operation.	
	Short	Normal operation.	
C504	Open	Normal operation.	
	Short	Normal operation.	.
C506 Only 24	Open	Normal operation.	
	Short	No Hazard.	AVR1:0

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<u>F　M　E　A</u>

Component	Mode	Comment	Output Voltage (V)
C507	Open	Normal operation.	
	Short	Normal operation.	
C508	Open	Normal operation.	
	Short	Normal operation.	
C510	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C511	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C512	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C513	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C514	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C521	Open	Normal operation.	
	Short	Normal operation.	
C522	Open	Normal operation.	
	Short	Normal operation.	
C601	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C602	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C603	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased

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Component	Mode	Comment	Output Voltage (V)
C604	Open	No Hazard.	AVR1:Decreased
	Short	No Hazard.	AVR1:Decreased
C605	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C606	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C609	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
C610	Open	Normal operation.	
	Short	Normal operation.	
C611	Open	Normal operation.	
	Short	Normal operation.	
C612	Open	Normal operation.	
	Short	No Hazard.	AVR1:Decreased
C613	Open	Normal operation.	
	Short	Normal operation.	
C614	Open	Normal operation.	
	Short	Normal operation.	
C619	Open	Normal operation.	
	Short	Normal operation.	
C651	Open	Normal operation.	
	Short	Normal operation.	
D101	Open	R186,R187 opened, No hazard.	AVR1:0
	Short	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
D102	Open	Normal operation.	
	Short	Normal operation.	
D103	Open	Normal operation.	
	Short	Normal operation.	
D104	Open	See 38 Page.	
	Short	See 38 Page.	
D105	Open	See 38 Page.	
	Short	See 38 Page.	
D106	Open	Normal operation.	
	Short	R186, R187 opened, No hazard.	AVR1:0
D111	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
D112	Open	Normal operation.	
	Short	Normal operation.	
D113	Open	Normal operation.	
	Short	Normal operation.	
D114	Open	Normal operation.	
	Short	Normal operation.	
D115	Open	Normal operation.	
	Short	Normal operation.	
D151	Open	R186, R187 opened, No hazard.	AVR1:0
	Short	R186, R187 opened, No hazard.	AVR1:0
D152	Open	R186, R187 opened, No hazard.	AVR1:0
	Short	R186, R187 opened, No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
D201	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D203	Open	Normal operation.	
	Short	Normal operation.	
D204	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
D206	Open	Normal operation.	
	Short	Normal operation.	
D207	Open	Normal operation.	
	Short	Normal operation.	
D208	Open	Normal operation.	
	Short	Normal operation.	
D209	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D210	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D211	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D212	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
D213	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
D301	Open	Normal operation.	
	Short	Normal operation.	

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F M E A

Component	Mode		Comment	Output Voltage (V)
D601	Open		Normal operation.	
	Short		Normal operation.	
D602	Open		Normal operation.	
	Short		Normal operation.	
D604	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D606	Open		Normal operation.	
	Short		Normal operation.	
D608	Open		Normal operation.	
	Short		Normal operation.	
D610	Open		Normal operation.	
	Short		Normal operation.	
D651	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
D652	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
IC101	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	F101 opened, No hazard.	AVR1:0
		8	F101 opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC101	Open	9	No Hazard.	AVR1:Decreased
		10	No Hazard.	AVR1:Decreased
		11	Normal operation.	
		12	R186,R187 opened,No hazard.	AVR1:0
		13	F101 opened,No hazard.	AVR1:0
		14	Normal operation.	
		15	F101 opened,No hazard.	AVR1:0
		16	F101 opened,No hazard.	AVR1:0
	Short	1-2	R186,R187 opened,No hazard.	AVR1:0
		2-3	Normal operation.	
		3-4	Normal operation.	
		4-5	R186,R187 opened,No hazard.	AVR1:0
		5-6	R186,R187 opened,No hazard.	AVR1:0
		6-7	Normal operation.	
		7-8	R186,R187 opened,No hazard.	AVR1:0
		9-10	Normal operation.	
		10-11	R186,R187 opened,No hazard.	AVR1:0
		11-12	Normal operation.	
		12-13	Normal operation.	
		13-14	R186,R187 opened,No hazard.	AVR1:0
		14-15	F101 opened,No hazard.	AVR1:0
		15-16	F101 opened,No hazard.	AVR1:0
IC201	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0

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参考資料

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

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Component	Mode		Comment	Output Voltage (V)
IC201	Short	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.	
		18-19	Normal operation.	
		19-20	No Hazard.	AVR1:0
IC601	Open	K	No Hazard.	AVR1:0
		A	No Hazard.	AVR1:0
		R	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:Decreased
		K-R	No Hazard.	AVR1:Decreased
		R-A	No Hazard.	AVR1:0
IC602	Open	K	Normal operation.	
		A	Normal operation.	
		R	Normal operation.	
	Short	A-K	No Hazard.	AVR1:0
		K-R	No Hazard.	AVR1:0
		R-A	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC603	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
		3-4	Normal operation.	
		5-6	Normal operation.	
		6-7	No Hazard.	AVR1:0
		7-8	Normal operation.	
J201	Open		No Hazard.	AVR1:0
J601	Open		Normal operation.	
J602	Open		No Hazard.	AVR1:0
J603	Open		No Hazard.	AVR1:0
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L103	Open	8,9or16,17	No Hazard.	AVR1:0
		2or3	See 38 Page.	

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Component	Mode		Comment	Output Voltage (V)
L103	Open	10or11	R186, R187 opened, No hazard.	AVR1：0
	Short	8, 9-16, 17	F101 opened, No hazard.	AVR1：0
		2-3	F101 opened, No hazard.	AVR1：0
		10-11	F101 opened, No hazard.	AVR1：0
L104	Open		F101 opened, No hazard.	AVR1：0
	Short		F101 opened, No hazard.	AVR1：0
L105	Open		F101 opened, No hazard.	AVR1：0
	Short		F101 opened, No hazard.	AVR1：0
L106	Open		F101 opened, No hazard.	AVR1：0
	Short		F101 opened, No hazard.	AVR1：0
L107	Open		F101 opened, No hazard.	AVR1：0
	Short		F101 opened, No hazard.	AVR1：0
L108	Open		Normal operation.	
	Short		Normal operation.	
L109	Open		Normal operation.	
	Short		Normal operation.	
L201	Open		No Hazard.	AVR1：0
	Short		No Hazard.	AVR1：0
L202	Open		No Hazard.	AVR1：0
	Short		No Hazard.	AVR1：0
L203	Open		No Hazard.	AVR1：0
	Short		No Hazard.	AVR1：0
L204	Open		No Hazard.	AVR1：0
	Short		No Hazard.	AVR1：0

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Component	Mode		Comment	Output Voltage (V)
L205	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
L206	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
L507	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
L508	Open		Normal operation.	
	Short		Normal operation.	
L601	Open		Normal operation.	
	Short		Normal operation.	
LED501	Open		Normal operation.	
	Short		Normal operation.	
PC201	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	No Hazard.	AVR1:0
PC202	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0
PC302	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
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.	
R109	Open	Normal operation.	
R110	Open	Normal operation.	
R111	Open	Normal operation.	
R112	Open	Normal operation.	
R113	Open	Normal operation.	
R114	Open	Normal operation.	
R117	Open	Normal operation.	
R118	Open	Normal operation.	
R121	Open	R186, R187 opened, No hazard.	AVR1:0
R122	Open	R186, R187 opened, No hazard.	AVR1:0
R123	Open	R186, R187 opened, No hazard.	AVR1:0
R124	Open	R186, R187 opened, No hazard.	AVR1:0
R126	Open	Normal operation.	
R127	Open	Normal operation.	
R128	Open	Normal operation.	
R129	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R130	Open	Normal operation.	
R131	Open	Normal operation.	
R132	Open	Normal operation.	
R133	Open	Normal operation.	
R134	Open	Normal operation.	
R135	Open	R186, R187 opened, No hazard.	AVR1:0
R136	Open	R186, R187 opened, No hazard.	AVR1:0
R139	Open	R186, R187 opened, No hazard.	AVR1:0
R140	Open	Normal operation.	
R141	Open	Normal operation.	
R142	Open	Normal operation.	
R143	Open	Normal operation.	
R144	Open	Normal operation.	
R145	Open	Normal operation.	
R146	Open	Normal operation.	
R147	Open	F101 opened, No hazard.	AVR1:0
R148	Open	Normal operation.	
R149	Open	Normal operation.	
R150	Open	Normal operation.	
R151	Open	R186, R187 opened, No hazard.	AVR1:0
R153	Open	Normal operation.	
R155	Open	See 38 Page.	
R156	Open	See 38 Page.	
R157	Open	See 38 Page.	

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Component	Mode	Comment	Output Voltage (V)
R158	Open	R186, R187 opened, No hazard.	AVR1:0
R159	Open	R186, R187 opened, No hazard.	AVR1:0
R160	Open	R186, R187 opened, No hazard.	AVR1:0
R165	Open	Normal operation.	
R166	Open	Normal operation.	
R167	Open	Normal operation.	
R168	Open	Normal operation.	
R169	Open	Normal operation.	
R170	Open	F101 opened, No hazard.	AVR1:0
R171	Open	F101 opened, No hazard.	AVR1:0
R172	Open	F101 opened, No hazard.	AVR1:0
R173	Open	F101 opened, No hazard.	AVR1:0
R174	Open	F101 opened, No hazard.	AVR1:0
R176	Open	Normal operation.	
R178	Open	R186, R187 opened, No hazard.	AVR1:0
R179	Open	R186, R187 opened, No hazard.	AVR1:0
R181	Open	Normal operation.	
R182	Open	Normal operation.	
R183	Open	Normal operation.	
R184	Open	Normal operation.	
R185	Open	Normal operation.	
R186	Open	Normal operation.	
R187	Open	Normal operation.	
R188	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R189	Open	Normal operation.	
R201	Open	Normal operation.	
R202	Open	Normal operation.	
R203	Open	Normal operation.	
R204	Open	Normal operation.	
R205	Open	No Hazard.	AVR1:0
R207	Open	Normal operation.	
R208	Open	Normal operation.	
R209	Open	Normal operation.	
R210	Open	No Hazard.	AVR1:0
R211	Open	No Hazard.	AVR1:Decreased
R212	Open	No Hazard.	AVR1:Decreased
R213	Open	Normal operation.	
R214	Open	Normal operation.	
R215	Open	Normal operation.	
R216	Open	Normal operation.	
R217	Open	Normal operation.	
R218	Open	No Hazard.	AVR1:0
R219	Open	Normal operation.	
R220	Open	Normal operation.	
R221	Open	No Hazard.	AVR1:0
R222	Open	No Hazard.	AVR1:0
R223	Open	No Hazard.	AVR1:0
R224	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R225	Open	No Hazard.	AVR1:0
R226	Open	No Hazard.	AVR1:0
R227	Open	No Hazard.	AVR1:0
R228	Open	No Hazard.	AVR1:0
R229	Open	No Hazard.	AVR1:0
R230	Open	Normal operation.	
R232	Open	Normal operation.	
R233	Open	Normal operation.	
R235	Open	Normal operation.	
R301	Open	Normal operation.	
R302	Open	Normal operation.	
R303	Open	Normal operation.	
R308	Open	Normal operation.	
R309	Open	Normal operation.	
R310	Open	Normal operation.	
R311	Open	Normal operation.	
R312	Open	Normal operation.	
R313	Open	Normal operation.	
R314	Open	Normal operation.	
R503	Open	Normal operation.	
R505	Open	Normal operation.	
R510	Open	Normal operation.	
R511	Open	Normal operation.	
R512	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R513	Open	Normal operation.	
R514	Open	Normal operation.	
R515	Open	Normal operation.	
R520	Open	Normal operation.	
R521	Open	Normal operation.	
R522	Open	Normal operation.	
R523	Open	Normal operation.	
R526 Only 36,48	Open	Normal operation.	
R527	Open	Normal operation.	
R531	Open	Normal operation.	
R532	Open	Normal operation.	
R533	Open	Normal operation.	
R534	Open	Normal operation.	
R535	Open	Normal operation.	
R536	Open	Normal operation.	
R559 Only 24,30	Open	Normal operation.	
R560 Only 24,30	Open	Normal operation.	
R561 Only 24,30	Open	Normal operation.	
R562 Only 24,30	Open	Normal operation.	
R601	Open	No Hazard.	AVR1:0
R602	Open	No Hazard.	AVR1:Decreased
R603	Open	No Hazard.	AVR1:Decreased
R604	Open	No Hazard.	AVR1:0
R605	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R606	Open	No Hazard.	AVR1:0
R607	Open	No Hazard.	AVR1:Decreased
R608	Open	No Hazard.	AVR1:0
R609	Open	No Hazard.	AVR1:Decreased
R610	Open	No Hazard.	AVR1:Decreased
R611	Open	No Hazard.	AVR1:0
R612	Open	No Hazard.	AVR1:0
R613	Open	No Hazard.	AVR1:Decreased
R614 Only 48	Open	No Hazard.	AVR1:Decreased
R615	Open	No Hazard.	AVR1:0
R616	Open	No Hazard.	AVR1:Decreased
R617	Open	No Hazard.	AVR1:0
R619	Open	Normal operation.	
R620	Open	Normal operation.	
R622	Open	Normal operation.	
R625	Open	No Hazard.	AVR1:0
R626	Open	No Hazard.	AVR1:0
R627	Open	Normal operation.	
R633	Open	Normal operation.	
R634	Open	Normal operation.	
R635	Open	Normal operation.	
R636	Open	Normal operation.	
R637	Open	Normal operation.	
R640	Open	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
R641	Open		Normal operation.	
R642	Open		Normal operation.	
R646	Open		Normal operation.	
R651	Open		No Hazard.	AVR1:0
R652	Open		No Hazard.	AVR1:0
R653	Open		Normal operation.	
R655	Open		Normal operation.	
R661 Only 24	Open		No Hazard.	AVR1:0
R691	Open		No Hazard.	AVR1:0
R692	Open		Normal operation.	
R694	Open		No Hazard.	AVR1:0
R696	Open		Normal operation.	
SCR151	Open	A	R186, R187 opened, No hazard.	AVR1:0
		K	R186, R187 opened, No hazard.	AVR1:0
		G	R186, R187 opened, No hazard.	AVR1:0
	Short	A-K	Normal operation.	
		A-G	Normal operation.	
		K-G	R186, R187 opened, No hazard.	AVR1:0
SS101	Open		See 38 Page.	
	Short		F101 opened, No hazard.	AVR1:0
SS102	Open		See 38 Page.	
	Short		F101 opened, No hazard.	AVR1:0
SS103	Open	Cathode	F101 opened, No hazard.	AVR1:0
		Alternative	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
SS103	Short		F101 opened, No hazard.	AVR1:0
SS501	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS502	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS503	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS504	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS505	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS506	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
SS507 Except 48	Open	Cathode	No Hazard.	AVR1:0
		Alternative	No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
T101	Open	1or2	F101 opened, No hazard.	AVR1:0
		3or4	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
T101	Short	1-2	Normal operation.	
		3-4	Normal operation.	
T102	Open	1or2	R186, R187 opened, No hazard.	AVR1:0
		3or4	Normal operation.	
	Short	1-2	Normal operation.	
		3-4	Normal operation.	
T201	Open	13, 14or16, 17	No Hazard.	AVR1:0
		10or11	No Hazard.	AVR1:0
		1, 2, 3or6, 7, 8	No Hazard.	AVR1:0
	Short	13, 14-16, 17	No Hazard.	AVR1:0
		10-11	No Hazard.	AVR1:0
		1, 2, 3-6, 7, 8	No Hazard.	AVR1:0
T202	Open	3or4	No Hazard.	AVR1:0
		7or8	No Hazard.	AVR1:0
		9or10	No Hazard.	AVR1:0
	Short	3-4	No Hazard.	AVR1:0
		7-8	No Hazard.	AVR1:0
		9-10	No Hazard.	AVR1:0
T203	Open	1or2	No Hazard.	AVR1:0
		3or4	Normal operation.	
	Short	1-2	Normal operation.	
		3-4	Normal operation.	
T204	Open	1or2	No Hazard.	AVR1:0
		3or4	Normal operation.	

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F M E A

Component	Mode		Comment	Output Voltage (V)
T204	Short	1-2	Normal operation.	
		3-4	Normal operation.	
THSW201	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
THSW501	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
TR101	Open	D	See 38 Page.	
		S	See 38 Page.	
		G	See 38 Page.	
	Short	D-S	See 38 Page.	
		S-G	See 38 Page.	
		G-D	See 38 Page.	
TR102	Open	D	See 38 Page.	
		S	See 38 Page.	
		G	See 38 Page.	
	Short	D-S	See 38 Page.	
		S-G	See 38 Page.	
		G-D	See 38 Page.	
TR103	Open	D	See 39 Page.	
		S	See 39 Page.	
		G	See 39 Page.	
	Short	D-S	See 39 Page.	
		S-G	See 39 Page.	
		G-D	See 39 Page.	

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Component	Mode		Comment	Output Voltage (V)
TR104	Open	D	See　39 Page.	
		S	See　39 Page.	
		G	See　39 Page.	
	Short	D-S	See　39 Page.	
		S-G	See　39 Page.	
		G-D	See　39 Page.	
TR106	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	R186, R187 opened, No hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	R186, R187 opened, No hazard.	AVR1:0
TR107	Open	C	R186, R187 opened, No hazard.	AVR1:0
		E	R186, R187 opened, No hazard.	AVR1:0
		B	R186, R187 opened, No hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	R186, R187 opened, No hazard.	AVR1:0
		B-C	Normal operation.	
TR108	Open	C	R186, R187 opened, No hazard.	AVR1:0
		E	R186, R187 opened, No hazard.	AVR1:0
		B	R186, R187 opened, No hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	R186, R187 opened, No hazard.	AVR1:0
		B-C	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR109	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR120	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	R186, R187 opened, No hazard.	AVR1:0
		B-C	F101 opened, No hazard.	AVR1:0
TR121	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	R186, R187 opened, No hazard.	AVR1:0
		B-C	F101 opened, No hazard.	AVR1:0
TR122	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	R186, R187 opened, No hazard.	AVR1:0
		E-B	F101 opened, No hazard.	AVR1:0
		B-C	R186, R187 opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR123	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	R186, R187 opened, No hazard.	AVR1:0
		E-B	F101 opened, No hazard.	AVR1:0
		B-C	R186, R187 opened, No hazard.	AVR1:0
TR124	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	R186, R187 opened, No hazard.	AVR1:0
		E-B	F101 opened, No hazard.	AVR1:0
		B-C	R186, R187 opened, No hazard.	AVR1:0
TR201	Open	D	See 39 Page.	
		S	See 39 Page.	
		G	See 39 Page.	
	Short	D-S	See 39 Page.	
		S-G	See 39 Page.	
		G-D	See 39 Page.	
TR202	Open	D	See 39 Page.	
		S	See 39 Page.	
		G	See 39 Page.	
	Short	D-S	See 39 Page.	
		S-G	See 39 Page.	
		G-D	See 39 Page.	

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F M E A

Component	Mode		Comment	Output Voltage (V)
TR203	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.	
TR204	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.	
TR205	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.	
TR206	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.	

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F M E A

Component	Mode		Comment	Output Voltage (V)
TR208	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.	
TR211	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR212	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR213	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR214	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR215	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR216	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR301	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR601	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	No Hazard.	AVR1:Decreased
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:Decreased
TR602	Open	C	No Hazard.	AVR1:Decreased
		E	No Hazard.	AVR1:Decreased
		B	No Hazard.	AVR1:Decreased
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:Decreased
		B-C	No Hazard.	AVR1:0
TR605	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.	
TR606	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

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Component	Mode		Comment	Output Voltage (V)
TR652	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.	
VR201	Open	brush	Normal operation.	
			No Hazard.	AVR1:Decreased
	Short		Normal operation.	
VR601	Open	brush	No Hazard.	AVR1:Decreased
			No Hazard.	AVR1:Decreased
	Short		No Hazard.	AVR1:0
ZD101	Open		R186,R187 opened, No hazard.	AVR1:0
	Short		Normal operation.	
ZD102	Open		Normal operation.	
	Short		Normal operation.	
ZD103	Open		Normal operation.	
	Short		Normal operation.	
ZD104	Open		Normal operation.	
	Short		R186,R187 opened, No hazard.	AVR1:0
ZD201	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD203	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0

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F M E A

Component	Mode	Comment	Output Voltage (V)
ZD302	Open	Normal operation.	
	Short	Normal operation.	
ZD521	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
ZD522	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
ZD602	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
ZD603	Open	Normal operation.	
	Short	Normal operation.	
ZD608	Open	Normal operation.	
	Short	Normal operation.	
ZD609	Open	Normal operation.	
	Short	Normal operation.	
ZD610 Except 24	Open	No Hazard.	AVR1:0
	Short	Normal operation.	
ZD611	Open	Normal operation.	
	Short	Normal operation.	

COSEL

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C124	Open		Normal operation.	
	Short		Normal operation.	
D104	Open		Normal operation.	
	Short		Normal operation.	
D105	Open		Normal operation.	
	Short		Normal operation.	
L103	Open	2or3	Normal operation.	
R155	Open		Normal operation.	
R156	Open		Normal operation.	
R157	Open		Normal operation.	
SS101	Open		Normal operation.	
SS102	Open		Normal operation.	
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR102	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0

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ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR103	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR104	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR201	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0
TR202	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0

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ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR203	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0
TR204	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0
TR205	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0
TR206	Open	D	Normal operation.	
		S	Normal operation.	
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0

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