



2019-04-03

NOTICE OF PROJECT COMPLETION AND TEST CONCLUSION LETTER

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Additional activity related to UL Project: 4788575416

Subject: **SCCR - Short Circuit Test - High Fault 100KA @ 600V on Industrial Control Switch: GTZ, GZ, GTS, GS, GTF and GQ Series**

Dear Mr. Facchini:

The Testing Session associated with project number 4788575416, has been completed.

UL have witnessed the complete test program, conducted at the ABB Laboratories, established for your products and these below are the details of the fuse used and of the results

High-Available Fault Current Circuit Test – 100kA @ 600V 3PH

Solid State Relay Model Name	Test Condition	Branch Circuit Protection Type	Branch Circuit Protection Mfr./Model. No.	Branch Circuit Protection Rating	Test Results
GTZ /GZ 25A/600V	100kA @ 600V 3PH	JDDZ Fuse class J	Bussmann / DFJ-25	25 A, 600 Vac, 200 kA	PASS
GTZ /GZ 40A/600V	100kA @ 600V 3PH	JDDZ Fuse class J	Bussmann / DFJ-40	40 A, 600 Vac, 200 kA	PASS
GTZ /GZ 55A/600V	100kA @ 600V 3PH	JDDZ Fuse class J	Bussmann / DFJ-80	80 A, 600 Vac, 200 kA	PASS

After the test all samples were able to function again, after the fuses replacement.

High-Available Fault Current Circuit Test - 100kA @ 600V 1PH

Solid State Relay Model Name	Test Condition	Branch Circuit Protection Type	Branch Circuit Protection Mfr./Model. No.	Branch Circuit Protection Rating	Test Results
GTS/GS 15A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-40	40 A, 600 Vac, 200 kA	PASS
GTS/GS 25A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-40	40 A, 600 Vac, 200 kA	PASS
GTS/GS 40A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-40	40 A, 600 Vac, 200 kA	PASS
GTS/GS 50A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-80	80 A, 600 Vac, 200 kA	PASS
GTS/GS 60A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-80	80 A, 600 Vac, 200 kA	PASS
GTS/GS 75A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-125	125 A, 600 Vac, 200 kA	PASS
GTS/GS 90A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-125	125 A, 600 Vac, 200 kA	PASS
GTS/GS 120A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-125	125 A, 600 Vac, 200 kA	PASS

After the test all samples were able to function again, after the fuses replacement.



High-Available Fault Current Circuit Test - 100kA @ 600V 1PH

Solid State Relay Model Name	Test Condition	Branch Circuit Protection Type	Branch Circuit Protection Mfr./Model. No.	Branch Circuit Protection Rating	Test Results
GTF 25A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-25	25 A, 600 Vac, 200 kA	PASS
GTF 40A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-50	50 A, 600 Vac, 200 kA	PASS
GTF 50A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-50	50 A, 600 Vac, 200 kA	PASS
GTF 60A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-100	100 A, 600 Vac, 200 kA	PASS
GTF 75A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-100	100 A, 600 Vac, 200 kA	PASS
GTF 90A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-100	100 A, 600 Vac, 200 kA	PASS
GTF 120A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-125	125 A, 600 Vac, 200 kA	PASS

After the test all samples were able to function again, after the fuses replacement.

High-Available Fault Current Circuit Test - 100kA @ 600V 1PH

Solid State Relay Model Name	Test Condition	Branch Circuit Protection Type	Branch Circuit Protection Mfr./Model. No.	Branch Circuit Protection Rating	Test Results
GQ 15A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-25	25 A, 600 Vac, 200 kA	PASS
GQ 25A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-25	25 A, 600 Vac, 200 kA	PASS
GQ 50A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-50	50 A, 600 Vac, 200 kA	PASS
GQ 90A/600V	100kA @ 600V 1PH	JDDZ Fuse class J	Bussmann / DFJ-100	100 A, 600 Vac, 200 kA	PASS

After the test all samples were able to function again, after the fuses replacement.

The fuses used on the above tests are considered representative of the all the fuses with current ratings lower than the current ratings used during the tests.

Testing conducted at 600Vac are considered representative also for the models with lower input voltage.



Please be informed that UL neither selected the samples and the related branch fuse protection nor determined whether the samples were representative of production samples. The test results apply only to the actual samples tested.

The branch fuse protection used were not the type indicated from the UL standard for the Short Circuit Test - High Fault but were determined from customer.

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Very truly yours

A handwritten signature in black ink that reads "Giovanni Borrelli".

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