XV SERIES DRAFT INDUCERS

Sound power by controller output · Independently tested to ANSI S12.51 / ISO 3741

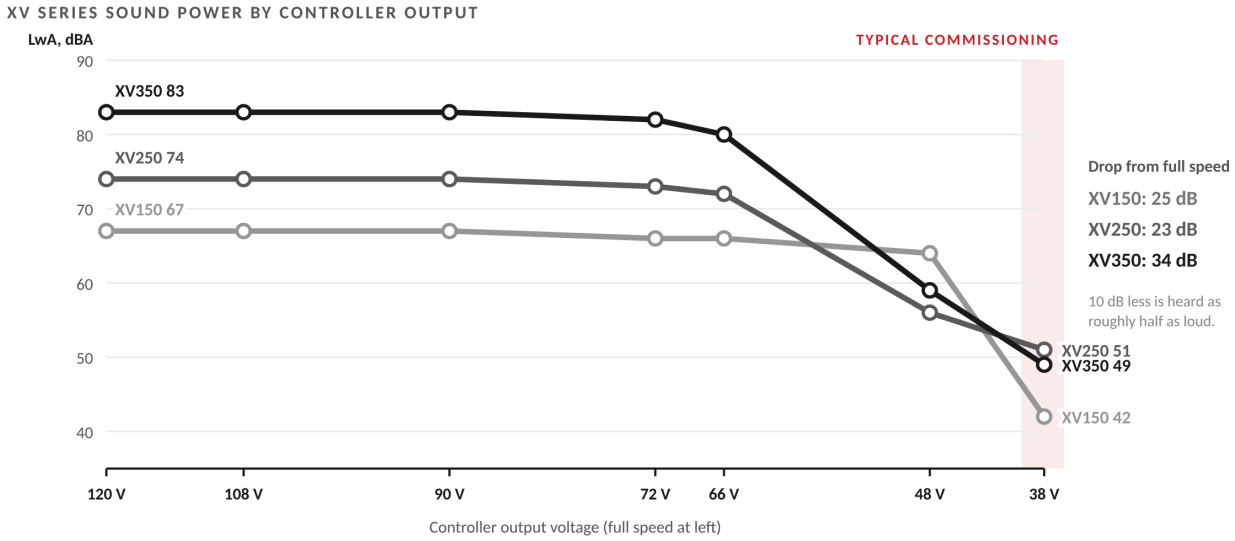
Summary. XV Series draft inducers were tested in March 2025 by Riverbank Acoustical Laboratories, an independent laboratory, to ANSI S12.51 / ISO 3741. Sound power falls 23 to 34 dB from full speed (120 V) to 38 V, a typical commissioning setting. A 10 dB reduction in sound power gives about 10 dB less at any listening position, which most people hear as roughly half as loud.

These are sound power levels: the acoustic power the draft inducer itself radiates, measured free-standing with the inlet closed and no silencer. Sound power is the source value used in acoustical calculations. It is not the sound level at a listening position and should not be compared with everyday decibel charts. Sound at a listener depends on the chimney, any silencer, the building, and distance.

TOTAL A-WEIGHTED SOUND POWER, LwA (dBA re 1 pW)

Model	120 V	108 V	90 V	72 V	66 V	48 V	38 V	Drop, 120 to 38 V
XV150	67	67	67	66	66	64	42	**25 dB**
XV250	74	74	74	73	72	56	51	**23 dB**
XV350	83	83	83	82	80	59	49	**34 dB**

Shaded: 38 V, a typical commissioning setting. Commissioning speed is set for each chimney.



A-weighted sound power, dBA re 1 pW. Draft inducer only, no silencer. Riverbank Acoustical Laboratories, ANSI S12.51 / ISO 3741, report Lw25-004 (2025). Free-standing, inlet closed (shutoff).

NOTES

Voltage is a controller setting. Speed and airflow at a given voltage differ between draft inducer and controller designs, and on site depend on the chimney. Values on this sheet apply to XV Series draft inducers on X-VENTISO controllers.

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Octave band sound power, Lw (dB re 1 pW), by controller output

OCTAVE BAND SOUND POWER, Lw (dB re 1 pW), UNWEIGHTED · OCTAVE BAND CENTER FREQUENCY (Hz)

XV150

Controller output	63	125	250	500	1,000	2,000	4,000	8,000	LwA
120 V	*≤62*	59	62	66	64	57	52	48	**67**
108 V	*≤64*	*≤60*	61	66	64	57	52	49	**67**
90 V	*≤70*	*≤63*	61	66	63	56	52	48	**67**
72 V	*≤64*	*≤57*	61	65	63	56	52	48	**66**
66 V	*≤61*	*≤54*	61	66	62	56	52	47	**66**
48 V	*≤58*	*≤52*	59	62	60	54	49	44	**64**
38 V	*≤52*	*≤45*	*≤41*	*≤36*	39	29	30	*≤30*	**42**

XV250

Controller output	63	125	250	500	1,000	2,000	4,000	8,000	LwA
120 V	64	64	69	72	70	66	60	54	**74**
108 V	64	63	69	73	69	65	60	54	**74**
90 V	63	63	69	73	69	65	60	53	**74**
72 V	*≤63*	62	68	73	68	64	58	52	**73**
66 V	*≤62*	61	68	72	68	63	57	50	**72**
48 V	*≤53*	*≤45*	54	58	50	43	35	34	**56**
38 V	*≤51*	*≤43*	*≤49*	*≤50*	48	37	31	31	**51**

XV350

Controller output	63	125	250	500	1,000	2,000	4,000	8,000	LwA
120 V	72	73	78	79	80	75	70	64	**83**
108 V	72	73	78	80	80	75	70	64	**83**
90 V	72	72	79	81	80	74	70	64	**83**
72 V	70	71	77	79	78	73	68	62	**82**
66 V	70	71	76	78	77	72	67	60	**80**
48 V	*≤52*	*≤53*	57	60	52	45	37	33	**59**
38 V	*≤50*	*≤49*	50	51	40	33	*≤25*	*≤30*	**49**

≤ Upper limit: in one or more one-third octave bands within this octave, the measured level was too close to the test room's background level for a complete background correction, so the true value is at or below the value shown. Where these bands contribute to a total, the total is also an upper limit and the drop from full speed is a minimum. LwA column: total A-weighted sound power, dBA. Octave bands are summed from the laboratory's one-third octave data.

TEST BASIS

Laboratory	Riverbank Acoustical Laboratories (independent)
Standard	ANSI S12.51 / ISO 3741, reverberation room, comparison method with a calibrated reference sound source
Report	Lw25-004. XV150 and XV350 tested March 20, 2025; XV250 tested March 21, 2025
Test condition	Free-standing on the reverberation room floor, inlet closed (shutoff). No silencer. Speed set by X-VENTISO controller output voltage, 120 V to 38 V.
Data	From laboratory report Lw25-004. Octave bands are energy sums of the reported one-third octave bands; all values rounded to the nearest dB.