

# SPECIAL SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS AND SYSTEMS

# **IBC CERTIFICATE OF COMPLIANCE**

Dynamic Certification Laboratories has qualified the listed units as CERTIFIED for seismic applications in accordance with the applicable codes listed below. The basis of this certification is through testing of the active and energized components per AC156. The seismic values are obtained from the Maximum Considered Earthquake Short Period Spectral Response Acceleration, Sds. For additional information see DCL Report No. 77789-1301.

**Approval for:** IBC 2012 Special Seismic Certification of Non-Structural Components and Systems **Manufacturer:** Cummins Power Generation, 1400 73rd Ave NE, OF143, Minneapolis, MN 55432

**Product Line:** Gas Gensets

**Mounting Description:** Rigid base mount

Certified Units												
Model	Power Rating	RPM	Weight max (lbs)	INCLUDED COMPONENT TYPE							Cds (s)	
				Engine	Alternator		Radiator	Enclosure	Chassis /	Control /	Sds (g), z/h=1	Unit
					Single Phase	Three Phase	Radiatoi	Enclosure	Skid	Connection	2/11-1	
C60 N6H	60 kw	3600	1,530	2.4L-T+OC	CA135-E12	CA135-E12	Large, Oil + Charge Cooler					иит6
C50 N6H	50 kw	3600	1,410	2.4L-NA+OC	CA135-E12	CA115-T12	Large, Oil Cooler	P2	P2	P2		interpolated
C45 N6H	45 kw	3600	1,410	2.4L-NA+OC	CA135-E12	CA115-T12	Large, Oil Cooler					interpolated
C40 N6H	40 kw	3600	1,260	2.4L-NA	CA115-T12	CA115-P12	Large					interpolated
C40 N6	40 kw	1800	1,435	2.4L-T	CA125-G14	CA115-V14	Large, Charge Cooler					interpolated
C36 N6H	36 kw	3600	1,260	2.4L-NA	CA115-R12	CA115-M12	Large				2.50	interpolated
C36 N6	36 kw	1800	1,367	2.4L-T	CA115-V14	CA115-S14	Large, Charge Cooler	]			-	interpolated
C30 N6	30 kw	1800	1,290	2.4L-T	CA115-R14	CA115-P14	Large					interpolated
C30 N6H	30 kw	3600	1,145	2.4L-NA	CA115-M12	CA115-J12	Small	P1	P1	P1		interpolated
C25 N6	25 kw	1800	1,158	2.4L-NA	CA115-R14	CA115-L14	Small					interpolated
C22 N6	22 kw	1800	1,158	2.4L-NA	CA115-R14	CA115-L14	Small					interpolated
C20 N6	20 kw	1800	1,090	2.4L-NA	CA115-J14	CA115-H14	Small					UUT5



Seismic Test and Certification Parameters											
Applicable Codes	Unit Under Test (UUT)	S <sub>DS</sub>	z/h	l <sub>p</sub>	Aflx-H	Arig-H	Aflx-V	Arig-V			
IBC 2012, 2012 ICC AC156, ASCE 7-10	UUT5, UUT6	2.50	1.0	1.5	4.00	3.00	1.67	0.67			

## Mounting Description:

Each unit was rigid base-mounted to the shake table interface frame using four 5/8-inch diameter Grade 8 bolts. Photographs of the UUTs on the shake table are shown below:









### Functionality

The unit was operational before and after shaking, and the unit was tested full of operating content. The structural integrity of the component attachment system and force-resisting systems was maintained.

### Site and Project Requirements

It is the responsibility of the Structural Engineer of Record to:

- 1. Provide engineering for the anchorage and restraint of the unit
- 2. Validate Certification Design Parameters with actual site conditions
- 3. Provide engineering of all equipment support structures
- 4. Confirm component configuration

Certification Issued by: Dynamic Certification Laboratories

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