

## IN-LINE CENTRIFUGAL DUCT FANS

### VT Series



#### DESCRIPTION

The VT series of circular in-line duct centrifugal fans consists of 14 model variations within 7 nominal model sizes of 100, 125, 150, 160, 200, 250 and 315 mm respectively.

The VT range of fans delivers airflow performances from 290 up to 1.900 m<sup>3</sup>/hr.

#### APPLICATIONS

The VT series of fans are ideally suited for a wide range of general residential, commercial and industrial exhaust or supply ventilation applications. Typical applications would include the following:

**RESIDENTIAL** – Bathrooms, toilets, utility rooms.

**COMMERCIAL** – Cafes, bars, offices, restaurants.

**INDUSTRIAL** – Spot ventilation, equipment cooling, workshop ventilation.

#### CONSTRUCTION

All VT fans are manufactured from high grade corrosion resistant pressed galvanised steel. All models are supplied as standard with a pre-wired wiring junction box.

All models include an enclosed type, single phase, external rotor motor with factory matched backward curved non-stalling impeller.

All models are fully speed controllable using either electronic or autotransformer voltage regulation controllers.

The following specifications apply:

- Single phase 230V 50Hz.
- IP44, Class B insulation.
- Operating temperatures -40° up to +40°.
- All motors include sealed for Sife ball bearing assemblies.
- All motors include an internal safety thermal overload protection device as standard.

#### TECHNICAL CHARACTERISTICS

Model Type	Nom. Speed (r.p.m.)	Maximum Absorbed Power (W)	Maximum Absorbed Current (A)	Maximum Air Volume (m <sup>3</sup> /h)	Sound Pressure Level (dB(A) at 3 m)	Max. Temperature (°C)	Weight (kg)
<b>VT-100 S</b>	2500	78	0,33	290	47	60	3
<b>VT-125 S</b>	2450	80	0,35	410	47	60	3
<b>VT-150 S</b>	2700	120	0,53	700	50	60	5
<b>VT-160 S</b>	2750	130	0,55	760	51	60	5
<b>VT-200 S</b>	2600	170	0,72	1.000	52	60	5
<b>VT-250 S</b>	2750	180	0,80	1.100	54	60	6
<b>VT-315 S</b>	2700	350	1,45	1.890	55	50	8

#### DIMENSIONS (mm)

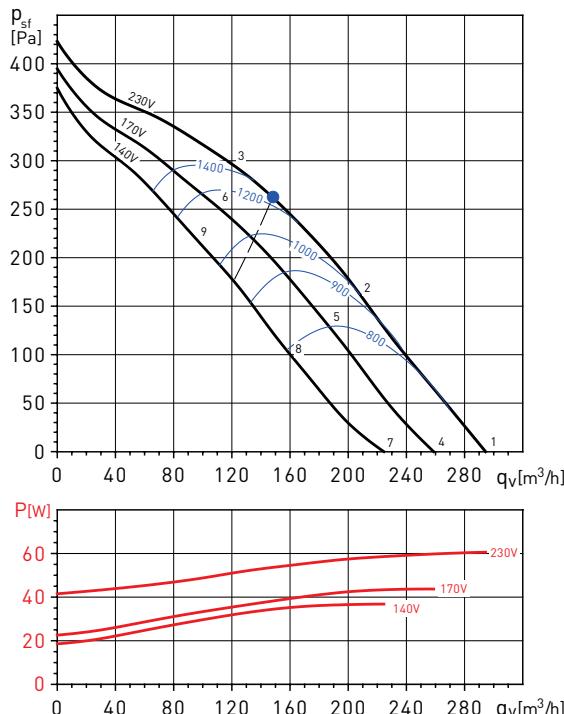
Type	A	B	C	D
<b>VT-100 S</b>	194	23	243	98
<b>VT-125 S</b>	195	27	243	123
<b>VT-150 S</b>	214	24	333	147
<b>VT-160 S</b>	222	28	333	157
<b>VT-200 S</b>	223	25	333	198
<b>VT-250 S</b>	206	27	333	248
<b>VT-315 S</b>	230	25	401	312



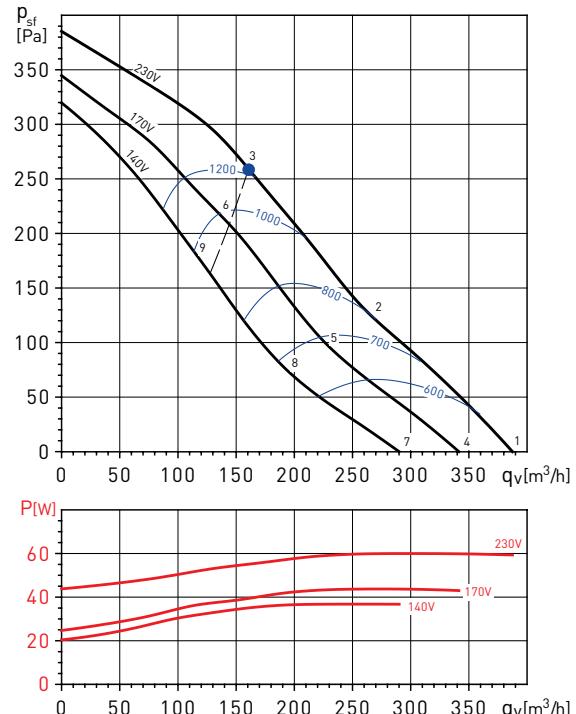
## PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- qv: Airflow in  $\text{m}^3/\text{h}$ .
- psf: Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in  $\text{W}/\text{m}^3/\text{s}$  (blue curves).
- Performance data in accordance with ISO 5801.

VT-100 S



VT-125 S



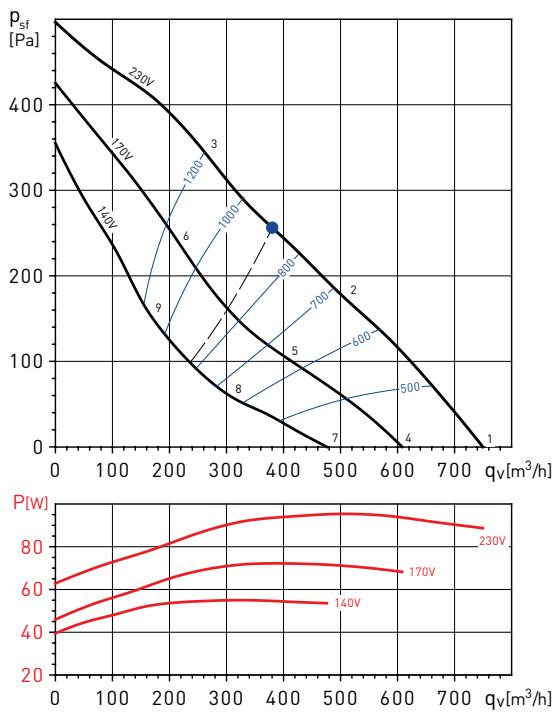
VT-100 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	37	46	58	62	68	64	60	46	<b>71</b>
	Outlet	37	45	63	58	63	61	57	46	<b>68</b>
	Radiated	33	38	50	50	55	49	51	37	<b>59</b>
2	Inlet	39	45	56	60	66	62	56	43	<b>69</b>
	Outlet	38	44	61	56	61	59	54	43	<b>66</b>
	Radiated	35	37	48	48	53	47	47	34	<b>56</b>
3	Inlet	37	43	53	58	65	60	53	42	<b>67</b>
	Outlet	37	43	57	56	60	57	52	42	<b>64</b>
	Radiated	33	35	45	46	52	45	44	33	<b>55</b>
4	Inlet	35	43	55	59	65	61	56	41	<b>68</b>
	Outlet	35	42	60	55	60	58	53	41	<b>65</b>
	Radiated	31	35	47	47	52	46	47	32	<b>55</b>
5	Inlet	36	42	54	57	63	60	52	39	<b>66</b>
	Outlet	36	42	59	53	58	56	50	39	<b>63</b>
	Radiated	32	34	46	45	50	45	43	30	<b>54</b>
6	Inlet	34	40	52	56	63	58	50	39	<b>65</b>
	Outlet	35	41	56	53	58	55	49	40	<b>62</b>
	Radiated	30	32	44	44	50	43	41	30	<b>53</b>
7	Inlet	32	39	51	55	60	57	49	34	<b>63</b>
	Outlet	31	39	56	50	55	53	46	34	<b>60</b>
	Radiated	28	31	43	43	47	42	40	25	<b>51</b>
8	Inlet	32	38	49	53	59	55	45	32	<b>62</b>
	Outlet	32	39	54	49	54	51	44	32	<b>59</b>
	Radiated	28	30	41	41	46	40	36	23	<b>49</b>
9	Inlet	32	37	49	52	61	55	46	35	<b>63</b>
	Outlet	32	39	54	50	56	52	45	35	<b>60</b>
	Radiated	28	29	41	40	48	40	37	26	<b>50</b>

VT-125 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	33	42	54	64	67	66	62	49	<b>71</b>
	Outlet	33	43	61	62	63	62	59	47	<b>69</b>
	Radiated	20	34	49	45	53	49	50	37	<b>57</b>
2	Inlet	34	42	53	64	66	64	58	47	<b>70</b>
	Outlet	34	43	59	62	62	60	56	45	<b>67</b>
	Radiated	21	34	48	45	52	47	46	35	<b>55</b>
3	Inlet	35	43	53	64	65	61	54	43	<b>69</b>
	Outlet	35	44	60	62	61	58	53	44	<b>67</b>
	Radiated	22	35	48	45	51	44	42	31	<b>54</b>
4	Inlet	31	40	52	62	65	64	60	47	<b>69</b>
	Outlet	31	41	59	60	61	60	57	45	<b>66</b>
	Radiated	18	32	47	43	51	47	48	35	<b>55</b>
5	Inlet	32	40	51	62	64	62	56	45	<b>67</b>
	Outlet	31	40	56	59	59	57	53	42	<b>65</b>
	Radiated	19	32	46	43	50	45	44	33	<b>53</b>
6	Inlet	33	41	51	62	63	59	52	41	<b>67</b>
	Outlet	33	42	58	60	59	56	51	42	<b>65</b>
	Radiated	20	33	46	43	49	42	40	29	<b>53</b>
7	Inlet	27	36	48	58	61	60	56	43	<b>66</b>
	Outlet	27	37	55	56	57	56	53	41	<b>63</b>
	Radiated	14	28	43	39	47	43	44	31	<b>51</b>
8	Inlet	28	36	47	58	60	58	52	41	<b>64</b>
	Outlet	28	37	53	56	56	54	50	39	<b>61</b>
	Radiated	15	28	42	39	46	41	40	29	<b>49</b>
9	Inlet	31	39	49	60	61	57	50	39	<b>65</b>
	Outlet	31	40	56	58	57	54	49	40	<b>63</b>
	Radiated	18	31	44	41	47	40	38	27	<b>50</b>

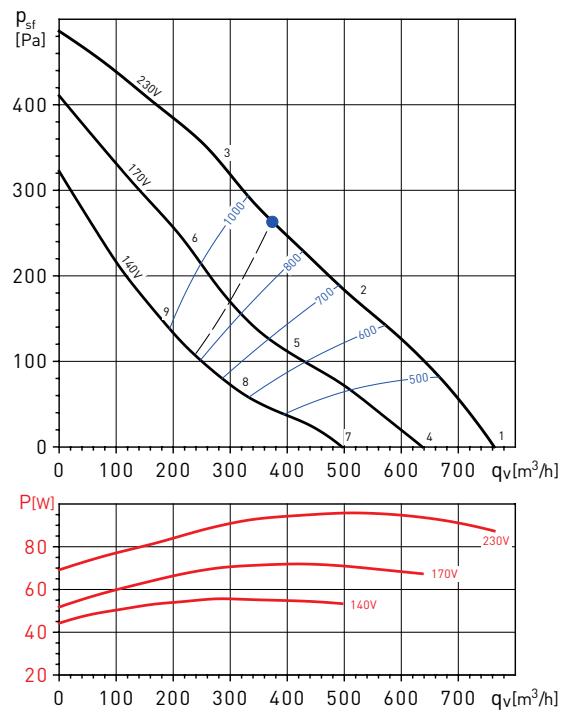
## PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- $q_v$ : Airflow in  $\text{m}^3/\text{h}$ .
- $p_{sf}$ : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in  $\text{W}/\text{m}^3/\text{s}$  (blue curves).
- Performance data in accordance with ISO 5801.

VT-150 S



VT-160 S



VT-150 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	37	45	58	69	68	67	63	51	<b>73</b>
	Outlet	37	48	62	63	64	64	61	51	<b>70</b>
	Radiated	21	37	45	49	50	51	49	37	<b>56</b>
2	Inlet	35	44	58	68	67	65	60	48	<b>72</b>
	Outlet	35	47	59	62	63	63	58	48	<b>69</b>
	Radiated	19	36	45	48	49	49	46	34	<b>55</b>
3	Inlet	37	48	60	68	66	65	57	47	<b>72</b>
	Outlet	36	49	61	61	62	61	55	46	<b>68</b>
	Radiated	21	40	47	48	48	49	43	33	<b>55</b>
4	Inlet	33	41	54	65	64	63	59	47	<b>70</b>
	Outlet	33	44	58	59	60	60	57	47	<b>66</b>
	Radiated	17	33	41	45	46	47	45	33	<b>52</b>
5	Inlet	30	39	53	63	62	60	55	43	<b>67</b>
	Outlet	30	42	54	57	58	58	53	43	<b>64</b>
	Radiated	14	31	40	43	44	44	41	29	<b>50</b>
6	Inlet	33	44	56	64	62	61	53	43	<b>68</b>
	Outlet	33	46	58	58	59	58	52	43	<b>64</b>
	Radiated	17	36	43	44	44	45	39	29	<b>51</b>
7	Inlet	28	36	49	60	59	58	54	42	<b>64</b>
	Outlet	28	39	53	54	55	55	52	42	<b>61</b>
	Radiated	12	28	36	40	41	42	40	28	<b>47</b>
8	Inlet	24	33	47	57	56	54	49	37	<b>62</b>
	Outlet	24	36	48	51	52	52	47	37	<b>58</b>
	Radiated	8	25	34	37	38	38	35	23	<b>44</b>
9	Inlet	28	39	51	59	57	56	48	38	<b>63</b>
	Outlet	28	41	53	53	54	53	47	38	<b>59</b>
	Radiated	12	31	38	39	39	40	34	24	<b>46</b>

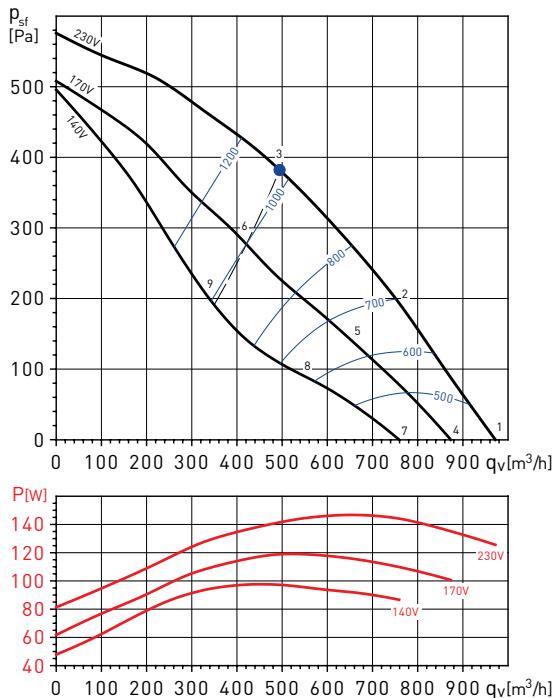
VT-160 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	36	45	58	68	67	67	65	53	<b>73</b>
	Outlet	38	47	61	62	64	64	62	52	<b>70</b>
	Radiated	22	37	46	50	53	52	50	41	<b>58</b>
2	Inlet	33	45	57	68	67	65	61	50	<b>72</b>
	Outlet	34	47	57	63	63	63	58	49	<b>69</b>
	Radiated	19	37	45	50	53	50	46	38	<b>57</b>
3	Inlet	37	48	58	67	65	64	57	47	<b>71</b>
	Outlet	37	51	62	63	63	61	55	46	<b>69</b>
	Radiated	23	40	46	49	51	49	42	35	<b>55</b>
4	Inlet	32	41	54	64	63	63	61	49	<b>69</b>
	Outlet	34	43	57	58	60	60	58	48	<b>66</b>
	Radiated	18	33	42	46	49	48	46	37	<b>54</b>
5	Inlet	28	40	52	63	62	60	56	45	<b>67</b>
	Outlet	29	42	52	58	58	58	53	44	<b>64</b>
	Radiated	14	32	40	45	48	45	41	33	<b>52</b>
6	Inlet	33	44	54	63	61	60	53	43	<b>67</b>
	Outlet	33	47	58	59	59	57	51	42	<b>65</b>
	Radiated	19	36	42	45	47	45	38	31	<b>51</b>
7	Inlet	27	36	49	59	58	58	56	44	<b>64</b>
	Outlet	29	38	52	53	55	55	53	43	<b>61</b>
	Radiated	13	28	37	41	44	43	41	32	<b>49</b>
8	Inlet	22	34	46	57	56	54	50	39	<b>62</b>
	Outlet	24	37	47	53	53	53	48	39	<b>58</b>
	Radiated	8	26	34	39	42	39	35	27	<b>46</b>
9	Inlet	28	39	49	58	56	55	48	38	<b>62</b>
	Outlet	28	42	53	54	52	46	37	30	<b>60</b>
	Radiated	14	31	37	40	42	40	33	26	<b>47</b>



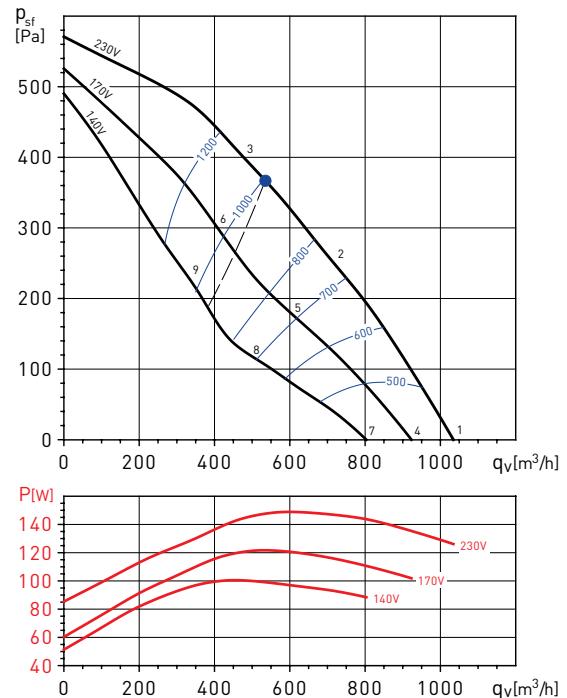
## PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- qv: Airflow in  $\text{m}^3/\text{h}$ .
- psf: Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in  $\text{W}/\text{m}^3/\text{s}$  (blue curves).
- Performance data in accordance with ISO 5801.

VT-200 S



VT-250 S



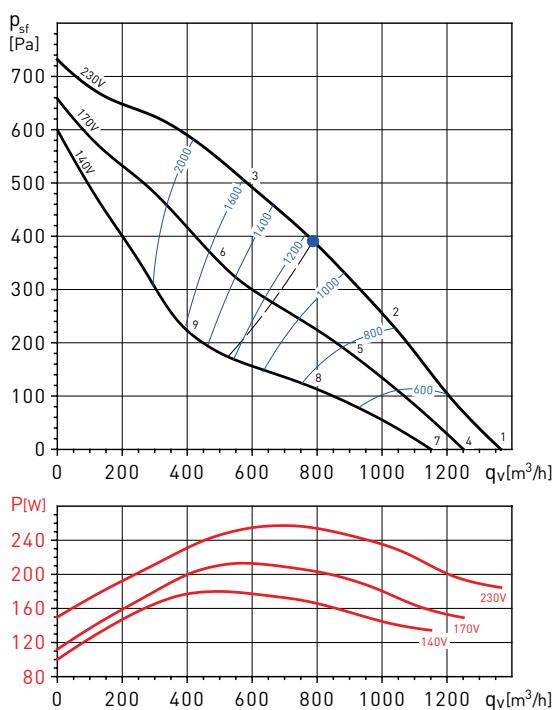
VT-200 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	38	48	63	67	70	68	65	63	<b>75</b>
	Outlet	37	47	61	63	67	67	65	62	<b>73</b>
	Radiated	36	39	44	38	48	52	54	48	<b>58</b>
2	Inlet	36	46	62	64	67	64	61	55	<b>71</b>
	Outlet	37	46	62	61	63	63	61	54	<b>69</b>
	Radiated	34	37	43	35	45	48	50	40	<b>54</b>
3	Inlet	37	46	60	63	65	62	57	50	<b>69</b>
	Outlet	35	46	61	59	62	62	58	50	<b>68</b>
	Radiated	35	37	41	34	43	46	46	35	<b>51</b>
4	Inlet	36	46	61	65	68	66	63	61	<b>73</b>
	Outlet	36	46	60	62	66	66	64	61	<b>71</b>
	Radiated	34	37	42	36	46	50	52	46	<b>56</b>
5	Inlet	33	43	59	61	64	61	58	52	<b>68</b>
	Outlet	34	43	59	58	60	60	58	51	<b>66</b>
	Radiated	31	34	40	32	42	45	47	37	<b>51</b>
6	Inlet	34	43	57	60	62	59	54	47	<b>67</b>
	Outlet	32	43	58	56	59	59	55	47	<b>65</b>
	Radiated	32	34	38	31	40	43	43	32	<b>48</b>
7	Inlet	33	43	58	62	65	63	60	58	<b>70</b>
	Outlet	32	42	56	58	62	62	60	57	<b>68</b>
	Radiated	31	34	39	33	43	47	49	43	<b>53</b>
8	Inlet	29	39	55	57	60	57	54	48	<b>64</b>
	Outlet	30	39	55	54	56	56	54	47	<b>62</b>
	Radiated	27	30	36	28	38	41	43	33	<b>47</b>
9	Inlet	30	39	53	56	58	55	50	43	<b>63</b>
	Outlet	28	39	54	52	55	55	51	43	<b>61</b>
	Radiated	28	30	34	27	36	39	39	28	<b>44</b>

VT-250 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	37	48	65	68	72	70	68	65	<b>77</b>
	Outlet	40	51	66	67	69	69	69	66	<b>76</b>
	Radiated	22	39	49	50	58	59	59	56	<b>64</b>
2	Inlet	36	46	63	64	68	66	66	65	<b>73</b>
	Outlet	39	49	63	63	65	64	66	59	<b>72</b>
	Radiated	21	37	47	46	54	55	57	50	<b>61</b>
3	Inlet	35	43	61	61	66	63	62	54	<b>70</b>
	Outlet	37	46	62	62	65	64	62	55	<b>70</b>
	Radiated	20	34	45	43	52	52	53	45	<b>58</b>
4	Inlet	35	46	63	66	70	68	66	63	<b>74</b>
	Outlet	38	49	64	65	67	67	67	64	<b>74</b>
	Radiated	20	37	47	48	56	57	57	54	<b>62</b>
5	Inlet	33	43	60	61	65	63	63	56	<b>70</b>
	Outlet	36	46	60	60	62	61	63	56	<b>68</b>
	Radiated	18	34	44	43	51	52	54	47	<b>58</b>
6	Inlet	32	40	58	58	63	60	59	51	<b>67</b>
	Outlet	34	43	59	59	62	61	59	52	<b>67</b>
	Radiated	17	31	42	40	49	49	50	42	<b>55</b>
7	Inlet	32	43	60	63	67	65	63	60	<b>72</b>
	Outlet	35	46	61	62	64	64	64	61	<b>71</b>
	Radiated	17	34	44	45	53	54	54	51	<b>60</b>
8	Inlet	28	38	55	56	60	58	58	51	<b>65</b>
	Outlet	31	41	55	55	57	56	58	51	<b>64</b>
	Radiated	13	29	39	38	46	47	49	42	<b>53</b>
9	Inlet	28	36	54	54	59	56	55	47	<b>63</b>
	Outlet	30	39	55	55	58	57	55	48	<b>64</b>
	Radiated	13	27	38	36	45	46	38	31	<b>51</b>

## PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- $q_v$ : Airflow in  $\text{m}^3/\text{h}$ .
- $p_{sf}$ : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in  $\text{W}/\text{m}^3/\text{s}$  (blue curves).
- Performance data in accordance with ISO 5801.

VT-315 S



VT-315 S		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	39	53	67	73	76	71	68	67	<b>79</b>
	Outlet	48	54	69	71	75	74	70	70	<b>80</b>
	Radiated	29	33	45	51	58	57	55	54	<b>63</b>
2	Inlet	38	55	67	73	73	69	67	63	<b>78</b>
	Outlet	49	55	70	71	74	72	69	64	<b>79</b>
	Radiated	28	35	45	51	55	55	54	50	<b>61</b>
3	Inlet	42	64	71	73	74	70	67	60	<b>79</b>
	Outlet	50	64	74	71	74	72	68	62	<b>80</b>
	Radiated	32	44	49	51	56	56	54	47	<b>61</b>
4	Inlet	38	52	66	72	75	70	67	66	<b>78</b>
	Outlet	47	53	68	70	74	73	69	69	<b>79</b>
	Radiated	28	32	44	50	57	56	54	53	<b>61</b>
5	Inlet	36	53	65	71	71	67	65	61	<b>75</b>
	Outlet	46	52	67	68	71	69	66	61	<b>76</b>
	Radiated	26	33	43	49	53	53	52	48	<b>58</b>
6	Inlet	39	61	68	70	71	67	64	57	<b>76</b>
	Outlet	47	61	71	68	71	69	65	59	<b>76</b>
	Radiated	29	41	46	48	53	53	51	44	<b>58</b>
7	Inlet	36	50	64	70	73	68	65	64	<b>76</b>
	Outlet	45	51	66	68	72	71	67	67	<b>77</b>
	Radiated	26	30	42	48	55	54	52	51	<b>59</b>
8	Inlet	31	48	60	66	66	62	60	56	<b>71</b>
	Outlet	42	48	63	64	67	65	62	57	<b>72</b>
	Radiated	21	28	38	44	48	48	47	43	<b>54</b>
9	Inlet	34	56	63	65	66	62	59	52	<b>71</b>
	Outlet	42	56	66	63	66	64	60	54	<b>72</b>
	Radiated	24	36	41	43	48	48	46	39	<b>53</b>