Instruction Booklet **IB 70-8738**

Rev.2
Effective February 2011

Eaton Generator and Automatic Transfer Switch Generator Start Connection Diagrams

Table 1. ATS and Generator Controller Matrix

Generator	RTC-50 Controller	RTC-100 Controller	ATC-100 Controller	ATC-300 Controller
Air Cooled / Nexus	Diagram 1	Diagram 3	Not Applicable	Not Applicable
Liquid Cooled / Nexus	Diagram 2	Diagram 4	Diagram 5	Diagram 6

Use Table 1 to determine which connection diagram should be used with your Eaton Generator and Eaton Automatic Transfer switch application. The diagram will show you how the generator start feature, for that combination of generator and ATS controller, will be field wired.

Table 2, on page 2, shows the Eaton generator catalog numbers and which generator controllers are supplied with those particular generators. This will help assist you in determining which generator controller you have installed on your Eaton generator

Table 3, on page 2, shows the Eaton ATS catalog numbers and which ATS controllers are supplied with those particular ATS's. This will help assist you in determining which ATS controller you have installed on your Eaton ATS.

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Table 2. Generator Controllers and Generator Catalog Numbers

Generators Associated with Each Generator Controller		
Air Cooled Controller / Nexus	**Liquid Cooled / Nexus**	**Liquid Cooled / Nexus**
EGEN8	EGEN22	EGEN70
EGEN10	EGEN25	EGEN80
EGEN14	EGEN27	EGEN100
EGEN17	EGEN36	EGEN130
EGEN17A	EGEN45	EGEN150
EGEN20A	EGEN48	
	EGEN60	

Table 3. ATS's and ATS Catalog Numbers

ATS's Associated with each ATS Controller				
RTC-50	**RTC-100**	**ATC-100**	**ATC-300**	
EGS50L12	EGSU100AC	69C2562G01	69C2562G11	69C2563G06
EGS50L12R	EGSU100NSEAC	69C2562G02	69C2562G12	69C2563G07
EGS100	EGSU100L24RAC	69C2562G03	69C2562G13	69C2563G08
EGS100SE	EGSU150NSEAC	69C2562G04	69C2562G14	69C2563G09
EGS100L24R	EGSU200AC	69C2562G05	69C2562G50	69C2563G10
EGS200	EGSU200NSEAC	69C2562G06	69C2562G51	69C2563G11
EGS200SE	EGSU400NSEAC	69C2562G09	69C2562G52	69C2563G12
EGS400NSE	EGSU100ACA	69C2562G10	69C2562G53	69C2563G13
EGS100A	EGSU100NSEACA		69C2563G01	69C2563G14
EGS100SEA	EGSU100L24RACA		69C2563G02	69C2563G50
EGS100L24RA	EGS150NSEACA		69C2563G03	69C2563G51
EGS200A	EGSU200ACA		69C2563G04	69C2563G52
EGS200SEA	EGSU200NSEACA		69C2563G05	69C2563G53

Connection of EATON RTC-50 ATS Controller to Utility Sensing on EATON Air Cooled Generator with Nexus Controller

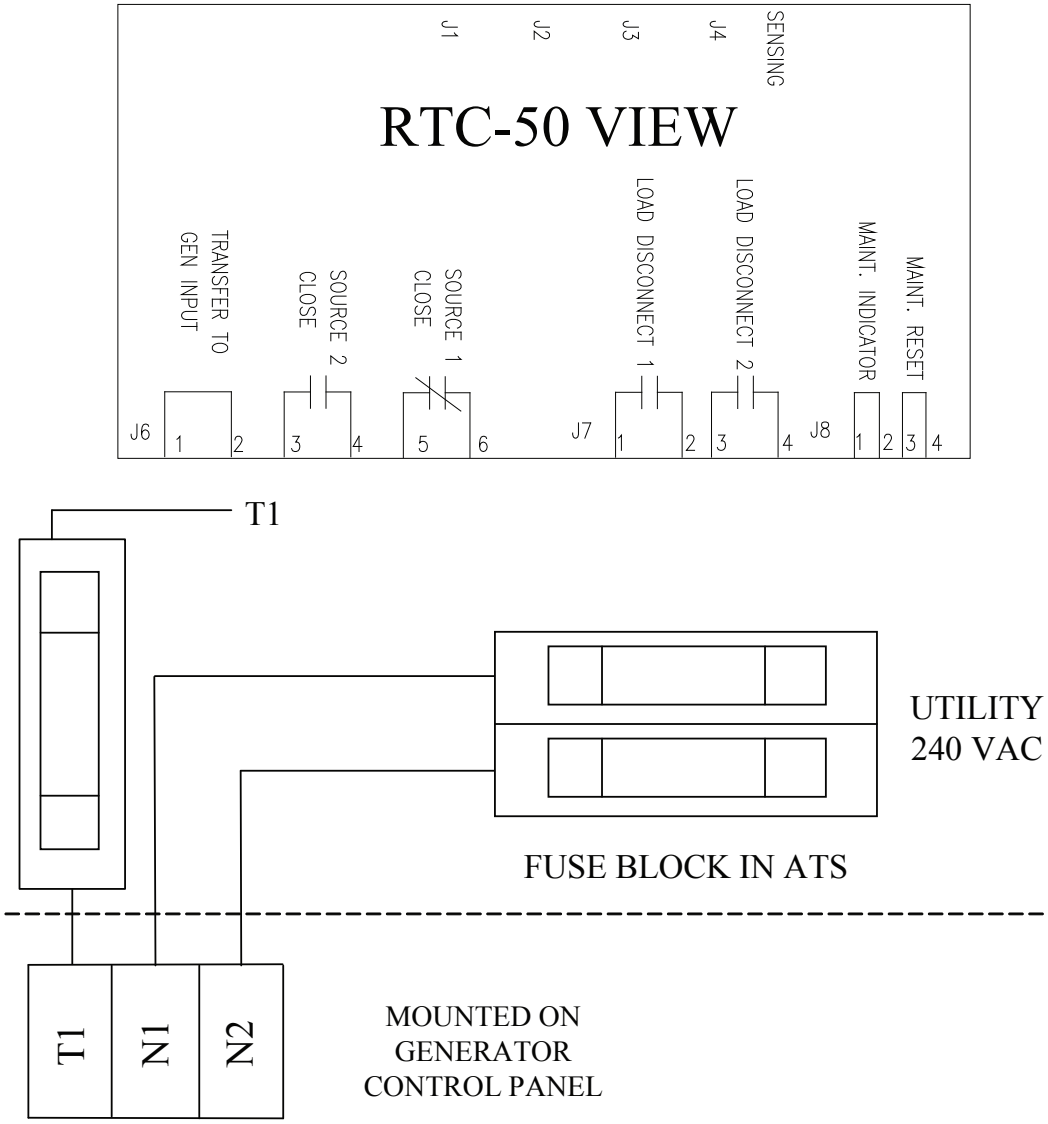


Figure 1. Connection of EATON RTC-50 ATS Controller to Utility Sensing on EATON Air Cooled Generator with Nexus Controler.

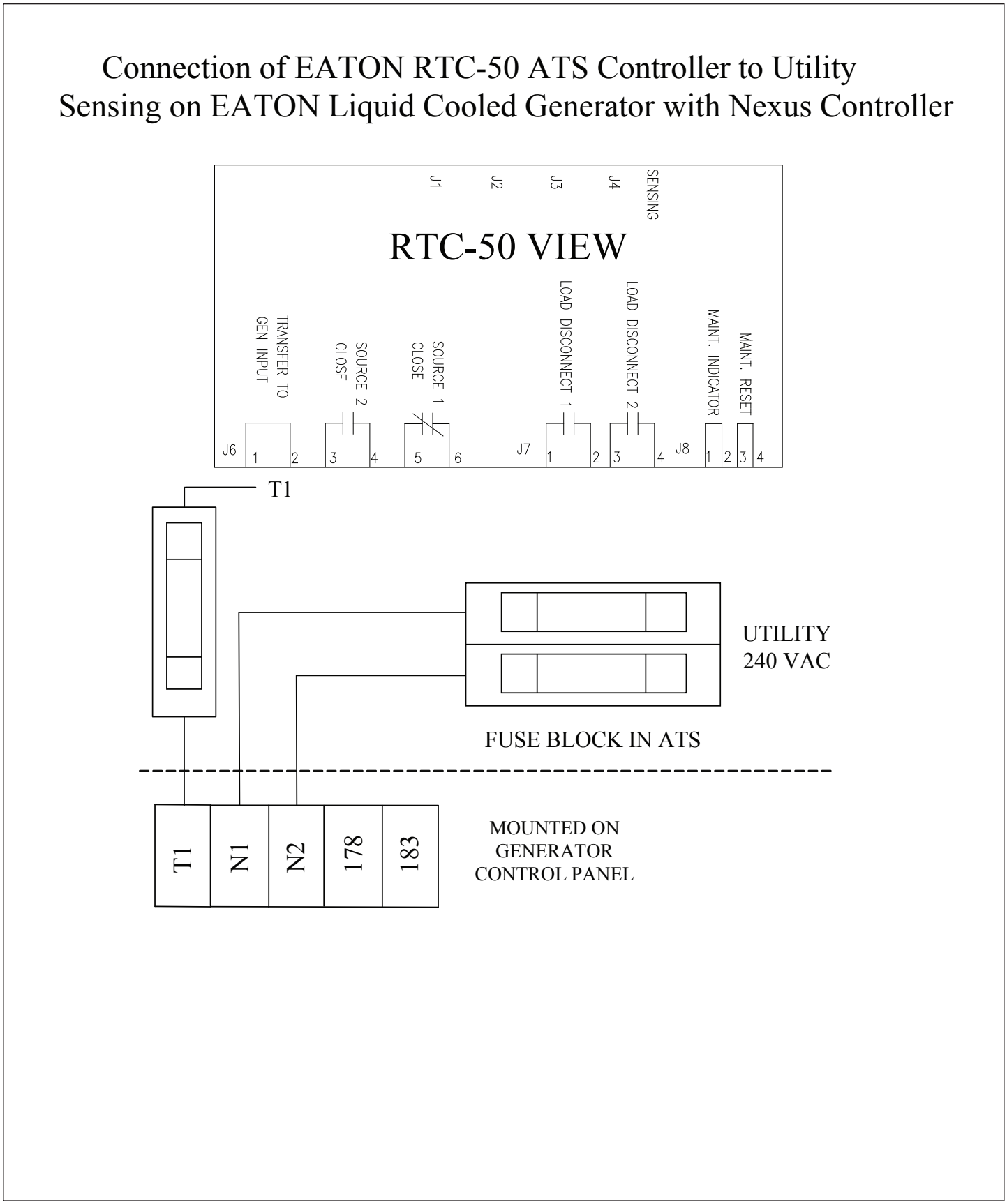
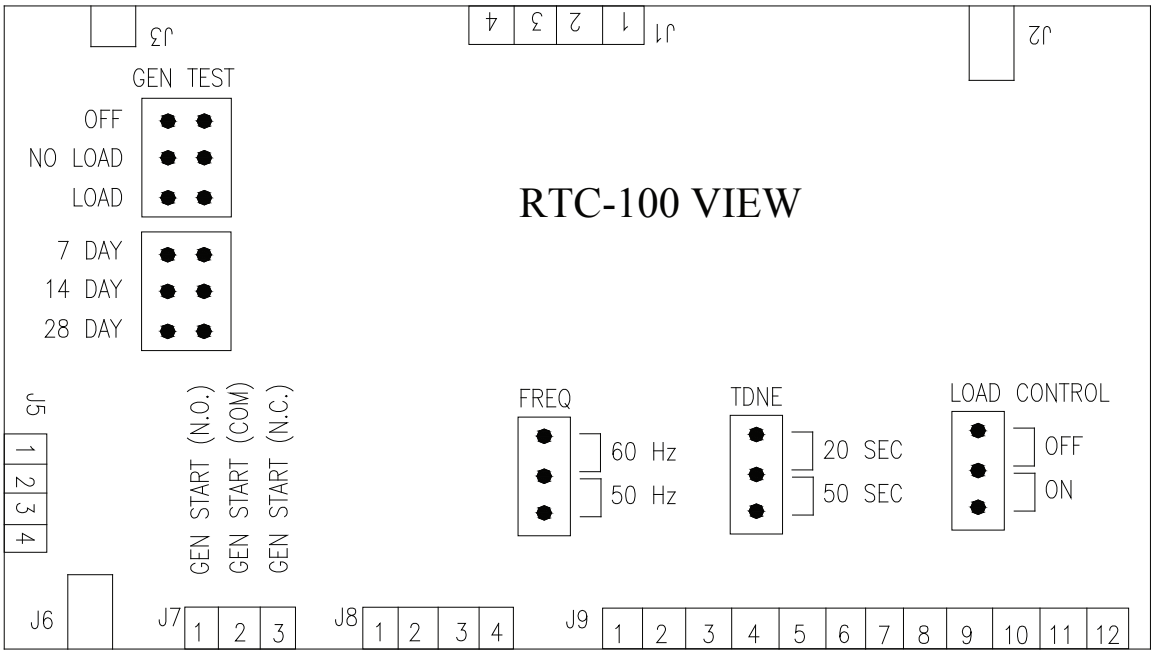


Figure 2. Connection of EATON RTC-50 ATS controller to Utility Sensing on Eaton Liquid Cooled Generator with Nexus Controller.

Connection of EATON RTC-100 ATS Controller to Utility Sensing on EATON Air Cooled Generator



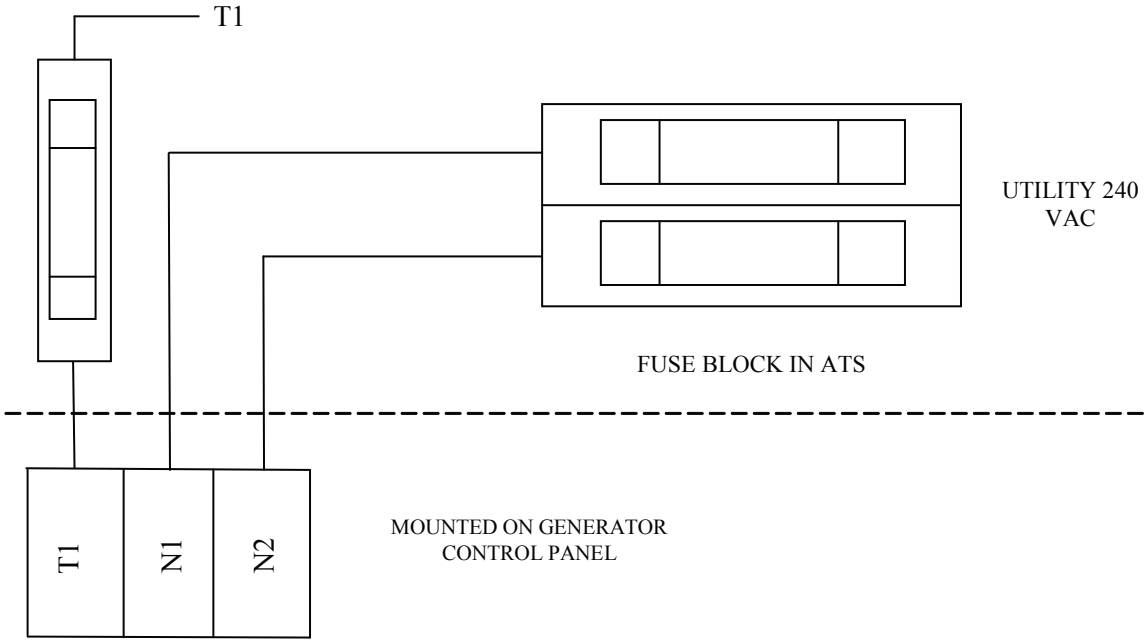
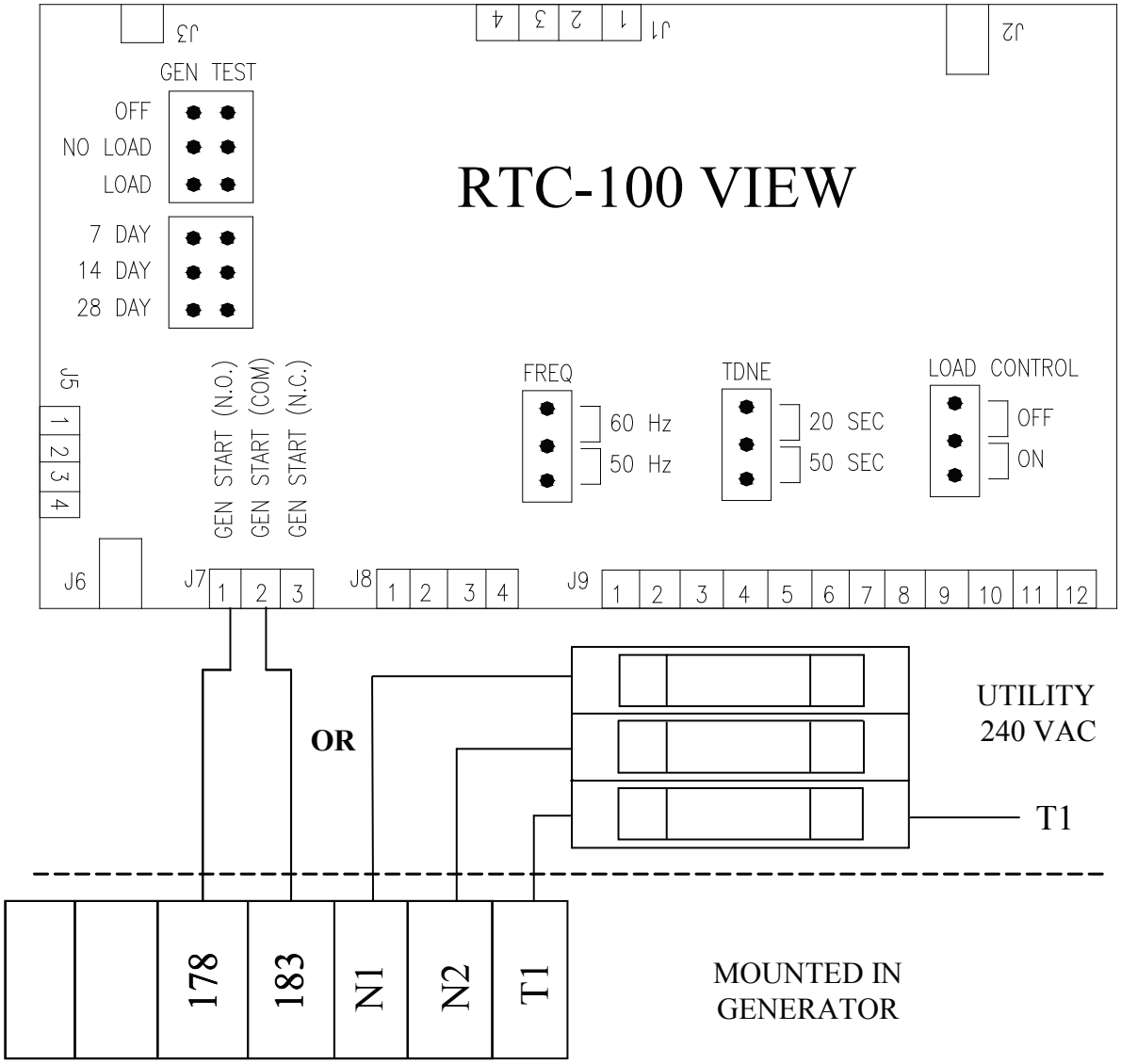


Figure 3. Connection of EATON RTC-100 ATS Controller to Utility Sensing on EATON Air Cooled Generator with Nexus Controller.

Connection of EATON RTC-100 ATS Controller to EATON Liquid Cooled Generator with Nexus Controller



Only utilize Gen Start contacts J7-1 and J7-2 to 178, 183 or utility 240 Vac to N1, N2.
Do NOT connect both.
Some reprogramming of the Nexus control may be required for 2 wire start connection.

Figure 4. Connection of EATON RTC-100 ATS Controller to EATON Liquid Cooled Generator with Nexus Controller.

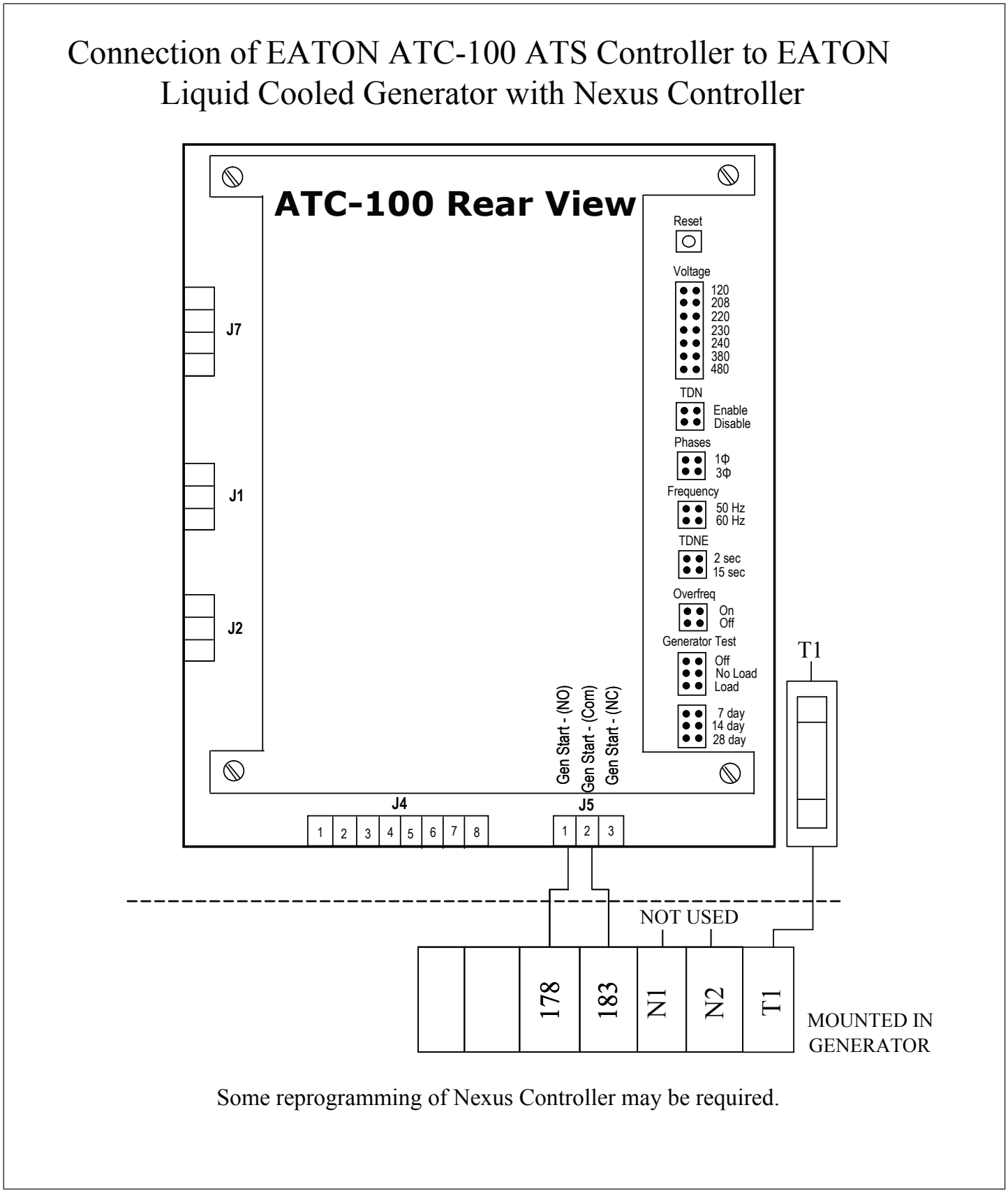


Figure 5. Connection of EATON ATC-100 ATS Controller to Eaton Liquid Cooled Generator Controller with Nexus Controller.

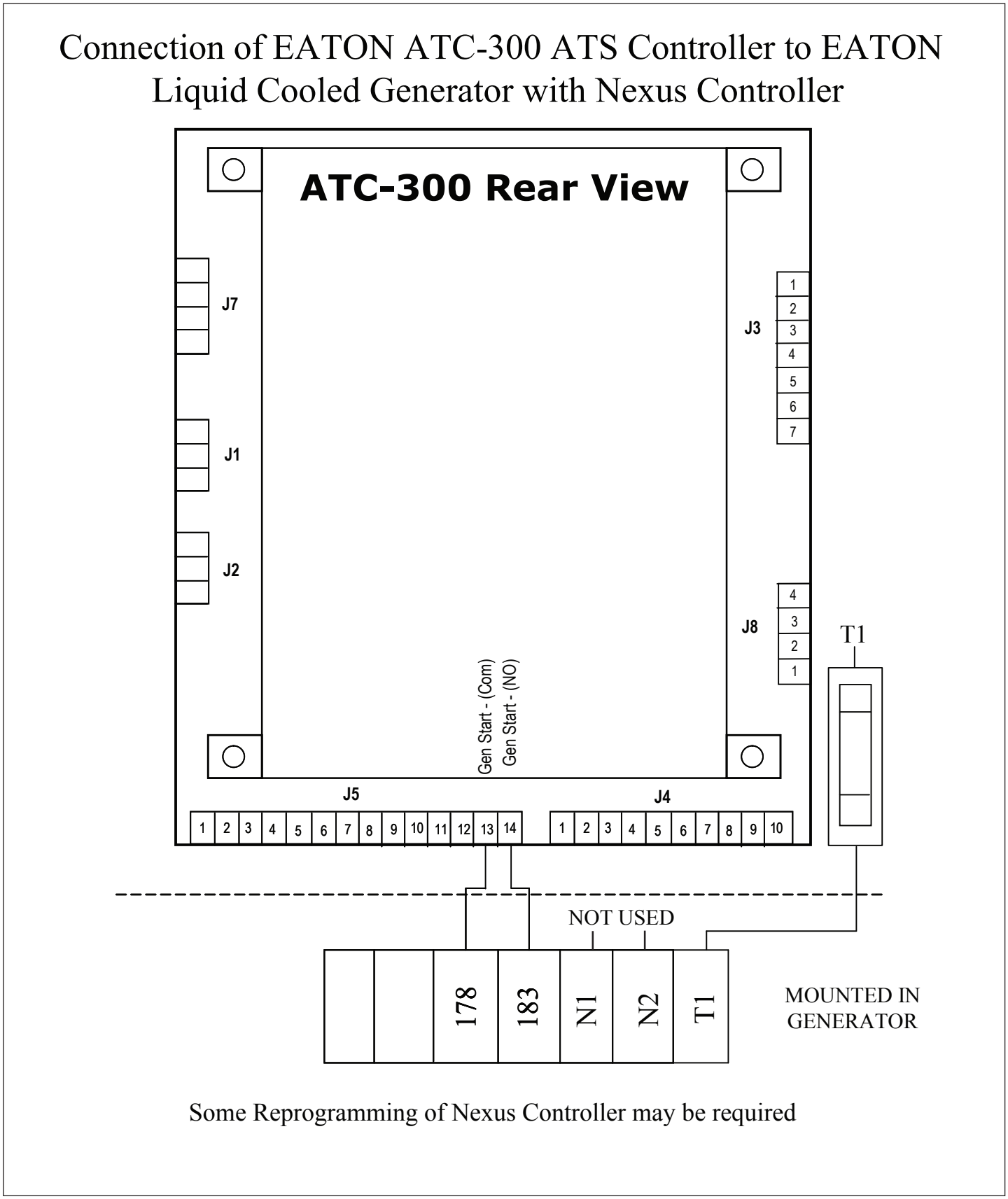


Figure 6. Connection of EATON ATC-300 ATS Controller to Eaton Liquid Cooled Generator with Nexus Controller.

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