Sound Data
C1100 D5
QST30-G4 50Hz Diesel

A-weighted Sound Pressure Level @ 7 meters, dB(A)

See notes 2, 5 and 7-11 listed below

Configuration	Exhaust	Applied Load	Position (Note 2)								8 Position Average
			1	2	3	4	5	6	7	8	
Standard – Unhoused (Mounted Cooling System)	Infinite Exhaust	0 % Prime	83.4	87.0	85.0	86.7	86.4	86.7	87.7	86.7	86.4
		75% Prime	84.9	89.8	88.7	89.5	87.4	88.5	89.4	88.6	88.6
		100 % Prime	86.2	91.3	90.1	90.9	88.4	89.7	90.7	90.4	90.0
		100 % Standby	86.9	92.0	90.7	91.5	88.8	90.1	91.3	91.0	90.5

Average A-weighted Sound Pressure Level @ 1 meter, dB(A)

See notes 1, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused (Mounted Cooling System)	Infinite Exhaust	0 % Prime	N/A	40.2	60.7	77.7	84.1	87.9	91.0	89.1	85.1	78.7	67.7	95.3
		75% Prime	N/A	41.1	61.7	78.4	84.5	88.4	92.8	91.4	89.6	86.6	72.7	97.6
		100 % Prime	N/A	41.6	62.5	78.9	85.0	89.5	93.9	93.0	91.6	89.7	77.0	99.1
		100 % Standby	N/A	41.6	62.9	79.2	85.1	90.0	94.1	93.6	92.3	92.1	77.9	99.8

A-weighted Sound Pressure Level @ Operator Location, dB(A)

See notes 1, 3, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused (Mounted Cooling System)	Infinite Exhaust	100 % Prime	N/A	39.0	58.7	79.9	85.1	84.3	87.1	87.4	84.1	81.3	69.1	93.3
		100 % Standby	N/A	39.2	59.2	80.5	85.1	84.6	87.1	87.9	85.1	82.6	69.8	93.8

Sound Data
C1100 D5
QST30-G4 50Hz Diesel

A-weighted Sound Power Level, dB(A)

See notes 1, 3 and 6-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused (Mounted Cooling System)	Infinite Exhaust	0 % Prime	N/A	59.4	79.4	96.8	104.9	105.1	108.5	107.0	102.2	96.5	85.1	113.2
		75% Prime	N/A	61.4	81.0	97.6	104.9	105.6	110.4	109.9	107.0	104.6	90.0	115.6
		100 % Prime	N/A	62.0	81.7	98.2	105.0	106.7	111.3	111.6	108.8	107.6	94.2	117.0
		100 % Standby	N/A	62.1	82.1	98.5	105.0	107.6	111.6	112.2	109.6	109.4	95.0	117.7

Exhaust Sound Power Level, dB(A)

See notes 4 and 6-14 listed below

Configuration	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
		16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Open Exhaust (No Muffler)	0 % Prime	N/A	56.8	88.4	98.5	104.0	105.2	103.2	102.4	99.1	90.2	78.1	110.6
	75% Prime	N/A	65.1	106.4	113.1	110.1	116.7	114.9	116.4	117.9	109.3	92.7	123.6
	100 % Prime	N/A	65.5	107.8	115.1	111.4	119.1	117.0	119.1	121.0	113.4	98.5	126.1
	100 % Standby	N/A	65.6	108.3	116.1	112.8	119.0	118.0	120.3	122.4	115.0	100.4	127.2

Global Notes:

1. Sound pressure levels at 1 meter are measured per the requirements of ISO 3744, ISO 8528-10, and European Communities Directive 2000/14/EC as applicable. The microphone measurement locations are 1 meter from a reference parallelepiped just enclosing the generator set (enclosed or unenclosed).
2. Seven-meter measurement location 1 is 7 meters (23 feet) from the generator (alternator) end of the generator set, and the locations proceed counter-clockwise around the generator set at 45° angles at a height of 1.2 meters (48 inches) above the ground surface.
3. Sound Power Levels are calculated according to ISO 3744, ISO 8528-10, and or CE (European Union) requirements..
4. Exhaust Sound Levels are measured and calculated per ISO 6798, Annex A.
5. Reference Sound Pressure Level is 20 µPa.
6. Reference Sound Power Level is 1 pW (10^{-12} Watt).
7. Sound data for remote-cooled generator sets are based on rated loads without cooling fan noise.
8. Sound data for the generator set with infinite exhaust do not include the exhaust noise contribution.
9. Published sound levels are measured at CE certified test site and are subject to instrumentation, measurement, installation and manufacturing variability.
10. Unhoused/Open configuration generator sets refers to generator sets with no sound enclosures of any kind.
11. Housed/Enclosed/Closed/Canopy configuration generator sets refer to generator sets that have noise reduction sound enclosures installed over the generator set and usually integrally attached to the skid base/base frame/fuel container base of the generator set.
12. Published sound levels meet the requirements India's Central Pollution Control Board (Ministry of Environment & Forests),vide GSR 371 (E), which states the A-weighted sound level at1meter from any diesel generator set up to a power output rating of 1000kVA shall not exceed 75dB(A)
13. For updated noise pollution information for India see website: http://www.envfor.nic.in/legis/legis.html
14. Sound levels must meet India's Ambient Air Noise Quality Standards detailed for Daytime/Night-time operation in Noise Pollution (Regulation and Control) Rules, 2000