

SEMI F47-0706 Compliance Certificate
EPRI PQ StarSM Test Program
Certification Date: July 31, 2012

PQ Star Reference Number:
SEMI F47.177

Manufacturer:
Rockwell Automation Inc.

Product:
Frame 6
PowerFlex[®] 755 Series Drives

Test Date: 6/25/2012 & 6/28/2012

Test Location:
Rockwell Automation
6400 West Enterprise Drive
Mequon, WI 53092

Test Configuration: The drives were tested using Rockwell's drive test stand with a voltage sag generator compliant with SEMI F47. All drive settings were set to default except for the motor parameters. The drive was auto-tuned. All parameters related for F47 testing are shown in table A-2, page 3 of this certification report.

Electrical Environment:
600Vac and 690V, 3 Phase 60 Hz with and without 0.185mH reactor (See attachments A,B,C, & D for detailed results)

Model Numbers and Load Configurations Tested

Catalog Number	Frame	Firmware Version	Drive Specs	Max Amps	Variable Torque HP
20G11NE053JA0NNNNN	6	7.001.12	600V – 50/60 Hz	53	50
20G11NF050JA0NNNNN	6	7.001.12	690V – 50/60 Hz	50	60
20G11NE144JA0NNNNN	6	7.001.12	600V – 50/60 Hz	144	150
20G11NF142JA0NNNNN	6	7.001.12	609V – 50/60 Hz	142	177

This letter and subsequent documentation certify that the specified Frame 6 PowerFlex[®] 755 600V and 690V series drives in the noted configuration has been voltage sag tested per SEMI F47-0706 with and without line reactors. The drive was tested as noted in the voltage sag immunity standard and IEC-61000-4-34, Figure C.3. This type of voltage sag is also referred to as a Type II voltage sag event as defined by CIGRE C4.110.

In the case of a 12 cycle, 50% of nominal phase-to-phase voltage sag applied to any phase executed in the "CONTINUE" mode, the output of the drive shut off. However, the motor stopped and restarted without operator and/or host controller intervention. The SEMI-F47 standard states in section 7.8.2 *Pass/Fail Criteria for Equipment* that subsystems and components may pass by recovery without operator interface (b) and (c). See section C for more details.

Based on these results, PowerFlex[®] 755 series 600V Frame 6 drives from 10Hp to 177Hp should be compliant with SEMI F47 as well in the same manner. Table A-1 of this certification document details the associated list of product catalog numbers. Certification remains valid for the model tested provided no component substitutions are made. Compliance is subject to reevaluation three years from the date of this certification.

Certified by,
Scott D. Bunton, Technologist
PQ Star Compliance Program



**PowerFlex[®] 755
Drives**

Allen-Bradley