

Concealed ceiling unit
with low ESP
Technical Data
FWE-FF /
FWE-FT



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FWE-FF / FWE-FT

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1 Features

1 - 1 FWE-FT, FWE-FF

- › Available static pressure up to 80Pa
- › Standard left and right side water connection
- › Additional drain pan as standard
- › G2 plastic frame filter
- › Open protocol control
- › Factory mounted valve available as option
- › Reduced sound noise thanks to the thinner heat exchanger



2 Specifications

2 - 1 Specifications

Technical specifications				FWE04FF		FWE04FFR		FWE05FF		FWE05FFR	
Cooling capacity (standard conditions)	Latent capacity 4-pipe	High	kW			0.45 (1)				0.47 (1)	
	Sensible capacity 4-pipe	Fan speed 1	kW			0.67 (1)				0.81 (1)	
		Fan speed 2	kW			1.02 (1)				1.21 (1)	
		Fan speed 3	kW			1.29 (1)				1.57 (1)	
		Fan speed 4	kW			1.56 (1)				1.93 (1)	
		Low	kW			1.02 (1)				1.21 (1)	
		Medium	kW			1.29 (1)				1.57 (1)	
		High	kW			1.56 (1)				1.93 (1)	
	Total capacity 4-pipe	Fan speed 1	kW			0.9				1.1	
		Fan speed 2	kW			1.37 (1)				1.61 (1)	
		Fan speed 3	kW			1.69 (1)				1.99 (1)	
		Fan speed 4	kW			2.01 (1)				2.4	
		Low	kW			1.37 (1)				1.61 (1)	
		Medium	kW			1.69 (1)				1.99 (1)	
		High	kW			2.01 (1)				2.4	
Heating capacity (standard conditions)	Capacity 4-pipe	Fan speed 1	kW			1.21 (2)				1.25 (2)	
		Fan speed 2	kW			1.66 (2)				1.72 (2)	
		Fan speed 3	kW			2				2.06 (2)	
		Fan speed 4	kW			2.38 (2)				2.45 (2)	
		Low	kW			1.66 (2)				1.72 (2)	
		Medium	kW			2				2.06 (2)	
		High	kW			2.38 (2)				2.45 (2)	
Power input	Fan speed 1	kW					0.04 (3)				
	Fan speed 2	kW					0.04 (3)				
	Fan speed 3	kW					0.05 (3)				
	Fan speed 4	kW					0.05 (3)				
	Low	kW					0.04 (3)				
	Med.	kW					0.05 (3)				
	High	kW					0.054 (3)				
Dimensions	Unit	Height	mm	-				253			
		Width	mm	-				728			
		Depth	mm	-				570			
	Packed unit	Height	mm	-				275			
		Width	mm	-				740			
		Depth	mm	-				585			
Weight	Unit	kg	40.6				10.4				
Weight	Packed unit	kg	44				13				
Casing	Colour			Metal							
	Material			Galvanised steel							
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.							
	Length			mm			465				
	Fin Type			Aluminium (Corrugated)							
	Tube material			Seamless copper							
	Tube type			Plain							
Fan	Type			Centrifugal (Blade: Forward - curve)							
	Air flow rate	Fan speed 1	m³/h					216 (3)			
		Fan speed 2	m³/h					307 (3)			
		Fan speed 3	m³/h					379 (3)			
		Fan speed 4	m³/h					465 (3)			
		Low	m³/h					307 (3)			
		Medium	m³/h					379 (3)			
		High	m³/h					465 (3)			
	Available static pressure	Fan speed 1	Pa			30				35	
		Fan speed 2	Pa			40				45	
		Fan speed 3	Pa			50				55	
		Fan speed 4	Pa					80			
		Low	Pa			40				45	
		Medium	Pa			50				55	
		High	Pa					80			
Fan motor	Model			AC induction							
Total sound power level	Fan speed 1	dBA			32				33		
	Fan speed 2	dBA					40				
	Fan speed 3	dBA					45				
	Fan speed 4	dBA			49				50		
	Low	dBA					40				
	Medium	dBA					45				
	High	dBA			49				50		

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Technical specifications				FWE04FF	FWE04FFR	FWE05FF	FWE05FFR
Sound pressure level			Fan speed 1	dBA	21		22
			Fan speed 2	dBA		29	
			Fan speed 3	dBA		34	
			Fan speed 4	dBA	38		39
			Low	dBA		29	
			Medium	dBA		34	
Sound pressure level			High	dBA	38		39
Water flow	Cooling	Fan speed	1	l/h	155 (1)		189 (1)
			2	l/h	236 (1)		277 (1)
			3	l/h	291 (1)		342 (1)
			4	l/h	346 (1)		413 (1)
			Low	l/h	236 (1)		277 (1)
			Medium	l/h	291 (1)		342 (1)
			High	l/h	346 (1)		413 (1)
		Heating	Fan speed 1	l/h	256 (2)		262 (2)
			Fan speed 2	l/h	353 (2)		361 (2)
			Fan speed 3	l/h	424 (2)		435 (2)
			Fan speed 4	l/h	504 (2)		517 (2)
			High	l/h	504 (2)		517 (2)
			Low	l/h	353 (2)		361 (2)
			Medium	l/h	424 (2)		435 (2)
	Water pressure drop	Cooling	Fan speed 1	kPa	2 (1)		4 (1)
			Fan speed 2	kPa	4 (1)		8 (1)
			Fan speed 3	kPa	5 (1)		11 (1)
			Fan speed 4	kPa	6 (1)		14 (1)
			Low	kPa	4 (1)		8 (1)
			Medium	kPa	5 (1)		11 (1)
			High	kPa	6 (1)		14 (1)
		Heating	Fan speed 1	kPa		1 (2)	
			Fan speed 2	kPa		2 (2)	
			Fan speed 3	kPa		3 (2)	
			Fan speed 4	kPa		4 (2)	
			Low	kPa		2 (2)	
			Medium	kPa		3 (2)	
			High	kPa		4 (2)	
Allowed water temperature	Cooling	Min.	°C			5	
		Max.	°C			90	
	Heating	Min.	°C			5	
		Max.	°C			90	
Piping connections	Water	Inlet			3/4" BSP (female thread)		
		Outlet			3/4" BSP (female thread)		

Technical specifications				FWE06FF	FWE06FFR	FWE08FF	FWE08FFR
Cooling capacity (standard conditions)	Latent capacity 4-pipe	High	kW	0.66 (1)		0.92 (1)	
		Sensible capacity 4-pipe	Fan speed 1	kW	1.37 (1)		0.95 (1)
			Fan speed 2	kW	1.83 (1)		1.62 (1)
			Fan speed 3	kW	2.28 (1)		2.48 (1)
			Fan speed 4	kW	2.43 (1)		3.28 (1)
			Fan speed 5	kW	2.74 (1)		-
			Low	kW	1.83 (1)		1.62 (1)
			Medium	kW	2.43 (1)		2.48 (1)
			High	kW	2.74 (1)		3.28 (1)
	Total capacity 4-pipe	Fan speed 1	kW	1.76 (1)		1.3	
		Fan speed 2	kW	2.29 (1)		2.19 (1)	
		Fan speed 3	kW	2.85 (1)		3.31 (1)	
		Fan speed 4	kW	3.04 (1)		4.2	
		Fan speed 5	kW	3.4		-	
		Low	kW	2.29 (1)		2.19 (1)	
		Medium	kW	3.04 (1)		3.31 (1)	
		High	kW	3.4		4.2	
Heating capacity (standard conditions)	Capacity 4-pipe	Fan speed 1	kW	1.72 (2)		1.82 (2)	
		Fan speed 2	kW	2.21 (2)		2.65 (2)	
		Fan speed 3	kW	2.72 (2)		3.79 (2)	
		Fan speed 4	kW	2.9		4.8	
		Fan speed 5	kW	3.23 (2)		-	
		Low	kW	2.21 (2)		2.65 (2)	
		Medium	kW	2.9		3.79 (2)	
		High	kW	3.23 (2)		4.8	

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Technical specifications				FWE06FF	FWE06FFR	FWE08FF	FWE08FFR
Power input	Fan speed 1	kW		0.05 (3)		0.06 (3)	
	Fan speed 2	kW		0.06 (3)		0.07 (3)	
	Fan speed 3	kW		0.07 (3)		0.08 (3)	
	Fan speed 4	kW		0.07 (3)		0.09 (3)	
	Fan speed 5	kW		0.08 (3)		-	
	Low	kW		0.06 (3)		0.07 (3)	
	Med.	kW		0.07 (3)		0.08 (3)	
	High	kW		0.076 (3)		0.094 (3)	
Dimensions	Unit	Height	mm		253		
		Width	mm	728		1,090	
		Depth	mm		570		
Dimensions	Packed unit	Height	mm		275		
		Width	mm	740		1,100	
		Depth	mm		585		
Weight	Unit	kg		10.4		24.8	
	Packed unit	kg		13		28	
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.			
	Length	mm		465		770	
	Fin	Type		Aluminium (Corrugated)			
	Tube material			Seamless copper			
	Tube type			Plain			
Fan	Type			Centrifugal (Blade: Forward - curve)			
	Air flow rate	Fan speed 1	m ³ /h	301 (3)		325 (3)	
		Fan speed 2	m ³ /h	400 (3)		467 (3)	
		Fan speed 3	m ³ /h	514 (3)		668 (3)	
		Fan speed 4	m ³ /h	555 (3)		854 (3)	
		Fan speed 5	m ³ /h	638 (3)		-	
		Low	m ³ /h	400 (3)		467 (3)	
		Medium	m ³ /h	555 (3)		668 (3)	
		High	m ³ /h	638 (3)		854 (3)	
	Available static pressure	Fan speed 1	Pa		30		
		Fan speed 2	Pa		45		
		Fan speed 3	Pa		60		
		Fan speed 4	Pa	70		80	
		Fan speed 5	Pa	80		-	
		Low	Pa		45		
		Medium	Pa	70		60	
		High	Pa		80		
Fan motor	Model			AC induction			
Total sound power level	Fan speed 1	dBA		41		35	
	Fan speed 2	dBA		48		41	
	Fan speed 3	dBA		54		49	
	Fan speed 4	dBA		56		55	
	Fan speed 5	dBA		59		-	
	Low	dBA		48		41	
	Medium	dBA		56		49	
	High	dBA		59		55	
Sound pressure level	Fan speed 1	dBA		30		24	
	Fan speed 2	dBA		37		30	
	Fan speed 3	dBA		43		38	
	Fan speed 4	dBA		45		44	
	Fan speed 5	dBA		48		-	
	Low	dBA		37		30	
	Medium	dBA		45		38	
	High	dBA		48		44	

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Technical specifications				FWE06FF	FWE06FFR	FWE08FF	FWE08FFR
Water flow	Cooling	Fan speed 1	l/h	303 (1)		224 (1)	
				394 (1)		377 (1)	
		Fan speed 2	l/h	490 (1)		569 (1)	
				522 (1)		722 (1)	
		Fan speed 3	l/h	585 (1)		-	
				394 (1)		377 (1)	
		Fan speed 4	l/h	522 (1)		569 (1)	
				585 (1)		722 (1)	
		Fan speed 5	l/h	365 (2)		384 (2)	
				469 (2)		547 (2)	
	Heating	Fan speed 1	l/h	578 (2)		753 (2)	
				615 (2)		919 (2)	
		Fan speed 2	l/h	686 (2)		-	
				686 (2)		919 (2)	
		Fan speed 3	l/h	469 (2)		547 (2)	
				615 (2)		753 (2)	
		Fan speed 4	l/h	-		-	
				-		-	
		Fan speed 5	l/h	-		-	
				-		-	
Water pressure drop	Cooling	Fan speed 1	kPa	6 (1)		3 (1)	
				9 (1)		7 (1)	
		Fan speed 2	kPa	12 (1)		14 (1)	
				14 (1)		22 (1)	
		Fan speed 3	kPa	16 (1)		-	
				9 (1)		7 (1)	
		Fan speed 4	kPa	14 (1)		-	
				16 (1)		22 (1)	
		Fan speed 5	kPa	14 (1)		10 (2)	
				15 (2)		15 (2)	
	Heating	Fan speed 1	kPa	5 (2)		-	
				2 (2)		5 (2)	
		Fan speed 2	kPa	2 (2)		10 (2)	
				3 (2)		15 (2)	
		Fan speed 3	kPa	4 (2)		-	
				5 (2)		10 (2)	
		Fan speed 4	kPa	5 (2)		15 (2)	
				2 (2)		5 (2)	
		Fan speed 5	kPa	4 (2)		10 (2)	
				5 (2)		15 (2)	
Allowed water temperature	Cooling	Min.	°C	5			
		Max.	°C	90			
	Heating	Min.	°C	5			
		Max.	°C	90			
Piping connections	Water	Inlet		3/4" BSP (female thread)			
		Outlet		3/4" BSP (female thread)			

Technical specifications				FWE10FF	FWE10FFR	FWE12FF	FWE12FFR
Cooling capacity (standard conditions)	Latent capacity 4-pipe	High	kW	0.99 (1)		1.12 (1)	
		Sensible capacity 4-pipe	kW	1.65 (1)		1.69 (1)	
				2.54 (1)		2.58 (1)	
		Fan speed 3	kW	3.24 (1)		3.33 (1)	
				3.71 (1)		3.79 (1)	
		Fan speed 4	kW	4.17 (1)		4.27 (1)	
				2.54 (1)		2.58 (1)	
		Fan speed 5	kW	3.24 (1)		3.79 (1)	
				3.71 (1)		4.27 (1)	
	Total capacity 4-pipe	Fan speed 1	kW	2.21 (1)		2.25 (1)	
				3.28 (1)		3.35 (1)	
		Fan speed 2	kW	4.18 (1)		4.29 (1)	
				4.69 (1)		4.84 (1)	
		Fan speed 3	kW	5.2		5.39 (1)	
				3.28 (1)		3.35 (1)	
		Fan speed 4	kW	4.18 (1)		4.84 (1)	
				4.69 (1)		5.39 (1)	
		Fan speed 5	kW	2.27 (2)		2.38 (2)	
				3.33 (2)		3.5	
Heating capacity (standard conditions)	Capacity 4-pipe	Fan speed 1	kW	4.43 (2)		4.66 (2)	
				5.2		5.47 (2)	
		Fan speed 2	kW	6.13 (2)		6.45 (2)	
				3.33 (2)		3.5	
		Fan speed 3	kW	4.43 (2)		5.47 (2)	
				5.2		6.45 (2)	
		Fan speed 4	kW	-		-	
				-		-	
		Fan speed 5	kW	-		-	
				-		-	

2 Specifications

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Technical specifications				FWE10FF	FWE10FFR	FWE12FF	FWE12FFR
Power input	Fan speed 1	kW			0.07 (3)		
	Fan speed 2	kW			0.08 (3)		
	Fan speed 3	kW			0.1		
	Fan speed 4	kW			0.11 (3)		
	Fan speed 5	kW			0.12 (3)		
	Low	kW			0.08 (3)		
	Med.	kW		0.1		0.11 (3)	
Dimensions	Unit	Height	mm		253		
		Width	mm		1,090		
		Depth	mm		570		
Dimensions	Packed unit	Height	mm		275		
		Width	mm		1,100		
		Depth	mm		585		
Weight	Unit	kg			24.8		
	Packed unit	kg			28		
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.			
	Length	mm			770		
	Fin	Type			Aluminium (Corrugated)		
	Tube material				Seamless copper		
	Tube type				Plain		
Fan	Type				Centrifugal (Blade: Forward - curve)		
	Air flow rate	Fan speed 1	m ³ /h		436 (3)		
		Fan speed 2	m ³ /h		620 (3)		
		Fan speed 3	m ³ /h		805 (3)		
		Fan speed 4	m ³ /h		931 (3)		
		Fan speed 5	m ³ /h		1,082 (3)		
		Low	m ³ /h		620 (3)		
		Medium	m ³ /h	805 (3)		931 (3)	
		High	m ³ /h	931 (3)		1,082 (3)	
	Available static pressure	Fan speed 1	Pa		30		
		Fan speed 2	Pa	45		50	
		Fan speed 3	Pa	65		70	
		Fan speed 4	Pa	70		75	
		Fan speed 5	Pa		80		
		Low	Pa	45		50	
		Medium	Pa	65		75	
		High	Pa	70		80	
Fan motor	Model				AC induction		
Total sound power level	Fan speed 1	dB(A)			43		
	Fan speed 2	dB(A)			49		
	Fan speed 3	dB(A)			54		
	Fan speed 4	dB(A)		57		58	
	Fan speed 5	dB(A)			61		
	Low	dB(A)			49		
	Medium	dB(A)		54		58	
Total sound power level	High	dB(A)		57		61	
Sound pressure level	Fan speed 1	dB(A)			32		
	Fan speed 2	dB(A)			38		
	Fan speed 3	dB(A)			43		
	Fan speed 4	dB(A)		46		47	
	Fan speed 5	dB(A)			50		
	Low	dB(A)			38		
	Medium	dB(A)		43		47	
	High	dB(A)		46		50	

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Technical specifications					FWE10FF	FWE10FFR	FWE12FF	FWE12FFR	
Water flow	Cooling	Fan speed 1		l/h	380 (1)		388 (1)		
		Fan speed 2		l/h	563 (1)		576 (1)		
		Fan speed 3		l/h	718 (1)		738 (1)		
		Fan speed 4		l/h	807 (1)		832 (1)		
		Fan speed 5		l/h	894 (1)		927 (1)		
		Low		l/h	563 (1)		576 (1)		
		Medium		l/h	718 (1)		832 (1)		
		High		l/h	807 (1)		927 (1)		
		Heating	Fan speed 1		l/h	434 (2)		456 (2)	
			Fan speed 2		l/h	637 (2)		669 (2)	
			Fan speed 3		l/h	847 (2)		890 (2)	
			Fan speed 4		l/h	995 (2)		1,045 (2)	
			Fan speed 5		l/h	1,173 (2)		1,233 (2)	
			High		l/h	995 (2)		1,233 (2)	
			Low		l/h	637 (2)		669 (2)	
			Medium		l/h	847 (2)		1,045 (2)	
	Water pressure drop	Cooling	Fan speed 1		kPa	6 (1)		5 (1)	
			Fan speed 2		kPa	11 (1)		10 (1)	
			Fan speed 3		kPa	17 (1)		15 (1)	
			Fan speed 4		kPa	21 (1)		19 (1)	
			Fan speed 5		kPa	25 (1)		23 (1)	
			Low		kPa	11 (1)		10 (1)	
			Medium		kPa	17 (1)		19 (1)	
			High		kPa	21 (1)		23 (1)	
		Heating	Fan speed 1		kPa	4 (2)		5 (2)	
			Fan speed 2		kPa	8 (2)		10 (2)	
			Fan speed 3		kPa	13 (2)		17 (2)	
			Fan speed 4		kPa	18 (2)		23 (2)	
			Fan speed 5		kPa	25 (2)		32 (2)	
			Low		kPa	8 (2)		10 (2)	
			Medium		kPa	13 (2)		23 (2)	
			High		kPa	18 (2)		32 (2)	
Water flow	Water pressure drop	Heating	Fan speed 5		kPa	25 (2)		32 (2)	
			Low		kPa	8 (2)		10 (2)	
			Medium		kPa	13 (2)		23 (2)	
			High		kPa	18 (2)		32 (2)	
Allowed water temperature	Cooling	Min.		°C	5				
		Max.		°C	90				
	Heating	Min.		°C	5				
		Max.		°C	90				
Piping connections	Water	Inlet			3/4" BSP (female thread)				
		Outlet			3/4" BSP (female thread)				

Technical specifications				FWE14FF	FWE14FFR	FWE16FF	FWE16FFR
Cooling capacity (standard conditions)	Latent capacity 4-pipe	High	kW	1.34 (1)		1.35 (1)	
				3.51 (1)		3.72 (1)	
		Sensible capacity 4-pipe	kW	4.24 (1)		4.35 (1)	
				5.1		5.23 (1)	
		Fan speed 4	kW	5.63 (1)		5.85 (1)	
				6.07 (1)		6.63 (1)	
		Low	kW	4.24 (1)		4.35 (1)	
				5.1		5.85 (1)	
		High	kW	5.63 (1)		6.63 (1)	
				4.79 (1)		5.03 (1)	
	Total capacity 4-pipe	Fan speed 2	kW	5.77 (1)		5.81 (1)	
				6.6		6.69 (1)	
		Fan speed 4	kW	6.97 (1)		7.19 (1)	
				7.42 (1)		7.98 (1)	
		Low	kW	5.77 (1)		5.81 (1)	
				6.6		7.19 (1)	
		High	kW	6.97 (1)		7.98 (1)	
				3.65 (2)		4.93 (2)	
		Fan speed 2	kW	4.93 (2)		6.15 (2)	
				6.75 (2)		7.6	
		Fan speed 5	kW	7.6		4.93 (2)	
				6.15 (2)		6.75 (2)	
		Low	kW	6.75 (2)		7.6	
				6.15 (2)		6.75 (2)	
		High	kW	6.75 (2)		7.6	
				6.15 (2)		6.75 (2)	

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Technical specifications				FWE14FF	FWE14FFR	FWE16FF	FWE16FFR
Power input	Fan speed 1	kW			0.12 (3)		
	Fan speed 2	kW			0.14 (3)		
	Fan speed 3	kW			0.16 (3)		
	Fan speed 4	kW			0.17 (3)		
	Fan speed 5	kW			0.19 (3)		
	Low	kW			0.14 (3)		
	Med.	kW		0.16 (3)		0.17 (3)	
	High	kW		0.17		0.189 (3)	
Dimensions	Unit	Height	mm		253		
		Width	mm		1,360		
		Depth	mm		570		
Dimensions	Packed unit	Height	mm		275		
		Width	mm		1,375		
		Depth	mm		585		
Weight	Unit	kg			34.3		
	Packed unit	kg			38		
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.			
	Length	mm			1,080		
	Fin Type				Aluminium (Corrugated)		
	Tube material				Seamless copper		
	Tube type				Plain		
Fan	Type				Centrifugal (Blade: Forward - curve)		
	Air flow rate	Fan speed 1	m ³ /h		730 (3)		
		Fan speed 2	m ³ /h		1,021 (3)		
		Fan speed 3	m ³ /h		1,314 (3)		
		Fan speed 4	m ³ /h		1,467 (3)		
		Fan speed 5	m ³ /h		1,692 (3)		
		Low	m ³ /h		1,021 (3)		
		Medium	m ³ /h	1,314 (3)		1,467 (3)	
		High	m ³ /h	1,467 (3)		1,692 (3)	
	Available static pressure	Fan speed 1	Pa		30		
		Fan speed 2	Pa		50		
		Fan speed 3	Pa		70		
		Fan speed 4	Pa		75		
		Fan speed 5	Pa		80		
		Low	Pa		50		
		Medium	Pa	70		75	
		High	Pa	75		80	
Fan motor	Model				AC induction		
Total sound power level	Fan speed 1	dB(A)			45		
	Fan speed 2	dB(A)			52		
	Fan speed 3	dB(A)			58		
	Fan speed 4	dB(A)			61		
	Fan speed 5	dB(A)			64		
	Low	dB(A)			52		
	Medium	dB(A)		58		61	
	High	dB(A)		61		64	
Sound pressure level	Fan speed 1	dB(A)			34		
	Fan speed 2	dB(A)			41		
	Fan speed 3	dB(A)			47		
	Fan speed 4	dB(A)			50		
	Fan speed 5	dB(A)			53		
	Low	dB(A)			41		
	Medium	dB(A)		47		50	
	High	dB(A)		50		53	

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Technical specifications					FWE14FF	FWE14FFR	FWE16FF	FWE16FFR	
Water flow	Cooling	Fan speed 1	I/h		823 (1)		865 (1)		
		Fan speed 2	I/h		992 (1)		998 (1)		
		Fan speed 3	I/h		1,135 (1)		1,150 (1)		
		Fan speed 4	I/h		1,198 (1)		1,237 (1)		
		Fan speed 5	I/h		1,276 (1)		1,372 (1)		
		Low	I/h		992 (1)		998 (1)		
		Medium	I/h		1,135 (1)		1,237 (1)		
		High	I/h		1,198 (1)		1,372 (1)		
	Heating	Fan speed 1	I/h			700 (2)			
		Fan speed 2	I/h			948 (2)			
		Fan speed 3	I/h			1,171 (2)			
		Fan speed 4	I/h			1,277 (2)			
		Fan speed 5	I/h			1,420 (2)			
		High	I/h		1,277 (2)		1,420 (2)		
		Low	I/h			948 (2)			
		Medium	I/h		1,171 (2)		1,277 (2)		
	Water pressure drop	Cooling	Fan speed 1	kPa		6 (1)		7 (1)	
			Fan speed 2	kPa		9 (1)		10 (1)	
			Fan speed 3	kPa		12 (1)		13 (1)	
			Fan speed 4	kPa		14 (1)		15 (1)	
			Fan speed 5	kPa		15 (1)		18 (1)	
			Low	kPa		9 (1)		10 (1)	
			Medium	kPa		12 (1)		15 (1)	
			High	kPa		14 (1)		18 (1)	
Heating		Fan speed 1	kPa			11 (2)			
		Fan speed 2	kPa			19 (2)			
		Fan speed 3	kPa			29 (2)			
		Fan speed 4	kPa			35 (2)			
		Water flow	Water pressure drop	Heating	Fan speed 5	kPa		44 (2)	
					Low	kPa		19 (2)	
				Medium	kPa	29 (2)		35 (2)	
				High	kPa	35 (2)		44 (2)	
Allowed water temperature	Cooling	Min.	°C		5				
		Max.	°C		90				
	Heating	Min.	°C		5				
		Max.	°C		90				
Piping connections	Water	Inlet			3/4" BSP (female thread)				
		Outlet			3/4" BSP (female thread)				

Technical specifications				FWE20FF	FWE20FFR	FWE24FF	FWE24FFR
Cooling capacity (standard conditions)	Latent capacity 4-pipe	High	kW	1.72 (1)		1.82 (1)	
	Sensible capacity 4-pipe	Fan speed 1	kW	4.17 (1)		4.67 (1)	
				5.28 (1)		5.91 (1)	
		Fan speed 2	kW	6.88 (1)		8.47 (1)	
				8.28 (1)		9.47 (1)	
		Low	kW	5.28 (1)		5.91 (1)	
				6.88 (1)		8.47 (1)	
		Medium	kW	8.28 (1)		9.47 (1)	
				5.5		6.09 (1)	
	Total capacity 4-pipe	Fan speed 1	kW	6.79 (1)		7.51 (1)	
				8.51 (1)		9.08 (1)	
		Fan speed 2	kW	10		10.13 (1)	
				-		11.3	
		Fan speed 3	kW	6.79 (1)		7.51 (1)	
				8.51 (1)		10.13 (1)	
		Low	kW	10		11.3	
	Heating capacity (standard conditions)	Capacity 4-pipe	kW	4.14 (2)		4.97 (2)	
				5.84 (2)		6.98 (2)	
		Fan speed 2	kW	7.94 (2)		8.88 (2)	
				9.6		10	
		Fan speed 3	kW	-		11.1	
				5.84 (2)		6.98 (2)	
		Low	kW	7.94 (2)		10	
				9.6		11.1	
		Medium	kW				
		High	kW				

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Technical specifications				FWE20FF	FWE20FFR	FWE24FF	FWE24FFR	
Power input	Fan speed 1		kW	0.11 (3)		0.13 (3)		
	Fan speed 2		kW	0.13 (3)		0.15 (3)		
	Fan speed 3		kW	0.15 (3)		0.18 (3)		
	Fan speed 4		kW	0.18 (3)		0.2		
	Fan speed 5		kW	-		0.22 (3)		
	Low		kW	0.13 (3)		0.15 (3)		
	Med.		kW	0.15 (3)		0.2		
High		kW	0.176 (3)		0.224 (3)			
Dimensions	Unit	Height	mm	253				
		Width	mm	1,680				
		Depth	mm	570				
Dimensions	Packed unit	Height	mm	275				
	Packed unit	Width	mm	1,690				
	Packed unit	Depth	mm	585				
Weight	Unit	kg		42.7				
	Packed unit	kg		46				
Casing	Colour		Metal					
	Material		Galvanised steel					
Heat exchanger	Type		Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.					
	Length		mm	1,380				
	Fin	Type	Aluminium (Corrugated)					
	Tube material		Seamless copper					
	Tube type		Plain					
Fan	Type		Centrifugal (Blade: Forward - curve)					
	Air flow rate	Fan speed 1	m³/h	714 (3)		855 (3)		
		Fan speed 2	m³/h	1,001 (3)		1,184 (3)		
		Fan speed 3	m³/h	1,382 (3)		1,528 (3)		
		Fan speed 4	m³/h	1,707 (3)		1,751 (3)		
		Fan speed 5	m³/h	-		1,990 (3)		
		Low	m³/h	1,001 (3)		1,184 (3)		
		Medium	m³/h	1,382 (3)		1,751 (3)		
		High	m³/h	1,707 (3)		1,990 (3)		
	Available static pressure	Fan speed 1	Pa	30				
		Fan speed 2	Pa	50				
		Fan speed 3	Pa	70				
		Fan speed 4	Pa	80		75		
		Fan speed 5	Pa	-		80		
		Low	Pa	50				
		Medium	Pa	70		75		
		High	Pa	80				
	Fan motor	Model		AC induction				
Total sound power level	Fan speed 1	dB(A)	43		44			
	Fan speed 2	dB(A)	48		51			
	Fan speed 3	dB(A)	54		58			
	Fan speed 4	dB(A)	59		61			
	Fan speed 5	dB(A)	-		64			
	Low	dB(A)	48		51			
	Medium	dB(A)	54		61			
	High	dB(A)	59		64			
Sound pressure level	Fan speed 1	dB(A)	32		33			
	Fan speed 2	dB(A)	37		40			
	Fan speed 3	dB(A)	43		47			
	Fan speed 4	dB(A)	48		50			
	Fan speed 5	dB(A)	-		53			
	Low	dB(A)	37		40			
	Medium	dB(A)	43		50			
	High	dB(A)	48		53			

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Technical specifications				FWE20FF	FWE20FFR	FWE24FF	FWE24FFR
Water flow	Cooling	Fan speed 1	l/h	947 (1)		1,047 (1)	
		Fan speed 2	l/h	1,168 (1)		1,292 (1)	
		Fan speed 3	l/h	1,464 (1)		1,561 (1)	
		Fan speed 4	l/h	1,719 (1)		1,742 (1)	
		Fan speed 5	l/h	-		1,943 (1)	
		Low	l/h	1,168 (1)		1,292 (1)	
		Medium	l/h	1,464 (1)		1,742 (1)	
		High	l/h	1,719 (1)		1,943 (1)	
	Heating	Fan speed 1	l/h	849 (2)		954 (2)	
		Fan speed 2	l/h	1,142 (2)		1,344 (2)	
		Fan speed 3	l/h	1,504 (2)		1,695 (2)	
		Fan speed 4	l/h	1,790 (2)		1,890 (2)	
		Fan speed 5	l/h	-		2,073 (2)	
		High	l/h	1,790 (2)		2,073 (2)	
		Low	l/h	1,142 (2)		1,344 (2)	
		Medium	l/h	1,504 (2)		1,890 (2)	
	Water pressure drop	Fan speed 1	kPa	8 (1)		10 (1)	
		Fan speed 2	kPa	12 (1)		15 (1)	
		Fan speed 3	kPa	19 (1)		21 (1)	
		Fan speed 4	kPa		26 (1)		
		Fan speed 5	kPa	-		33 (1)	
		Low	kPa	12 (1)		15 (1)	
		Medium	kPa	19 (1)		26 (1)	
		High	kPa	26 (1)		33 (1)	
	Heating	Fan speed 1	kPa	5 (2)		6 (2)	
		Fan speed 2	kPa	8 (2)		12 (2)	
		Fan speed 3	kPa	15 (2)		19 (2)	
		Fan speed 4	kPa	22 (2)		24 (2)	
		Fan speed 5	kPa	-		29 (2)	
Water flow	Water pressure drop	Heating Low	kPa	8 (2)		12 (2)	
		Medium	kPa	15 (2)		24 (2)	
		High	kPa	22 (2)		29 (2)	
Allowed water temperature	Cooling	Min.	°C		5		
		Max.	°C		90		
	Heating	Min.	°C		5		
		Max.	°C		90		
Piping connections	Water	Inlet			3/4" BSP (female thread)		
		Outlet			3/4" BSP (female thread)		

(1) Inlet/outlet water temperature 7/12 °C; inlet air temperature 27°C DB 19°C WB |
(2) Heating: indoor temp. 20°CDB, 15°CWB; entering water temp. 45°C, water temperature drop 5K. |
(3) Airflow value measurements are performed at 20C (DB) /15 C(WB) condition. |
Sound power level according to ISO3741 |
The sound pressure level is measured via a microphone at 1m distance of the unit.

Technical specifications				FWE04FT	FWE04FTR	FWE05FT	FWE05FTR
Cooling capacity (standard conditions)	Latent capacity 2-pipe	High	kW	0.42 (1)		0.44 (1)	
	Sensible capacity 2-pipe	Fan speed 1	kW	0.69 (1)		0.83 (1)	
		Fan speed 2	kW	1.08 (1)		1.31 (1)	
		Fan speed 3	kW	1.36 (1)		1.69 (1)	
		Fan speed 4	kW	1.68 (1)		2.06 (1)	
		Low	kW	1.08 (1)		1.31 (1)	
		Medium	kW	1.36 (1)		1.69 (1)	
		High	kW	1.68 (1)		2.06 (1)	
	Total capacity 2-pipe	Fan speed 1	kW	0.9		1.1	
		Fan speed 2	kW	1.4		1.7	
		Fan speed 3	kW	1.75 (1)		2.1	
		Fan speed 4	kW	2.1		2.5	
		Low	kW	1.4		1.7	
		Medium	kW	1.75 (1)		2.1	
		High	kW	2.1		2.5	
Heating capacity (standard conditions)	Capacity 2-pipe	Fan speed 1	kW	1.49 (2)		1.53 (2)	
		Fan speed 2	kW	2.05 (2)		2.1	
		Fan speed 3	kW	2.47 (2)		2.53 (2)	
		Fan speed 4	kW	2.93 (2)		3	
		Low	kW	2.05 (2)		2.1	
		Medium	kW	2.47 (2)		2.53 (2)	
		High	kW	2.93 (2)		3	

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Technical specifications				FWE04FT	FWE04FTR	FWE05FT	FWE05FTR
Power input	Fan speed 1		kW			0.04 (3)	
	Fan speed 2		kW			0.05 (3)	
	Fan speed 3		kW			0.05 (3)	
	Fan speed 4		kW			0.06 (3)	
	Low		kW			0.05 (3)	
	Med.		kW			0.05 (3)	
	High		kW			0.058 (3)	
Dimensions	Unit	Height	mm			253	
		Width	mm			728	
		Depth	mm			570	
	Packed unit	Height	mm			275	
		Width	mm			740	
		Depth	mm			585	
Weight	Unit		kg			9.55	
Weight	Packed unit		kg			12	
Casing	Colour					Metal	
	Material					Galvanised steel	
Heat exchanger	Type					Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.	
	Length		mm			465	
Fan	Type					Centrifugal (Blade: Forward - curve)	
	Air flow rate	Fan speed 1	m ³ /h			218 (3)	
		Fan speed 2	m ³ /h			319 (3)	
		Fan speed 3	m ³ /h			398 (3)	
		Fan speed 4	m ³ /h			492 (3)	
		Low	m ³ /h			319 (3)	
		Medium	m ³ /h			398 (3)	
		High	m ³ /h			492 (3)	
	Available static pressure	Fan speed 1	Pa	30			35
		Fan speed 2	Pa	40			45
		Fan speed 3	Pa	50			55
		Fan speed 4	Pa		80		
		Low	Pa	40			45
		Medium	Pa	50			55
		High	Pa		80		
Fan motor	Model					AC induction	
Total sound power level	Fan speed 1		dBA			31	
	Fan speed 2		dBA			39	
	Fan speed 3		dBA			44	
	Fan speed 4		dBA	49			50
	Low		dBA			39	
	Medium		dBA			44	
	High		dBA	49			50
Sound pressure level	Fan speed 1		dBA			20	
	Fan speed 2		dBA			28	
	Fan speed 3		dBA	33			34
	Fan speed 4		dBA	38			39
	Low		dBA			28	
	Medium		dBA	33			34
	High		dBA	38			39
Water flow	Cooling	Fan speed 1	l/h	155 (1)			189 (1)
		Fan speed 2	l/h	241 (1)			292 (1)

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Technical specifications				FWE04FT	FWE04FTR	FWE05FT	FWE05FTR
Water flow	Cooling	Fan speed 3	l/h	301 (1)		361 (1)	
		Fan speed 4	l/h	361 (1)		430 (1)	
		Low	l/h	241 (1)		292 (1)	
		Medium	l/h	301 (1)		361 (1)	
		High	l/h	361 (1)		430 (1)	
	Heating	Fan speed 1	l/h	256 (2)		262 (2)	
		Fan speed 2	l/h	353 (2)		361 (2)	
		Fan speed 3	l/h	424 (2)		435 (2)	
		Fan speed 4	l/h	504 (2)		517 (2)	
		High	l/h	504 (2)		517 (2)	
		Low	l/h	353 (2)		361 (2)	
		Medium	l/h	424 (2)		435 (2)	
	Water pressure drop	Cooling	Fan speed 1	kPa	2 (1)	4 (1)	
			Fan speed 2	kPa	4 (1)	8 (1)	
			Fan speed 3	kPa	5 (1)	11 (1)	
			Fan speed 4	kPa	7 (1)	15 (1)	
			Low	kPa	4 (1)	8 (1)	
			Medium	kPa	5 (1)	11 (1)	
			High	kPa	7 (1)	15 (1)	
		Heating	Fan speed 1	kPa	4 (2)	6 (2)	
			Fan speed 2	kPa	6 (2)	10 (2)	
			Fan speed 3	kPa	8 (2)	13 (2)	
			Fan speed 4	kPa	10 (2)	17 (2)	
			Low	kPa	6 (2)	10 (2)	
			Medium	kPa	8 (2)	13 (2)	
			High	kPa	10 (2)	17 (2)	
Allowed water temperature	Cooling	Min.	°C		5		
		Max.	°C		90		
	Heating	Min.	°C		5		
		Max.	°C		90		
Piping connections	Water	Inlet			3/4" BSP (female thread)		
		Outlet			3/4" BSP (female thread)		

Technical specifications				FWE06FT	FWE06FTR	FWE08FT	FWE08FTR
Cooling capacity (standard conditions)	Latent capacity 2-pipe	High	kW	0.61 (1)		1.02 (1)	
	Sensible capacity 2-pipe	Fan speed 1	kW	1.44 (1)		1.01 (1)	
		Fan speed 2	kW	1.92 (1)		1.82 (1)	
		Fan speed 3	kW	2.39 (1)		2.77 (1)	
		Fan speed 4	kW	2.53 (1)		3.38 (1)	
		Fan speed 5	kW	2.84 (1)		-	
		Low	kW	1.92 (1)		1.82 (1)	
		Medium	kW	2.53 (1)		2.77 (1)	
		High	kW	2.84 (1)		3.38 (1)	
	Total capacity 2-pipe	Fan speed 1	kW	1.81 (1)		1.35 (1)	
		Fan speed 2	kW	2.39 (1)		2.4	
		Fan speed 3	kW	2.95 (1)		3.6	
		Fan speed 4	kW	3.13 (1)		4.4	
		Fan speed 5	kW	3.45 (1)		-	
		Low	kW	2.39 (1)		2.4	
		Medium	kW	3.13 (1)		3.6	
		High	kW	3.45 (1)		4.4	
Heating capacity (standard conditions)	Capacity 2-pipe	Fan speed 1	kW	2.13 (2)		2.23 (2)	
		Fan speed 2	kW	2.73 (2)		3.18 (2)	
		Fan speed 3	kW	3.36 (2)		4.38 (2)	
		Fan speed 4	kW	3.58 (2)		5.34 (2)	
		Fan speed 5	kW	3.99 (2)		-	
		Low	kW	2.73 (2)		3.18 (2)	
		Medium	kW	3.58 (2)		4.38 (2)	
		High	kW	3.99 (2)		5.34 (2)	
Power input		Fan speed 1	kW		0.05 (3)		
		Fan speed 2	kW		0.06 (3)		
		Fan speed 3	kW	0.07 (3)		0.08 (3)	
		Fan speed 4	kW	0.08 (3)		0.1	
		Fan speed 5	kW	0.08 (3)		-	
		Low	kW		0.06 (3)		
		Med.	kW		0.08 (3)		
		High	kW	0.082 (3)		0.096 (3)	
Dimensions	Unit	Height	mm		253		
		Width	mm	728		1,090	
		Depth	mm		570		

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Technical specifications				FWE06FT	FWE06FTR	FWE08FT	FWE08FTR	
Dimensions	Packed unit	Height	mm	275				
		Width	mm	740				
		Depth	mm	585				
Weight	Unit	kg	9.55					
	Packed unit	kg	12					
Casing	Colour	Metal						
	Material	Galvanised steel						
Heat exchanger	Type	Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.						
	Length	mm	465				770	
Fan	Type	Centrifugal (Blade: Forward - curve)						
	Air flow rate	Fan speed 1	m³/h	312 (3)				338 (3)
		Fan speed 2	m³/h	421 (3)				503 (3)
		Fan speed 3	m³/h	546 (3)				734 (3)
		Fan speed 4	m³/h	592 (3)				949 (3)
		Fan speed 5	m³/h	683 (3)				-
		Low	m³/h	421 (3)				503 (3)
		Medium	m³/h	592 (3)				734 (3)
		High	m³/h	683 (3)				949 (3)
	Available static pressure	Fan speed 1	Pa	30				
		Fan speed 2	Pa	45				
		Fan speed 3	Pa	60				
		Fan speed 4	Pa	70				80
		Fan speed 5	Pa	80				-
		Low	Pa	45				
		Medium	Pa	70				60
		High	Pa	80				
Fan motor	Model	AC induction						
Total sound power level	Fan speed 1	dBA	40				34	
	Fan speed 2	dBA	47				40	
	Fan speed 3	dBA	54				48	
	Fan speed 4	dBA	56				54	
	Fan speed 5	dBA	58				-	
	Low	dBA	47				40	
	Medium	dBA	56				48	
	High	dBA	58				54	
Sound pressure level	Fan speed 1	dBA	29				23	
	Fan speed 2	dBA	36				29	
Sound pressure level	Fan speed 3	dBA	43				37	
	Fan speed 4	dBA	45				43	
	Fan speed 5	dBA	47				-	
	Low	dBA	36				29	
	Medium	dBA	45				37	
	High	dBA	47				43	

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Technical specifications				FWE06FT	FWE06FTR	FWE08FT	FWE08FTR
Water flow	Cooling	Fan speed 1	l/h		311 (1)		232 (1)
					410 (1)		413 (1)
		Fan speed 2	l/h		507 (1)		618 (1)
					538 (1)		757 (1)
		Fan speed 3	l/h		592 (1)		-
					410 (1)		413 (1)
		Fan speed 4	l/h		538 (1)		618 (1)
					592 (1)		757 (1)
		Fan speed 5	l/h		365 (2)		384 (2)
					469 (2)		547 (2)
		Fan speed 3	l/h		578 (2)		753 (2)
					615 (2)		919 (2)
	Heating	Fan speed 1	l/h		686 (2)		-
					686 (2)		919 (2)
		Fan speed 2	l/h		469 (2)		547 (2)
					615 (2)		753 (2)
		Fan speed 3	l/h		365 (2)		384 (2)
					469 (2)		547 (2)
		Fan speed 4	l/h		578 (2)		753 (2)
					615 (2)		919 (2)
		Fan speed 5	l/h		686 (2)		-
					686 (2)		919 (2)
		Fan speed 1	l/h		469 (2)		547 (2)
					615 (2)		753 (2)
Water pressure drop	Cooling	Fan speed 1	kPa		6 (1)		3 (1)
					9 (1)		8 (1)
		Fan speed 2	kPa		13 (1)		17 (1)
					14 (1)		24 (1)
		Fan speed 3	kPa		17 (1)		-
					9 (1)		8 (1)
		Fan speed 4	kPa		14 (1)		17 (1)
					17 (1)		24 (1)
		Fan speed 5	kPa		17 (1)		24 (1)
					10 (2)		11 (2)
		Fan speed 1	kPa		14 (2)		20 (2)
					15 (2)		30 (2)
	Heating	Fan speed 2	kPa		18 (2)		-
					10 (2)		11 (2)
		Fan speed 3	kPa		15 (2)		20 (2)
					18 (2)		-
		Fan speed 4	kPa		10 (2)		11 (2)
					15 (2)		20 (2)
		Fan speed 5	kPa		18 (2)		30 (2)
					18 (2)		30 (2)
		Fan speed 1	kPa		18 (2)		30 (2)
					18 (2)		30 (2)
		Fan speed 2	kPa		18 (2)		30 (2)
					18 (2)		30 (2)
Allowed water temperature	Cooling	Min.	°C		5		
		Max.	°C		90		
	Heating	Min.	°C		5		
		Max.	°C		90		
Piping connections	Water	Inlet			3/4" BSP (female thread)		
		Outlet			3/4" BSP (female thread)		

Technical specifications				FWE10FT	FWE10FTR	FWE12FT	FWE12FTR
Cooling capacity (standard conditions)	Latent capacity 2-pipe	High	kW		0.92 (1)		1.07 (1)
		Sensible capacity 2-pipe	kW		1.77 (1)		1.78 (1)
					2.68 (1)		2.76 (1)
		Fan speed 1	kW		3.42 (1)		3.57 (1)
					3.89 (1)		4.09 (1)
		Fan speed 2	kW		4.29 (1)		4.53 (1)
					2.68 (1)		2.76 (1)
		Fan speed 3	kW		3.42 (1)		4.09 (1)
					3.89 (1)		4.53 (1)
		Fan speed 4	kW		4.29 (1)		4.53 (1)
					4.29 (1)		4.53 (1)
	Total capacity 2-pipe	Low	kW		2.31 (1)		2.32 (1)
					3.4		3.5
		Medium	kW		4.3		4.5
					4.81 (1)		5.06 (1)
		High	kW		5.3		5.6
					3.4		3.5
		Fan speed 1	kW		4.3		5.06 (1)
					4.81 (1)		5.6
		Fan speed 2	kW		2.52 (2)		2.65 (2)
					3.7		3.89 (2)
		Fan speed 3	kW		4.93 (2)		5.18 (2)
					5.78 (2)		6.08 (2)
		Fan speed 4	kW		6.82 (2)		7.17 (2)
					3.7		3.89 (2)
		Fan speed 5	kW		4.93 (2)		6.08 (2)
					5.78 (2)		7.17 (2)
Heating capacity (standard conditions)	Capacity 2-pipe	Low	kW		2.52 (2)		2.65 (2)
					3.7		3.89 (2)
		Medium	kW		4.93 (2)		5.18 (2)
					5.78 (2)		6.08 (2)
		High	kW		6.82 (2)		7.17 (2)
					6.82 (2)		7.17 (2)
		Fan speed 1	kW		2.52 (2)		2.65 (2)
					3.7		3.89 (2)
		Fan speed 2	kW		4.93 (2)		5.18 (2)
					5.78 (2)		6.08 (2)
		Fan speed 3	kW		6.82 (2)		7.17 (2)
					6.82 (2)		7.17 (2)

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Technical specifications				FWE10FT	FWE10FTR	FWE12FT	FWE12FTR
Power input	Fan speed 1	kW			0.06 (3)		
	Fan speed 2	kW			0.08 (3)		
	Fan speed 3	kW			0.09 (3)		
	Fan speed 4	kW			0.1		
	Fan speed 5	kW			0.12 (3)		
	Low	kW			0.08 (3)		
	Med.	kW		0.09 (3)		0.1	
Dimensions	High	kW		0.103 (3)		0.115 (3)	
	Unit	Height	mm		253		
		Width	mm		1,090		
Dimensions	Packed unit	Depth	mm		570		
		Height	mm		275		
		Width	mm		1,100		
Weight	Unit	kg			23.5		
	Packed unit	kg			26		
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.			
	Length	mm			770		
Fan	Type			Centrifugal (Blade: Forward - curve)			
	Air flow rate	Fan speed 1	m ³ /h		444 (3)		
		Fan speed 2	m ³ /h		646 (3)		
		Fan speed 3	m ³ /h		850 (3)		
		Fan speed 4	m ³ /h		989 (3)		
		Fan speed 5	m ³ /h		1,155 (3)		
	Low	Medium	m ³ /h	850 (3)		989 (3)	
		High	m ³ /h	989 (3)		1,155 (3)	
		Available static pressure	Pa		30		
	Fan speed 1	Fan speed 2	Pa	45		50	
		Fan speed 3	Pa	65		70	
		Fan speed 4	Pa	70		75	
		Fan speed 5	Pa		80		
		Low	Pa	45		50	
	Medium	High	Pa	65		75	
			Pa	70		80	
	Fan motor	Model			AC induction		
		Fan speed 1	dBA		42		
		Fan speed 2	dBA		48		
Total sound power level	Fan speed 3	Fan speed 3	dBA		54		
		Fan speed 4	dBA		57		
		Fan speed 5	dBA		61		
		Low	dBA		48		
		Medium	dBA	54		57	
		High	dBA	57		61	
Sound pressure level	Fan speed 1	Fan speed 2	dBA		31		
		Fan speed 3	dBA		37		
Sound pressure level	Fan speed 3	Fan speed 4	dBA		43		
		Fan speed 5	dBA		46		
		Low	dBA		50		
		Medium	dBA	43		46	
		High	dBA	46		50	

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Technical specifications					FWE10FT	FWE10FTR	FWE12FT	FWE12FTR	
Water flow	Cooling	Fan speed 1	I/h		396 (1)		399 (1)		
		Fan speed 2	I/h		584 (1)		602 (1)		
		Fan speed 3	I/h		740 (1)		773 (1)		
		Fan speed 4	I/h		827 (1)		870 (1)		
		Fan speed 5	I/h		911 (1)		964 (1)		
		Low	I/h		584 (1)		602 (1)		
		Medium	I/h		740 (1)		870 (1)		
		High	I/h		827 (1)		964 (1)		
		Heating	Fan speed 1	I/h		434 (2)		456 (2)	
			Fan speed 2	I/h		637 (2)		669 (2)	
			Fan speed 3	I/h		847 (2)		890 (2)	
			Fan speed 4	I/h		995 (2)		1,045 (2)	
			Fan speed 5	I/h		1,173 (2)		1,233 (2)	
			High	I/h		995 (2)		1,233 (2)	
	Low		I/h		637 (2)		669 (2)		
	Medium	I/h		847 (2)		1,045 (2)			
	Water pressure drop	Cooling	Fan speed 1	kPa		6 (1)			
			Fan speed 2	kPa		12 (1)		11 (1)	
			Fan speed 3	kPa		18 (1)		16 (1)	
			Fan speed 4	kPa		22 (1)		20 (1)	
Fan speed 5			kPa		26 (1)		24 (1)		
Low			kPa		12 (1)		11 (1)		
Medium			kPa		18 (1)		20 (1)		
High			kPa		22 (1)		24 (1)		
Heating		Fan speed 1	kPa		5 (2)				
		Fan speed 2	kPa		11 (2)		9 (2)		
		Fan speed 3	kPa		19 (2)		16 (2)		
		Fan speed 4	kPa		26 (2)		22 (2)		
		Fan speed 5	kPa		36 (2)		30 (2)		
		Low	kPa		11 (2)		9 (2)		
		Medium	kPa		19 (2)		22 (2)		
Water flow	Water pressure drop	Heating	High	kPa		26 (2)		30 (2)	
Allowed water temperature	Cooling	Min.	°C		5				
		Max.	°C		90				
	Heating	Min.	°C		5				
		Max.	°C		90				
Piping connections	Water	Inlet			3/4" BSP (female thread)				
		Outlet			3/4" BSP (female thread)				

Technical specifications				FWE14FT	FWE14FTR	FWE16FT	FWE16FTR
Cooling capacity (standard conditions)	Latent capacity 2-pipe	High	kW	1.25 (1)		1.22 (1)	
		Sensible capacity 2-pipe	kW	3.75 (1)		3.82 (1)	
				4.56 (1)		4.68 (1)	
		Fan speed 1	kW	5.37 (1)		5.62 (1)	
				5.81 (1)		6.14 (1)	
		Fan speed 2	kW	6.31 (1)		6.82 (1)	
				4.56 (1)		4.68 (1)	
		Fan speed 3	kW	5.37 (1)		6.14 (1)	
				5.81 (1)		6.82 (1)	
Heating capacity (standard conditions)	Total capacity 2-pipe	High	kW	5.81 (1)		6.82 (1)	
				4.98 (1)		5.01 (1)	
		Fan speed 1	kW	5.9		5.98 (1)	
				6.69 (1)		6.92 (1)	
		Fan speed 2	kW	7.06 (1)		7.38 (1)	
				7.52 (1)		8.05 (1)	
		Fan speed 3	kW	5.9		5.98 (1)	
				6.69 (1)		7.38 (1)	
		Fan speed 4	kW	7.06 (1)		8.05 (1)	
	Capacity 2-pipe	Fan speed 1	kW	4.07 (2)			
				5.51 (2)			
		Fan speed 2	kW	6.81 (2)			
				7.43 (2)			
		Fan speed 3	kW	8.26 (2)			
				5.51 (2)			
		Fan speed 4	kW				
		Fan speed 5	kW	6.81 (2)		7.43 (2)	
				7.43 (2)		8.26 (2)	
		Low	kW				
		Medium	kW				
		High	kW				

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Technical specifications				FWE14FT	FWE14FTR	FWE16FT	FWE16FTR
Power input	Fan speed 1	kW			0.14 (3)		
	Fan speed 2	kW			0.17 (3)		
	Fan speed 3	kW			0.21 (3)		
	Fan speed 4	kW			0.22 (3)		
	Fan speed 5	kW			0.24 (3)		
	Low	kW			0.17 (3)		
	Med.	kW		0.21 (3)		0.22 (3)	
Dimensions	Unit			0.222 (3)		0.244 (3)	
	Height	mm			253		
	Width	mm			1,360		
Dimensions	Packed unit						
	Height	mm			275		
	Width	mm			1,375		
Weight	Unit	kg			33		
	Packed unit	kg			36		
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type				Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.		
	Length	mm			1,080		
Fan	Type				Centrifugal (Blade: Forward - curve)		
	Air flow rate						
	Fan speed 1	m ³ /h			738 (3)		
	Fan speed 2	m ³ /h			1,052 (3)		
	Fan speed 3	m ³ /h			1,368 (3)		
	Fan speed 4	m ³ /h			1,534 (3)		
	Fan speed 5	m ³ /h			1,776 (3)		
	Low	m ³ /h			1,052 (3)		
	Medium	m ³ /h		1,368 (3)		1,534 (3)	
	High	m ³ /h		1,534 (3)		1,776 (3)	
	Available static pressure						
	Fan speed 1	Pa			30		
	Fan speed 2	Pa			50		
	Fan speed 3	Pa			70		
	Fan speed 4	Pa			75		
	Fan speed 5	Pa			80		
	Low	Pa			50		
	Medium	Pa		70		75	
	High	Pa		75		80	
Fan motor	Model				AC induction		
Total sound power level	Fan speed 1	dBA			44		
	Fan speed 2	dBA			51		
	Fan speed 3	dBA			58		
	Fan speed 4	dBA			60		
	Fan speed 5	dBA			64		
	Low	dBA			51		
	Medium	dBA		58		60	
Sound pressure level	High	dBA		60		64	
	Fan speed 1	dBA			33		
Sound pressure level	Fan speed 2	dBA			40		
	Fan speed 3	dBA			47		
	Fan speed 4	dBA			49		
	Fan speed 5	dBA			53		
	Low	dBA			40		
	Medium	dBA		47		49	
	High	dBA		49		53	

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Technical specifications				FWE14FT	FWE14FTR	FWE16FT	FWE16FTR
Water flow	Cooling	Fan speed 1	l/h	857 (1)		861 (1)	
				1,014 (1)		1,029 (1)	
		Fan speed 2	l/h	1,151 (1)		1,189 (1)	
				1,213 (1)		1,270 (1)	
		Fan speed 3	l/h	1,294 (1)		1,384 (1)	
				1,014 (1)		1,029 (1)	
		Fan speed 4	l/h	1,151 (1)		1,270 (1)	
				1,213 (1)		1,384 (1)	
		Fan speed 5	l/h	700 (2)			
				948 (2)			
		Fan speed 3	l/h	1,171 (2)			
				1,277 (2)			
	Heating	Fan speed 4	l/h	1,420 (2)			
				1,277 (2)		1,420 (2)	
		Fan speed 5	l/h	948 (2)			
				1,171 (2)		1,277 (2)	
		High	l/h				
				1,277 (2)		1,420 (2)	
		Low	l/h				
				948 (2)			
		Medium	l/h				
				1,171 (2)		1,277 (2)	
	Water pressure drop	Cooling	Fan speed 1	kPa	7 (1)		
			Fan speed 2	kPa	10 (1)		
			Fan speed 3	kPa	13 (1)		14 (1)
			Fan speed 4	kPa	14 (1)		16 (1)
			Fan speed 5	kPa	16 (1)		18 (1)
			Low	kPa	10 (1)		
		Heating	Fan speed 1	kPa	4 (2)		
			Fan speed 2	kPa	7 (2)		
			Fan speed 3	kPa	10 (2)		
			Fan speed 4	kPa	12 (2)		
			Fan speed 5	kPa	15 (2)		
			Low	kPa	7 (2)		
			Medium	kPa	10 (2)		12 (2)
		Water pressure drop	High	kPa	12 (2)		15 (2)
	Allowed water temperature	Cooling	Min.	°C	5		
			Max.	°C	90		
		Heating	Min.	°C	5		
			Max.	°C	90		
Piping connections	Water	Inlet			3/4" BSP (female thread)		
		Outlet			3/4" BSP (female thread)		

Technical specifications				FWE20FT	FWE20FTR	FWE24FT	FWE24FTR
Cooling capacity (standard conditions)	Latent capacity 2-pipe	High	kW	1.58 (1)		1.64 (1)	
		Sensible capacity 2-pipe	Fan speed 1	kW	4.44 (1)		4.95 (1)
					5.64 (1)		6.37 (1)
		Fan speed 3	kW	kW	7.31 (1)		7.94 (1)
					8.72 (1)		8.97 (1)
		Fan speed 5	kW	kW	-		9.86 (1)
					5.64 (1)		6.37 (1)
		Low	kW	kW	7.31 (1)		8.97 (1)
					8.72 (1)		9.86 (1)
		Medium	kW	kW	5.72 (1)		6.3
					7.08 (1)		7.9
	Total capacity 2-pipe	Fan speed 3	kW	kW	8.84 (1)		9.5
					10.3		10.48 (1)
		Fan speed 5	kW	kW	-		11.5
					7.08 (1)		7.9
		Low	kW	kW	8.84 (1)		10.48 (1)
					10.3		11.5
		Medium	kW	kW	4.94 (2)		5.55 (2)
					6.64 (2)		7.82 (2)
		Fan speed 3	kW	kW	8.75 (2)		9.85 (2)
					10.41 (2)		10.99 (2)
		Fan speed 5	kW	kW	-		12.05 (2)
					6.64 (2)		7.82 (2)
		Low	kW	kW	8.75 (2)		10.99 (2)
					10.41 (2)		12.05 (2)
		Medium	kW	kW			
		High	kW	kW			

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Technical specifications				FWE20FT	FWE20FTR	FWE24FT	FWE24FTR
Power input	Fan speed 1	kW		0.1		0.17 (3)	
	Fan speed 2	kW		0.12 (3)		0.21 (3)	
	Fan speed 3	kW		0.16 (3)		0.25 (3)	
	Fan speed 4	kW		0.19 (3)		0.27 (3)	
	Fan speed 5	kW		-		0.3	
	Low	kW		0.12 (3)		0.21 (3)	
	Med.	kW		0.16 (3)		0.27 (3)	
	High	kW		0.191 (3)		0.298 (3)	
Dimensions	Unit	Height	mm		253		
		Width	mm		1,680		
		Depth	mm		570		
Dimensions	Packed unit	Height	mm		275		
		Width	mm		1,690		
		Depth	mm		585		
Weight	Unit	kg			40.6		
	Packed unit	kg			44		
Casing	Colour				Metal		
	Material				Galvanised steel		
Heat exchanger	Type			Seamless copper tubing, mechanically bonded to rippled and louvred aluminum fins.			
	Length	mm			1,380		
Fan	Type			Centrifugal (Blade: Forward - curve)			
	Air flow rate	Fan speed 1	m ³ /h	720 (3)		864 (3)	
		Fan speed 2	m ³ /h	1,036 (3)		1,220 (3)	
		Fan speed 3	m ³ /h	1,455 (3)		1,591 (3)	
		Fan speed 4	m ³ /h	1,812 (3)		1,831 (3)	
		Fan speed 5	m ³ /h	-		2,090 (3)	
		Low	m ³ /h	1,036 (3)		1,220 (3)	
		Medium	m ³ /h	1,455 (3)		1,831 (3)	
		High	m ³ /h	1,812 (3)		2,090 (3)	
	Available static pressure	Fan speed 1	Pa		30		
		Fan speed 2	Pa		50		
		Fan speed 3	Pa		70		
		Fan speed 4	Pa	80		75	
		Fan speed 5	Pa	-		80	
		Low	Pa		50		
		Medium	Pa	70		75	
		High	Pa		80		
Fan motor	Model			AC induction			
Total sound power level	Fan speed 1	dBA		42		43	
	Fan speed 2	dBA		47		50	
	Fan speed 3	dBA		53		57	
	Fan speed 4	dBA		58		60	
	Fan speed 5	dBA		-		64	
	Low	dBA		47		50	
	Medium	dBA		53		60	
	High	dBA		58		64	
Sound pressure level	Fan speed 1	dBA		31		32	
	Fan speed 2	dBA		36		39	
Sound pressure level	Fan speed 3	dBA		42		46	
	Fan speed 4	dBA		47		49	
	Fan speed 5	dBA		-		53	
	Low	dBA		36		39	
	Medium	dBA		42		49	
	High	dBA		47		53	

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Technical specifications					FWE20FT	FWE20FTR	FWE24FT	FWE24FTR			
Water flow	Cooling	Fan speed 1		l/h	983 (1)		1,083 (1)				
		Fan speed 2		l/h	1,217 (1)		1,359 (1)				
		Fan speed 3		l/h	1,519 (1)		1,633 (1)				
		Fan speed 4		l/h	1,771 (1)		1,802 (1)				
		Fan speed 5		l/h	-		1,978 (1)				
		Low		l/h	1,217 (1)		1,359 (1)				
		Medium		l/h	1,519 (1)		1,802 (1)				
		High		l/h	1,771 (1)		1,978 (1)				
		Heating	Fan speed 1		l/h	849 (2)		954 (2)			
			Fan speed 2		l/h	1,142 (2)		1,344 (2)			
	Fan speed 3		l/h	1,504 (2)		1,695 (2)					
	Fan speed 4		l/h	1,790 (2)		1,890 (2)					
	Fan speed 5		l/h	-		2,073 (2)					
	High		l/h	1,790 (2)		2,073 (2)					
	Low		l/h	1,142 (2)		1,344 (2)					
	Medium		l/h	1,504 (2)		1,890 (2)					
	Water pressure drop		Cooling	Fan speed 1	kPa	9 (1)		11 (1)			
				Fan speed 2	kPa	13 (1)		16 (1)			
		Fan speed 3		kPa	20 (1)		23 (1)				
		Fan speed 4		kPa	27 (1)		28 (1)				
		Fan speed 5		kPa	-		34 (1)				
		Low		kPa	13 (1)		16 (1)				
		Medium		kPa	20 (1)		28 (1)				
		High		kPa	27 (1)		34 (1)				
		Heating	Fan speed 1	kPa	5 (2)		7 (2)				
			Fan speed 2	kPa	9 (2)		12 (2)				
			Fan speed 3	kPa	15 (2)		19 (2)				
			Fan speed 4	kPa	22 (2)		24 (2)				
			Fan speed 5	kPa	-		29 (2)				
			Low	kPa	9 (2)		12 (2)				
			Medium	kPa	15 (2)		24 (2)				
			Water flow	Water pressure drop	Heating	High	kPa	22 (2)		29 (2)	
			Allowed water temperature	Cooling	Min.	°C	5				
					Max.	°C	90				
	Heating	Min.		°C	5						
		Max.		°C	90						
	Piping connections	Water	Inlet	3/4" BSP (female thread)							
			Outlet	3/4" BSP (female thread)							

(1) Inlet/outlet water temperature 7/12 °C; inlet air temperature 27°C DB 19°C WB |
(2) Heating: indoor temp. 20°CDB, 15°CWB; entering water temp. 45°C, water temperature drop 5K. |
(3) Airflow value measurements are performed at 20°C (DB) /15 °C(WB) condition. |
Sound power level according to ISO3741 |
The sound pressure level is measured via a microphone at 1m distance of the unit.

3 Hydraulic performance

3 - 1 Heat Exchange Volume

FWE-FF
FWE-FT

MODEL	2 PIPE COIL VOLUME		4 PIPE COIL VOLUME	
	(m ³)	(L)	(m ³)	(L)
FWE04F	0.00041	0.41	0.00064	0.64
FWE05/06F	0.00058	0.58	0.00081	0.81
FWE08F	0.00071	0.71	0.00104	1.04
FWE10F	0.00082	0.82	0.00114	1.14
FWE12F	0.00088	0.88	0.0012	1.2
FWE14/16F	0.00124	1.24	0.00166	1.66
FWE20/24F	0.00199	1.99	0.00251	2.51

NOTE:

THIS TABLE IS FOR BLANC COIL + COLLECTOR.

4D151734

4 Nomenclature

4 - 1 Nomenclature

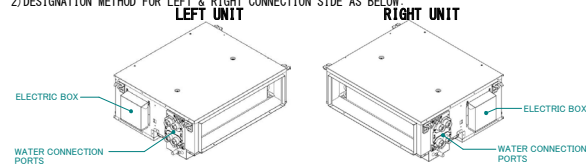
FWE-FF
FWE-FT

DIGIT	CLASSIFICATION	CODE	DESCRIPTION
1-2	TYPE OF UNIT	FW	Water Fan Coil Unit
3	SUBCLASS	E	LSP
4-5	SPECIFICATION INDEX	04	Capacity Class. (e.g: Total Cooling Capacity: 04 = ~2 kW, 05 = ~2.5 kW)
6	MODEL CHANGE INDICATION	F	Major Model Series
7		B	Minor Model Change
8	COIL TYPE	T	2 Pipe
		F	4 Pipe
9	VALVE	N	Without valve
		T	2 way on-off 230 V valve
		V	3 way on-off 230 V valve
10	FACTORY	5	DTAS (Turkey)
11-12	POWER SUPPLY	V1	Single Phase 50 Hz / 220-240 V
13	OPTIONS (FACTORY MOUNTED)	-	No Options
14	CONNECTION SIDE (SEE NOTE 2)	-	Left side water - Left side electric connection
		R	Right side water - Right side electric connection

NOTES:

1) THIS NOMENCLATURE IS APPLICABLE ONLY FOR FWE-F.

2) DESIGNATION METHOD FOR LEFT & RIGHT CONNECTION SIDE AS BELOW:



WHEN THE UNIT IS FACED FROM THE DISCHARGE SIDE, CONNECTION SIDE IS IN THE SAME SIDE WITH WATER CONNECTION PORTS.

-UNIT IS LEFT IF THE WATER CONNECTION PORTS ARE ON THE LEFT SIDE OF THE UNIT.
-UNIT IS RIGHT IF THE WATER CONNECTION PORTS ARE ON THE RIGHT SIDE OF THE UNIT.

3D149178A

5 Electrical data

5 - 1 Electrical Data

FWE-FF FWE-FT

UNITS			POWER SUPPLY			UNIT												
MODEL	TYPE	PHASE	Hz	VOLTAGE RANGE (V)	VOLTAGE LIMITS	MCA	MFA	MFA(CAL)	FLA	FAN INPUT(W)								
FWE04FBTV1-I-R	2 PIPE STD	-1	50 Hz	220	MAX. 264 MIN. 198	0.32	5	1.03	0.26	53								
				0.34		5	1.07	0.27	56									
				240		0.35	5	1.12	0.28	63								
220				0.32		5	1.03	0.26	53									
230				0.34		5	1.07	0.27	58									
240				0.35		5	1.12	0.28	63									
220				0.45		5	1.45	0.36	75									
230				0.47		5	1.52	0.38	82									
240				0.49		5	1.58	0.40	89									
220				0.53		5	1.70	0.42	98									
230				0.56		5	1.78	0.44	96									
240				0.58		5	1.85	0.46	105									
220				0.57		5	1.82	0.46	94									
230				0.60		5	1.91	0.48	103									
240				0.62		5	1.98	0.50	112									
220				0.64		5	2.04	0.51	105									
230				0.66		5	2.13	0.53	115									
240				0.69		5	2.22	0.56	125									
220				0.97		5	3.10	0.77	160									
230				1.01		5	3.24	0.81	175									
240				1.06		5	3.38	0.84	191									
220				1.05		5	3.36	0.84	174									
230				1.10		5	3.52	0.89	196									
240				1.15		5	3.67	0.92	207									
FWE05FBTV1-I-R				2 PIPE STD		-1	50 Hz	220	MAX. 264 MIN. 198	1.06	5	3.38	0.85	175				
								1.10		5	3.53	0.88	191					
								240		1.15	5	3.68	0.92	208				
220								1.27		5	4.07	1.02	210					
230								1.33		5	4.26	1.06	220					
240								1.38		5	4.44	1.11	250					
220								0.32		5	1.01	0.25	52					
230								0.33		5	1.05	0.26	57					
240								0.34		5	1.10	0.28	62					
220								0.32		5	1.01	0.25	52					
230								0.33		5	1.05	0.26	57					
240								0.34		5	1.10	0.28	62					
220								0.44		5	1.40	0.35	72					
230								0.46		5	1.46	0.37	79					
240								0.48		5	1.53	0.38	86					
220								0.52		5	1.66	0.42	88					
230								0.54		5	1.74	0.43	94					
240								0.57		5	1.81	0.45	102					
220								0.60		5	1.93	0.48	100					
230								0.63		5	2.02	0.50	109					
240								0.66		5	2.10	0.53	119					
220								0.67		5	2.16	0.54	112					
230								0.71		5	2.26	0.56	122					
240								0.74		5	2.36	0.59	133					
220								0.94		5	3.01	0.75	156					
230								0.98		5	3.15	0.79	170					
240								1.03		5	3.28	0.82	185					
220								1.05		5	3.34	0.84	173					
230								1.09		5	3.50	0.87	198					
240								1.14		5	3.65	0.91	206					
220								1.00		5	3.19	0.80	165					
230								1.04		5	3.33	0.83	180					
240								1.09		5	3.48	0.87	195					
FWE24FBTV1-I-R								4 PIPE STD		-1	50 Hz	220	MAX. 264 MIN. 198	1.24	5	3.96	0.99	205
												1.30		5	4.14	1.04	224	
												240		1.36	5	4.32	1.08	244

6 Safety device settings

6 - 1 Safety Device Settings

FWE-FF
FWE-FT

6

Safety devices		FWE(04/05/06/08/10/12/14/16/20/24)F(T/F)(N/T/V)5V1B(L/R)
Fan motor thermal protector	Maximum	250VAC, Activation temperature:130°C (Class B)

4D150038

7 Options

7 - 1 Options

FWE-FF FWE-FT

Description	Option Name	Source	Availability		2 PIPE				4 PIPE			
			Option Kit	Factory Mounted	04-05-06	08-10-12	14-16	20-24	04-05-06	08-10-12	14-16	20-24
G2 Filter	EKAF02G5A	DTAS	Yes	No	1		2	1	1		2	1
	EKAF03G5A	DTAS	Yes	No		1		1		1		1
2-way valve-ON/OFF (AC 230 V)	EK02WW2V3W5A	DTAS	Yes	Yes	1	1			2	2		
	EK04WW2V3C5A	DTAS	Yes	Yes			1				2	
	EK06WW2V3C5A	DTAS	Yes	Yes				1				2
3-way valve-ON/OFF (AC 230V)	EK02WW3V3W5A	DTAS	Yes	Yes	1	1			2	2		
	EK04WW3V3C5A	DTAS	Yes	Yes			1				2	
	EK06WW3V3C5A	DTAS	Yes	Yes				1				2
Proportional Valve (AC 24 V) 3 Way-4 Port valve	EK02P3V24W5A	DTAS	Yes	No	1	1			2	2		
	EK04P3V24C5A	DTAS	Yes	No			1				2	
	EK06P3V24C5A	DTAS	Yes	No				1				2
Remote Controller	FWEC1A	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
	FWEC2A	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
	FWEC3A	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
Remote Controller (for 2 Pipe)	FWEC2T	DENV	Yes	No	✓	✓	✓	✓				
Remote Controller (for 4 Pipe)	FWEC4T	DENV	Yes	No					✓	✓	✓	✓
Remote Controller (Panel Control)	FWEC5AP	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
Remote Controller (Panel)	FWEC5AC	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
Remote Controller (Panel)	FWTOUCHW FWTOUCHB FWTOUCHG	DENV	Yes	No	✓	✓	✓	✓	✓	✓	✓	✓
Valve Cable Kit	EKER015A	DTAS	Yes	No		✓	✓	✓		✓	✓	✓

NOTE:

1) 1 AND 2 MEANS THE NUMBER OF OPTIONS REQUIRED PER UNIT.
EXAMPLE: G2 FILTER OPTION FOR FWE24F* UNIT, NEEDED TO TAKE BOTH EKAF02G5A AND EKAF03G5A

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Capacity tables

8 - 1 Cooling Capacity Tables

FWE-FF

COOLING 4 PIPE @ 0 ESP																										
Air Temperature		DB:33°C - WB:26°C																								
Water Temperature		ΔT=3												ΔT=5												
Delta T °C		Water In / Out																								
Model / Fan Speed		5 °C - 8 °C				11 °C - 14 °C				7 °C - 12 °C				13 °C - 18 °C				6 °C - 13 °C				10 °C - 17 °C				
		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	
		kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	
FWE04	F4A/BF	V1 (SL)	2.38	0.99	883	47.95	1.74	0.93	498	27.49	2.06	0.97	353	15.57	1.41	0.94	243	8.97	1.82	0.87	224	8.03	1.45	0.86	179	6.12
	F4A/BF	V2 (L)	3.24	1.36	924	84.72	2.37	1.28	679	47.54	2.80	1.33	481	25.90	1.93	1.30	331	14.08	2.48	1.20	305	12.39	1.98	1.18	244	9.01
	F4A/BF	V3 (M)	3.80	1.64	1089	114.24	2.78	1.52	796	63.57	3.28	1.59	564	34.12	2.26	1.54	389	18.12	2.91	1.44	357	15.82	2.33	1.41	286	11.27
	F4A/BF	V4 (H)	4.33	1.93	1240	146.23	3.16	1.78	907	80.90	3.74	1.87	642	42.99	2.57	1.80	443	22.46	3.31	1.69	407	19.51	2.65	1.64	325	13.69
FWE05	F5A/BF	V1 (SL)	2.59	0.99	743	24.48	1.89	0.94	543	14.57	2.24	0.97	385	8.55	1.54	0.97	265	5.03	1.98	0.88	243	4.50	1.59	0.88	195	3.40
	F5A/BF	V2 (L)	3.64	1.44	1044	44.17	2.66	1.37	784	25.34	3.15	1.42	541	14.50	2.17	1.40	373	8.15	2.79	1.28	342	7.20	2.23	1.27	274	5.27
	F5A/BF	V3 (M)	4.42	1.77	1268	62.56	3.24	1.68	928	35.89	3.82	1.74	657	19.93	2.63	1.72	453	10.96	3.39	1.57	416	9.61	2.71	1.56	333	6.92
	F5A/BF	V4 (H)	5.30	2.15	1520	87.07	3.88	2.03	1113	49.47	4.58	2.11	788	27.06	3.16	2.08	543	14.60	4.06	1.91	499	12.74	3.25	1.88	400	9.04
FWE06	F6A/BF	V1 (SL)	3.61	1.41	1036	43.55	2.64	1.34	757	25.26	3.12	1.39	536	14.30	2.15	1.38	369	8.04	2.76	1.26	339	7.11	2.21	1.25	271	5.20
	F6A/BF	V2 (L)	4.68	1.94	1342	69.37	3.42	1.82	982	39.62	4.04	1.89	696	21.91	2.79	1.86	479	11.95	3.58	1.71	440	10.48	2.87	1.68	352	7.50
	F6A/BF	V3 (L)	5.82	2.41	1669	103.40	4.26	2.27	1221	58.42	5.03	2.36	865	31.76	3.47	2.31	596	16.96	4.46	2.13	547	14.77	3.57	2.10	438	10.41
	F6A/BF	V4 (M)	6.21	2.58	1780	116.53	4.54	2.42	1302	65.64	5.36	2.52	922	35.53	3.70	2.47	636	18.86	4.75	2.28	584	16.40	3.81	2.24	468	11.50
FWE08	F8A/BF	V1 (SL)	6.95	2.89	1993	143.89	5.09	2.71	1458	80.67	6.01	2.82	1033	43.35	4.14	2.77	712	22.79	5.32	2.55	654	19.76	4.26	2.51	524	13.76
	F8A/BF	V2 (L)	9.35	1.68	1248	50.04	3.18	1.60	912	26.89	3.76	1.65	647	13.82	2.59	1.65	445	7.03	3.33	1.50	409	6.09	2.67	1.49	327	4.29
	F8A/BF	V3 (L)	11.57	2.36	1710	94.13	4.37	2.24	1252	50.34	5.16	2.32	887	25.41	3.55	2.30	611	12.44	4.57	2.10	561	10.61	3.66	2.08	449	7.14
	F8A/BF	V4 (H)	13.75	3.14	2221	159.15	6.57	2.97	1625	82.18	7.68	3.69	1308	41.15	4.62	3.40	794	20.50	5.93	2.79	729	17.36	4.75	2.75	584	11.41
FWE10	F10A/BF	V1 (SL)	8.89	3.79	2549	210.17	6.51	3.54	1866	112.14	7.68	3.69	1322	56.12	5.30	3.59	911	26.84	6.81	3.34	837	22.69	5.46	3.27	670	14.79
	F10A/BF	V2 (L)	11.57	2.36	1710	94.13	4.37	2.24	1252	50.34	5.16	2.32	887	25.41	3.55	2.30	611	12.44	4.57	2.10	561	10.61	3.66	2.08	449	7.14
	F10A/BF	V3 (M)	13.75	3.14	2221	159.15	6.57	2.97	1625	82.18	7.68	3.69	1308	41.15	4.62	3.40	794	20.50	5.93	2.79	729	17.36	4.75	2.75	584	11.41
	F10A/BF	V4 (H)	15.89	4.39	2949	242.17	7.81	4.04	2147	105.22	8.85	4.33	1521	54.97	6.10	4.19	1049	27.94	7.84	3.92	963	24.05	6.28	3.82	771	16.45
FWE12	F12A/BF	V1 (SL)	10.24	4.46	2935	191.85	7.49	4.15	2147	105.22	8.85	4.33	1521	54.97	6.10	4.19	1049	27.94	7.84	3.92	963	24.05	6.28	3.82	771	16.45
	F12A/BF	V2 (L)	14.72	2.15	1353	44.36	3.45	1.98	989	24.98	4.08	2.08	701	13.62	2.80	1.99	482	7.31	3.61	1.88	443	6.40	2.89	1.82	355	4.56
	F12A/BF	V3 (L)	16.95	3.03	1991	91.71	5.08	2.81	1456	50.87	6.00	2.94	1032	26.98	4.13	2.84	711	13.96	5.32	2.66	653	12.07	4.26	2.59	523	8.33
	F12A/BF	V4 (M)	18.81	3.57	2524	144.41	6.44	3.37	1847	79.54	7.61	3.50	1308	41.68	5.25	3.45	902	21.20	6.74	3.17	828	18.22	5.40	3.13	663	12.39
FWE16	F16A/BF	V1 (SL)	9.86	4.00	2827	178.52	7.22	3.78	2068	98.62	8.52	3.92	1465	51.44	5.87	3.87	1010	25.97	7.55	3.55	927	22.27	6.05	3.50	743	15.06
	F16A/BF	V2 (L)	10.88	4.55	3119	217.22	7.96	4.27	2282	118.99	9.40	4.45	1616	61.84	6.48	4.35	1114	31.04	8.33	4.02	1023	26.58	6.67	3.95	819	17.88
	F16A/BF	V3 (L)	11.51	4.07	3762	111.13	7.05	3.30	2021	60.39	8.32	3.36	1432	31.11	5.74	3.45	986	15.43	7.38	3.05	906	13.20	5.91	3.09	725	8.83
	F16A/BF	V4 (H)	11.65	4.07	3738	161.14	8.52	3.98	2442	87.34	10.06	4.06	1730	44.74	6.93	4.17	1193	22.00	8.92	3.69	1059	18.75	7.14	3.73	877	12.41
FWE20	F20A/BF	V1 (SL)	13.34	5.19	3825	210.63	9.76	4.95	2798	113.95	11.53	5.11	2082	58.19	7.94	5.09	1366	28.46	10.21	4.63	1255	24.21	8.18	4.40	1005	15.99
	F20A/BF	V2 (L)	15.79	6.36	4524	234.42	11.56	6.02	3314	96.55	13.65	6.24	2347	49.25	9.42	6.17	1619	24.22	12.09	5.65	1486	20.61	9.69	5.58	1190	13.71
	F20A/BF	V3 (M)	18.98	8.21	5441	256.82	13.90	7.65	3984	138.70	16.40	7.99	2821	70.45	11.32	7.75	1947	34.38	14.54	7.23	1786	29.17	11.65	7.06	1431	19.23
	F20A/BF	V4 (H)	21.33	9.56	6052	317.65	15.47	8.83	4435	171.36	18.26	9.26	3140	86.87	12.60	8.88	2167	42.23	16.19	8.37	1988	35.79	12.97	8.12	1593	23.50
FWE24	F24A/BF	V1 (SL)	20.41	9.05	5850	296.55	14.95	8.40	4285	160.10	17.64	8.78	3033	81.19	12.18	8.48	2094	39.54	15.64	7.94	1921	33.51	10.53	7.73	1540	22.07
	F24A/BF	V2 (L)	22.89	4.93	3696	119.64	9.44	4.72	2705	64.93	11.14	4.87	1913	33.34	7.68	4.88	1322	16.59	9.87	4.41	1213	14.19	7.91	4.40	972	9.92
	F24A/BF	V3 (M)	25.19	6.36	4524	234.42	11.56	6.02	3314	96.55	13.65	6.24	2347	49.25	9.42	6.17	1619	24.22	12.09	5.65	1486	20.61	9.69	5.58	1190	13.71
	F24A/BF	V4 (H)	28.98	8.21	5441	256.83	13.90	7.65	3984	138.70	16.40	7.99	2821	70.45	11.32	7.75	1947	34.38	14.54	7.23	1786	29.17	11.65	7.06	1431	19.23
FWE24	F24A/BF	V1 (SL)	21.33	9.56	6056	317.65	15.47	8.83	4435	171.36	18.26	9.26	3140	86.87	12.60	8.88	2167	42.23	16.19	8.37	1988	35.79	12.97	8.12	1593	23.50
	F24A/BF	V2 (L)	23.52	10.09	6742	393.06	17.22	9.86	4937	211.85	20.33	10.35	3496	107.23	14.03	9.92	2412	51.96	18.02	9.35	2213	43.99	14.44	9.07	1774	28.78

SYMBOLS

Tc = TOTAL COOLING CAPACITY

Sc = SENSIBLE COOLING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150137B

FWE-FF

Air Temperature		COOLING 4 PIPE @ 0 ESP																							
		DB:27°C - WB:19°C																							
Water Temperature		ΔT=3												ΔT=5											
Water In / Out		5°C - 8°C				11°C - 14°C				7°C - 12°C				13°C - 18°C				6°C - 13°C				10°C - 17°C			
Model / Fan Speed		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd
FA/B/F	(N/T/W)	KW	KVA	HP	KPA	KW	KVA	HP	KPA	KW	KVA	HP	KPA	KW	KVA	HP	KPA	KW	KVA	HP	KPA	KW	KVA	HP	KPA
FW504	V1(S)	1.48	1.08	425	0.101	0.84	0.21	0.76	1.93	0.99	0.58	0.58	1.00	3.63	0.92	0.76	1.13	0.96	0.62	0.62	1.16	0.96	0.62	0.62	1.16
	V2 (L)	2.02	1.48	580	35.80	1.15	1.10	330	13.98	1.58	1.27	272	10.48	0.80	0.80	138	4.67	1.26	1.04	155	5.24	0.85	0.85	105	3.73
	V3(M)	2.37	1.76	680	47.60	1.35	1.30	387	18.00	1.85	1.51	319	13.26	0.94	0.94	162	5.48	1.48	1.24	182	6.82	1.00	1.00	123	4.23
	V4 (H)	2.70	2.04	774	60.30	1.54	1.50	441	22.31	2.11	1.75	363	16.24	1.07	1.07	184	6.33	1.68	1.44	207	7.28	1.14	1.14	140	4.75
FW505	V1(S)	1.62	1.12	463	0.114	0.92	0.84	263	4.99	1.26	0.97	217	3.88	0.64	0.64	110	1.83	1.01	0.79	124	2.06	0.68	0.68	83	1.45
	V2 (L)	2.27	1.61	652	19.66	1.30	1.20	372	8.11	1.78	1.39	306	6.13	0.90	0.90	155	2.61	1.42	1.14	174	2.98	0.96	0.94	118	1.97
	V3(M)	2.76	1.96	792	27.32	1.58	1.47	452	10.92	2.16	1.70	372	8.12	1.10	1.10	189	3.28	1.73	1.40	212	3.77	1.17	1.15	144	2.41
	V4 (H)	3.32	2.37	950	37.44	1.89	1.75	543	14.57	2.59	2.05	446	10.70	1.32	1.32	227	4.12	2.07	1.69	255	4.77	1.41	1.39	173	2.95
FW506	V1(S)	2.25	1.58	676	35.18	1.38	1.19	367	7.95	1.63	1.24	306	6.04	0.96	0.96	153	2.57	1.40	1.12	174	2.94	0.95	0.92	116	1.94
	V2 (L)	2.92	2.11	838	30.08	1.66	1.57	477	11.88	2.29	1.82	393	8.82	1.16	1.16	199	3.49	1.82	1.50	227	4.04	1.22	1.22	152	2.55
	V3(M)	3.34	2.64	1043	44.06	2.07	1.96	594	16.89	2.84	2.27	489	12.35	1.45	1.45	249	4.62	2.27	1.87	270	5.40	1.54	1.53	189	3.28
	V4 (H)	3.88	2.82	1112	49.43	2.21	2.10	634	18.79	3.03	2.43	522	13.68	1.54	1.54	265	5.04	2.42	2.00	298	5.90	1.64	1.63	202	3.55
FW508	V1(S)	4.35	3.15	1245	60.57	2.48	2.35	711	22.72	3.40	2.72	584	16.43	1.73	1.73	297	5.89	2.72	2.24	334	6.93	1.84	1.83	226	4.10
	V2 (L)	5.72	2.89	1779	79.75	1.55	1.42	444	6.98	2.14	1.64	365	5.07	1.08	1.08	185	2.21	1.70	1.35	208	2.46	1.15	1.11	141	1.83
	V3(M)	3.73	2.63	1069	36.78	2.13	1.98	610	12.40	2.92	2.28	502	8.66	1.49	1.49	255	3.07	2.33	1.87	286	3.56	1.58	1.54	194	3.20
	V4 (H)	4.84	3.47	1389	61.97	2.17	2.00	793	20.47	3.79	3.00	652	14.04	1.93	1.93	332	4.39	3.03	2.47	372	5.12	2.06	2.03	253	3.03
FW510	V1(S)	4.54	4.09	1594	81.71	3.18	3.04	911	26.78	4.35	3.52	748	19.48	2.22	2.22	381	5.43	3.48	2.90	427	6.55	2.96	2.96	290	3.62
	V2 (L)	2.88	1.98	825	18.44	1.63	1.49	469	7.61	2.25	1.71	387	5.87	1.13	1.13	195	2.92	1.79	1.41	220	3.22	1.16	1.14	144	2.44
	V3(M)	4.27	2.97	1223	36.83	2.43	2.23	697	13.94	3.34	2.57	574	10.25	1.69	1.69	291	4.22	2.66	2.12	327	4.80	1.81	1.74	222	3.24
	V4 (H)	5.35	3.83	1535	55.87	3.06	2.86	876	20.41	4.19	3.31	720	14.70	2.13	2.13	366	5.49	3.34	2.72	411	6.36	2.27	2.23	279	4.02
FW512	V1(S)	5.92	4.29	1696	67.37	3.38	3.20	968	24.27	4.63	3.70	796	17.36	2.35	2.35	405	6.24	3.70	3.05	454	7.29	2.51	2.49	308	4.48
	V2 (L)	6.40	4.77	1834	78.00	3.65	3.53	1046	27.82	5.00	4.10	860	19.80	2.54	2.54	437	6.92	4.00	3.37	491	8.13	2.71	2.71	333	4.89
	V3(M)	2.94	2.25	844	18.82	1.67	1.65	479	7.24	2.30	1.93	395	5.36	1.16	1.16	200	2.14	1.83	1.58	225	2.46	1.24	1.24	152	1.59
	V4 (H)	4.34	3.24	1244	37.96	2.47	2.39	709	13.89	3.39	2.78	583	9.98	1.72	1.72	296	3.53	2.71	2.29	333	4.16	1.84	1.84	226	2.47
FW513	V1(S)	5.50	3.94	1578	59.08	3.14	2.95	901	21.13	4.31	3.40	740	14.98	2.19	2.19	377	4.99	3.44	2.80	423	5.94	2.34	2.30	287	3.37
	V2 (L)	6.16	4.41	1767	73.12	3.52	3.30	1009	20.59	4.82	3.81	829	18.26	2.46	2.46	422	5.93	3.85	3.14	473	7.10	2.62	2.57	321	3.95
	V3(M)	6.80	4.96	1499	88.08	3.38	3.69	1113	30.95	5.32	4.27	915	21.73	2.71	2.71	466	6.92	4.25	3.51	522	8.31	2.88	2.88	354	4.55
	V4 (H)	6.02	3.97	1725	44.50	3.43	3.03	984	15.35	4.71	3.45	809	10.74	2.39	2.39	411	3.41	3.76	2.85	462	4.09	2.55	2.56	333	2.28
FW516	V1(S)	7.28	4.80	2086	64.24	4.15	3.66	1190	21.91	5.18	4.18	979	15.57	2.89	2.89	482	4.65	4.55	3.45	515	7.00	3.08	2.86	379	3.71
	V2 (L)	8.32	6.04	2363	138.53	2.63	2.63	1383	28.34	5.50	4.21	1959	33.31	3.59	3.59	580	3.48	4.15	3.17	570	7.07	3.53	3.52	421	3.01
	V3(M)	8.81	6.46	2524	131.02	4.82	4.49	1439	37.61	5.99	5.06	1184	21.71	3.80	3.80	602	4.68	5.50	4.41	675	7.78	3.71	3.71	458	2.48
	V4 (H)	9.39	6.98	2892	106.61	5.35	5.17	1534	35.49	7.34	6.00	1262	24.50	3.73	3.73	641	7.10	5.86	4.83	720	8.71	3.97	3.97	488	4.47
FW518	V1(S)	6.40	4.26	1835	50.11	3.65	3.24	1047	17.24	5.01	3.70	861	12.02	2.55	2.55	438	3.76	4.00	3.06	491	4.53	2.71	2.53	333	2.49
	V2 (L)	7.66	5.17	2195	70.95	4.37	3.92	1253	24.16	5.99	4.49	1030	16.73	3.05	3.05	525	5.04	4.79	3.70	588	6.12	3.25	3.07	399	3.26
	V3(M)	8.72	6.17	2499	91.34	4.98	4.63	1426	30.89	6.82	5.33	1173	21.32	3.47	3.47	597	6.28	4.55	3.69	669	7.65	3.70	3.61	454	3.99
	V4 (H)	9.19	6.79	2633	101.19	5.24	5.04	1503	34.12	7.19	5.84	1236	23.53	3.66	3.66	629	6.86	5.74	4.80	705	8.39	3.89	3.89	478	4.33
FW520	V1(S)	9.77	7.39	2801	114.18	5.57	5.45	1597	38.76	6.74	6.35	1314	26.43	3.88	3.88	668	7.62	6.10	5.22	749	9.36	4.14	4.14	508	4.79
	V2 (L)	7.14	4.88	2045	37.79	4.08	3.69	1169	13.28	5.58	4.23	960	9.37	2.85	2.85	490	3.30	4.46	3.48	548	3.85	3.04	2.89	373	2.98
	V3(M)	8.68	6.11	2487	55.14	4.96	4.59	1423	19.02	6.79	5.29	1168	13.25	3.47	3.47	597	4.34	5.43	4.36	667	5.14	3.70	3.59	454	2.99
	V4 (H)	10.83	7.95	3103	85.00	6.20	5.93	1777	28.90	8.48	6.85	1459	19.93	4.34	4.34	746	6.13	6.78	5.64	833	7.36	4.62	4.62	567	5.04
FW522	V1(S)	12.78	9.63	3662	117.47	7.31	7.13	2096	39.61	10.08	8.28	1720	27.16	5.12	5.12	810	8.06	8.00	6.82	983	9.75	5.45	5.45	669	4.16
	V2 (L)	8.06	5.58	2311	47.83	4.61	4.21	1321	16.57	6.31	4.84	1085	11.61	3.22	3.22	553	3.89	5.04	3.99	619	4.59	3.43	3.29	421	2.73
	V3(M)	9.88	7.04	2931	70.98	5.65	5.28	1619	24.22	7.73	6.08	1330	16.78	3.95	3.95	679	5.28	6.18	5.01	759	6.31	4.20	4.12	516	3.94
	V4 (H)	13.22	10.08	3789	125.67	8.56	7.74	2167	42.25	13.55	8.66	1780	28.97	5.28	5.28	529	5.29	6.09	5.52	828	7.13	1017	10.13	5.63	6.91
FW524	V1(S)	14.22	11.25	4138	155.25	8.42	8.30	2431	51.97	11.52	9.67	1881	35.56	5.88	5.88	1012	10.26	9.21	7.95	1137	12.53	6.27	6.27	700	6.45

Capacity tables

8 - 1 Cooling Capacity Tables

FWE-FF

Air Temperature		COOLING 4 PIPE @ 0 ESP																																			
		DB:18°C - WB:15°C												DB:18°C - WB:15°C																							
		Water Temperature		ΔT=3												ΔT=5																					
Delta T °C		Water In / Out																																			
		5°C - 8°C				11°C - 14°C				7°C - 12°C				12°C - 17°C				6°C - 13°C				10°C - 17°C															
Model / Fan Speed		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd												
		kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa												
FWE04	FIA/BIF	V1 (SL)	0.89	0.68	254	9.54	0.20	0.20	58	2.72	0.56	0.49	96	3.52	0.06	0.06	11	2.09	0.33	0.28	40	2.43	0.09	0.09	11	2.09											
	FIA/BIF	V2 (L)	1.42	1.11	408	15.16	0.28	0.28	81	3.17	0.77	0.68	132	4.51	0.09	0.09	16	2.14	0.45	0.39	55	2.67	0.13	0.13	16	2.14											
	FIA/BIF	V3 (M)	1.62	1.29	464	19.60	0.33	0.33	96	3.50	0.90	0.80	155	5.26	0.11	0.11	20	2.18	0.53	0.47	65	2.85	0.15	0.15	19	2.17											
	FIA/BIF	V4 (H)	1.62	1.29	464	24.36	0.38	0.38	109	3.84	1.03	0.93	177	6.06	0.13	0.13	22	2.21	0.60	0.54	74	3.03	0.17	0.17	21	2.20											
FWE05	FIA/BIF	V1 (SL)	0.97	0.71	277	5.35	0.22	0.22	64	1.18	0.61	0.51	105	1.77	0.07	0.07	13	0.61	0.36	0.30	44	0.94	0.10	0.10	12	0.61											
	FIA/BIF	V2 (L)	1.37	1.02	391	8.77	0.32	0.32	92	1.57	0.87	0.74	149	2.51	0.11	0.11	19	0.68	0.51	0.43	63	1.17	0.15	0.15	18	0.67											
	FIA/BIF	V3 (M)	1.66	1.25	476	11.84	0.40	0.40	113	1.89	1.06	0.91	182	3.14	0.14	0.14	24	0.73	0.62	0.53	77	1.35	0.18	0.18	23	0.71											
	FIA/BIF	V4 (H)	1.99	1.51	572	15.85	0.48	0.48	137	2.29	1.27	1.10	219	3.93	0.17	0.17	30	0.79	0.75	0.65	92	1.57	0.23	0.23	28	0.77											
FWE06	FIA/BIF	V1 (SL)	1.35	1.00	387	8.61	0.31	0.31	89	1.53	0.86	0.73	147	2.47	0.10	0.10	18	0.66	0.50	0.42	61	1.15	0.14	0.14	17	0.66											
	FIA/BIF	V2 (L)	1.75	1.34	503	12.90	0.41	0.41	118	1.97	1.12	0.97	192	3.34	0.14	0.14	24	0.73	0.65	0.57	80	1.40	0.19	0.19	23	0.72											
	FIA/BIF	V3 (M)	2.18	1.67	626	18.39	0.52	0.52	148	2.49	1.39	1.21	239	4.40	0.18	0.18	31	0.80	0.82	0.71	101	1.70	0.24	0.24	30	0.78											
	FIA/BIF	V4 (M)	2.33	1.79	668	20.48	0.55	0.55	159	2.68	1.49	1.30	255	4.79	0.20	0.20	34	0.83	0.87	0.76	107	1.80	0.26	0.26	32	0.81											
FWE08	FIA/BIF	V1 (SL)	2.61	2.01	749	24.80	0.62	0.62	179	3.06	1.67	1.45	286	5.60	0.22	0.22	38	0.88	0.98	0.85	121	2.01	0.29	0.29	36	0.85											
	FIA/BIF	V2 (L)	3.63	2.80	1076	36.38	0.88	0.88	250	4.40	2.47	2.14	418	8.40	0.33	0.33	51	1.47	1.61	1.51	175	2.91	0.42	0.42	50	1.47											
	FIA/BIF	V3 (M)	4.27	3.30	1253	42.17	1.04	1.04	298	5.13	2.79	2.45	479	9.53	0.37	0.37	63	1.64	1.84	1.64	202	3.33	0.48	0.48	60	3.63											
	FIA/BIF	V4 (H)	5.01	3.71	1436	51.28	1.19	1.19	341	5.58	3.19	2.70	549	11.02	0.42	0.42	72	1.88	2.18	1.98	231	3.95	0.55	0.55	68	6.65											
FWE10	FIA/BIF	V1 (SL)	2.56	1.89	734	15.18	0.61	0.61	174	2.69	1.63	1.38	281	5.05	0.21	0.21	36	1.64	0.96	0.81	118	2.17	0.28	0.28	34	1.63											
	FIA/BIF	V2 (L)	3.22	2.44	922	22.32	0.77	0.77	220	3.22	1.77	1.57	353	5.24	0.27	0.27	47	1.70	1.21	1.04	148	2.44	0.36	0.36	44	1.68											
	FIA/BIF	V3 (M)	4.17	3.56	1273	30.25	0.95	0.85	243	3.51	2.27	1.98	390	5.94	0.30	0.30	52	1.72	1.34	1.16	164	2.59	0.40	0.40	49	1.72											
	FIA/BIF	V4 (H)	4.84	3.03	1020	30.52	0.91	0.91	261	3.77	2.45	2.19	421	6.57	0.32	0.32	55	1.74	1.44	1.28	177	2.72	0.42	0.42	52	1.74											
FWE12	FIA/BIF	V1 (SL)	1.76	1.42	505	7.88	0.41	0.41	116	1.25	1.02	0.92	124	0.13	0.13	23	0.60	0.65	0.59	80	0.95	0.18	0.18	22	0.60												
	FIA/BIF	V2 (L)	2.61	2.05	747	15.20	0.62	0.62	177	1.86	1.66	1.48	285	3.35	0.22	0.22	37	0.68	0.98	0.87	120	1.28	0.29	0.29	35	0.67											
	FIA/BIF	V3 (M)	3.31	2.51	949	23.19	0.79	0.79	226	2.48	2.11	1.82	363	4.72	0.28	0.28	49	0.74	1.24	1.07	153	1.60	0.37	0.37	46	0.73											
	FIA/BIF	V4 (M)	3.71	2.81	1062	28.45	0.89	0.89	254	2.87	2.36	2.04	407	5.60	0.32	0.32	55	0.78	1.39	1.20	171	1.80	0.42	0.42	51	0.78											
FWE14	FIA/BIF	V1 (SL)	4.09	3.15	1172	34.03	0.98	0.98	280	3.26	2.61	2.28	448	6.52	0.35	0.35	60	0.82	1.54	1.34	189	2.00	0.46	0.46	56	0.79											
	FIA/BIF	V2 (L)	3.62	2.54	1036	16.91	0.85	0.85	245	3.60	2.30	1.86	396	3.21	0.30	0.30	51	0.80	1.35	1.09	166	1.10	0.40	0.40	49	0.79											
	FIA/BIF	V3 (M)	4.37	3.07	1253	24.17	1.04	1.04	298	5.13	2.79	2.25	479	9.53	0.37	0.37	63	1.64	1.84	1.62	202	3.33	0.48	0.48	60	3.63											
	FIA/BIF	V4 (H)	5.29	4.10	1516	34.71	1.25	1.25	359	5.78	3.37	2.97	579	9.96	0.44	0.44	76	0.68	1.98	1.74	243	1.65	0.58	0.58	72	0.67											
FWE16	FIA/BIF	V1 (SL)	5.64	4.43	1616	39.22	1.33	1.33	381	6.04	3.59	3.20	617	10.64	0.46	0.46	80	0.69	2.11	1.87	259	1.78	0.61	0.61	75	0.68											
	FIA/BIF	V2 (L)	5.85	2.72	1013	18.99	0.92	0.92	262	1.81	2.45	1.99	422	5.34	0.33	0.33	56	0.62	1.44	1.17	177	1.17	0.43	0.43	53	0.61											
	FIA/BIF	V3 (L)	4.61	3.30	1320	26.66	1.10	1.10	315	2.31	2.94	2.42	505	4.74	0.39	0.39	68	0.65	1.73	1.42	213	1.41	0.52	0.52	63	0.64											
	FIA/BIF	V4 (M)	5.24	3.93	1502	34.11	1.25	1.25	358	5.77	3.34	2.86	575	9.96	0.45	0.45	77	0.68	1.97	1.68	242	1.64	0.59	0.59	72	0.67											
FWE18	FIA/BIF	V1 (SL)	5.52	4.31	1583	37.69	1.31	1.31	377	5.98	3.52	3.12	605	10.64	0.47	0.47	80	0.70	2.07	1.83	255	1.74	0.61	0.61	75	0.68											
	FIA/BIF	V2 (L)	5.87	4.69	1682	42.39	1.39	1.39	399	6.25	3.74	3.28	643	11.04	0.49	0.49	84	0.71	2.20	1.98	270	1.88	0.65	0.65	79	0.69											
	FIA/BIF	V3 (L)	6.30	5.12	1821	46.58	1.47	1.47	429	6.77	4.01	3.48	702	12.04	0.51	0.51	90	0.73	2.36	2.10	290	2.04	0.68	0.68	81	0.71											
	FIA/BIF	V4 (M)	6.52	5.06	1871	38.11	1.59	1.59	455	7.00	4.18	3.68	718	12.04	0.59	0.59	102	1.14	2.48	2.18	305	1.95	0.77	0.77	94	1.12											
FWE20	FIA/BIF	V1 (SL)	7.70	6.13	2207	43.75	1.88	1.88	537	9.44	5.44	4.84	847	15.56	0.70	0.70	121	1.18	2.93	2.63	359	2.28	0.91	0.91	111	1.16											
	FIA/BIF	V2 (L)	8.65	6.56	2391	48.23	1.77	1.77	534	10.24	6.00	5.34	947	17.04	0.72	0.72	130	1.08	3.13	2.83	411	2.55	0.95	0.95	111	1.07											
	FIA/BIF	V3 (L)	8.64	6.49	2383	47.71	1.44	1.44	412	7.66	4.86	4.30	727	13.42	0.68	0.68	91	1.12	2.25	1.93	277	1.79	0.69	0.69	84	1.10											
	FIA/BIF	V4 (M)	7.15	5.61	2050	37.97	1.73	1.73	497	8.57	5.07	4.47	787	13.42	0.64	0.64	110	1.16	2.71	2.41	333	2.11	0.83	0.83	102	1.14											
FWE24	FIA/BIF	V1 (SL)	7.96	6.41	2282	46.88	1.93	1.93	553	8.59	5.09	4.63	876	15.56	0.71	0.71	123	1.19	3.02	2.74	371	2.36	0.92	0.92	114	1.17											
	FIA/BIF	V2 (L)	8.86	7.15	2541	57.46	2.15	2.15	615	9.54	5.67	5.17	975	17.04	0.79	0.79	136	1.23	3.36	3.05	412	2.66	1.03	1.03	126	1.20											

SYMBOLS

Tc = TOTAL COOLING CAPACITY

Sc = SENSIBLE COOLING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150139B

FWE-FT

Air Temperature		COOLING 2 PIPE @ 0 ESP																																					
		DB:33°C - WB: 26°C																																					
Water Temperature		Delta T °C		ΔT=3												ΔT=5												ΔT=7											
		Water In / Out		5 °C - 8 °C				11 °C - 14 °C				7 °C - 12 °C				13 °C - 18 °C				6 °C - 13 °C				10 °C - 17 °C															
Model / Fan Speed		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd										
		kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa										
FWE04	FIA/BIT	V1 (SL)	2.42	1.01	694	49.45	1.77	0.94	507	28.31	2.09	0.98	360	16.00	1.44	0.96	247	9.18	1.85	0.89	227	8.21	1.48	0.87	182	6.24													
	FIA/BIT	V2 (L)	3.35	1.39	961	90.26	2.45	1.31	703	50.55	2.90	1.36	498	27.45	1.99	1.33	343	14.85	2.57	1.23	315	13.04	2.05	1.21	252	9.44													
	FIA/BIT	V3 (M)	4.94	1.98	1130	122.49	2.88	1.57	826	68.05	3.40	1.63	585	36.42	2.34	1.59	403	19.25	3.02	1.48	270	16.78	2.41	1.45	207	11.90													
	FIA/BIT	V4 (H)	4.48	1.99	1283	156.11	3.27	1.84	938	86.96	3.87	1.93	665	45.73	2.66	1.86	458	23.79	3.43	1.75	421	20.64	2.74	1.70	337	14.44													
FWE05	FIA/BIT	V1 (SL)	2.53	0.92	725	23.46	1.85	0.89	529	14.00	2.18	0.92	375	8.24	1.50	0.93	258	4.86	1.93	0.83	237	4.35	1.55	0.83	190	3.30													
	FIA/BIT	V2 (L)	3.75	1.44	1074	46.45	2.74	1.38	785	26.92	3.24	1.42	557	15.17	2.23	1.42	383	8.50	2.87	1.29	352	7.50	2.30	1.28	282	5.48													
	FIA/BIT	V3 (M)	4.61	1.78	1321	67.38	3.37	1.70	967	38.56	3.98	1.76	685	21.34	2.75	1.75	472	11.68	3.53	1.59	433	10.23	2.83	1.58	347	7.34													
	FIA/BIT	V4 (H)	5.52	2.14	1583	93.85	4.04	2.04	1159	53.21	4.77	2.10	821	29.02	3.29	2.10	566	15.60	4.23	1.91	520	13.59	3.39	1.90	416	9.62													
FWE06	FIA/BIT	V1 (SL)	3.70	1.35	1059	45.34	2.70	1.31	774	26.24	3.19	1.34	549	14.83	2.19	1.36	377	8.30	2.83	1.22	347	7.34	2.26	1.22	278	5.36													
	FIA/BIT	V2 (L)	4.87	1.68	1310	62.61	3.57	1.61	1002	42.14	4.24	1.72	724	23.42	3.04	1.72	488	12.55	3.73	1.68	458	10.78	2.41	1.45	370	7.92													
	FIA/BIT	V3 (M)	6.02	2.33	1727	110.15	4.41	2.22	1263	62.13	5.20	2.29	869	37.00	3.59	2.29	617	17.94	4.61	2.08	580	15.61	3.68	2.07	454	9.07													
	FIA/BIT	V4 (H)	6.39	2.48	1831	122.81	4.67	2.36	1339	69.05	5.52	2.44	949	37.33	3.80	2.43	654	19.77	4.89	2.21	607	17.17	4.32	2.40	581	12.02													
FWE07	FIA/BIT	V1 (SL)	4.70	2.78	2160	147.09	5.15	2.64	1475	82.41	6.08	2.73	1045	44.26	4.19	2.71	720	23.24	5.39	2.48	662	20.14	4.31	2.45	530	14.01													
	FIA/BIT	V2 (L)	6.36	1.84	1250	50.21	3.19	1.57	914	27.01	3.77	1.62	648	13.87	2.60	1.63	446	7.06	3.34	1.47	410	6.11	2.67	1.47	328	4.31													
	FIA/BIT	V3 (M)	4.17	1.67	1067	100.54	4.51	2.27	1294	53.77	5.33	2.34	916	27.11	3.67	2.34	632	13.24	4.72	2.12	580	11.28	3.78	2.11	465	7.56													
	FIA/BIT	V4 (H)	8.06	3.19	2309	172.15	5.90	3.03	1690	91.92	6.96	3.13	1197	46.03	5.31	3.13	828	22.12	6.17	2.84	758	18.72	4.94	2.81	607	12.28													
FWE08	FIA/BIT	V1 (SL)	4.14	3.80	2619	121.67	6.69	3.57	1919	112.38	7.89	3.71	1358	59.25	5.44	3.84	936	28.30	6.00	3.36	859	23.91	5.60	3.30	688	15.57													
	FIA/BIT	V2 (L)	4.65	1.71	1334	43.14	3.40	1.65	975	24.56	4.02	1.70	691	13.72	2.76	1.71	475	7.77	3.66	1.54	437	6.56	1.54	350	5.19														
	FIA/BIT	V3 (M)	7.04	2.65	2019	93.54	5.15	2.54	1477	52.06	6.08	2.62	1046	27.84	4.24	2.64	722	14.74	5.39	2.37	662	12.83	4.32	2.37	531	9.11													
	FIA/BIT	V4 (H)	8.85	3.50	2536	144.64	6.48	3.33	1856	79.98	7.64	3.34	1314	41.99	5.27	3.42	907	21.66	6.77	3.12	832	18.71	5.43	3.09	667	12.97													
FWE09	FIA/BIT	V1 (SL)	9.74	3.93	2991	174.01	7.13	3.73	2043	95.67	8.41	3.87	1447	50.09	5.80	3.82	998	25.60	7.46	3.50	916	22.05	5.97	3.46	734	15.15													
	FIA/BIT	V2 (L)	10.43	4.44	2990	198.75	7.63	4.15	2188	100.01	9.01	4.33	1550	56.88	6.21	4.21	1069	28.89	7.99	3.91	981	24.04	6.90	3.83	786	16.98													
	FIA/BIT	V3 (M)	9.41	2.19	1408	48.38	3.59	2.02	1029	27.28	4.24	2.12	730	14.87	2.92	2.04	502	7.99	3.76	1.92	462	6.98	3.01	1.86	369	9.19													
	FIA/BIT	V4 (H)	7.27	2.09	1408	101.08	5.32	2.89	1525	56.14	6.28	3.00	1080	29.77	3.33	2.94	745	15.42	5.57	2.73	684	13.31	4.46	2.67	548	9.17													
FWE12	FIA/BIT	V3 (L1)	9.14	3.75	2619	156.40	6.69	3.54	1917	86.26	7.89	3.67	1358	45.22	5.45	3.61	937	23.03	7.00	3.32	859	19.78	5.61	3.27	689	13.47													
	FIA/BIT	V4 (M)	10.12	4.21	2902	190.55	7.41	3.95	2124	104.79	8.75	4.11	1504	54.70	6.03	4.03	1038	27.68	7.75	3.72	952	23.73	6.21	3.66	763	16.06													
	FIA/BIT	V5 (H)	10.99	4.60	3149	223.23	8.34	4.30	2305	122.49	9.49	4.49	1633	63.74	6.59	4.39	1128	32.09	8.41	4.06	1034	27.48	6.94	3.99	828	15.82													
	FIA/BIT	V6 (L)	9.68	3.29	2775	112.15	7.08	3.24	2029	60.98	8.36	3.29	1438	31.38	5.76	3.41	960	15.55	7.41	2.99	910	13.30	5.93	3.04	728	8.89													
FWE14	FIA/BIT	V2 (L)	11.83	4.02	3662	26.36	3.88	2.48	2481	9.00	4.02	2.48	1758	4.12	2.04	1.59	1211	22.66	9.08	3.66	1034	13.31	7.25	3.72	891	12.79													
	FIA/BIT	V3 (M)	13.62	5.10	3903	219.23	9.96	4.95	2855	118.54	11.76	5.09	2023	60.52	8.11	5.11	1394	29.57	10.42	4.62	1280	25.16	8.34	4.61	1025	16.57													
	FIA/BIT	V4 (H)	14.40	5.95	4126	244.61	10.53	5.60	3018	112.18	12.43	5.82	2138	67.41	8.57	5.71	1474	32.87	11.02	5.27	1353	29.75	8.82	5.18	1084	18.38													
	FIA/BIT	V5 (H1)	15.35	6.50	4399	277.60	11.23	6.08	3217	149.88	13.26	6.34	2280	76.35	9.13	6.17	1571	37.15	11.75	5.73	1443	31.57	9.40	5.51	1155	20.27													
FWE16	FIA/BIT	V1 (SL)	10.29	3.56	2949	126.33	7.53	3.49	2157	68.88	8.38	3.55	1528	35.25	6.12	3.66	1053	17.42	7.87	3.23	967	14.88	6.30	3.27	774	9.92													
	FIA/BIT	V2 (L)	12.44	4.42	3566	183.45	9.10	4.31	2609	99.34	10.75	4.41	1848	50.81	7.41	4.50	1274	24.92	9.52	4.40	1170	21.21	7.63	4.03	937	14.03													
	FIA/BIT	V3 (L1)	12.22	5.51	4077	238.92	10.41	5.26	2893	129.17	12.29	5.43	2113	65.87	8.47	5.42	1457	32.15	10.89	4.92	1337	27.33	8.72	4.89	1071	17.99													
	FIA/BIT	V4 (M)	15.00	6.28	4300	265.38	10.98	5.89	3146	143.39	12.96	6.13	2226	73.05	8.93	5.94	1536	35.60	11.48	5.55	1411	30.24	9.02	5.44	1130	18.97													
FWE20	FIA/BIT	V5 (H)	15.95	6.97	4573	299.71	11.67	6.47	3345	161.80	13.78	6.77	2370	82.36	9.90	6.54	1633	40.05	12.21	6.12	1500	34.01	9.78	5.96	1221	22.30													
	FIA/BIT	V6 (L)	11.35	4.13	3254	93.26	8.31	4.00	2381	50.74	9.81	4.10	1687	26.20	6.76	4.17	1163	13.17	8.69	3.72	1068	11.67	6.96	3.74	855	7.69													
	FIA/BIT	V7 (M)	14.07	5.40	4034	142.33	10.30	5.17	2953	77.16	12.16	5.33	2091	39.49	8.39	5.34	1443	19.55	10.78	4.83	1324	16.62	8.64	4.81	1051	11.17													
	FIA/BIT	V8 (H)	17.89	7.41	5287	238.67	11.90	6.98	3745	122.98	15.46	7.09	2617	93.76	7.11	6.85	1942	33.70	16.55	6.88	1705	30.45	11.45	6.81	1300	21.90													
FWE24	FIA/BIT	V4 (M)	21.35	9.26	6119	324.57	15.63	8.62	4481	175.14	18.45	9.00	3173	88.76	12.73	8.74	2190	43.15	16.35	8.14	2009	36.55	13.11	7.96	1610	24.00													
	FIA/BIT	V5 (L)	12.86	4.79	3688	119.04	9.41	4.62	2698	84.17	11.11	4.74	1911	33.17	7.66	4.79	1317	16.50	9.85	4.30	1209	14.11	7.89	4.31	969	5.91													
	FIA/BIT	V2 (L)	16.00	8.28	5587	183.18	11.71	5.98	3358	99.07	13.83	6.18	2378	50.53	9.54	6.15	1640	24.82	12.25	5.60	1505	21.13	9.82	5.56	1206	10.44													
	FIA/BIT	V3 (L1)	14.98	8.23	5583	270.30	14.26	7.71	4087	145.90	16.83	8.03	2894	74.08	11.61	7.84	1997	36.10	14.92	7.27	1833	30.63	11.95	7.12	1426	20.17													
FWE24	FIA/BIT	V4 (M)	21.83	9.66	6256	338.81	15.98	8.96	4581	187.73	18.86	9.37	3244	92.59	13.02	9.05	2239	44.97	16.72	8.48	2054	38.09	13.04	8.25	1646	20.98													
	FIA/BIT	V5 (H)	24.45	10																																			

8 Capacity tables

8 - 1 Cooling Capacity Tables

FWE-FT

COOLING 2 PIPE @ 0 ESP																															
Air Temperature		Delta T °C		DB:27°C - WB:19°C																											
Water Temperature		Water In / Out		ΔT=3								ΔT=5								ΔT=7											
		5 °C - 8 °C				11 °C - 14 °C				7 °C - 12 °C				13 °C - 18 °C				6 °C - 13 °C				10 °C - 17 °C									
Model / Fan Speed		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd		
		kW	kW	l/h	l/h	kW	kW	l/h	l/h	kPa	kPa	kW	kW	l/h	l/h	kPa	kPa	kW	kW	l/h	l/h	kPa	kPa	kW	kW	l/h	l/h	kPa	kPa		
FWE04	F/A/B/T	V1 (SL)	1.51	1.10	433	21.62	0.86	0.81	245	9.09	1.18	0.94	203	7.09	0.59	0.59	102	3.66	0.94	0.77	115	4.01	0.63	0.63	78	3.10					
	F/A/B/T	V2 (L)	2.09	1.52	600	38.02	1.19	1.13	341	14.74	1.64	1.31	281	11.01	0.83	0.83	142	4.82	1.30	1.07	160	5.43	0.88	0.88	108	3.83					
	5V1- (-/R)	V3 (M)	2.46	1.81	840	50.14	1.34	1.24	402	19.81	2.56	2.18	341	14.74	1.18	1.18	168	5.70	1.53	1.25	174	6.14	1.14	1.14	123	4.64					
FWE05	F/A/B/T	V1 (SL)	1.58	1.06	452	10.90	0.89	0.80	256	4.82	1.23	0.92	212	3.76	0.62	0.62	107	1.79	0.98	0.76	120	2.01	0.66	0.63	81	1.42					
	F/A/B/T	V2 (L)	2.34	1.63	671	20.61	1.33	1.22	382	8.47	1.83	1.41	315	6.38	0.93	0.93	160	2.70	1.46	1.16	179	3.08	0.99	0.95	122	2.03					
	5V1- (-/R)	V3 (M)	2.88	2.01	826	29.32	1.64	1.51	471	11.65	2.25	1.74	387	8.64	1.15	1.15	197	3.45	1.80	1.43	221	3.98	1.22	1.18	150	2.52					
FWE06	F/A/B/T	V1 (SL)	1.58	1.06	452	10.90	0.89	0.80	256	4.82	1.23	0.92	212	3.76	0.62	0.62	107	1.79	0.98	0.76	120	2.01	0.66	0.63	81	1.42					
	F/A/B/T	V2 (L)	2.34	1.63	671	20.61	1.33	1.22	382	8.47	1.83	1.41	315	6.38	0.93	0.93	160	2.70	1.46	1.16	179	3.08	0.99	0.95	122	2.03					
	5V1- (-/R)	V3 (M)	2.88	2.01	826	29.32	1.64	1.51	471	11.65	2.25	1.74	387	8.64	1.15	1.15	197	3.45	1.80	1.43	221	3.98	1.22	1.18	150	2.52					
FWE08	F/A/B/T	V1 (SL)	2.30	1.56	660	20.08	1.31	1.17	375	8.22	1.80	1.35	309	6.23	0.91	0.91	156	2.63	1.43	1.11	176	3.01	0.97	0.91	119	1.98					
	F/A/B/T	V2 (L)	3.04	2.12	872	32.25	1.73	1.59	497	12.67	2.38	1.83	409	9.37	1.21	1.21	208	3.67	1.90	1.51	233	4.26	1.29	1.24	158	2.67					
	5V1- (-/R)	V3 (M)	3.76	2.62	1079	46.82	2.15	1.97	615	17.87	2.94	2.27	506	13.03	1.50	1.50	257	4.84	2.35	1.87	289	5.66	1.59	1.54	196	3.42					
FWE10	F/A/B/T	V1 (SL)	3.90	2.78	1144	51.98	2.28	2.09	653	19.69	3.12	2.41	537	14.31	1.59	1.59	273	5.24	2.49	1.98	306	6.14	1.69	1.63	208	3.68					
	F/A/B/T	V2 (L)	4.40	3.10	1260	61.85	2.51	2.33	719	23.16	3.44	2.68	591	16.74	1.75	1.75	301	5.99	2.75	2.21	337	7.05	1.86	1.81	229	4.15					
	5V1- (-/R)	V3 (M)	5.71	4.12	1638	64.13	2.88	2.67	825	22.10	3.94	3.08	678	15.15	2.01	2.01	346	4.66	3.15	2.53	387	5.56	2.14	2.09	263	3.19					
FWE12	F/A/B/T	V1 (SL)	4.90	3.57	1832	106.55	3.15	2.88	1037	35.45	4.73	3.77	854	23.16	2.43	2.43	435	6.36	3.96	3.26	487	7.59	2.69	2.68	331	4.23					
	F/A/B/T	V2 (L)	6.33	4.59	2438	136.46	3.62	3.43	1307	44.73	5.14	4.02	1085	27.44	3.38	3.38	581	6.00	5.31	4.18	652	7.32	3.60	3.45	442	5.82					
	5V1- (-/R)	V3 (M)	8.51	6.04	3022	166.97	4.21	3.94	1721	53.11	6.44	5.02	1289	36.12	3.57	3.57	614	6.59	5.61	4.41	690	8.07	3.81	3.78	468	6.18					
FWE14	F/A/B/T	V1 (SL)	5.30	3.90	1586	93.37	3.16	2.93	906	21.63	3.33	2.64	744	15.52	2.21	2.21	379	5.74	3.46	2.78	425	6.65	2.39	2.29	289	4.17					
	F/A/B/T	V2 (L)	6.59	4.36	1745	71.04	3.48	3.26	997	25.56	4.76	3.76	819	18.22	2.43	2.43	418	6.50	3.81	3.10	468	7.59	2.59	2.55	318	4.61					
	5V1- (-/R)	V3 (M)	8.08	1869	8082	372	356	1067	28.82	5.10	4.13	877	20.46	2.60	2.60	447	7.12	4.08	3.40	501	8.36	2.77	2.77	340	5.04						
FWE16	F/A/B/T	V1 (SL)	3.07	2.32	879	20.57	1.74	1.70	500	7.92	2.39	1.99	412	5.85	1.21	1.21	208	2.32	1.91	1.63	235	2.67	1.29	1.29	159	1.72					
	F/A/B/T	V2 (L)	4.55	3.34	1303	41.93	2.60	2.49	744	15.39	3.56	2.88	612	11.03	1.81	1.81	312	3.89	2.84	2.37	349	4.58	1.93	1.93	237	2.71					
	5V1- (-/R)	V3 (L)	6.11	4.12	1638	64.13	3.27	3.08	936	23.02	4.47	3.56	769	16.29	2.28	2.28	392	5.44	3.57	2.93	439	6.46	2.43	2.40	298	3.67					
FWE18	F/A/B/T	V1 (SL)	6.33	4.59	1815	77.77	3.62	3.43	1037	27.65	4.95	3.96	852	19.48	2.53	2.53	435	6.36	3.96	3.26	487	7.59	2.69	2.68	331	4.23					
	F/A/B/T	V2 (L)	6.87	5.01	1969	90.77	3.93	3.73	1125	32.04	5.38	4.32	925	22.51	2.74	2.74	471	7.21	4.30	3.55	528	8.65	2.92	2.91	359	4.78					
	5V1- (-/R)	V3 (M)	8.04	3.93	1732	44.85	3.44	3.00	986	15.43	4.72	3.42	812	10.81	2.39	2.39	412	3.41	3.77	2.82	451	5.25	2.34	2.33	229	3.17					
FWE20	F/A/B/T	V1 (SL)	7.39	4.80	2119	106.21	4.21	3.87	1208	22.53	5.78	4.18	994	15.65	2.94	2.94	505	4.73	4.61	3.45	567	5.75	3.13	2.87	384	5.29					
	F/A/B/T	V2 (L)	8.51	5.86	2438	136.46	4.75	4.45	1390	39.42	6.65	5.08	1144	20.34	3.38	3.38	581	6.00	5.31	4.18	652	7.32	3.60	3.45	442	5.82					
	5V1- (-/R)	V3 (M)	10.31	7.03	2857	151.85	5.13	4.85	1469	42.70	7.03	5.61	1209	22.58	3.57	3.57	614	6.59	5.61	4.41	690	8.07	3.81	3.78	468	6.18					
FWE22	F/A/B/T	V1 (SL)	9.59	7.03	2747	109.55	5.46	5.22	1566	36.94	7.49	6.06	1289	25.48	3.81	3.81	654	7.36	5.98	4.98	735	9.04	4.06	4.06	498	6.53					
	F/A/B/T	V2 (L)	10.31	7.42	2857	118.69	5.68	5.51	1629	39.86	7.79	6.40	1340	27.44	3.96	3.96	681	7.90	6.22	5.26	765	9.70	4.22	4.22	519	6.95					
	5V1- (-/R)	V3 (M)	12.61	8.11	3252	126.59	5.94	5.61	1837	43.62	8.40	6.80	1504	30.93	4.30	4.30	739	8.13	6.65	5.55	842	10.42	4.55	4.55	570	7.82					
FWE24	F/A/B/T	V1 (SL)	11.80	8.10	3259	129.75	6.46	6.06	1836	30.77	8.76	6.99	1507	21.40	4.48	4.48	770	6.46	7.01	5.76	861	11.78	4.77	4.77	604	8.18					
	F/A/B/T	V2 (L)	13.36	9.49	3829	128.46	7.65	7.38	2192	43.22	10.46	8.56	1799	29.61	5.35	5.35	920	8.70	8.37	7.05	1028	10.56	5.70	5.70	700	5.54					
	5V1- (-/R)	V3 (M)	16.06	10.28	4515	143.99	7.81	7.51	2239	45.00	10.69	8.84	1839	30.83	5.46	5.46	939	9.01	8.55	7.28	1050	10.96	5.82	5.82	714	5.72					
FWE26	F/A/B/T	V1 (SL)	13.36	9.49	3829	128.46	7.65	7.38	2192	43.22	10.46	8.56	1799	29.61	5.35	5.35	920	8.70	8.37	7.05	1028	10.56	5.70	5.70	700	5.54					
	F/A/B/T	V2 (L)	14.01	9.84	4034	136.46	7.81	7.51	2315	46.59	11.15	9.15	1915	32.00	5.55	5.55	980	9.00	8.57	7.02	1088	11.16	5.90	5.90	750	5.84					
	5V1- (-/R)	V3 (M)	16.81	10.28	4515	143.99	8.15	7.85	2439	48.12	11.85	9.65	2015	34.42	5.85	5.85	1015	9.25	8.58	7.17	1136	12.42	6.51	6.51	780	6.72					

SYMBOLS

Tc = TOTAL COOLING CAPACITY

Sc = SENSIBLE COOLING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150135A

FWE-FT

COOLING 2 PIPE @ 0 ESP																																	
Air Temperature		Delta T °C		DB:18°C - WB:15°C																													
Water Temperature		Water In / Out		ΔT=3					ΔT=5					ΔT=7																			
		5 °C - 8 °C					11 °C - 14 °C					7 °C - 12 °C					12 °C - 17 °C					6 °C - 13 °C					10 °C - 17 °C						
Model / Fan Speed		Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd	Tc	Sc	Wf	Wpd
FW004		V1(SL)	0.90	0.69	259	9.78	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
		V2 (L)	1.25	0.96	360	16.00	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
		V3(M)	1.48	1.15	423	20.84	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
		V4(H)	1.68	1.34	481	25.83	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
		V1(SL)	0.94	0.68	270	5.17	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
		V2 (L)	1.41	1.04	403	9.15	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
		V3(M)	1.73	1.28	496	12.64	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
		V4(H)	2.08	1.54	596	16.94	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
		V1(SL)	1.38	0.99	395	8.89	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
		V2 (L)	1.83	1.35	524	13.76	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
		V3(M)	2.24	1.61	623	18.47	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
		V4(H)	2.60	1.97	887	21.77	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
		V1(SL)	1.48	1.04	403	9.15	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
		V2 (L)	2.32	1.71	665	14.58	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
		V3(M)	3.03	2.27	869	24.45	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
		V4(H)	3.44	2.64	985	31.28	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
		V1(SL)	1.74	1.25	498	8.80	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
		V2 (L)	2.65	1.93	759	16.02	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
		V3(M)	3.33	2.49	954	23.67	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
		V4(H)	3.96	2.78	1050	28.01	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
		V1(SL)	3.62	2.65	1124	31.61	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
		V2 (L)	5.14	4.47	1527	8.62	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
		V3(M)	2.84	2.13	784	16.84	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
		V4(M)	3.84	2.62	986	25.24	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
		V1(SL)	3.81	2.93	1092	30.37	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
		V2 (L)	5.13	4.19	1185	35.21	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
		V3(M)	3.63	2.51	1039	17.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
		V4(H)	4.44	3.07	1272	24.86	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
		V1(SL)	5.11	3.73	1444	32.49	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
		V2 (L)	5.40	4.13	1548	36.12	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
		V3(M)	5.76	4.45	1650	40.02	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
		V4(H)	6.31	3.86	1809	45.09	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
		V1(SL)	6.37	3.81	1339	27.37	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
		V2 (L)	5.34	3.95	1531	35.33	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
		V3(M)	5.63	4.34	1614	39.16	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
		V4(H)	5.99	4.72	1716	44.05	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
		V1(SL)	4.27	3.06	1224	14.44	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
		V2 (L)	5.30	3.90	1520	21.54	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
		V3(M)	6.74	5.16	1933	33.96	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64
		V4(H)	8.05	6.33	2308	47.75	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96

8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FF

HEATING 4 PIPE @ 0 ESP																			
Air Temperature				DB:25°C - WB:**°C															
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40 °C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd
		kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
FWE04 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	0.61	105	1.09	1.52	262	4.19	0.70	60	0.69	1.38	118	1.25	0.32	14	0.51	2.16	93	0.97
	V2 (L)	0.76	131	1.42	1.90	327	6.25	0.87	75	0.80	1.72	148	1.68	0.40	17	0.52	2.70	116	1.23
	V3 (M)	0.87	150	1.70	2.17	373	7.99	0.99	85	0.89	1.96	169	2.03	0.45	19	0.52	3.09	133	1.45
	V4 (H)	0.99	170	2.05	2.46	423	10.12	1.12	97	1.00	2.22	191	2.47	0.51	22	0.53	3.50	150	1.72
FWE05 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	0.62	107	1.11	1.56	268	4.30	0.71	61	0.70	1.41	121	1.28	0.33	14	0.51	2.22	95	0.98
	V2 (L)	0.78	134	1.45	1.94	334	6.42	0.89	76	0.81	1.76	151	1.71	0.41	17	0.52	2.76	119	1.25
	V3 (M)	0.89	153	1.74	2.22	381	8.21	1.02	87	0.90	2.01	173	2.08	0.46	20	0.52	3.16	136	1.48
	V4 (H)	1.01	173	2.09	2.51	432	10.40	1.15	99	1.02	2.27	195	2.53	0.53	23	0.53	3.58	154	1.75
FWE06 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	0.77	133	1.95	1.93	332	6.92	0.88	76	1.31	1.74	150	2.21	0.40	17	1.02	2.74	118	1.75
	V2 (L)	0.92	159	2.36	2.30	396	9.44	1.05	91	1.44	2.08	179	2.73	0.48	21	1.02	3.28	141	2.07
	V3 (L1)	1.07	185	2.83	2.68	460	12.40	1.22	105	1.60	2.42	208	3.33	0.56	24	1.03	3.81	164	2.44
	V4 (M)	1.12	193	3.00	2.80	481	13.45	1.28	110	1.65	2.53	217	3.55	0.58	25	1.03	3.98	171	2.57
FWE08 F(A/B)F (N/T/V) 5V1- (-/R)	V5 (H)	1.21	208	3.33	3.01	518	15.46	1.38	119	1.76	2.73	234	3.96	0.63	27	1.04	4.29	184	2.83
	V1 (SL)	1.14	196	2.80	2.84	488	7.46	1.30	112	2.17	2.56	221	3.05	0.59	25	1.83	4.03	173	2.61
	V2 (L)	1.38	237	3.24	3.44	592	10.03	1.57	135	2.31	3.11	268	3.60	0.72	31	1.85	4.89	210	2.95
	V3 (M)	1.69	290	3.90	4.21	724	14.00	1.93	166	2.54	3.81	328	4.44	0.88	38	1.86	5.99	258	3.48
FWE10 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	1.94	334	4.54	4.85	833	17.85	2.22	191	2.76	4.38	377	5.25	1.01	44	1.88	6.89	296	3.98
	V1 (SL)	1.33	229	3.35	3.33	572	9.71	1.52	131	2.48	3.01	259	3.69	0.70	30	2.04	4.73	204	3.08
	V2 (L)	1.62	278	3.93	4.03	693	13.19	1.84	159	2.68	3.64	313	4.43	0.84	36	2.06	5.73	246	3.54
	V3 (M)	1.86	321	4.53	4.65	800	16.81	2.13	183	2.89	4.21	362	5.19	0.97	42	2.07	6.61	284	4.02
FWE12 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	2.02	347	4.94	5.03	864	19.24	2.30	198	3.03	4.55	391	5.70	1.05	45	2.08	7.15	307	4.34
	V5(H1)	2.17	374	5.40	5.42	932	22.00	2.48	213	3.18	4.90	422	6.28	1.13	49	2.09	7.71	332	4.70
	V1 (SL)	1.35	233	3.89	3.38	580	10.43	1.54	133	3.00	3.05	262	4.24	0.71	30	2.54	4.80	206	3.61
	V2 (L)	1.63	281	4.48	4.08	701	13.95	1.87	160	3.20	3.69	317	4.98	0.85	37	2.56	5.80	249	4.08
FWE14 F(A/B)F (N/T/V) 5V1- (-/R)	V3 (L1)	1.88	324	5.08	4.70	808	17.60	2.15	185	3.41	4.25	365	5.75	0.98	42	2.57	6.68	287	4.56
	V4 (M)	2.03	350	5.49	5.07	873	20.06	2.32	200	3.54	4.59	395	6.27	1.06	46	2.58	7.22	310	4.88
	V5 (H)	2.19	377	5.95	5.47	941	22.84	2.50	215	3.70	4.95	425	6.85	1.14	49	2.59	7.78	334	5.25
	V1 (SL)	2.14	367	5.76	5.33	916	22.17	2.44	210	3.43	4.82	414	6.65	1.11	48	2.16	7.58	326	5.04
FWE16 F(A/B)F (N/T/V) 5V1- (-/R)	V2 (L)	2.54	437	7.11	6.33	1089	30.02	2.90	249	3.91	5.73	493	8.36	1.32	57	2.20	9.01	387	6.12
	V3 (M)	2.90	499	8.51	7.24	1245	38.18	3.31	285	4.41	6.55	563	10.12	1.51	65	2.24	10.30	443	7.24
	V4 (H)	3.07	529	9.23	7.66	1318	42.39	3.51	302	4.66	6.93	596	11.02	1.60	69	2.26	10.90	469	7.81
	V5(H1)	3.30	568	10.25	8.24	1417	48.41	3.77	324	5.01	7.45	641	12.31	1.72	74	2.29	11.72	504	8.62
FWE20 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	2.17	374	6.38	5.42	933	23.36	2.48	213	3.98	4.91	422	7.30	1.13	49	2.66	7.71	332	5.63
	V2 (L)	2.58	443	7.75	6.43	1105	31.33	2.94	253	4.46	5.81	500	9.03	1.34	58	2.71	9.14	393	6.73
	V3 (L1)	2.94	506	9.17	7.33	1261	39.59	3.36	289	4.96	6.63	570	10.81	1.53	66	2.75	10.43	448	7.86
	V4 (M)	3.11	535	9.90	7.76	1334	43.86	3.55	305	5.21	7.02	603	11.73	1.62	70	2.77	11.04	475	8.44
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V5 (H)	3.34	575	10.93	8.33	1433	49.94	3.81	328	5.57	7.54	648	13.03	1.74	75	2.79	11.85	510	9.26
	V1 (SL)	2.54	437	7.85	6.34	1090	34.05	2.90	249	3.69	5.73	493	9.38	1.32	57	0.99	9.02	388	6.61
	V2 (L)	2.98	513	9.96	7.44	1280	45.07	3.41	293	4.52	6.73	579	11.98	1.55	67	1.09	10.58	455	8.33
	V3 (M)	3.56	613	13.10	8.88	1528	61.81	4.07	350	5.72	8.04	691	15.87	1.86	80	1.23	12.64	543	10.87
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	4.05	696	16.07	10.10	1737	77.95	4.62	397	6.85	9.13	785	19.55	2.11	91	1.35	14.36	618	13.27
	V1 (SL)	2.78	479	8.97	6.94	1193	39.87	3.18	273	4.14	6.28	540	10.76	1.45	62	1.05	9.87	424	7.52
	V2 (L)	3.29	565	11.55	8.20	1409	53.49	3.75	322	5.13	7.41	637	13.95	1.71	74	1.17	11.66	501	9.61
	V3 (L1)	3.81	655	14.55	9.49	1632	69.65	4.34	374	6.27	8.59	738	17.66	1.98	85	1.29	13.50	580	12.04
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (M)	4.14	712	16.64	10.32	1775	81.08	4.72	406	7.06	9.33	803	20.27	2.16	93	1.38	14.68	631	13.73
	V5 (H)	4.49	773	19.03	11.20	1927	94.26	5.13	441	7.95	10.13	871	23.24	2.34	101	1.47	15.94	685	15.66

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150140B

8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FF

HEATING 4 PIPE @ 0 ESP																			
Air Temperature		DB:20°C - WB:**°C																	
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40°C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd
		kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
FWE04 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	0.90	155	1.79	1.75	301	5.38	0.93	80	0.84	1.61	138	1.53	0.55	24	0.53	2.39	103	1.07
	V2 (L)	1.12	193	2.51	2.19	376	8.11	1.16	99	1.03	2.00	172	2.10	0.69	30	0.55	2.99	128	1.39
	V3 (M)	1.28	220	3.12	2.50	429	10.42	1.32	114	1.19	2.29	197	2.59	0.79	34	0.56	3.41	147	1.66
	V4 (H)	1.45	250	3.86	2.83	487	13.24	1.50	129	1.39	2.59	223	3.18	0.89	38	0.58	3.87	166	1.99
FWE05 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	0.92	158	1.83	1.79	308	5.54	0.95	82	0.85	1.64	141	1.56	0.57	24	0.53	2.45	105	1.09
	V2 (L)	1.15	197	2.57	2.24	385	8.34	1.18	102	1.05	2.05	176	2.15	0.70	30	0.55	3.06	131	1.41
	V3 (M)	1.31	225	3.19	2.55	439	10.72	1.35	116	1.21	2.34	201	2.65	0.80	35	0.56	3.49	150	1.69
	V4 (H)	1.49	255	3.96	2.89	498	13.62	1.53	132	1.42	2.65	228	3.26	0.91	39	0.58	3.95	170	2.03
FWE06 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	1.14	196	3.07	2.22	382	8.84	1.17	101	1.55	2.03	175	2.65	0.70	30	1.05	3.03	130	1.91
	V2 (L)	1.36	234	3.95	2.65	456	12.18	1.40	121	1.78	2.43	209	3.35	0.84	36	1.07	3.62	156	2.31
	V3 (L1)	1.58	272	4.98	3.08	530	16.11	1.63	140	2.06	2.82	243	4.17	0.97	42	1.09	4.21	181	2.76
	V4 (M)	1.65	284	5.35	3.22	554	17.49	1.70	146	2.15	2.95	254	4.47	1.01	44	1.10	4.40	189	2.92
FWE08 F(A/B)F (N/T/V) 5V1- (-/R)	V5 (H)	1.78	306	6.05	3.47	597	20.16	1.84	158	2.34	3.18	273	5.03	1.09	47	1.12	4.74	204	3.24
	V1 (SL)	1.68	288	3.87	3.26	561	9.23	1.73	148	2.41	2.99	257	3.47	1.03	44	1.88	4.46	192	2.77
	V2 (L)	2.03	350	4.79	3.96	681	12.61	2.09	180	2.66	3.63	312	4.21	1.25	54	1.91	5.41	233	3.19
	V3 (M)	2.49	428	6.20	4.85	833	17.85	2.56	220	3.05	4.44	382	5.34	1.53	66	1.95	6.62	285	3.82
FWE10 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	2.86	492	7.57	5.58	959	22.95	2.95	254	3.43	5.11	440	6.44	1.76	76	1.99	7.62	328	4.44
	V1 (SL)	1.97	338	4.80	3.83	659	12.14	2.03	174	2.81	3.51	302	4.26	1.21	52	2.10	5.23	225	3.30
	V2 (L)	2.38	409	6.04	4.64	797	16.72	2.45	211	3.15	4.25	366	5.25	1.46	63	2.14	6.34	272	3.86
	V3 (M)	2.75	473	7.33	5.35	920	21.50	2.83	243	3.51	4.91	422	6.28	1.69	73	2.17	7.31	314	4.44
FWE12 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	2.97	511	8.19	5.79	995	24.72	3.06	263	3.75	5.30	456	6.97	1.82	78	2.20	7.91	340	4.83
	V5(H1)	3.20	551	9.17	6.24	1073	28.36	3.30	284	4.01	5.72	492	7.75	1.97	85	2.23	8.53	367	5.27
	V1 (SL)	1.99	343	5.38	3.88	668	12.92	2.06	177	3.33	3.56	306	4.82	1.22	53	2.60	5.31	228	3.84
	V2 (L)	2.41	414	6.63	4.69	807	17.56	2.48	213	3.68	4.30	370	5.83	1.48	64	2.64	6.41	276	4.40
FWE14 F(A/B)F (N/T/V) 5V1- (-/R)	V3 (L1)	2.78	477	7.93	5.41	930	22.39	2.86	246	4.04	4.96	426	6.87	1.70	73	2.68	7.39	318	4.99
	V4 (M)	3.00	516	8.80	5.84	1004	25.64	3.09	266	4.28	5.35	460	7.56	1.84	79	2.70	7.98	343	5.38
	V5 (H)	3.23	556	9.79	6.29	1082	29.32	3.33	286	4.55	5.77	496	8.35	1.98	85	2.73	8.60	370	5.83
	V1 (SL)	3.15	542	9.56	6.13	1055	28.35	3.24	279	4.32	5.62	483	8.15	1.93	83	2.34	8.38	360	5.63
FWE16 F(A/B)F (N/T/V) 5V1- (-/R)	V2 (L)	3.74	644	12.40	7.29	1254	38.68	3.86	332	5.13	6.68	575	10.43	2.30	99	2.44	9.96	428	6.94
	V3 (M)	4.28	736	15.33	8.33	1433	49.42	4.41	379	5.97	7.64	657	12.79	2.63	113	2.54	11.38	489	8.28
	V4 (H)	4.53	779	16.85	8.82	1517	54.97	4.67	401	6.39	8.09	695	14.01	2.78	120	2.59	12.05	518	8.98
	V5(H1)	4.87	837	19.00	9.48	1630	62.90	5.02	431	7.00	8.69	747	15.74	2.99	128	2.65	12.96	557	9.96
FWE20 F(A/B)F (N/T/V) 5V1- (-/R)	V1 (SL)	3.20	551	10.31	6.24	1073	29.75	3.30	284	4.89	5.72	492	8.85	1.97	85	2.85	8.53	367	6.24
	V2 (L)	3.80	653	13.19	7.40	1272	40.24	3.91	337	5.72	6.78	583	11.17	2.33	100	2.95	10.11	435	7.57
	V3 (L1)	4.33	745	16.16	8.44	1451	51.13	4.46	384	6.56	7.74	665	13.56	2.66	114	3.05	11.53	496	8.93
	V4 (M)	4.59	789	17.69	8.93	1536	56.75	4.72	406	6.99	8.19	704	14.79	2.82	121	3.10	12.20	525	9.63
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V5 (H)	4.92	847	19.87	9.59	1649	64.77	5.07	436	7.60	8.79	756	16.54	3.02	130	3.17	13.10	563	10.63
	V1 (SL)	3.75	644	14.18	7.30	1255	43.52	3.86	332	5.33	6.69	575	11.87	2.30	99	1.45	9.97	429	7.63
	V2 (L)	4.40	756	18.38	8.56	1473	57.87	4.53	390	6.66	7.85	675	15.29	2.70	116	1.66	11.70	503	9.67
	V3 (M)	5.25	903	24.67	10.22	1758	79.73	5.41	465	8.60	9.37	806	20.41	3.22	139	1.95	13.97	601	12.70
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (H)	5.97	1026	30.68	11.62	1999	100.83	6.15	529	10.43	10.66	916	25.29	3.66	158	2.21	15.88	683	15.57
	V1 (SL)	4.10	705	16.40	7.99	1374	51.10	4.23	363	6.04	7.32	630	13.68	2.52	108	1.56	10.91	469	8.71
	V2 (L)	4.84	833	21.55	9.43	1622	68.86	4.99	429	7.64	8.65	744	17.88	2.97	128	1.80	12.89	554	11.20
	V3 (L1)	5.61	965	27.60	10.92	1879	89.98	5.78	497	9.49	10.02	861	22.79	3.44	148	2.07	14.93	642	14.10
FWE24 F(A/B)F (N/T/V) 5V1- (-/R)	V4 (M)	6.10	1049	31.84	11.88	2042	104.93	6.28	540	10.78	10.89	936	26.24	3.74	161	2.26	16.23	698	16.12
	V5 (H)	6.62	1139	36.72	12.90	2218	122.19	6.82	587	12.24	11.82	1017	30.19	4.06	175	2.46	17.62	758	18.43

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150141B

8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FF

HEATING 4 PIPE @ 0 ESP																			
Air Temperature		DB:18°C - WB:**°C																	
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40 °C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa
FWE04 F(A)/B(F) (N/T/V) 5V1- (-R)	V1 (SL)	0.98	168	2.03	1.83	315	5.85	1.01	87	0.91	1.69	145	1.63	0.64	27	0.54	2.48	106	1.11
	V2 (L)	1.22	210	2.88	2.29	394	8.84	1.26	108	1.13	2.11	181	2.26	0.79	34	0.56	3.09	133	1.45
	V3 (M)	1.40	240	3.60	2.61	450	11.38	1.44	124	1.32	2.40	207	2.80	0.91	39	0.58	3.53	152	1.74
	V4 (H)	1.58	272	4.49	2.96	509	14.47	1.63	140	1.56	2.72	234	3.45	1.03	44	0.60	4.00	172	2.09
FWE05 F(A)/B(F) (N/T/V) 5V1- (-R)	V1 (SL)	1.00	172	2.08	1.88	323	6.02	1.03	89	0.92	1.73	148	1.67	0.65	28	0.54	2.53	109	1.13
	V2 (L)	1.25	215	2.95	2.34	403	9.09	1.29	111	1.15	2.15	185	2.32	0.81	35	0.56	3.16	136	1.48
	V3 (M)	1.43	246	3.70	2.67	460	11.70	1.47	126	1.35	2.46	211	2.87	0.93	40	0.58	3.61	155	1.77
	V4 (H)	1.62	278	4.60	3.03	521	14.88	1.67	143	1.59	2.79	240	3.54	1.05	45	0.61	4.09	176	2.14
FWE06 F(A)/B(F) (N/T/V) 5V1- (-R)	V1 (SL)	1.24	213	3.45	2.32	399	9.59	1.28	110	1.65	2.14	184	2.82	0.81	35	1.06	3.14	135	1.98
	V2 (L)	1.48	255	4.50	2.78	477	13.26	1.53	131	1.93	2.55	219	3.59	0.96	41	1.09	3.75	161	2.40
	V3 (L1)	1.72	296	5.73	3.23	555	17.56	1.78	153	2.25	2.97	255	4.50	1.12	48	1.12	4.35	187	2.89
	V4 (M)	1.80	310	6.16	3.37	580	19.08	1.85	159	2.37	3.10	267	4.82	1.17	50	1.14	4.55	196	3.06
FWE08 F(A)/B(F) (N/T/V) 5V1- (-R)	V5 (H)	1.94	334	6.99	3.63	625	22.00	2.00	172	2.59	3.34	287	5.44	1.26	54	1.16	4.90	211	3.39
	V1 (SL)	1.83	314	4.23	3.42	588	9.92	1.88	162	2.51	3.14	270	3.63	1.18	51	1.90	4.61	198	2.83
	V2 (L)	2.21	381	5.32	4.15	713	13.63	2.28	196	2.81	3.81	328	4.44	1.44	62	1.93	5.60	241	3.27
	V3 (M)	2.71	466	6.99	5.07	873	19.37	2.79	240	3.27	4.67	401	5.69	1.76	76	1.99	6.85	294	3.96
FWE10 F(A)/B(F) (N/T/V) 5V1- (-R)	V4 (H)	3.12	536	8.60	5.84	1004	24.94	3.21	276	3.71	5.37	462	6.90	2.03	87	2.04	7.88	339	4.62
	V1 (SL)	2.14	368	5.30	4.01	690	13.09	2.21	190	2.95	3.69	317	4.48	1.39	60	2.13	5.41	233	3.39
	V2 (L)	2.59	446	6.76	4.86	835	18.11	2.67	230	3.35	4.47	384	5.57	1.68	72	2.17	6.55	282	3.98
	V3 (M)	2.99	515	8.28	5.60	964	23.34	3.08	265	3.77	5.15	443	6.71	1.94	84	2.22	7.56	325	4.60
FWE12 F(A)/B(F) (N/T/V) 5V1- (-R)	V4 (H)	3.24	556	9.30	6.06	1042	26.87	3.33	287	4.05	5.57	479	7.47	2.10	90	2.25	8.18	351	5.02
	V5(H1)	3.49	600	10.46	6.53	1124	30.86	3.60	309	4.36	6.01	517	8.33	2.27	97	2.29	8.82	379	5.49
	V1 (SL)	2.17	374	5.89	4.07	699	13.90	2.24	192	3.47	3.74	322	5.05	1.41	61	2.63	5.49	236	3.92
	V2 (L)	2.62	451	7.37	4.91	845	18.98	2.70	232	3.88	4.52	389	6.15	1.70	73	2.68	6.63	285	4.53
FWE14 F(A)/B(F) (N/T/V) 5V1- (-R)	V3 (L1)	3.02	520	8.91	5.66	973	24.27	3.12	268	4.30	5.21	448	7.30	1.96	84	2.73	7.64	328	5.15
	V4 (M)	3.27	562	9.94	6.11	1052	27.83	3.36	289	4.59	5.62	484	8.07	2.12	91	2.76	8.25	355	5.57
	V5 (H)	3.52	605	11.10	6.59	1133	31.86	3.63	312	4.90	6.06	521	8.94	2.29	98	2.79	8.89	382	6.05
	V1 (SL)	3.43	590	10.85	6.42	1104	30.77	3.53	304	4.69	5.91	508	8.72	2.23	96	2.42	8.67	373	5.85
FWE16 F(A)/B(F) (N/T/V) 5V1- (-R)	V2 (L)	4.08	701	14.19	7.63	1313	42.06	4.20	361	5.64	7.02	604	11.23	2.65	114	2.54	10.30	443	7.24
	V3 (M)	4.66	801	17.65	8.72	1500	53.82	4.80	413	6.62	8.02	690	13.83	3.02	130	2.67	11.77	506	8.68
	V4 (H)	4.93	848	19.44	9.24	1588	59.90	5.08	437	7.12	8.50	730	15.16	3.20	138	2.73	12.47	536	9.42
	V5(H1)	5.30	912	21.98	9.93	1707	68.58	5.46	470	7.83	9.13	785	17.07	3.44	148	2.81	13.40	576	10.47
FWE20 F(A)/B(F) (N/T/V) 5V1- (-R)	V1 (SL)	3.49	600	11.64	6.54	1124	32.25	3.60	309	5.27	6.01	517	9.44	2.27	97	2.93	8.82	379	6.47
	V2 (L)	4.14	712	15.03	7.75	1332	43.73	4.26	367	6.24	7.13	613	11.99	2.69	115	3.06	10.45	449	7.89
	V3 (L1)	4.72	812	18.54	8.84	1519	55.64	4.86	418	7.23	8.13	699	14.62	3.06	132	3.18	11.93	513	9.34
	V4 (M)	4.99	859	20.35	9.35	1608	61.79	5.15	442	7.74	8.60	740	15.97	3.24	139	3.24	12.62	543	10.09
FWE24 F(A)/B(F) (N/T/V) 5V1- (-R)	V5 (H)	5.36	922	22.92	10.04	1727	70.57	5.53	475	8.45	9.24	794	17.90	3.48	150	3.33	13.55	583	11.15
	V1 (SL)	4.08	702	16.27	7.64	1314	47.20	4.20	361	5.99	7.03	604	12.82	2.65	114	1.63	10.31	443	8.01
	V2 (L)	4.79	824	21.16	8.97	1542	62.86	4.93	424	7.52	8.25	709	16.55	3.11	134	1.88	12.10	520	10.18
	V3 (M)	5.72	983	28.52	10.71	1841	86.70	5.89	507	9.77	9.85	847	22.15	3.71	160	2.24	14.45	621	13.39
FWE24 F(A)/B(F) (N/T/V) 5V1- (-R)	V4 (H)	6.50	1118	35.57	12.17	2093	109.76	6.70	576	11.89	11.19	962	27.49	4.22	181	2.56	16.42	706	16.44
	V1 (SL)	4.47	768	18.86	8.36	1438	55.46	4.60	396	6.80	7.69	661	14.79	2.90	125	1.76	11.29	485	9.16
	V2 (L)	5.28	907	24.87	9.88	1698	74.84	5.43	467	8.66	9.08	781	19.38	3.42	147	2.06	13.33	573	11.80
	V3 (L1)	6.11	1051	31.95	11.44	1967	97.90	6.29	541	10.81	10.52	905	24.75	3.97	171	2.40	15.44	664	14.88
FWE24 F(A)/B(F) (N/T/V) 5V1- (-R)	V4 (M)	6.64	1142	36.93	12.44	2138	114.24	6.84	588	12.30	11.44	983	28.53	4.31	185	2.62	16.78	722	17.02
	V5 (H)	7.21	1240	42.65	13.50	2322	133.09	7.43	639	14.00	12.42	1068	32.86	4.68	201	2.87	18.22	783	19.47

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150142B

8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FT

HEATING 2 PIPE @ 0 ESP																			
Air Temperature		DB:25°C - WB:**°C																	
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40 °C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd
		kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
FWE04 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.11	190	4.38	2.47	425	16.82	1.13	97	1.79	2.25	194	4.50	0.49	21	0.66	3.54	152	3.16
	V2 (L)	1.47	252	6.85	3.28	563	28.18	1.50	129	2.53	2.99	257	7.06	0.65	28	0.72	4.69	202	4.80
	V3 (M)	1.73	297	9.00	3.86	663	38.19	1.77	152	3.16	3.52	302	9.28	0.76	33	0.77	5.52	238	6.21
	V4 (H)	2.01	346	11.69	4.49	772	50.80	2.06	177	3.93	4.09	352	12.06	0.89	38	0.83	6.43	276	7.97
FWE05 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.23	212	3.60	2.76	474	10.35	1.26	109	1.82	2.51	216	3.68	0.55	23	0.74	3.95	170	2.81
	V2 (L)	1.69	290	5.27	3.76	647	16.59	1.73	148	2.45	3.43	295	5.39	0.75	32	0.83	5.39	232	4.00
	V3 (M)	2.03	348	6.71	4.52	778	22.22	2.07	178	2.97	4.12	355	6.87	0.90	38	0.91	6.48	279	5.01
	V4 (H)	2.41	415	8.55	5.39	927	29.63	2.47	212	3.61	4.91	423	8.77	1.07	46	0.99	7.72	332	6.29
FWE06 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.66	286	5.18	3.71	639	16.25	1.70	146	2.42	3.39	291	5.30	0.74	32	0.83	5.32	229	3.93
	V2 (L)	2.13	366	7.18	4.76	818	24.10	2.18	187	3.13	4.34	373	7.36	0.94	40	0.93	6.81	293	5.34
	V3 (L1)	2.63	453	9.69	5.88	1012	34.31	2.70	232	4.00	5.36	461	9.95	1.16	50	1.04	8.43	362	7.08
	V4 (M)	2.81	483	10.64	6.27	1079	38.25	2.88	247	4.32	5.72	492	10.92	1.24	53	1.08	8.99	386	7.73
FWE08 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	3.15	541	12.60	7.03	1209	46.49	3.22	277	4.98	6.41	551	12.95	1.39	60	1.16	10.07	433	9.08
	V1 (SL)	1.99	343	2.79	4.45	765	11.91	2.04	175	1.10	4.06	349	2.87	0.88	38	0.53	6.37	274	1.96
	V2 (L)	2.67	459	4.60	5.96	1025	20.96	2.73	235	1.57	5.43	467	4.75	1.18	51	0.55	8.53	367	3.12
	V3 (M)	3.55	611	7.77	7.94	1365	36.79	3.64	313	2.41	7.24	622	8.04	1.57	68	0.59	11.37	489	5.15
FWE10 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	4.31	741	11.21	9.63	1656	53.90	4.41	379	3.30	8.78	755	11.60	1.91	82	0.63	13.79	593	7.35
	V1 (SL)	2.48	426	4.04	5.54	952	18.15	2.54	218	1.43	5.05	434	4.17	1.10	47	0.54	7.93	341	2.76
	V2 (L)	3.27	563	6.67	7.31	1257	31.26	3.35	288	2.12	6.66	573	6.89	1.45	62	0.58	10.47	450	4.44
	V3 (M)	4.01	690	9.78	8.96	1542	46.81	4.11	353	2.93	8.17	703	10.12	1.77	76	0.61	12.84	552	6.44
FWE12 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	4.49	772	12.11	10.03	1724	58.43	4.60	395	3.54	9.14	786	12.54	1.98	85	0.64	14.36	617	7.93
	V5(H1)	5.02	863	15.02	11.21	1928	72.92	5.14	442	4.30	10.22	879	15.55	2.22	95	0.68	16.06	690	9.78
	V1 (SL)	2.56	441	4.28	5.72	984	19.36	2.62	225	1.49	5.22	448	4.42	1.13	49	0.55	8.19	352	2.92
	V2 (L)	3.35	577	6.98	7.49	1288	32.85	3.43	295	2.20	6.83	587	7.22	1.48	64	0.58	10.73	461	4.65
FWE14 F(A/B)T (N/T/V) 5V1- (-R)	V3 (L1)	4.10	705	10.17	9.15	1574	48.74	4.19	361	3.03	8.34	717	10.52	1.81	78	0.62	13.11	563	6.68
	V4 (M)	4.57	786	12.55	10.21	1756	60.60	4.68	403	3.66	9.31	801	12.99	2.02	87	0.65	14.63	629	8.20
	V5 (H)	5.10	878	15.50	11.40	1960	75.34	5.22	449	4.43	10.39	893	16.05	2.26	97	0.68	16.32	702	10.09
	V1 (SL)	3.74	644	6.16	8.36	1438	21.11	3.83	330	3.05	7.62	655	6.30	1.65	71	1.69	11.97	515	4.69
FWE16 F(A/B)T (N/T/V) 5V1- (-R)	V2 (L)	4.79	824	8.66	10.70	1840	32.57	4.90	422	3.80	9.75	839	8.89	2.12	91	1.75	15.32	659	6.35
	V3 (M)	5.78	994	11.51	12.91	2221	45.81	5.92	509	4.63	11.77	1012	11.83	2.56	110	1.82	18.49	795	8.22
	V4 (H)	6.27	1079	13.09	14.01	2409	53.22	6.42	552	5.09	12.77	1098	13.47	2.77	119	1.86	20.06	862	9.26
	V5(H1)	6.96	1197	15.49	15.54	2672	64.57	7.12	613	5.78	14.17	1218	15.96	3.08	132	1.91	22.26	957	10.84
FWE20 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	3.82	656	6.82	8.53	1466	22.33	3.91	336	3.60	7.77	668	6.97	1.69	73	2.19	12.21	525	5.30
	V2 (L)	4.87	837	9.35	10.87	1868	33.98	4.98	428	4.35	9.91	852	9.59	2.15	92	2.26	15.56	669	6.98
	V3 (L1)	5.86	1007	12.24	13.08	2249	47.40	6.00	516	5.20	11.92	1025	12.57	2.59	111	2.33	18.73	805	8.88
	V4 (M)	6.35	1091	13.84	14.17	2437	54.89	6.50	559	5.66	12.92	1111	14.23	2.80	121	2.36	20.30	873	9.93
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	7.03	1209	16.27	15.71	2701	66.36	7.20	619	6.36	14.32	1231	16.74	3.11	134	2.42	22.49	967	11.52
	V1 (SL)	4.41	758	4.79	9.84	1693	19.92	4.51	388	1.99	8.97	772	4.93	1.95	84	1.05	14.10	606	3.43
	V2 (L)	5.58	959	7.08	12.46	2143	31.32	5.71	491	2.59	11.36	977	7.30	2.47	106	1.07	17.84	767	4.89
	V3 (M)	7.04	1211	10.68	15.72	2704	49.28	7.21	620	3.54	14.33	1233	11.03	3.11	134	1.12	22.52	968	7.19
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	8.21	1411	14.15	18.33	3151	66.58	8.40	722	4.45	16.71	1437	14.63	3.63	156	1.16	26.25	1128	9.41
	V1 (SL)	5.02	864	5.43	11.22	1930	25.09	5.14	442	1.79	10.23	880	5.61	2.22	95	0.56	16.07	691	3.65
	V2 (L)	6.31	1085	8.27	14.09	2422	39.25	6.46	555	2.54	12.84	1104	8.56	2.79	120	0.60	20.17	867	5.47
	V3 (L1)	7.57	1302	11.69	16.91	2907	56.32	7.75	666	3.43	15.41	1325	12.10	3.35	144	0.64	24.21	1041	7.66
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (M)	8.34	1434	14.09	18.63	3204	68.27	8.54	734	4.06	16.98	1460	14.59	3.69	159	0.67	26.68	1147	9.19
	V5 (H)	9.14	1571	16.80	20.40	3508	81.79	9.35	804	4.77	18.60	1599	17.39	4.04	174	0.70	29.22	1256	10.93

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

3D150131A

8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FT

HEATING 2 PIPE @ 0 ESP																			
Air Temperature		DB:20°C - WB:**°C																	
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40°C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa	Th kW	Wf l/h	Wpd kPa
FWE04 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.46	251	6.81	2.83	486	21.48	1.49	128	2.50	2.48	214	5.24	0.85	37	0.81	3.89	167	3.62
	V2 (L)	1.94	334	10.99	3.75	645	36.23	1.98	170	3.70	3.29	283	8.31	1.13	49	0.96	5.17	222	5.58
	V3 (M)	2.28	393	14.64	4.42	759	49.26	2.33	200	4.73	3.88	334	10.99	1.33	57	1.08	6.08	261	7.27
	V4 (H)	2.66	457	19.21	5.14	884	65.67	2.71	233	6.01	4.51	388	14.33	1.55	67	1.23	7.08	304	9.38
FWE05 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.63	281	5.06	3.16	543	12.65	1.66	143	2.36	2.77	238	4.13	0.95	41	0.93	4.35	187	3.12
	V2 (L)	2.23	383	7.65	4.31	741	20.55	2.27	195	3.28	3.79	326	6.13	1.30	56	1.11	5.94	255	4.49
	V3 (M)	2.68	461	9.93	5.18	891	27.72	2.73	235	4.05	4.55	391	7.87	1.56	67	1.25	7.13	307	5.67
	V4 (H)	3.19	549	12.87	6.17	1061	37.19	3.25	280	5.03	5.42	466	10.10	1.86	80	1.42	8.50	365	7.16
FWE06 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	2.20	378	7.51	4.25	731	20.12	2.24	193	3.23	3.74	321	6.02	1.28	55	1.10	5.86	252	4.42
	V2 (L)	2.82	484	10.68	5.44	936	30.12	2.87	247	4.31	4.78	411	8.44	1.64	71	1.30	7.50	322	6.05
	V3 (L1)	3.48	599	14.71	6.74	1158	43.19	3.55	305	5.63	5.92	509	11.49	2.03	87	1.52	9.28	399	8.08
	V4 (M)	3.71	639	16.24	7.18	1235	48.24	3.78	325	6.12	6.31	543	12.65	2.16	93	1.60	9.89	425	8.85
FWE08 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	4.16	716	19.44	8.05	1384	58.84	4.24	365	7.14	7.07	608	15.04	2.43	104	1.76	11.08	477	10.43
	V1 (SL)	2.64	453	4.50	5.09	876	15.46	2.68	231	1.54	4.48	385	3.39	1.54	66	0.58	7.02	302	2.27
	V2 (L)	3.53	607	7.67	6.82	1173	27.31	3.59	309	2.36	5.99	515	5.67	2.06	88	0.65	9.40	404	3.68
	V3 (M)	4.70	808	13.22	9.08	1562	48.05	4.79	412	3.80	7.98	686	9.68	2.74	118	0.77	12.51	538	6.14
FWE10 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	5.70	980	19.22	11.02	1895	70.48	5.81	499	5.35	9.68	833	14.00	3.32	143	0.90	15.18	653	8.80
	V1 (SL)	3.28	564	6.69	6.34	1090	23.63	3.34	287	2.10	5.57	479	4.96	1.91	82	0.63	8.73	375	3.24
	V2 (L)	4.33	744	11.28	8.36	1438	40.81	4.41	379	3.30	7.35	632	8.28	2.52	108	0.73	11.52	495	5.28
	V3 (M)	5.31	913	16.73	10.26	1765	61.18	5.41	465	4.71	9.02	775	12.21	3.09	133	0.84	14.13	608	7.69
FWE12 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	5.94	1021	20.81	11.48	1974	76.42	6.05	520	5.77	10.08	867	15.15	3.46	149	0.93	15.81	680	9.50
	V5(H1)	6.64	1142	25.89	12.83	2207	95.41	6.76	581	7.08	11.28	970	18.81	3.87	166	1.04	17.68	760	11.75
	V1 (SL)	3.39	583	7.11	6.55	1126	25.21	3.45	297	2.21	5.75	495	5.27	1.97	85	0.64	9.02	388	3.43
	V2 (L)	4.44	763	11.84	8.58	1475	42.89	4.52	389	3.44	7.54	648	8.68	2.59	111	0.74	11.81	508	5.53
FWE14 F(A/B)T (N/T/V) 5V1- (-R)	V3 (L1)	5.42	932	17.41	10.47	1801	63.72	5.52	474	4.89	9.20	791	12.70	3.16	136	0.86	14.43	620	8.00
	V4 (M)	6.05	1040	21.57	11.69	2011	79.26	6.16	530	5.96	10.27	883	15.70	3.52	152	0.95	16.10	692	9.84
	V5 (H)	6.75	1160	26.74	13.05	2244	98.58	6.87	591	7.30	11.46	986	19.43	3.93	169	1.06	17.97	773	12.13
	V1 (SL)	4.95	851	9.08	9.57	1646	26.71	5.04	434	3.90	8.41	723	7.19	2.88	124	1.88	13.18	567	5.25
FWE16 F(A/B)T (N/T/V) 5V1- (-R)	V2 (L)	6.34	1089	13.30	12.25	2106	41.59	6.45	555	5.12	10.76	925	10.30	3.69	159	2.03	16.87	725	7.22
	V3 (M)	7.65	1315	18.13	14.78	2542	58.82	7.79	670	6.48	12.99	1117	13.84	4.46	192	2.19	20.36	875	9.47
	V4 (H)	8.29	1426	20.82	16.03	2757	68.46	8.45	726	7.24	14.09	1211	15.81	4.83	208	2.27	22.09	949	10.71
	V5(H1)	9.20	1582	24.93	17.79	3059	83.24	9.37	806	8.38	15.63	1344	18.81	5.36	231	2.40	24.50	1053	12.60
FWE20 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	5.05	868	9.85	9.76	1678	28.15	5.14	442	4.48	8.57	737	7.89	2.94	126	2.39	13.44	578	5.87
	V2 (L)	6.43	1106	14.13	12.44	2139	43.27	6.55	563	5.71	10.93	940	11.04	3.75	161	2.54	17.13	737	7.88
	V3 (L1)	7.74	1332	19.02	14.97	2575	60.73	7.89	678	7.10	13.15	1131	14.63	4.51	194	2.70	20.62	887	10.15
	V4 (M)	8.39	1443	21.74	16.22	2790	70.48	8.55	735	7.86	14.25	1226	16.62	4.89	210	2.79	22.35	961	11.41
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	9.30	1599	25.89	17.98	3092	85.42	9.47	814	9.01	15.80	1358	19.65	5.42	233	2.91	24.76	1065	13.32
	V1 (SL)	5.83	1002	7.63	11.27	1938	25.79	5.94	510	2.72	9.90	851	5.78	3.40	146	1.14	15.52	667	3.94
	V2 (L)	7.38	1269	11.63	14.26	2453	40.73	7.51	646	3.76	12.53	1077	8.67	4.30	185	1.23	19.64	845	5.71
	V3 (M)	9.31	1601	17.92	18.00	3095	64.26	9.48	815	5.39	15.81	1360	13.21	5.43	233	1.36	24.79	1066	8.50
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	10.85	1866	23.99	20.98	3608	86.94	11.05	950	6.96	18.43	1585	17.58	6.32	272	1.49	28.89	1242	11.19
	V1 (SL)	6.64	1143	9.12	12.84	2209	32.72	6.77	582	2.74	11.29	970	6.72	3.87	166	0.68	17.69	761	4.32
	V2 (L)	8.34	1434	14.09	16.13	2773	51.28	8.49	730	4.03	14.17	1218	10.30	4.86	209	0.79	22.21	955	6.52
	V3 (L1)	10.01	1721	20.07	19.35	3328	73.65	10.20	877	5.58	17.00	1462	14.62	5.83	251	0.92	26.66	1146	9.18
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (M)	11.03	1897	24.26	21.32	3667	89.31	11.23	966	6.67	18.74	1611	17.64	6.43	276	1.01	29.37	1263	11.03
	V5 (H)	12.08	2077	29.00	23.35	4016	107.02	12.30	1058	7.89	20.52	1764	21.06	7.04	303	1.11	32.17	1383	13.13

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

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8 Capacity tables

8 - 2 Heating Capacity Tables

FWE-FT

HEATING 2 PIPE @ 0 ESP																			
Air Temperature			DB:18°C - WB:***C																
Water Temperature	Delta T °C	ΔT=5						ΔT=10						ΔT=20					
	Water In / Out	45 °C - 40 °C			65 °C - 60 °C			50 °C - 40°C			65 °C - 55 °C			50 °C - 30 °C			90 °C - 70 °C		
Model / Fan Speed		Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd	Th	Wf	Wpd
		kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
FWE04 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.60	274	7.88	2.96	509	23.39	1.62	140	2.80	2.74	236	6.14	0.99	43	0.88	4.03	173	3.81
	V2 (L)	2.12	364	12.81	3.93	676	39.53	2.15	185	4.21	3.64	313	9.83	1.31	56	1.07	5.34	230	5.89
	V3 (M)	2.49	429	17.13	4.63	796	53.80	2.54	218	5.42	4.28	368	13.06	1.54	66	1.22	6.29	271	7.69
	V4 (H)	2.90	499	22.54	5.38	926	71.79	2.95	254	6.92	4.98	429	17.10	1.80	77	1.41	7.32	315	9.94
FWE05 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	1.78	306	5.66	3.31	568	13.57	1.81	156	2.57	3.06	263	4.66	1.10	47	1.01	4.50	193	3.24
	V2 (L)	2.43	419	8.65	4.51	776	22.15	2.48	213	3.62	4.18	359	7.00	1.51	65	1.22	6.14	264	4.68
	V3 (M)	2.92	503	11.29	5.43	933	29.95	2.97	256	4.50	5.02	432	9.05	1.81	78	1.39	7.38	317	5.92
	V4 (H)	3.48	599	14.71	6.46	1112	40.26	3.54	305	5.62	5.99	515	11.68	2.16	93	1.60	8.79	378	7.50
FWE06 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	2.40	413	8.49	4.46	766	21.68	2.44	210	3.56	4.12	355	6.88	1.49	64	1.21	6.06	261	4.61
	V2 (L)	3.07	529	12.17	5.70	981	32.57	3.13	269	4.79	5.28	454	9.72	1.90	82	1.45	7.76	334	6.33
	V3 (L1)	3.80	654	16.86	7.06	1214	46.80	3.87	333	6.31	6.53	562	13.33	2.36	101	1.72	9.60	413	8.48
	V4 (M)	4.06	697	18.65	7.52	1294	52.31	4.12	355	6.87	6.97	599	14.70	2.51	108	1.82	10.23	440	9.29
FWE08 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	4.54	782	22.38	8.43	1450	63.87	4.62	397	8.04	7.81	671	17.55	2.82	121	2.01	11.47	493	10.96
	V1 (SL)	2.88	495	5.27	5.34	918	16.92	2.93	252	1.73	4.94	425	4.02	1.78	77	0.61	7.26	312	2.40
	V2 (L)	3.85	662	9.05	7.15	1229	29.93	3.92	337	2.71	6.62	569	6.81	2.39	103	0.70	9.72	418	3.90
	V3 (M)	5.13	882	15.66	9.52	1637	52.70	5.22	449	4.42	8.81	758	11.68	3.18	137	0.86	12.94	557	6.53
FWE10 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	6.22	1070	22.82	11.55	1986	77.32	6.33	544	6.27	10.69	919	16.96	3.86	166	1.03	15.70	675	9.38
	V1 (SL)	3.58	615	7.88	6.64	1142	25.89	3.64	313	2.41	6.15	528	5.94	2.22	95	0.68	9.03	388	3.43
	V2 (L)	4.72	812	13.35	8.76	1507	44.75	4.80	413	3.82	8.11	698	9.98	2.93	126	0.81	11.92	512	5.61
	V3 (M)	5.80	997	19.85	10.75	1849	67.11	5.89	507	5.50	9.95	856	14.77	3.59	154	0.96	14.62	629	8.20
FWE12 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	6.48	1115	24.71	12.03	2068	83.83	6.59	567	6.76	11.13	957	18.36	4.02	173	1.08	16.36	703	10.13
	V5(H1)	7.25	1246	30.76	13.45	2312	104.68	7.37	634	8.33	12.45	1070	22.82	4.49	193	1.23	18.29	786	12.54
	V1 (SL)	3.70	636	8.38	6.86	1180	27.63	3.76	323	2.54	6.35	546	6.31	2.29	98	0.69	9.33	401	3.64
	V2 (L)	4.84	833	14.02	8.99	1545	47.03	4.93	424	4.00	8.32	715	10.47	3.00	129	0.82	12.22	525	5.88
FWE14 F(A/B)T (N/T/V) 5V1- (-R)	V3 (L1)	5.92	1017	20.66	10.97	1887	69.90	6.02	517	5.71	10.16	874	15.37	3.66	158	0.98	14.92	642	8.52
	V4 (M)	6.60	1135	25.61	12.25	2106	86.95	6.72	577	6.99	11.34	975	19.02	4.09	176	1.10	16.66	716	10.49
	V5 (H)	7.37	1267	31.78	13.67	2351	108.16	7.49	644	8.59	12.65	1088	23.57	4.56	196	1.25	18.59	799	12.94
	V1 (SL)	5.40	929	10.37	10.03	1724	29.00	5.50	473	4.27	9.28	798	8.27	3.35	144	1.96	13.64	586	5.47
FWE16 F(A/B)T (N/T/V) 5V1- (-R)	V2 (L)	6.92	1189	15.34	12.83	2207	45.29	7.04	605	5.69	11.88	1022	12.00	4.28	184	2.15	17.45	750	7.57
	V3 (M)	8.35	1436	21.05	15.49	2663	64.16	8.49	730	7.29	14.34	1233	16.28	5.17	222	2.35	21.06	906	9.96
	V4 (H)	9.05	1557	24.24	16.80	2889	74.72	9.21	792	8.18	15.55	1337	18.66	5.61	241	2.46	22.85	982	11.29
	V5(H1)	10.05	1728	29.10	18.64	3205	90.91	10.22	879	9.52	17.26	1484	22.29	6.22	268	2.62	25.35	1090	13.30
FWE20 F(A/B)T (N/T/V) 5V1- (-R)	V1 (SL)	5.51	948	11.18	10.23	1758	30.53	5.61	482	4.86	9.47	814	9.01	3.41	147	2.47	13.91	598	6.10
	V2 (L)	7.02	1208	16.24	13.03	2241	47.08	7.14	614	6.30	12.06	1037	12.80	4.35	187	2.66	17.72	762	8.24
	V3 (L1)	8.45	1454	22.02	15.69	2697	66.20	8.60	739	7.92	14.52	1249	17.13	5.24	225	2.87	21.33	917	10.66
	V4 (M)	9.16	1576	25.24	17.00	2923	76.89	9.32	801	8.82	15.74	1353	19.53	5.68	244	2.98	23.12	994	12.00
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V5 (H)	10.15	1746	30.16	18.84	3239	93.25	10.33	888	10.17	17.44	1500	23.20	6.29	270	3.14	25.62	1101	14.03
	V1 (SL)	6.36	1094	8.91	11.80	2030	28.21	6.47	556	3.05	10.93	940	6.83	3.94	169	1.19	16.05	690	4.15
	V2 (L)	8.05	1385	13.67	14.94	2570	44.61	8.19	704	4.28	13.83	1190	10.35	4.99	215	1.30	20.32	874	6.04
	V3 (M)	10.16	1748	21.17	18.86	3243	70.44	10.34	889	6.22	17.46	1501	15.88	6.30	271	1.48	25.64	1103	9.03
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (H)	11.85	2037	28.41	21.98	3780	95.33	12.05	1036	8.09	20.35	1750	21.22	7.34	316	1.66	29.89	1285	11.91
	V1 (SL)	7.25	1247	10.78	13.46	2314	35.87	7.38	634	3.16	12.46	1071	8.08	4.49	193	0.75	18.30	787	4.59
	V2 (L)	9.11	1566	16.70	16.89	2905	56.24	9.26	796	4.69	15.64	1345	12.45	5.64	243	0.89	22.98	988	6.95
	V3 (L1)	10.93	1879	23.83	20.28	3487	80.79	11.12	956	6.54	18.77	1614	17.71	6.77	291	1.06	27.58	1186	9.78
FWE24 F(A/B)T (N/T/V) 5V1- (-R)	V4 (M)	12.04	2071	28.83	22.34	3842	97.98	12.25	1053	7.83	20.68	1779	21.39	7.46	321	1.18	30.39	1306	11.77
	V5 (H)	13.19	2268	34.47	24.47	4208	117.42	13.41	1153	9.29	22.65	1948	25.56	8.17	351	1.32	33.28	1431	14.02

SYMBOLS

Th = TOTAL HEATING CAPACITY

Wf = WATER FLOW RATE

Wpd = WATER PRESSURE DROP

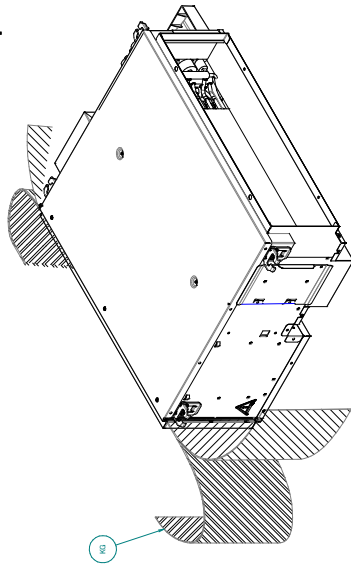
3D150133A

9 Dimensional drawings

9 - 1 Dimensional Drawings

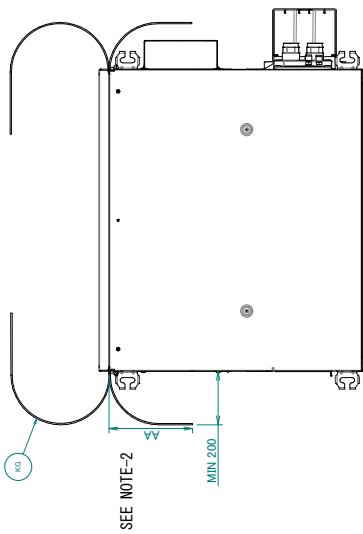
FWE-FF
FWE-FT

FILTER MAINTENANCE SPACE



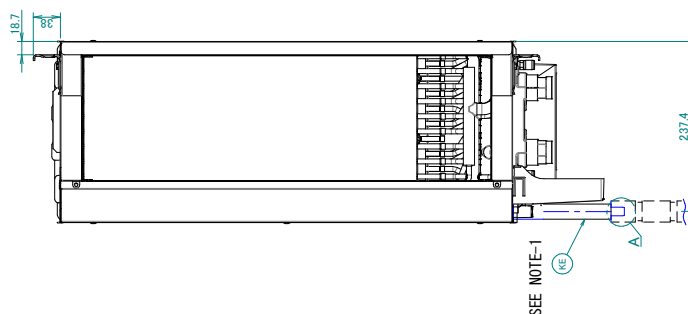
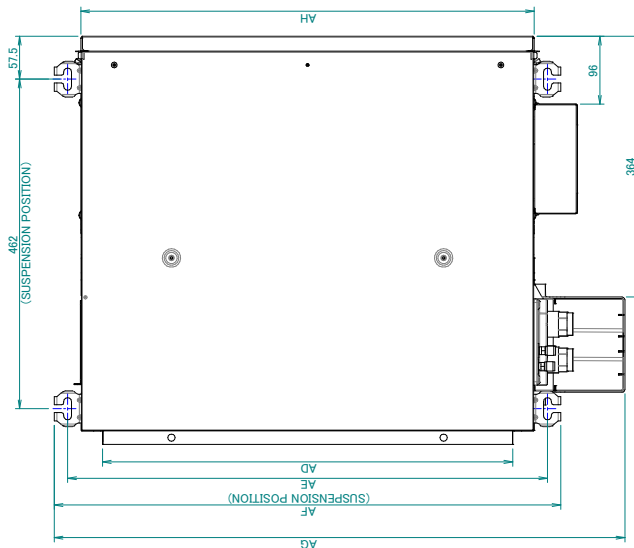
MODEL	AD	AE	AF	AG	AH
FWE0460S&06FF(B)	572	670	707	797	633
FWE08810812FF(B)	877	975	1012	1102	938
FWE14816FF(B)	1187	1285	1322	1412	1248
FWE20824FF(B)	1487	1585	1622	1712	1548

MODEL	AA (MAX.)
FWE0460S&06FF(B)	626
FWE08810812FF(B)	939
FWE14816FF(B)	1252
FWE20824FF(B)	1565

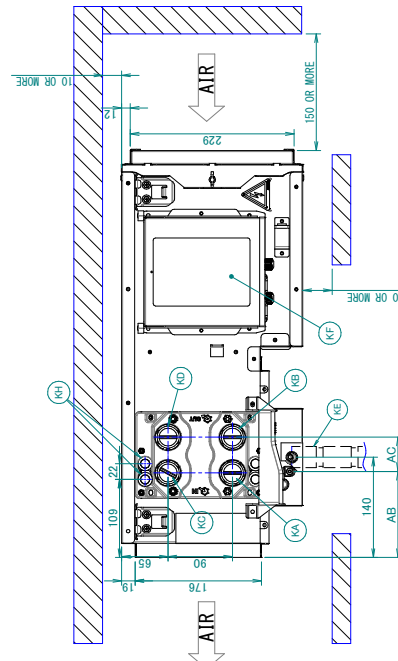


SEE NOTE-2

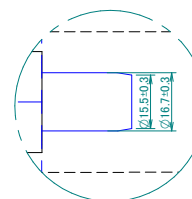
ITEM NAME	DESCRIPTION	REMARK
KA	WATER PIPE CONNECTION COOLING IN	3/4" BSP FEMALE FOR FWE-AT1, WATER IN
KB	WATER PIPE CONNECTION COOLING OUT	3/4" BSP FEMALE FOR FWE-AT1, WATER OUT
KC	WATER PIPE CONNECTION HEATING IN	3/4" BSP FEMALE
KD	WATER PIPE CONNECTION HEATING OUT	3/4" BSP FEMALE
KE	DRAIN HOSE	3/4" BSP FEMALE
KF	POWER SUPPLY CONNECTION	C.S. BS-17
KG	AIR FILTER	
KH	AIR PURGE	



SEE NOTE-1



MODEL	AB	AC
FWE0460S&0608&10812FF	118	50
FWE14816&20824FF	121	44



DETAIL A
DRAIN HOSE

NOTES:

- 1) DRAIN HOSE (KE) IS FLEXIBLE.
- 2) AIR FILTER NETS SHOULD NOT BE CONTACTED TO THE HANGERS.

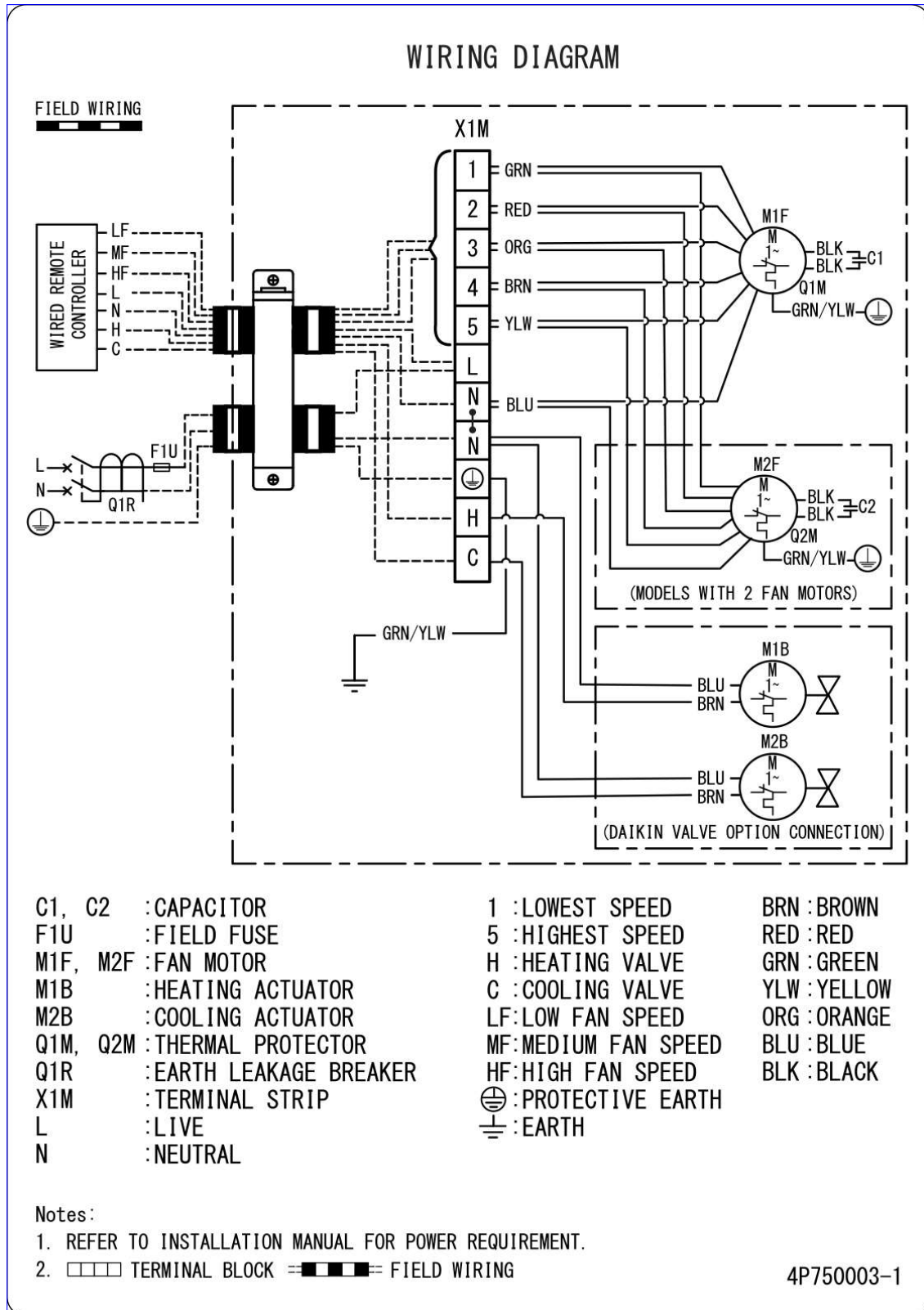
1D153382

10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

FWE-FF
FWE-FT

10



4D148896

11 Sound data

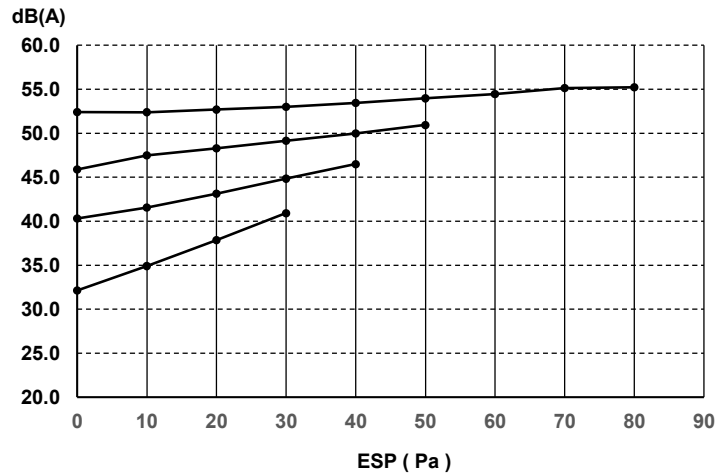
11 - 1 Sound Power Spectrum

FWE04FF
FWE04FFR

Sound Power overall (dBA): FWE04F(A/B)F(N/T/V)5V1-(-/R)

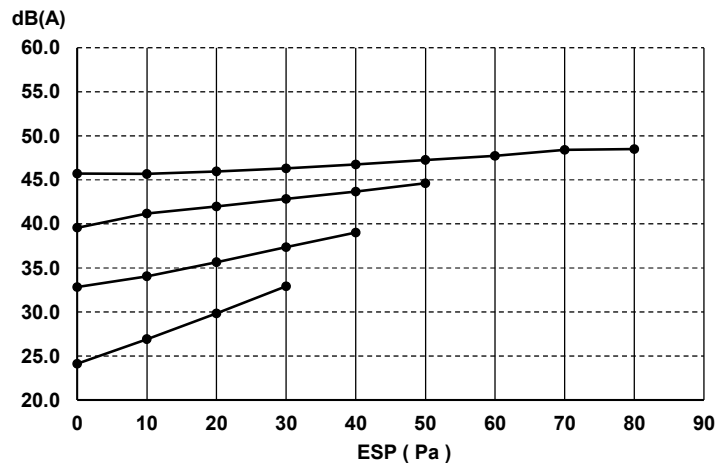
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		52.4	45.9	40.3	32.1
10		52.4	47.5	41.5	34.9
20		52.7	48.3	43.1	37.9
30		53.0	49.2	44.8	40.9
40		53.4	50.0	46.5	
50		54.0	50.9		
60		54.4	51.9		
70		55.1			
80		55.2			



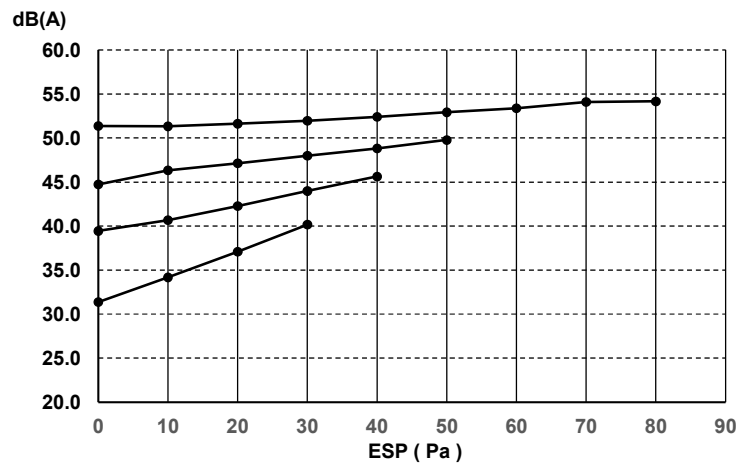
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		45.7	39.6	32.8	24.1
10		45.7	41.2	34.1	26.9
20		46.0	42.0	35.7	29.8
30		46.3	42.8	37.4	32.9
40		46.7	43.7	39.0	
50		47.3	44.6		
60		47.7	45.6		
70		48.4			
80		48.5			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		51.4	44.7	39.5	31.4
10		51.3	46.3	40.7	34.2
20		51.6	47.1	42.3	37.1
30		52.0	48.0	44.0	40.2
40		52.4	48.8	45.6	
50		52.9	49.8		
60		53.4	50.8		
70		54.1			
80		54.2			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE04FF
FWE04FFR

Sound Power Spectrum : FWE04F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.6		50.4		51.9		46.1		46.2	
125				44.3	56.2	38.1	50.9	34.7	52.1	29.4	46.2		
160				43.8		38.5		37.3		26.0			
200	250			43.5		41.6		33.2		25.4			
250				49.6	51.8	41.1	45.7	35.9	40.0	28.3	32.1		
315				45.8		39.9		35.9		27.8			
400	500			45.5		40.7		35.0		26.7			
500				46.3	50.5	40.6	45.1	35.4	39.5	26.4	30.6		
630				45.3		39.7		33.5		23.6			
800	1000			42.7		36.8		29.7		19.4			
1000				42.9	46.8	36.5	40.6	29.1	33.2	18.3	22.6		
1250				40.0		33.6		25.5		14.4			
1600	2000			39.9		32.7		24.7		14.2			
2000				38.8	44.1	30.6	35.6	22.6	27.3	15.7	18.6		
2500				39.1		27.5		18.4		9.6			
3150	4000			36.3		24.5		14.4		6.8			
4000				34.6	39.3	22.8	27.6	14.1	18.8	9.8	14.0		
5000				31.2		20.2		13.5		10.3			
6300	8000			29.4		17.0		11.5		9.4			
8000				25.2	31.3	15.4	20.2	13.6	17.7	11.6	16.0		
10000				21.6		13.3		13.6		12.2			
dB(A)				52.4		45.9		40.3		32.1			

ESP=0Pa		Sound Power Spectrum (dB) : Discharge											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			43.2		40.5		31.1		23.8			
125				38.5	45.0	34.4	41.8	28.6	33.7	25.3	28.2		
160				35.1		30.2		25.7		18.9			
200				34.7		30.8		23.5		16.6			
250	250			41.7	44.2	34.4	38.2	29.0	32.7	21.6	25.0		
315				39.4		34.3		29.4		21.2			
400				40.7		36.0		30.0		21.8			
500				39.8	44.4	34.1	39.1	27.9	32.9	18.9	24.3		
630	500			37.8		32.0		25.4		15.9			
800				35.8		30.0		23.0		13.2			
1000				37.5	40.7	31.1	34.5	23.8	27.2	13.2	16.8		
1250				33.4		27.1		19.1		7.8			
1600	1000			34.2		27.5		19.1		7.9			
2000				31.6	37.2	24.4	29.8	15.6	21.2	6.5	10.9		
2500				30.6		21.1		11.1		2.2			
3150				28.4		17.7		7.6		1.5			
4000	4000			26.2	31.3	16.4	21.2	7.8	12.5	3.8	8.4		
5000				23.9		14.6		7.8		4.9			
6300				21.8		11.9		7.0		4.8			
8000				18.7	24.0	9.9	15.1	8.1	12.7	6.1	10.7		
10000	8000			13.9		8.4		8.6		6.8			
dB(A)				45.7		39.6		32.8		24.1			

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.4		49.9		51.8		46.1			
125				43.0	55.8	35.7	50.3	33.5	52.0	27.3	46.2		
160				43.2		37.8		37.0		25.0			
200	250			42.8		41.2		32.7		24.8			
250				48.8	50.9	40.0	44.8	34.9	39.1	27.3	31.2		
315				44.7		38.5		34.9		26.7			
400	500			43.8		38.9		33.3		25.0			
500				45.2	49.3	39.5	43.9	34.5	38.4	25.6	29.4		
630				44.4		38.9		32.7		22.8			
800	1000			41.7		35.7		28.7		18.2			
1000				41.5	45.6	35.0	39.4	27.6	32.0	16.7	21.3		
1250				38.9		32.5		24.3		13.3			
1600	2000			38.5		31.2		23.2		13.0			
2000				37.9	43.0	29.4	34.2	21.6	26.1	15.1	17.8		
2500				38.4		26.4		17.4		8.7			
3150	4000			35.6		23.4		13.4		5.3			
4000				33.9	38.5	21.6	26.5	13.0	17.6	8.5	12.6		
5000				30.3		18.8		12.1		8.8			
6300	8000			28.6		15.3		9.6		7.5			
8000				24.1	30.4	13.9	18.7	12.1	16.1	10.1	14.4		
10000				20.8		11.6		11.9		10.7			
dB(A)				51.4		44.7		39.5		31.4			

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11 Sound data

11 - 1 Sound Power Spectrum

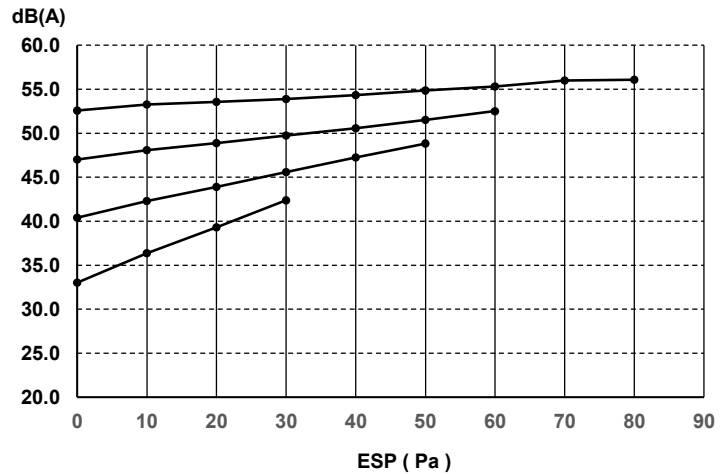
FWE05FF

FWE05FFR

Sound Power overall (dBA): FWE05F(A/B)F(N/T/V)5V1-(-/R)

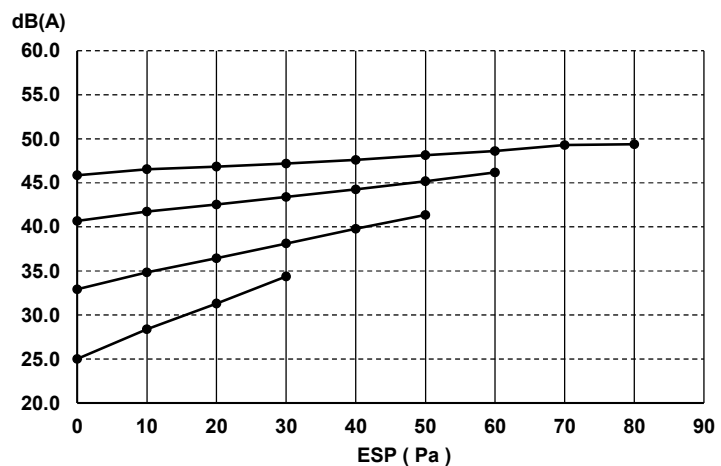
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		52.6	47.0	40.4	33.0
10		53.3	48.1	42.3	36.4
20		53.6	48.9	43.9	39.3
30		53.9	49.7	45.6	42.4
40		54.3	50.6	47.3	
50		54.9	51.5	48.8	
60		55.3	52.5		
70		56.0			
80		56.1			



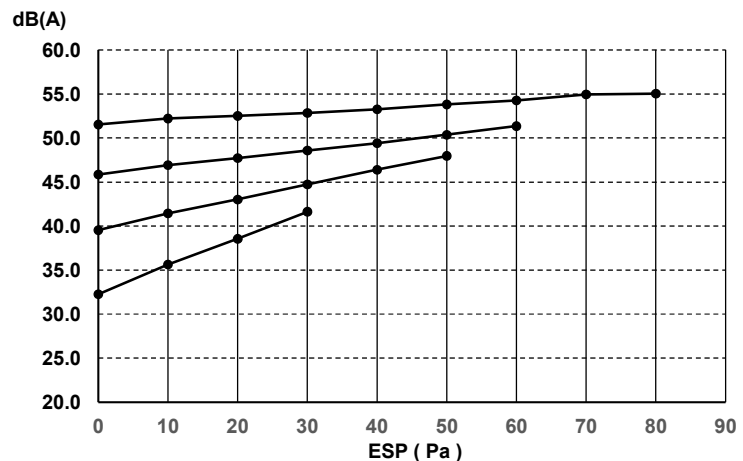
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		45.9	40.7	32.9	25.0
10		46.6	41.7	34.8	28.4
20		46.8	42.6	36.4	31.3
30		47.2	43.4	38.1	34.4
40		47.6	44.2	39.8	
50		48.1	45.2	41.4	
60		48.6	46.2		
70		49.3			
80		49.4			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		51.5	45.8	39.5	32.3
10		52.2	46.9	41.4	35.6
20		52.5	47.7	43.0	38.6
30		52.9	48.6	44.7	41.6
40		53.3	49.4	46.4	
50		53.8	50.4	48.0	
60		54.3	51.4		
70		55.0			
80		55.0			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE05FF
FWE05FFR

Sound Power Spectrum : FWE05F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.8		51.5		51.9		47.0			
125				44.5	56.3	39.2	52.0	34.8	52.2	30.3	47.1		
160				44.0		39.6		37.4		26.9			
200				43.6		42.7		33.3		26.3			
250	250			49.7	51.9	42.2	46.8	36.0	40.1	29.2	33.0		
315				45.9		41.0		36.0		28.7			
400				45.7		41.8		35.1		27.6			
500				46.5	50.7	41.7	46.2	35.5	39.5	27.3	31.4		
630	500			45.4		40.8		33.6		24.5			
800				42.9		37.9		29.8		20.3			
1000				43.1	47.0	37.6	41.7	29.2	33.3	19.2	23.5		
1250				40.1		34.7		25.5		15.3			
1600	1000			40.1		33.8		24.8		15.1			
2000				39.0	44.2	31.7	36.7	22.6	27.4	16.6	19.5		
2500				39.2		28.7		18.5		10.5			
3150				36.5		25.6		14.5		7.7			
4000	4000			34.8	39.5	23.9	28.7	14.2	18.9	10.7	14.9		
5000				31.4		21.3		13.5		11.1			
6300				29.6		18.1		11.6		10.2			
8000				25.3	31.5	16.5	21.3	13.6	17.8	12.4	16.8		
10000	8000			21.8		14.4		13.7		13.0			
dB(A)				52.6		47.0		40.4		33.0			

ESP=0Pa		Sound Power Spectrum (dB) : Discharge											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			43.4		41.6		31.1		24.7			
125				38.7	45.1	35.5	42.9	28.6	33.8	26.2	29.0		
160				35.2		31.3		25.7		19.7			
200				34.9		31.9		23.6		17.4			
250	250			41.9	44.4	35.5	39.3	29.1	32.8	22.4	25.9		
315				39.5		35.4		29.5		22.0			
400				40.9		37.2		30.0		22.7			
500				40.0	44.5	35.2	40.2	28.0	33.0	19.8	25.2		
630	500			38.0		33.1		25.5		16.8			
800				36.0		31.1		23.1		14.1			
1000				37.7	40.8	32.3	35.6	23.9	27.3	14.1	17.7		
1250				33.6		28.2		19.1		8.7			
1600	1000			34.4		28.6		19.2		8.8			
2000				31.8	37.4	25.5	30.9	15.7	21.3	7.4	11.8		
2500				30.8		22.2		11.2		3.1			
3150				28.6		18.8		7.6		2.4			
4000	2000			26.3	31.5	17.5	22.3	7.9	12.6	4.7	9.3		
5000				24.1		15.7		7.9		5.8			
6300				21.9		13.0		7.0		5.7			
8000				18.8	24.1	11.0	16.2	8.1	12.8	7.0	11.6		
10000	4000			14.1		9.5		8.7		7.7			
dB(A)				45.9		40.7		32.9		25.0			

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.5		51.0		51.9		47.0			
125				43.1	56.0	36.8	51.5	33.6	52.1	28.2	47.1		
160				43.4		38.9		37.1		25.9			
200	250			43.0		42.3		32.8		25.7			
250				48.9	51.1	41.1	45.9	35.0	39.1	28.1	32.0		
315				44.8		39.6		35.0		27.6			
400	500			43.9		40.0		33.4		25.9			
500				45.4	49.4	40.6	45.0	34.6	38.5	26.4	30.3		
630				44.6		40.0		32.8		23.7			
800	1000			41.9		36.8		28.7		19.1			
1000				41.6	45.8	36.1	40.5	27.7	32.1	17.5	22.1		
1250				39.1		33.6		24.4		14.2			
1600	2000			38.7		32.3		23.3		13.9			
2000				38.0	43.2	30.5	35.3	21.7	26.2	16.0	18.7		
2500				38.5		27.5		17.5		9.6			
3150	4000			35.7		24.6		13.5		6.1			
4000				34.1	38.7	22.8	27.6	13.0	17.7	9.4	13.4		
5000				30.5		19.9		12.2		9.7			
6300	8000			28.8		16.5		9.7		8.3			
8000				24.2	30.6	15.0	19.8	12.2	16.2	11.0	15.3		
10000				21.0		12.8		12.0		11.6			
dB(A)				51.5		45.8		39.5		32.3			

4D149962A

11 Sound data

11 - 1 Sound Power Spectrum

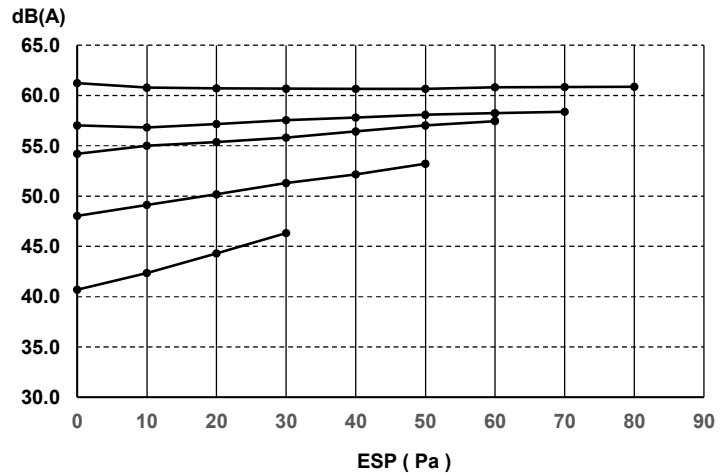
FWE06FF

FWE06FFR

Sound Power overall (dBA): FWE06F(A/B)F(N/T/V)5V1-(-/R)

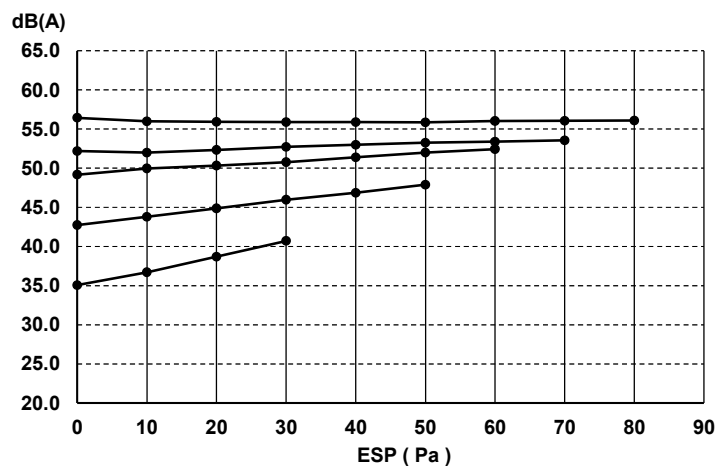
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	61.2	57.0	54.2	48.0	40.7
10	60.8	56.8	55.0	49.1	42.3
20	60.7	57.2	55.4	50.2	44.3
30	60.7	57.6	55.8	51.3	46.3
40	60.7	57.8	56.4	52.2	
50	60.7	58.1	57.0	53.2	
60	60.8	58.2	57.5		
70	60.8	58.4			
80	60.9				



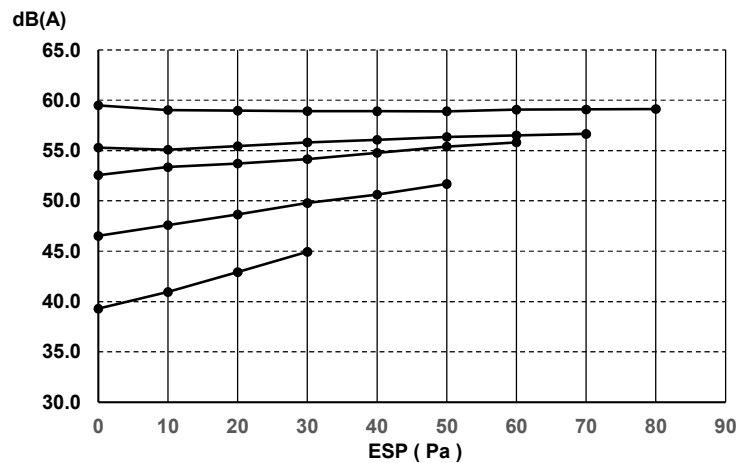
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	56.4	52.2	49.2	42.7	35.1
10	56.0	52.0	50.0	43.8	36.7
20	55.9	52.3	50.3	44.9	38.7
30	55.9	52.7	50.8	46.0	40.7
40	55.9	53.0	51.4	46.8	
50	55.9	53.3	52.0	47.9	
60	56.0	53.4	52.4		
70	56.0	53.6			
80	56.1				



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	59.5	55.3	52.6	46.5	39.3
10	59.0	55.1	53.4	47.6	41.0
20	59.0	55.4	53.7	48.7	42.9
30	58.9	55.8	54.2	49.8	44.9
40	58.9	56.1	54.8	50.6	
50	58.9	56.4	55.4	51.7	
60	59.1	56.5	55.8		
70	59.1	56.7			
80	59.1				



4D149963A

11 Sound data

11 - 1 Sound Power Spectrum

FWE06FF
FWE06FFR

Sound Power Spectrum : FWE06F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.8		56.0		58.1		55.5		53.6	
125		53.4	59.3	50.0	58.0	46.9	58.8	41.4	55.9	35.5	53.8
160		55.2		51.3		48.2		42.7		39.0	
200	250	54.3		50.8		48.0		44.6		34.8	
250		57.1	62.5	54.9	58.0	53.4	55.6	44.5	49.1	37.1	41.1
315		60.0		53.0		49.3		43.9		36.8	
400	500	55.2		51.4		48.7		43.7		35.9	
500		55.3	59.5	51.8	55.9	49.3	53.3	43.7	47.8	35.9	39.8
630		53.6		49.9		47.2		41.3		32.7	
800	1000	51.5		47.6		44.5		38.0		28.7	
1000		51.8	55.7	47.8	51.6	44.7	48.5	37.6	41.6	28.0	32.0
1250		48.7		44.3		41.0		33.8		23.7	
1600	2000	48.0		43.6		40.1		32.6		22.4	
2000		46.2	51.1	41.7	46.6	38.0	43.0	30.6	35.3	21.7	25.5
2500		43.9		39.1		35.1		26.5		15.0	
3150	4000	41.8		36.6		32.2		22.9		11.9	
4000		40.6	45.4	35.1	40.0	30.5	35.4	20.9	26.0	12.4	17.3
5000		39.2		33.3		28.4		19.2		13.1	
6300	8000	37.0		30.8		25.5		17.4		13.3	
8000		34.4	39.5	28.0	33.3	22.7	28.1	16.6	21.9	14.0	19.3
10000		30.7		24.5		20.2		17.5		15.8	
dB(A)		61.2		57.0		54.2		48.0		40.7	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	45.4		49.3		48.3		48.8		45.9	
125		48.4	51.4	44.4	51.0	41.2	49.5	35.5	49.1	29.5	46.0
160		45.3		41.0		38.8		32.7		25.9	
200	250	44.9		41.2		38.8		35.1		25.2	
250		51.4	55.7	49.2	51.8	47.7	49.6	38.1	42.1	31.0	34.8
315		53.0		47.5		43.9		38.2		31.6	
400	500	50.7		46.7		44.2		39.0		31.4	
500		50.0	54.6	46.4	50.7	43.7	48.1	37.8	42.4	30.0	34.6
630		48.5		44.5		41.5		35.4		27.3	
800	1000	46.4		42.2		39.1		32.6		24.0	
1000		48.2	51.4	43.8	47.1	40.5	43.8	33.7	37.1	24.7	28.2
1250		44.8		40.4		37.1		30.0		20.4	
1600	2000	45.0		40.5		37.1		29.6		19.8	
2000		42.7	47.9	38.2	43.3	34.6	39.8	27.1	32.1	17.7	22.2
2500		40.7		35.7		31.8		23.0		11.5	
3150	4000	38.0		32.5		28.1		18.5		8.0	
4000		37.2	41.9	31.3	36.1	26.7	31.4	16.7	21.8	8.3	13.1
5000		35.9		29.7		24.7		15.1		8.7	
6300	8000	33.8		27.1		21.7		12.8		8.5	
8000		31.1	36.1	24.0	29.2	18.4	23.9	11.8	17.0	9.1	14.0
10000		25.8		18.8		14.9		12.1		9.9	
dB(A)		56.4		52.2		49.2		42.7		35.1	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.3		54.9		57.6		54.5		52.8	
125		51.8	58.5	48.6	57.0	45.5	58.3	40.1	54.9	34.3	53.0
160			54.8		50.8		47.7		42.2		38.8
200	250	53.8		50.3		47.5		44.1		34.2	
250		55.7	61.5	53.5	56.8	52.0	54.4	43.4	48.1	35.8	39.9
315			59.0		51.6		47.9		42.5		35.3
400	500	53.3		49.6		46.8		41.9		34.1	
500		53.8	57.9	50.3	54.3	47.9	51.7	42.4	46.3	34.5	38.3
630			52.0		48.4		45.8		40.0		31.2
800	1000	49.9		46.1		43.0		36.6		26.9	
1000		49.4	53.6	45.6	49.7	42.6	46.6	35.3	39.7	25.2	29.7
1250			46.4		42.1		38.8		31.5		21.0
1600	2000	45.1		40.7		37.2		29.4		19.0	
2000		43.6	48.3	39.1	43.9	35.4	40.2	28.1	32.5	19.5	22.7
2500			41.2		36.4		32.4		23.9		12.4
3150	4000	39.4		34.4		30.0		20.9		9.6	
4000		38.0	42.9	32.8	37.7	28.2	33.1	18.9	24.0	10.4	15.2
5000			36.5		30.9		26.0		17.0		11.1
6300	8000	34.2		28.4		23.3		15.5		11.6	
8000		31.8	36.9	25.7	31.0	20.7	26.1	14.9	20.3	12.4	17.8
10000			29.1		23.1		18.6		16.0		14.5
dB(A)		59.5		55.3		52.6		46.5		39.3	

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11 Sound data

11 - 1 Sound Power Spectrum

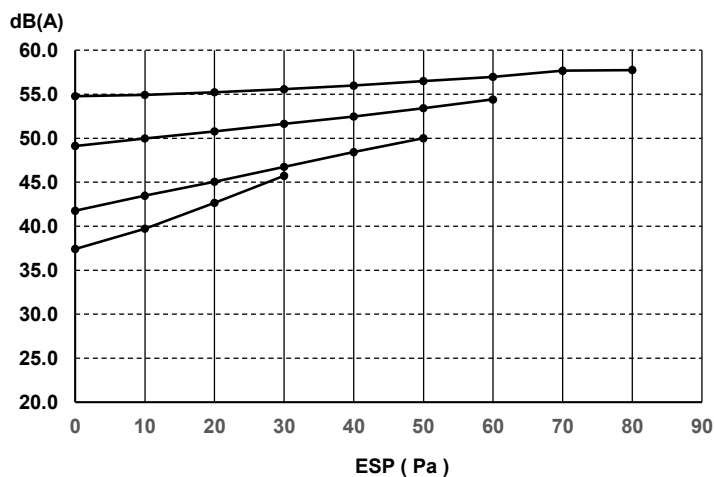
FWE08FF

FWE08FFR

Sound Power overall (dBA): FWE08F(A/B)F(N/T/V)5V1-(-/R)

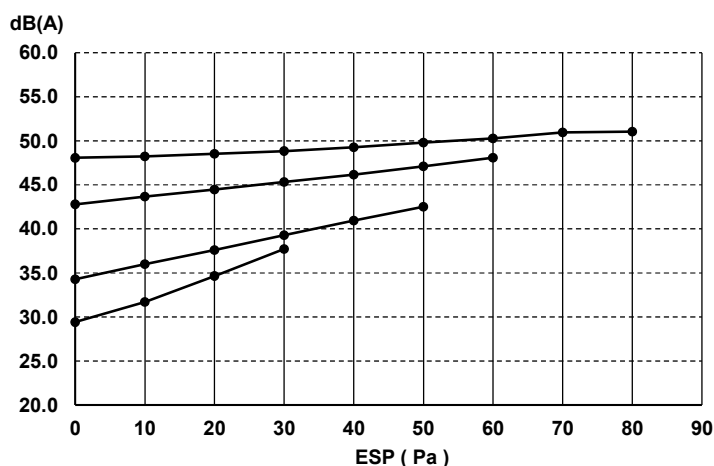
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		54.8	49.1	41.8	37.4
10		54.9	50.0	43.5	39.7
20		55.2	50.8	45.1	42.7
30		55.6	51.6	46.8	45.7
40		56.0	52.5	48.4	
50		56.5	53.4	50.0	
60		57.0	54.4		
70		57.7			
80		57.8			



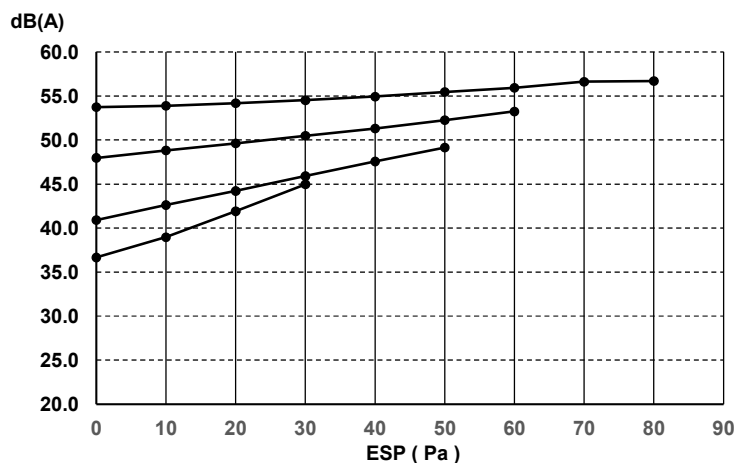
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		48.1	42.8	34.3	29.4
10		48.2	43.6	36.0	31.7
20		48.5	44.5	37.6	34.6
30		48.8	45.3	39.3	37.7
40		49.3	46.1	40.9	
50		49.8	47.1	42.5	
60		50.3	48.1		
70		51.0			
80		51.0			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		53.7	48.0	40.9	36.7
10		53.9	48.8	42.6	39.0
20		54.2	49.6	44.2	41.9
30		54.5	50.5	45.9	45.0
40		54.9	51.3	47.6	
50		55.5	52.3	49.1	
60		55.9	53.3		
70		56.6			
80		56.7			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE08FF
FWE08FFR

Sound Power Spectrum : FWE08F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed				4		3		2		1			
				H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1		
100	125			58.0		53.6		53.3		51.4			
125				46.7	58.5	41.3	54.1	36.1	53.5	34.7	51.5		
160				46.2		41.7		38.7		31.3			
200	250			45.8		44.8		34.7		30.7			
250				51.9	54.1	44.3	48.9	37.3	41.4	33.6	37.4		
315				48.1		43.1		37.4		33.1			
400	500			47.9		43.9		36.4		32.0			
500				48.7	52.9	43.8	48.4	36.8	40.9	31.7	35.8		
630				47.6		42.9		34.9		28.9			
800	1000			45.1		40.0		31.2		24.7			
1000				45.3	49.2	39.7	43.8	30.6	34.7	23.6	27.9		
1250				42.3		36.8		26.9		19.7			
1600	2000			42.3		36.0		26.1		19.5			
2000				41.2	46.4	33.8	38.8	24.0	28.8	21.0	23.9		
2500				41.4		30.8		19.8		14.9			
3150	4000			38.7		27.7		15.8		12.1			
4000				37.0	41.7	26.0	30.8	15.6	20.2	15.1	19.3		
5000				33.6		23.4		14.9		15.6			
6300	8000			31.8		20.2		12.9		14.6			
8000				27.5	33.7	18.6	23.5	15.0	19.2	16.8	21.2		
10000				24.0		16.5		15.0		17.5			
dB(A)				54.8		49.1		41.8		37.4			

ESP=0Pa		Sound Power Spectrum (dB) : Discharge											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			45.6		43.7		32.5		29.1			
125				40.9	47.3	37.6	45.0	30.0	35.2	30.6	33.5		
160				37.4		33.4		27.1		24.2			
200				37.1		34.0		24.9		21.9			
250				44.1	46.6	37.6	41.4	30.5	34.2	26.8	30.3		
315	250			41.7		37.5		30.8		26.4			
400				43.1		39.3		31.4		27.1			
500				42.2	46.7	37.3	42.4	29.4	34.4	24.2	29.6		
630				40.2		35.2		26.8		21.2			
800				38.2		33.2		24.5		18.5			
1000	1000			39.9	43.0	34.4	37.7	25.3	28.6	18.5	22.1		
1250				35.8		30.4		20.5		13.1			
1600				36.6		30.7		20.6		13.2			
2000				34.0	39.6	27.6	33.1	17.1	22.6	11.8	16.2		
2500				33.0		24.3		12.6		7.5			
3150	2000			30.8		20.9		9.0		6.8			
4000				28.5	33.7	19.6	24.4	9.3	13.9	9.1	13.7		
5000				26.3		17.8		9.2		10.2			
6300				24.1		15.1		8.4		10.1			
8000				21.0	26.3	13.1	18.3	9.5	14.1	11.4	16.0		
10000	8000			16.3		11.6		10.0		12.1			
dB(A)				48.1		42.8		34.3		29.4			

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			57.7		53.2		53.3		51.4			
125				45.3	58.2	38.9	53.6	34.9	53.5	32.6	51.5		
160				45.6		41.0		38.4		30.3			
200	250			45.2		44.4		34.2		30.1			
250				51.1	53.3	43.2	48.0	36.4	40.5	32.5	36.4		
315				47.0		41.7		36.3		32.0			
400	500			46.1		42.1		34.8		30.3			
500				47.6	51.6	42.8	47.1	36.0	39.8	30.9	34.7		
630				46.8		42.1		34.2		28.1			
800	1000			44.1		39.0		30.1		23.5			
1000				43.8	48.0	38.2	42.6	29.1	33.4	21.9	26.5		
1250				41.3		35.7		25.8		18.6			
1600	2000			40.9		34.4		24.7		18.3			
2000				40.2	45.4	32.6	37.4	23.0	27.6	20.4	23.1		
2500				40.7		29.7		18.9		14.0			
3150	4000			37.9		26.7		14.8		10.6			
4000				36.3	40.9	24.9	29.7	14.4	19.1	13.8	17.9		
5000				32.7		22.0		13.5		14.1			
6300	8000			31.0		18.6		11.1		12.8			
8000				26.4	32.8	17.2	21.9	13.6	17.6	15.4	19.7		
10000				23.2		14.9		13.4		16.0			
dB(A)				53.7		48.0		40.9		36.7			

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11 Sound data

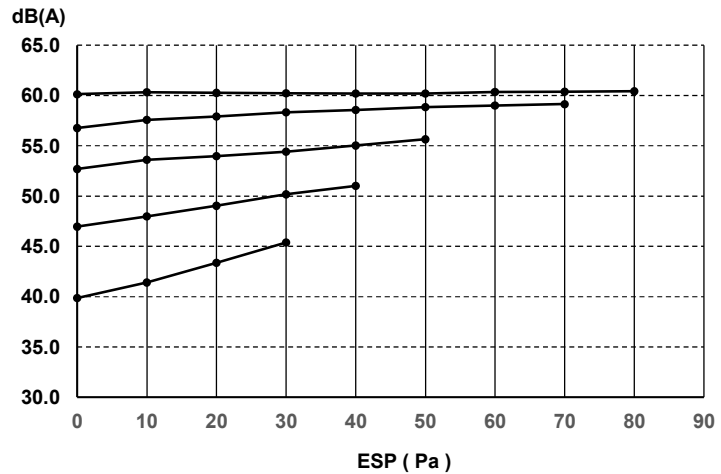
11 - 1 Sound Power Spectrum

FWE10FF
FWE10FFR

Sound Power overall (dBA): FWE10F(A/B)F(N/T/V)5V1-(-/R)

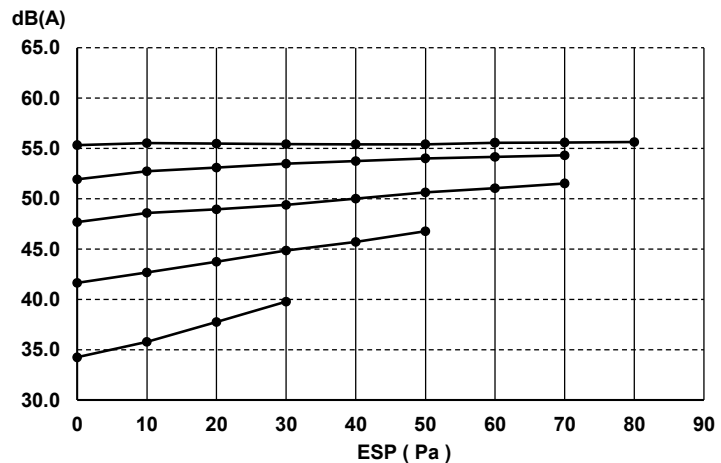
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	60.1	56.8	52.7	47.0	39.9
10	60.3	57.6	53.6	48.0	41.4
20	60.3	57.9	54.0	49.0	43.4
30	60.2	58.3	54.4	50.2	45.4
40	60.2	58.6	55.0	51.0	
50	60.2	58.8	55.6	52.1	
60	60.4	59.0	56.1		
70	60.4	59.1	56.5		
80	60.4				



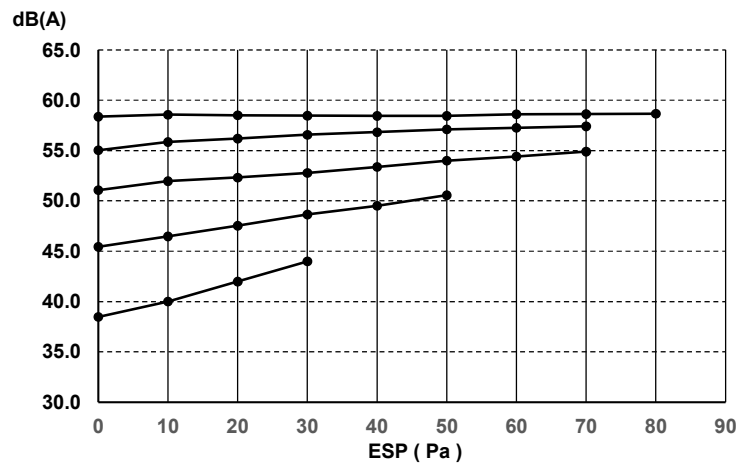
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	55.3	51.9	47.7	41.7	34.2
10	55.5	52.7	48.6	42.7	35.8
20	55.5	53.1	48.9	43.7	37.7
30	55.4	53.5	49.4	44.9	39.8
40	55.4	53.7	50.0	45.7	
50	55.4	54.0	50.6	46.8	
60	55.6	54.2	51.0		
70	55.6	54.3	51.5		
80	55.6				



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	58.4	55.0	51.1	45.4	38.5
10	58.6	55.9	52.0	46.5	40.0
20	58.5	56.2	52.3	47.5	42.0
30	58.5	56.6	52.8	48.7	44.0
40	58.5	56.8	53.4	49.5	
50	58.4	57.1	54.0	50.6	
60	58.6	57.3	54.4		
70	58.6	57.4	54.9		
80	58.7				



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11 Sound data

11 - 1 Sound Power Spectrum

FWE10FF
FWE10FFR

Sound Power Spectrum : FWE10F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.7		55.7		56.6		54.5		52.8	
125		52.3	58.2	49.8	57.7	45.4	57.3	40.3	54.8	34.7	53.0
160		54.1		51.0		46.7		41.6		38.2	
200	250	53.2		50.6		46.5		43.5		33.9	
250		56.0	61.4	54.6	57.7	51.9	54.1	43.5	48.0	36.2	40.3
315		58.9		52.7		47.8		42.8		36.0	
400	500	54.1		51.1		47.2		42.6		35.1	
500		54.2	58.4	51.5	55.6	47.8	51.8	42.6	46.7	35.0	39.0
630		52.5		49.6		45.7		40.3		31.9	
800	1000	50.4		47.4		43.0		37.0		27.9	
1000		50.7	54.6	47.6	51.4	43.2	47.0	36.5	40.5	27.2	31.2
1250		47.6		44.1		39.5		32.7		22.9	
1600	2000	46.9		43.3		38.6		31.5		21.6	
2000		45.1	50.0	41.4	46.3	36.5	41.5	29.6	34.2	20.9	24.7
2500		42.8		38.8		33.6		25.4		14.2	
3150	4000	40.7		36.3		30.7		21.8		11.0	
4000		39.5	44.3	34.9	39.7	29.0	33.9	19.8	24.9	11.6	16.4
5000		38.1		33.1		26.9		18.1		12.3	
6300	8000	35.9		30.6		24.0		16.3		12.5	
8000		33.3	38.4	27.7	33.0	21.2	26.6	15.5	20.9	13.2	18.5
10000		29.6		24.2		18.7		16.4		15.0	
dB(A)		60.1		56.8		52.7		47.0		39.9	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	44.3		49.0		46.8		47.7		45.1	
125		47.3	50.3	44.1	50.7	39.7	48.0	34.5	48.0	28.7	45.2
160		44.2		40.7		37.3		31.7		25.0	
200	250	43.8		41.0		37.3		34.0		24.4	
250		50.3	54.6	48.9	51.6	46.2	48.1	37.0	41.0	30.1	34.0
315		51.9		47.3		42.4		37.2		30.8	
400	500	49.6		46.4		42.7		37.9		30.5	
500		48.9	53.5	46.1	50.5	42.2	46.6	36.7	41.3	29.2	33.8
630		47.4		44.2		40.0		34.4		26.5	
800	1000	45.3		42.0		37.6		31.5		23.2	
1000		47.1	50.3	43.5	46.9	39.0	42.3	32.6	36.0	23.9	27.4
1250		43.7		40.1		35.6		28.9		19.5	
1600	2000	43.9		40.2		35.6		28.6		18.9	
2000		41.6	46.8	37.9	43.0	33.1	38.3	26.0	31.0	16.9	21.4
2500		39.6		35.4		30.3		21.9		10.7	
3150	4000	36.9		32.3		26.6		17.4		7.2	
4000		36.1	40.8	31.1	35.8	25.2	29.9	15.6	20.7	7.4	12.3
5000		34.8		29.4		23.2		14.0		7.9	
6300	8000	32.7		26.9		20.2		11.8		7.7	
8000		30.0	35.0	23.7	29.0	16.9	22.4	10.7	15.9	8.3	13.2
10000		24.7		18.6		13.4		11.0		9.1	
dB(A)		55.3		51.9		47.7		41.7		34.2	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.2		54.7		56.1		53.4		52.0	
125		50.7	57.4	48.4	56.8	44.0	56.8	39.0	53.8	33.4	52.2
160			53.7		50.6		46.2		41.1		38.0
200	250	52.7		50.1		46.0		43.0		33.4	
250		54.6	60.4	53.3	56.5	50.5	52.9	42.4	47.1	35.0	39.1
315			57.9		51.3		46.4		41.4		34.5
400	500	52.2		49.3		45.3		40.8		33.2	
500		52.7	56.8	50.1	54.0	46.4	50.2	41.3	45.2	33.7	37.4
630			50.9		48.1		44.3		39.0		30.4
800	1000	48.8		45.9		41.5		35.5		26.0	
1000		48.3	52.5	45.4	49.5	41.1	45.1	34.2	38.6	24.4	28.9
1250			45.3		41.9		37.3		30.4		20.2
1600	2000	44.0		40.5		35.7		28.4		18.2	
2000		42.5	47.2	38.9	43.6	33.9	38.7	27.0	31.4	18.7	21.9
2500			40.1		36.1		30.9		22.9		11.6
3150	4000	38.3		34.1		28.5		19.8		8.8	
4000		36.9	41.8	32.5	37.4	26.7	31.6	17.8	22.9	9.5	14.3
5000			35.4		30.6		24.5		15.9		10.3
6300	8000	33.1		28.1		21.8		14.4		10.8	
8000		30.7	35.8	25.5	30.8	19.2	24.6	13.8	19.2	11.5	17.0
10000			28.0		22.9		17.1		15.0		13.7
dB(A)		58.4		55.0		51.1		45.4		38.5	

4D149965A

11 Sound data

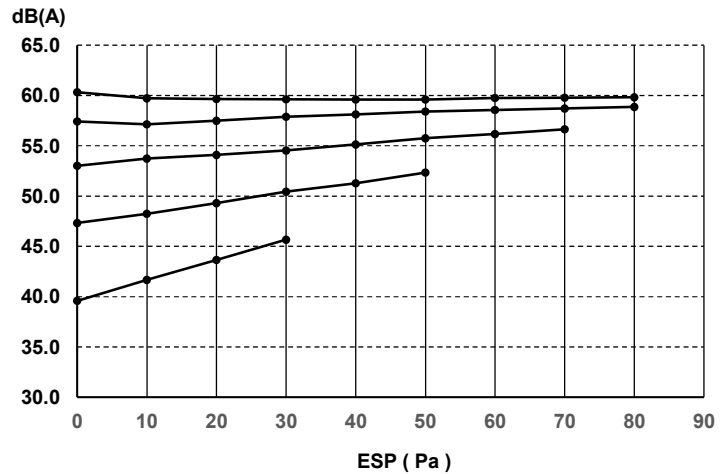
11 - 1 Sound Power Spectrum

FWE12FF
FWE12FFR

Sound Power overall (dBA): FWE12F(A/B)F(N/T/V)5V1-(-/R)

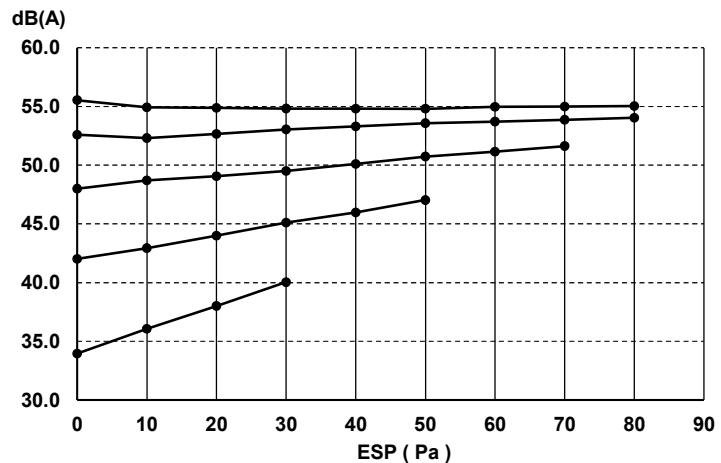
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	60.3	57.4	53.0	47.3	39.6
10	59.7	57.1	53.7	48.2	41.7
20	59.7	57.5	54.1	49.3	43.6
30	59.6	57.9	54.5	50.4	45.7
40	59.6	58.1	55.1	51.3	
50	59.6	58.4	55.8	52.3	
60	59.8	58.6	56.2		
70	59.8	58.7	56.6		
80	59.8	58.9			



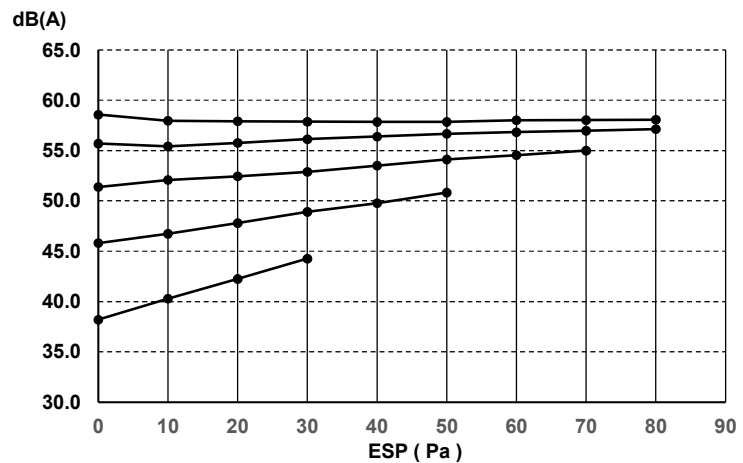
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	55.5	52.6	48.0	42.0	34.0
10	54.9	52.3	48.7	42.9	36.1
20	54.9	52.7	49.1	44.0	38.0
30	54.8	53.0	49.5	45.1	40.0
40	54.8	53.3	50.1	46.0	
50	54.8	53.6	50.7	47.0	
60	55.0	53.7	51.1		
70	55.0	53.9	51.6		
80	55.0	54.0			



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	58.6	55.7	51.4	45.8	38.2
10	58.0	55.4	52.1	46.7	40.3
20	57.9	55.8	52.4	47.8	42.3
30	57.9	56.1	52.9	48.9	44.3
40	57.9	56.4	53.5	49.8	
50	57.8	56.7	54.1	50.8	
60	58.0	56.8	54.5		
70	58.0	57.0	55.0		
80	58.1	57.1			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE12FF
FWE12FFR

Sound Power Spectrum : FWE12F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.9		56.4		56.9		54.8		52.5	
125		52.5	58.4	50.4	58.4	45.7	57.6	40.7	55.2	34.4	52.7
160		54.3		51.7		47.0		42.0		37.9	
200	250	53.4		51.2		46.8		43.9		33.7	
250		56.2	61.6	55.3	58.4	52.2	54.5	43.8	48.4	36.0	40.0
315		59.1		53.4		48.2		43.2		35.7	
400	500	54.3		51.8		47.6		43.0		34.8	
500		54.4	58.6	52.2	56.3	48.1	52.1	43.0	47.1	34.8	38.7
630		52.7		50.3		46.0		40.6		31.6	
800	1000	50.6		48.0		43.3		37.3		27.6	
1000		50.9	54.8	48.2	52.0	43.5	47.3	36.9	40.9	26.9	30.9
1250		47.8		44.7		39.8		33.1		22.6	
1600	2000	47.1		44.0		38.9		31.8		21.3	
2000		45.3	50.2	42.1	47.0	36.9	41.8	29.9	34.6	20.6	24.4
2500		43.0		39.5		33.9		25.8		13.9	
3150	4000	40.9		37.0		31.0		22.2		10.8	
4000		39.7	44.5	35.5	40.4	29.3	34.2	20.2	25.3	11.3	16.2
5000		38.3		33.7		27.2		18.4		12.0	
6300	8000	36.1		31.2		24.4		16.6		12.2	
8000		33.5	38.6	28.4	33.7	21.6	27.0	15.9	21.2	12.9	18.2
10000		29.8		24.9		19.0		16.8		14.7	
dB(A)		60.3		57.4		53.0		47.3		39.6	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	44.5		49.7		47.1		48.1		44.8	
125		47.5	50.5	44.8	51.4	40.1	48.3	34.8	48.4	28.4	44.9
160		44.4		41.4		37.6		32.0		24.8	
200	250	44.0		41.6		37.6		34.3		24.1	
250		50.5	54.8	49.6	52.2	46.6	48.4	37.4	41.4	29.9	33.7
315		52.1		47.9		42.7		37.5		30.5	
400	500	49.8		47.1		43.1		38.3		30.3	
500		49.1	53.7	46.8	51.1	42.5	46.9	37.0	41.7	28.9	33.5
630		47.6		44.9		40.3		34.7		26.2	
800	1000	45.5		42.6		37.9		31.9		22.9	
1000		47.3	50.5	44.2	47.5	39.3	42.7	32.9	36.4	23.6	27.1
1250		43.9		40.8		35.9		29.3		19.3	
1600	2000	44.1		40.9		35.9		28.9		18.7	
2000		41.8	47.0	38.6	43.7	33.5	38.6	26.3	31.4	16.6	21.1
2500		39.8		36.1		30.6		22.3		10.4	
3150	4000	37.1		32.9		26.9		17.8		6.9	
4000		36.3	41.0	31.7	36.5	25.5	30.3	16.0	21.1	7.2	12.0
5000		35.0		30.1		23.5		14.4		7.6	
6300	8000	32.9		27.5		20.5		12.1		7.4	
8000		30.2	35.2	24.4	29.6	17.3	22.8	11.1	16.3	8.0	12.9
10000		24.9		19.2		13.8		11.4		8.8	
dB(A)		55.5		52.6		48.0		42.0		34.0	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.4		55.3		56.5		53.8		51.7	
125		50.9	57.6	49.0	57.4	44.3	57.1	39.4	54.2	33.2	51.9
160			53.9		51.2		46.5		41.5		37.7
200	250	52.9		50.7		46.3		43.4		33.1	
250		54.8	60.6	53.9	57.2	50.8	53.2	42.7	47.4	34.7	38.8
315			58.1		52.0		46.7		41.8		34.2
400	500	52.4		50.0		45.7		41.2		33.0	
500		52.9	57.0	50.7	54.7	46.7	50.5	41.7	45.6	33.4	37.2
630			51.1		48.8		44.6		39.3		30.1
800	1000	49.0		46.5		41.9		35.9		25.8	
1000		48.5	52.7	46.0	50.1	41.4	45.4	34.6	39.0	24.1	28.6
1250			45.5		42.5		37.6		30.8		19.9
1600	2000	44.2		41.1		36.0		28.7		17.9	
2000		42.7	47.4	39.5	44.3	34.2	39.0	27.4	31.8	18.4	21.6
2500			40.3		36.8		31.2		23.2		11.3
3150	4000	38.5		34.8		28.8		20.2		8.5	
4000		37.1	42.0	33.2	38.1	27.0	32.0	18.1	23.3	9.3	14.1
5000			35.6		31.3		24.8		16.3		10.0
6300	8000	33.3		28.8		22.1		14.8		10.5	
8000		30.9	36.0	26.1	31.4	19.5	24.9	14.2	19.5	11.3	16.7
10000			28.2		23.5		17.4		15.3		13.4
dB(A)		58.6		55.7		51.4		45.8		38.2	

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11 Sound data

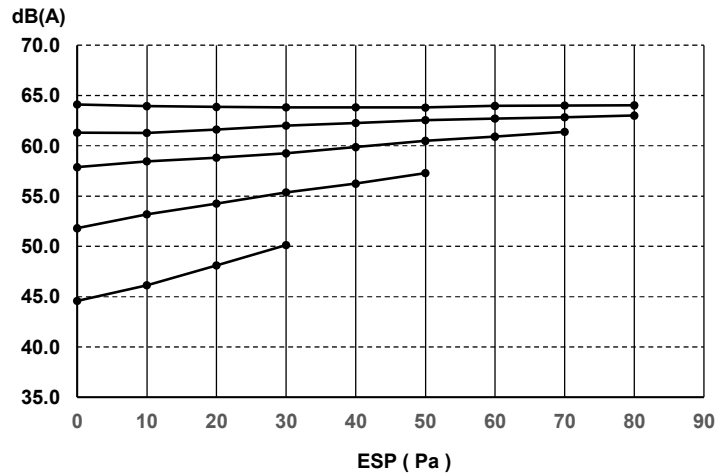
11 - 1 Sound Power Spectrum

FWE14FF
FWE14FFR

Sound Power overall (dBA): FWE14F(A/B)F(N/T/V)5V1-(-/R)

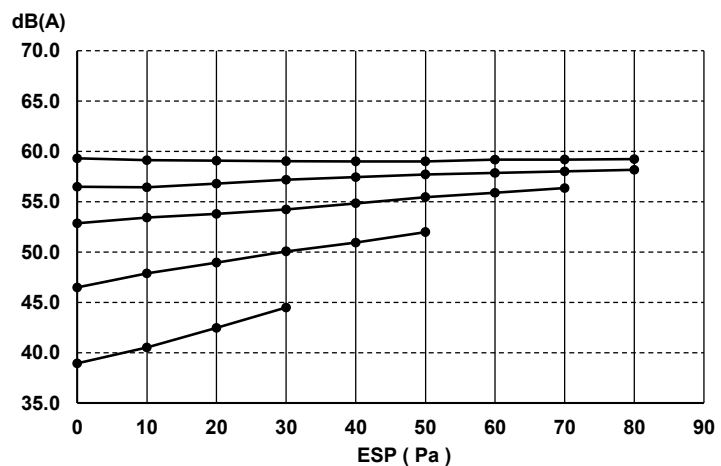
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	64.1	61.3	57.9	51.8	44.6
10	63.9	61.3	58.5	53.2	46.1
20	63.9	61.6	58.8	54.3	48.1
30	63.8	62.0	59.3	55.4	50.1
40	63.8	62.3	59.9	56.2	
50	63.8	62.5	60.5	57.3	
60	64.0	62.7	60.9		
70	64.0	62.8	61.4		
80	64.0	63.0			



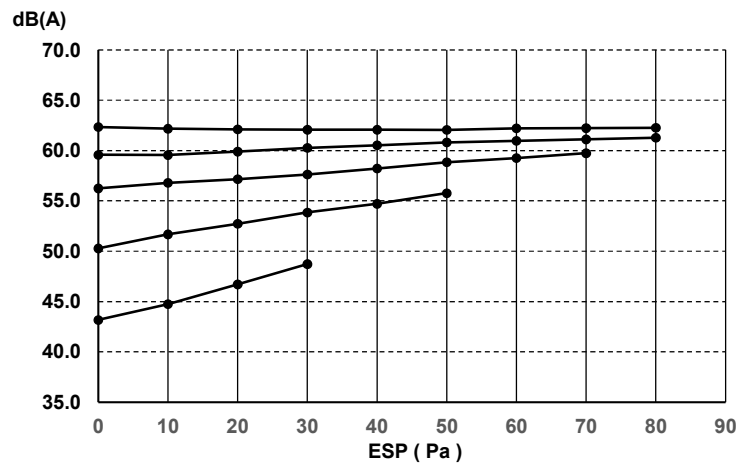
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	59.3	56.5	52.9	46.5	38.9
10	59.1	56.4	53.4	47.9	40.5
20	59.1	56.8	53.8	48.9	42.5
30	59.0	57.2	54.2	50.1	44.5
40	59.0	57.4	54.8	50.9	
50	59.0	57.7	55.5	52.0	
60	59.2	57.9	55.9		
70	59.2	58.0	56.4		
80	59.2	58.2			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	62.4	59.6	56.2	50.3	43.2
10	62.2	59.6	56.8	51.7	44.7
20	62.1	59.9	57.2	52.7	46.7
30	62.1	60.3	57.6	53.9	48.7
40	62.1	60.5	58.2	54.7	
50	62.1	60.8	58.8	55.8	
60	62.2	61.0	59.3		
70	62.2	61.1	59.7		
80	62.3	61.3			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE14FF
FWE14FFR

Sound Power Spectrum : FWE14F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing										
Fan Speed		5		4		3		2		1		
		H		M		L						
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	
100	125	57.7		60.3		61.8		59.3		57.5		
125		56.3	62.2	54.3	62.3	50.6	62.5	45.1	59.7	39.4	57.7	
160		58.1		55.6		51.9		46.4		42.9		
200		57.2		55.1		51.7		48.3		38.6		
250		60.0	65.3	59.2	62.3	57.1	59.3	48.3	52.9	40.9	45.0	
315	250	62.8		57.3		53.0		47.6		40.7		
400		58.1		55.7		52.4		47.4		39.8		
500		58.2	62.4	56.1	60.2	53.0	56.9	47.4	51.6	39.7	43.7	
630		56.5		54.2		50.9		45.1		36.6		
800		54.4		51.9		48.2		41.8		32.6		
1000	500	54.7	58.5	52.1	55.9	48.3	52.1	41.3	45.4	31.9	35.9	
1250		51.6		48.6		44.7		37.6		27.6		
1600		50.9		47.9		43.8		36.3		26.3		
2000		49.1	54.0	46.0	50.9	41.7	46.7	34.4	39.1	25.6	29.4	
2500		46.8		43.4		38.8		30.3		18.9		
3150	1000	44.7		40.9		35.8		26.6		15.7		
4000		43.5	48.3	39.4	44.3	34.2	39.1	24.7	29.8	16.3	21.1	
5000		42.1		37.6		32.1		22.9		17.0		
6300		39.9		35.1		29.2		21.1		17.2		
8000		37.3	42.4	32.2	37.5	26.4	31.8	20.4	25.7	17.9	23.2	
10000	8000	33.6		28.8		23.9		21.3		19.7		
dB(A)		64.1		61.3		57.9		51.8		44.6		

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.3		53.6		52.0		52.6		49.8	
125		51.3	54.3	48.7	55.2	44.9	53.2	39.3	52.9	33.4	49.9
160			48.2		45.2		42.5		36.5		29.7
200	250	47.7		45.5		42.5		38.8		29.1	
250		54.3	58.6	53.4	56.1	51.4	53.3	41.8	45.9	34.8	38.7
315		55.9		51.8		47.6		42.0		35.5	
400	500	53.5		51.0		47.9		42.7		35.2	
500		52.9	57.4	50.7	55.0	47.4	51.7	41.5	46.2	33.9	38.5
630		51.3		48.8		45.2		39.2		31.2	
800	1000	49.2		46.5		42.7		36.3		27.9	
1000		51.0	54.3	48.1	51.4	44.1	47.5	37.4	40.9	28.6	32.1
1250		47.7		44.7		40.7		33.7		24.2	
1600	2000	47.8		44.7		40.7		33.4		23.6	
2000		45.6	50.8	42.5	47.6	38.3	43.5	30.8	35.9	21.6	26.1
2500		43.5		40.0		35.4		26.8		15.4	
3150	4000	40.9		36.8		31.7		22.3		11.9	
4000		40.1	44.8	35.6	40.4	30.3	35.1	20.5	25.5	12.1	17.0
5000		38.7		34.0		28.3		18.9		12.6	
6300	8000	36.7		31.4		25.3		16.6		12.4	
8000		33.9	38.9	28.3	33.5	22.1	27.6	15.5	20.8	13.0	17.9
10000		28.7		23.1		18.6		15.8		13.8	
dB(A)		59.3		56.5		52.9		46.5		38.9	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.1		59.2		61.3		58.3		56.7	
125		54.6	61.4	52.9	61.3	49.2	62.0	43.8	58.7	38.1	56.9
160		57.6		55.1		51.4		46.0		42.7	
200	250	56.6		54.6		51.1		47.8		38.1	
250		58.6	64.3	57.8	61.1	55.7	58.1	47.2	51.9	39.7	43.8
315		61.8		55.8		51.5		46.2		39.2	
400	500	56.2		53.9		50.5		45.6		37.9	
500		56.7	60.7	54.6	58.6	51.6	55.4	46.2	50.1	38.4	42.1
630		54.9		52.7		49.5		43.8		35.1	
800	1000	52.8		50.4		46.7		40.3		30.7	
1000		52.3	56.5	49.9	54.0	46.3	50.3	39.1	43.5	29.1	33.6
1250		49.3		46.4		42.4		35.3		24.9	
1600	2000	47.9		45.0		40.8		33.2		22.9	
2000		46.5	51.2	43.4	48.2	39.1	43.8	31.9	36.3	23.4	26.6
2500		44.0		40.7		36.0		27.7		16.3	
3150	4000	42.3		38.7		33.7		24.7		13.5	
4000		40.9	45.8	37.1	42.0	31.9	36.8	22.6	27.7	14.2	19.0
5000		39.3		35.2		29.7		20.7		15.0	
6300	8000	37.1		32.7		26.9		19.2		15.5	
8000		34.6	39.8	30.0	35.3	24.4	29.7	18.6	24.0	16.2	21.7
10000		31.9		27.4		22.3		19.8		18.4	
dB(A)		62.4		59.6		56.2		50.3		43.2	

4D149967A

11 Sound data

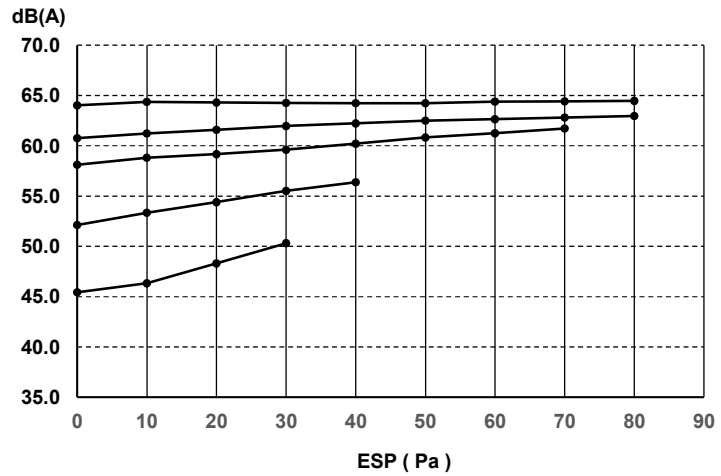
11 - 1 Sound Power Spectrum

FWE16FF
FWE16FFR

Sound Power overall (dBA): FWE16F(A/B)F(N/T/V)5V1-(-/R)

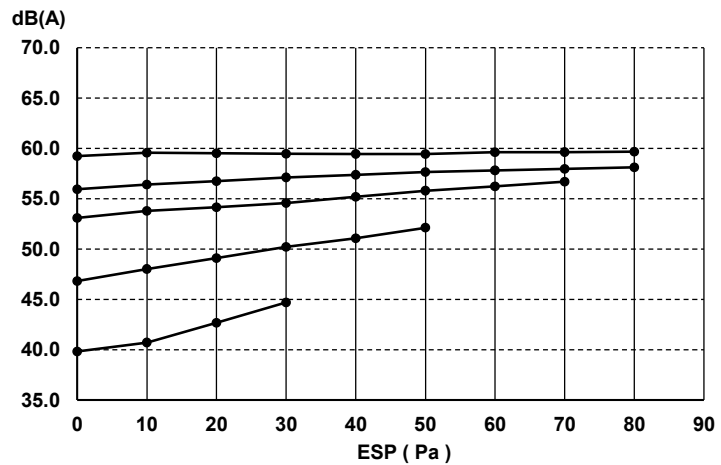
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	64.0	60.8	58.1	52.1	45.4
10	64.4	61.2	58.8	53.3	46.3
20	64.3	61.6	59.2	54.4	48.3
30	64.3	62.0	59.6	55.5	50.3
40	64.2	62.2	60.2	56.4	
50	64.2	62.5	60.8	57.4	
60	64.4	62.6	61.3		
70	64.4	62.8	61.7		
80	64.5	63.0			



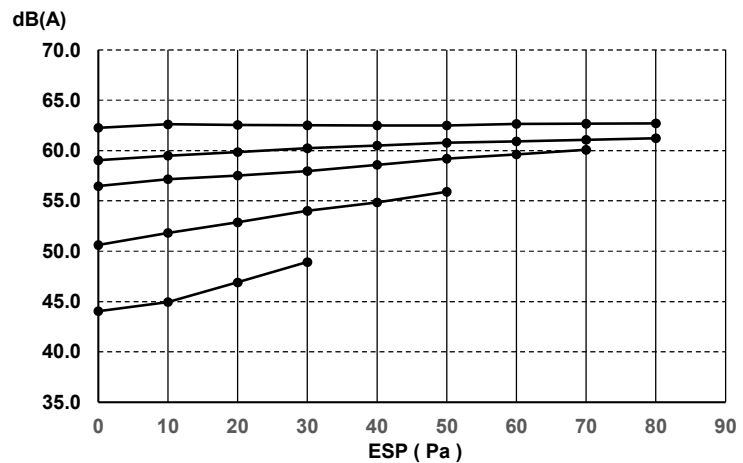
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	59.2	55.9	53.1	46.8	39.8
10	59.6	56.4	53.8	48.0	40.7
20	59.5	56.7	54.1	49.1	42.7
30	59.5	57.1	54.6	50.2	44.7
40	59.5	57.4	55.2	51.1	
50	59.4	57.7	55.8	52.1	
60	59.6	57.8	56.2		
70	59.6	58.0	56.7		
80	59.7	58.1			



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	62.3	59.0	56.5	50.6	44.0
10	62.6	59.5	57.2	51.8	44.9
20	62.6	59.9	57.5	52.9	46.9
30	62.5	60.2	58.0	54.0	48.9
40	62.5	60.5	58.6	54.9	
50	62.5	60.8	59.2	55.9	
60	62.6	60.9	59.6		
70	62.7	61.1	60.1		
80	62.7	61.2			



4D149968A

11 Sound data

11 - 1 Sound Power Spectrum

FWE16FF
FWE16FFR

Sound Power Spectrum : FWE16F(A/B)F(N/T/V)5V1-(-/R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.6		59.7		62.0		59.6		58.4	
125		56.2	62.1	53.8	61.7	50.8	62.7	45.5	60.0	40.3	58.6
160		58.0		55.0		52.1		46.8		43.7	
200	250	57.1		54.6		51.9		48.7		39.5	
250		59.9	65.3	58.6	61.7	57.3	59.6	48.6	53.2	41.8	45.9
315		62.7		56.8		53.2		48.0		41.6	
400	500	58.0		55.1		52.7		47.8		40.7	
500		58.1	62.3	55.6	59.6	53.2	57.2	47.8	51.9	40.6	44.6
630		56.4		53.6		51.1		45.4		37.4	
800	1000	54.3		51.4		48.4		42.1		33.4	
1000		54.6	58.4	51.6	55.4	48.6	52.4	41.7	45.7	32.7	36.8
1250		51.5		48.1		44.9		37.9		28.4	
1600	2000	50.8		47.4		44.0		36.6		27.2	
2000		49.0	53.9	45.4	50.4	42.0	46.9	34.7	39.4	26.5	30.2
2500		46.7		42.8		39.0		30.6		19.7	
3150	4000	44.6		40.3		36.1		27.0		16.6	
4000		43.4	48.2	38.9	43.7	34.4	39.3	25.0	30.1	17.2	22.0
5000		42.0		37.1		32.3		23.2		17.8	
6300	8000	39.8		34.6		29.5		21.4		18.1	
8000		37.2	42.3	31.7	37.0	26.7	32.0	20.7	26.0	18.8	24.0
10000		33.5		28.3		24.1		21.6		20.6	
dB(A)		64.0		60.8		58.1		52.1		45.4	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.2		53.0		52.2		52.9		50.6	
125		51.2	54.2	48.1	54.7	45.2	53.4	39.6	53.2	34.3	50.8
160			48.1		44.7		42.7		36.8		30.6
200	250	47.6		45.0		42.7		39.1		29.9	
250		54.2	58.5	52.9	55.6	51.6	53.5	42.2	46.2	35.7	39.6
315			55.8		51.3		47.8		42.3		36.4
400	500	53.5		50.4		48.1		43.1		36.1	
500		52.8	57.4	50.1	54.5	47.6	52.0	41.8	46.5	34.8	39.4
630			51.2		48.2		45.4		39.5		32.1
800	1000	49.2		46.0		43.0		36.7		28.8	
1000		50.9	54.2	47.6	50.9	44.4	47.8	37.7	41.2	29.5	32.9
1250			47.6		44.1		41.0		34.1		25.1
1600	2000	47.8		44.2		41.0		33.7		24.5	
2000		45.5	50.7	41.9	47.0	38.6	43.7	31.1	36.2	22.4	27.0
2500			43.5		39.4		35.7		27.1		16.3
3150	4000	40.8		36.3		32.0		22.6		12.7	
4000		40.0	44.7	35.1	39.9	30.6	35.4	20.8	25.9	13.0	17.9
5000			38.7		33.4		28.6		19.2		13.5
6300	8000	36.6		30.9		25.6		16.9		13.2	
8000		33.9	38.9	27.7	33.0	22.4	27.9	15.9	21.1	13.8	18.7
10000			28.6		22.6		18.8		16.2		14.7
dB(A)		59.2		55.9		53.1		46.8		39.8	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.0		58.7		61.5		58.6		57.6	
125		54.6	61.3	52.4	60.8	49.4	62.2	44.2	59.0	39.0	57.8
160			57.5		54.6		51.6		46.3		43.5
200	250	56.6		54.1		51.4		48.2		39.0	
250		58.5	64.2	57.3	60.5	55.9	58.3	47.5	52.2	40.6	44.7
315			61.8		55.3		51.8		46.6		40.0
400	500	56.1		53.3		50.8		46.0		38.8	
500		56.6	60.7	54.1	58.0	51.8	55.6	46.5	50.4	39.3	43.0
630			54.8		52.2		49.7		44.1		36.0
800	1000	52.7		49.9		46.9		40.7		31.6	
1000		52.2	56.4	49.4	53.5	46.5	50.5	39.4	43.8	29.9	34.5
1250			49.2		45.9		42.7		35.6		25.7
1600	2000	47.9		44.5		41.1		33.5		23.7	
2000		46.4	51.1	42.9	47.6	39.3	44.1	32.2	36.6	24.3	27.5
2500			43.9		40.2		36.3		28.0		17.1
3150	4000	42.2		38.1		33.9		25.0		14.3	
4000		40.8	45.7	36.6	41.4	32.1	37.1	22.9	28.1	15.1	19.9
5000			39.3		34.6		29.9		21.1		15.9
6300	8000	37.0		32.2		27.2		19.6		16.3	
8000		34.6	39.7	29.5	34.8	24.6	30.0	19.0	24.3	17.1	22.5
10000			31.9		26.9		22.5		20.1		19.3
dB(A)		62.3		59.0		56.5		50.6		44.0	

4D149968A

11 Sound data

11 - 1 Sound Power Spectrum

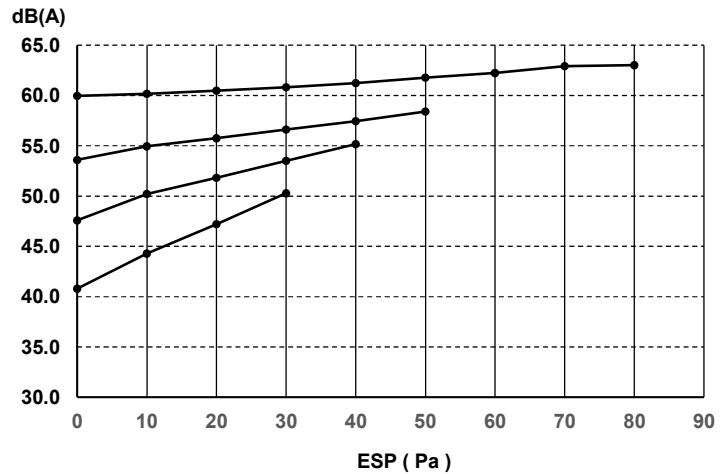
FWE20FF

FWE20FFR

Sound Power overall (dBA): FWE20F(A/B)F(N/T/V)5V1-(-/R)

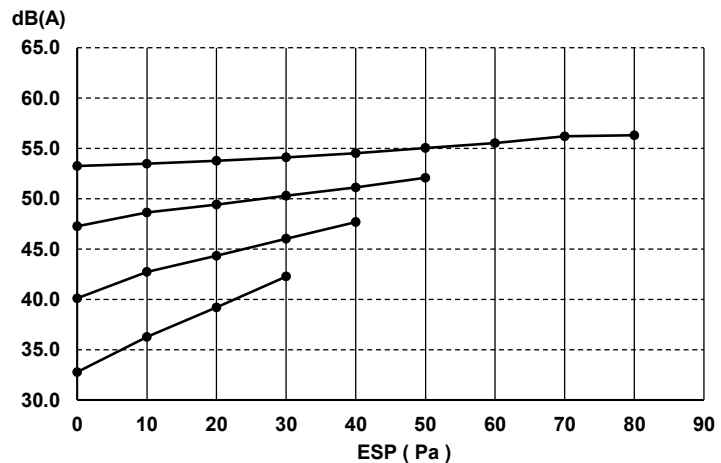
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		60.0	53.6	47.6	40.8
10		60.2	55.0	50.2	44.3
20		60.5	55.8	51.8	47.2
30		60.8	56.6	53.5	50.3
40		61.2	57.4	55.2	
50		61.8	58.4	56.7	
60		62.2	59.4		
70		62.9	60.4		
80		63.0			



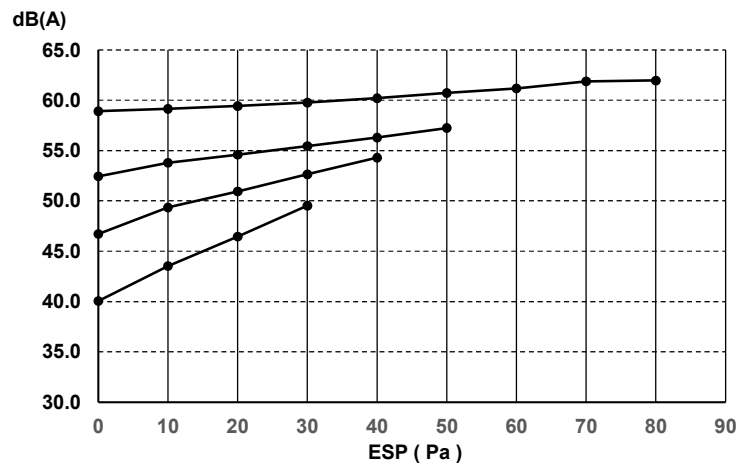
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		53.2	47.3	40.1	32.8
10		53.5	48.6	42.7	36.3
20		53.8	49.4	44.3	39.2
30		54.1	50.3	46.0	42.3
40		54.5	51.1	47.7	
50		55.1	52.1	49.3	
60		55.5	53.1		
70		56.2	54.1		
80		56.3			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		58.9	52.4	46.7	40.0
10		59.1	53.8	49.4	43.5
20		59.4	54.6	50.9	46.5
30		59.8	55.5	52.6	49.5
40		60.2	56.3	54.3	
50		60.7	57.2	55.9	
60		61.2	58.2		
70		61.9	59.3		
80		62.0			



4D149969A

11 Sound data

11 - 1 Sound Power Spectrum

FWE20FF
FWE20FFR

Sound Power Spectrum : FWE20F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			63.2		58.1		59.1		54.8			
125				51.8	63.7	45.8	58.6	42.0	59.4	38.1	54.9		
160				51.4		46.2		44.6		34.6			
200				51.0		49.3		40.5		34.1			
250	250			57.1	59.3	48.8	53.4	43.2	47.2	36.9	40.8		
315				53.3		47.6		43.2		36.4			
400				53.1		48.4		42.2		35.4			
500				53.9	58.0	48.3	52.8	42.6	46.7	35.1	39.2		
630	500			52.8		47.4		40.8		32.3			
800				50.2		44.5		37.0		28.0			
1000				50.5	54.4	44.2	48.3	36.4	40.5	26.9	31.2		
1250				47.5		41.3		32.7		23.1			
1600	1000			47.4		40.4		31.9		22.8			
2000				46.4	51.6	38.3	43.3	29.8	34.6	24.3	27.3		
2500				46.6		35.3		25.6		18.3			
3150				43.9		32.2		21.7		15.5			
4000	4000			42.2	46.8	30.5	35.3	21.4	26.0	18.5	22.6		
5000				38.8		27.9		20.7		18.9			
6300				37.0		24.7		18.8		18.0			
8000				32.7	38.8	23.1	27.9	20.8	25.0	20.2	24.6		
10000				29.2		21.0		20.8		20.8			
dB(A)		60.0				53.6		47.6		40.8			

ESP=0Pa		Sound Power Spectrum (dB) : Discharge												
Fan Speed						4		3		2		1		
						H		M		L				
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	
100	125			50.8		48.2		38.3		41.0		36.8		
125				46.1	52.5	42.1	49.5	35.8	40.2	33.9	36.8			
160				42.6		37.9		32.9		27.5				
200				42.3		38.5		30.7		25.2				
250	250			49.3	51.8	42.1	45.9	36.3	40.0	30.2	33.7			
315				46.9		42.0		36.6		29.8				
400				48.2		43.8		37.2		30.5				
500				47.3	51.9	41.8	46.8	35.2	40.2	27.6	33.0			
630	500			45.3		39.7		32.7		24.6				
800				43.3		37.7		30.3		21.9				
1000				45.1	48.2	38.9	42.2	31.1	34.5	21.9	25.5			
1250				41.0		34.8		26.3		16.5				
1600	1000			41.8		35.2		26.4		16.6				
2000				39.2	44.8	32.1	37.5	22.9	28.5	15.2	19.6			
2500				38.2		28.8		18.4		10.8				
3150				36.0		25.4		14.8		10.2				
4000	2000			33.7	38.9	24.1	28.9	15.1	19.8	12.5	17.1			
5000				31.5		22.3		15.1		13.6				
6300				29.3		19.6		14.2		13.5				
8000				26.2	31.5	17.6	22.8	15.3	19.9	14.7	19.4			
10000	4000			21.5		16.1		15.8		15.5				
dB(A)				53.2				47.3				40.1		

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			62.9		57.6		59.1		54.7			
125				50.5	63.4	43.4	58.1	40.7	59.3	36.0	54.8		
160				50.8		45.5		44.3		33.7			
200	250			50.4		48.9		40.0		33.5			
250				56.3	58.5	47.7	52.5	42.2	46.3	35.9	39.8		
315				52.2		46.2		42.1		35.4			
400	500			51.3		46.6		40.6		33.6			
500				52.8	56.8	47.2	51.6	41.8	45.6	34.2	38.0		
630				52.0		46.6		40.0		31.5			
800	1000			49.2		43.4		35.9		26.8			
1000				49.0	53.2	42.7	47.1	34.9	39.3	25.3	29.9		
1250				46.4		40.2		31.6		22.0			
1600	2000			46.1		38.9		30.5		21.7			
2000				45.4	50.6	37.1	41.9	28.8	33.4	23.8	26.4		
2500				45.9		34.1		24.7		17.4			
3150	4000			43.1		31.2		20.7		13.9			
4000				41.5	46.1	29.4	34.2	20.2	24.9	17.2	21.2		
5000				37.9		26.5		19.3		17.4			
6300	8000			36.1		23.1		16.9		16.1			
8000				31.6	38.0	21.6	26.4	19.4	23.4	18.8	23.1		
10000				28.4		19.4		19.2		19.3			
dB(A)						58.9		52.4		46.7		40.0	

4D149969A

11 Sound data

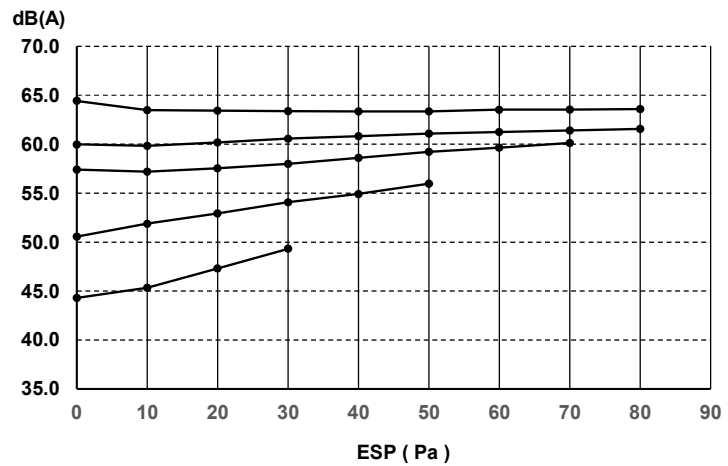
11 - 1 Sound Power Spectrum

FWE24FF
FWE24FFR

Sound Power overall (dBA): FWE24F(A/B)F(N/T/V)5V1-(-/R)

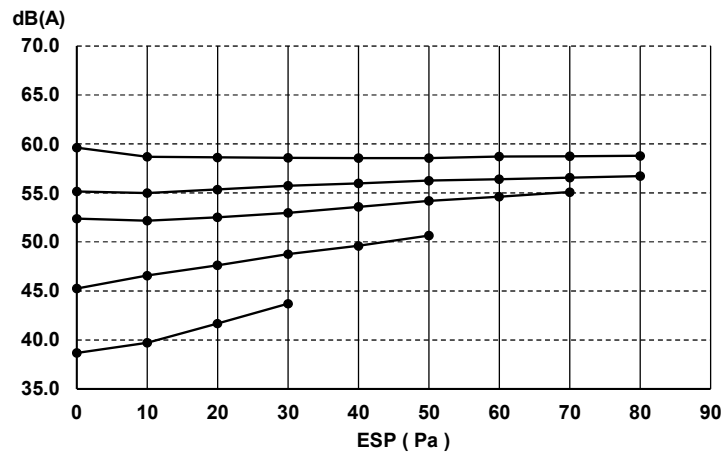
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
	H	M		L	
0	64.4	60.0	57.4	50.6	44.3
10	63.5	59.8	57.2	51.9	45.3
20	63.4	60.2	57.6	52.9	47.3
30	63.4	60.6	58.0	54.1	49.3
40	63.4	60.8	58.6	54.9	
50	63.4	61.1	59.2	56.0	
60	63.5	61.2	59.6		
70	63.5	61.4	60.1		
80	63.6	61.6			



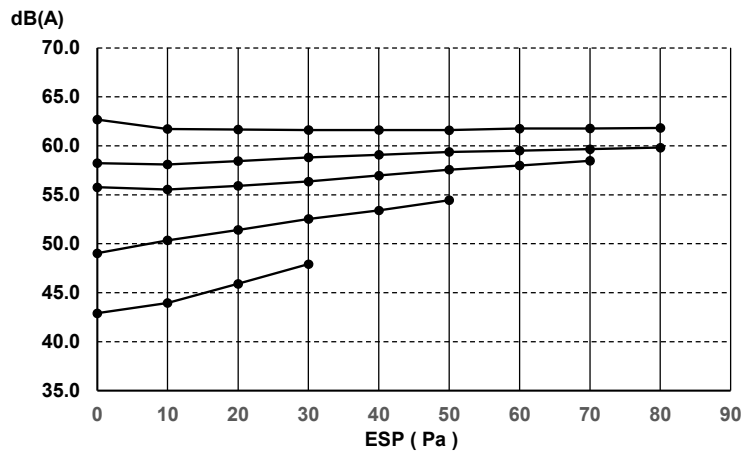
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
	H	M		L	
0	59.6	55.1	52.4	45.3	38.7
10	58.7	55.0	52.2	46.6	39.7
20	58.6	55.3	52.5	47.6	41.7
30	58.6	55.7	53.0	48.7	43.7
40	58.6	56.0	53.6	49.6	
50	58.6	56.3	54.2	50.7	
60	58.7	56.4	54.6		
70	58.7	56.6	55.1		
80	58.8	56.7			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
	H	M		L	
0	62.7	58.3	55.8	49.0	42.9
10	61.7	58.1	55.6	50.4	43.9
20	61.7	58.5	55.9	51.4	45.9
30	61.6	58.8	56.4	52.5	47.9
40	61.6	59.1	57.0	53.4	
50	61.6	59.4	57.6	54.5	
60	61.8	59.5	58.0		
70	61.8	59.7	58.5		
80	61.8	59.8			



4D149970A

11 Sound data

11 - 1 Sound Power Spectrum

FWE24FF
FWE24FFR
Sound Power Spectrum : FWE24F(A/B)F(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M		L		L		L	
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	58.0		58.9		61.3		58.1		57.2	
125		56.6	62.5	53.0	61.0	50.1	62.0	43.9	58.4	39.1	57.4
160		58.4		54.2		51.4		45.2		42.6	
200	250	57.5		53.8		51.2		47.1		38.4	
250		60.3	65.7	57.8	60.9	56.6	58.9	47.1	51.6	40.7	44.7
315		63.1		56.0		52.5		46.4		40.5	
400	500	58.4		54.3		52.0		46.2		39.5	
500		58.5	62.7	54.8	58.8	52.5	56.5	46.2	50.3	39.5	43.4
630		56.8		52.8		50.4		43.9		36.3	
800	1000	54.7		50.6		47.7		40.6		32.3	
1000		55.0	58.8	50.8	54.6	47.9	51.7	40.1	44.1	31.6	35.6
1250		51.9		47.3		44.2		36.3		27.3	
1600	2000	51.2		46.6		43.3		35.1		26.0	
2000		49.4	54.3	44.6	49.6	41.3	46.2	33.2	37.8	25.3	29.1
2500		47.1		42.0		38.3		29.0		18.6	
3150	4000	45.0		39.5		35.4		25.4		15.5	
4000		43.8	48.6	38.1	42.9	33.7	38.6	23.4	28.5	16.1	20.9
5000		42.4		36.3		31.6		21.7		16.7	
6300	8000	40.2		33.8		28.8		19.9		16.9	
8000		37.6	42.7	30.9	36.2	26.0	31.3	19.1	24.5	17.6	22.9
10000		33.9		27.5		23.4		20.0		19.4	
dB(A)		64.4		60.0		57.4		50.6		44.3	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.6		52.2		51.5		51.3		49.5	
125		51.6	54.6	47.3	53.9	44.5	52.7	38.1	51.6	33.1	49.6
160		48.5		43.9		42.0		35.3		29.5	
200	250	48.0		44.2		42.0		37.6		28.8	
250		54.6	58.9	52.1	54.8	50.9	52.8	40.6	44.6	34.6	38.4
315		56.2		50.5		47.1		40.8		35.3	
400	500	53.9		49.6		47.4		41.5		35.0	
500		53.2	57.8	49.3	53.7	46.9	51.3	40.3	44.9	33.6	38.3
630		51.6		47.4		44.7		38.0		30.9	
800	1000	49.6		45.2		42.3		35.1		27.7	
1000		51.3	54.6	46.8	50.1	43.7	47.1	36.2	39.6	28.3	31.8
1250		48.0		43.3		40.3		32.5		24.0	
1600	2000	48.2		43.4		40.3		32.2		23.4	
2000		45.9	51.1	41.1	46.3	37.9	43.0	29.6	34.6	21.3	25.9
2500		43.9		38.6		35.0		25.5		15.1	
3150	4000	41.2		35.5		31.3		21.0		11.6	
4000		40.4	45.1	34.3	39.1	29.9	34.7	19.2	24.3	11.9	16.7
5000		39.1		32.6		27.9		17.6		12.3	
6300	8000	37.0		30.1		24.9		15.4		12.1	
8000		34.3	39.3	26.9	32.2	21.7	27.2	14.3	19.5	12.7	17.6
10000		29.0		21.8		18.1		14.6		13.6	
dB(A)		59.6		55.1		52.4		45.3		38.7	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed		5		4		3		2		1			
		H		M				L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1		
100	125	57.4		57.9		60.8		57.0		56.4			
125		55.0	61.7	51.6	60.0	48.7	61.5	42.6	57.4	37.9	56.7		
160		57.9		53.8		50.9		44.7		42.4			
200	250	57.0		53.3		50.7		46.6		37.9			
250		58.9	64.6	56.5	59.7	55.2	57.6	46.0	50.7	39.4	43.6		
315		62.2		54.5		51.1		45.0		38.9			
400	500	56.5		52.5		50.1		44.4		37.7			
500		57.0	61.1	53.3	57.2	51.1	54.9	44.9	48.8	38.2	41.9		
630		55.2		51.4		49.0		42.6		34.8			
800	1000	53.1		49.1		46.2		39.1		30.5			
1000		52.6	56.8	48.6	52.7	45.8	49.8	37.8	42.2	28.8	33.3		
1250		49.6		45.1		42.0		34.0		24.6			
1600	2000	48.3		43.7		40.4		32.0		22.6			
2000		46.8	51.5	42.1	46.8	38.6	43.4	30.6	35.0	23.2	26.3		
2500		44.3		39.4		35.6		26.5		16.0			
3150	4000	42.6		37.4		33.2		23.4		13.2			
4000		41.2	46.1	35.8	40.7	31.4	36.4	21.4	26.5	14.0	18.8		
5000		39.7		33.8		29.2		19.5		14.7			
6300	8000	37.4		31.4		26.5		18.0		15.2			
8000		35.0	40.1	28.7	34.0	23.9	29.3	17.4	22.8	16.0	21.4		
10000		32.3		26.1		21.8		18.6		18.1			
dB(A)		62.7		58.3		55.8		49.0		42.9			

4D149970A

11 Sound data

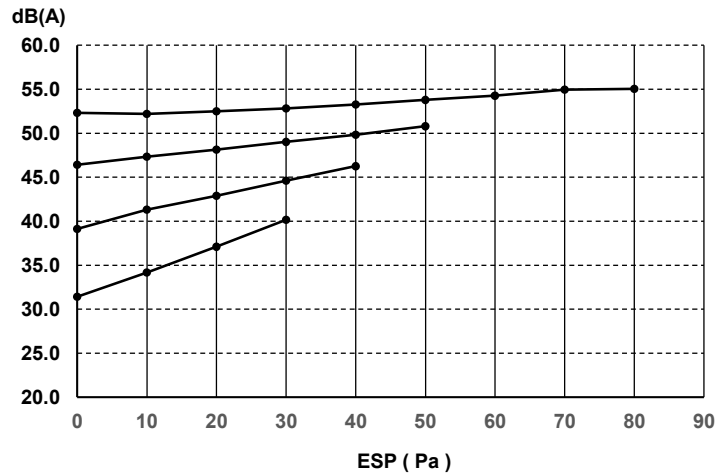
11 - 1 Sound Power Spectrum

FWE04FT
FWE04FTR

Sound Power overall (dBA): FWE04F(A/B)T(N/T/V)5V1-(-/R)

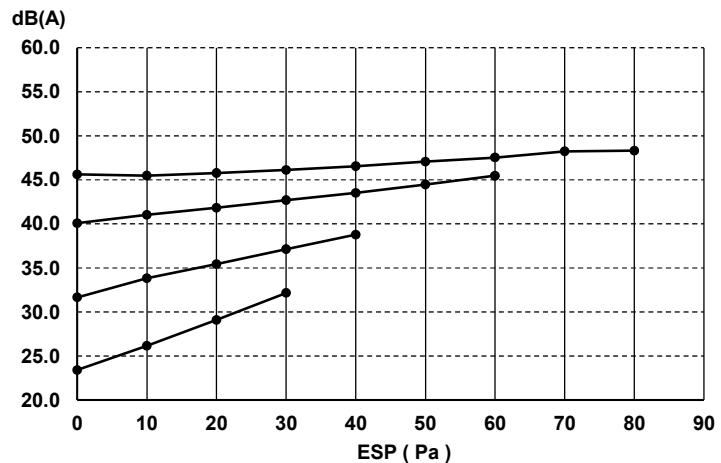
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		52.3	46.4	39.1	31.4
10		52.2	47.4	41.3	34.2
20		52.5	48.2	42.9	37.1
30		52.8	49.0	44.6	40.2
40		53.3	49.8	46.3	
50		53.8	50.8		
60		54.3	51.8		
70		54.9			
80		55.0			



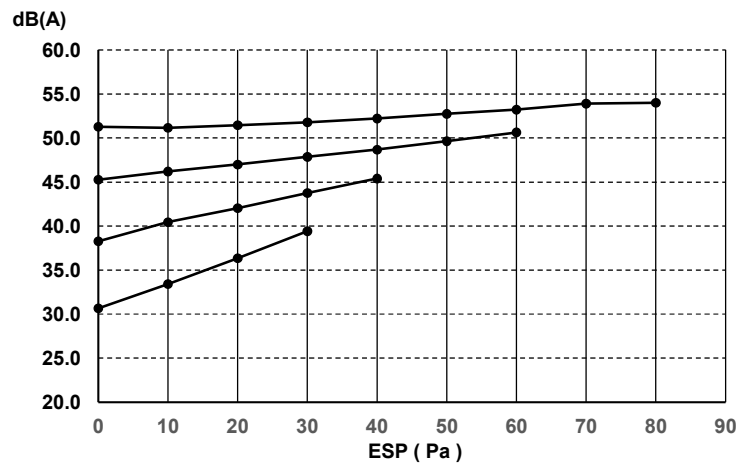
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		45.6	40.1	31.7	23.4
10		45.5	41.0	33.8	26.2
20		45.8	41.8	35.4	29.1
30		46.1	42.7	37.1	32.2
40		46.6	43.5	38.8	
50		47.1	44.5		
60		47.5	45.5		
70		48.2			
80		48.3			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		51.3	45.3	38.3	30.7
10		51.2	46.2	40.5	33.4
20		51.5	47.0	42.0	36.4
30		51.8	47.9	43.7	39.4
40		52.2	48.7	45.4	
50		52.7	49.6		
60		53.2	50.6		
70		53.9			
80		54.0			



4D149949A

11 Sound data

11 - 1 Sound Power Spectrum

FWE04FT
FWE04FTR

Sound Power Spectrum : FWE04F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.5		50.9		50.7		45.4		28.7	45.5
125				44.2	56.1	38.6	51.4	33.5	50.9	25.3			
160				43.8		39.0		36.1		25.3			
200				43.4		42.1		32.0		24.7			
250	250			49.5	51.7	41.6	46.2	34.7	38.8	27.6		31.4	
315				45.7		40.4		34.8		27.1			
400				45.4		41.2		33.8		26.0			
500				46.2	50.4	41.1	45.7	34.2	38.3	25.7	29.8		
630	500			45.2		40.2		32.3		22.9			
800				42.6		37.3		28.5		18.7			
1000				42.8	46.7	37.0	41.1	28.0	32.1	17.6	21.9		
1250				39.9		34.1		24.3		13.7			
1600	1000			39.8		33.3		23.5		13.5			
2000				38.7	44.0	31.1	36.1	21.4	26.2	15.0	17.9		
2500				39.0		28.1		17.2		8.9			
3150				36.2		25.0		13.2		6.1			
4000	2000			34.5	39.2	23.3	28.1	12.9	17.6	9.1	13.3		
5000				31.1		20.7		12.3		9.6			
6300				29.3		17.5		10.3		8.6			
8000				25.1	31.2	15.9	20.8	12.4	16.6	10.8	15.2		
10000	2000			21.6		13.8		12.4		11.5			
dB(A)				52.3		46.4		39.1		31.4			

ESP=0Pa			Sound Power Spectrum (dB) : Discharge											
Fan Speed				4		3		2		1				
				H		M		L						
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1			
100	125			43.1		41.0		29.9		23.1				
125				38.4	44.9	34.9	42.3	27.4	32.5	24.6	27.5			
160				35.0		30.7		24.5		18.2				
200	250			34.6		31.3		22.3		15.9				
250				41.6	44.1	34.9	38.7	27.8	31.6	20.8	24.3			
315				39.3		34.8		28.2		20.4				
400	500			40.6		36.6		28.8		21.1				
500				39.7	44.3	34.6	39.6	26.8	31.7	18.2	23.6			
630				37.7		32.5		24.2		15.2				
800	1000			35.7		30.5		21.9		12.5				
1000				37.4	40.6	31.7	35.0	22.6	26.0	12.5	16.1			
1250				33.3		27.6		17.9		7.1				
1600	2000			34.1		28.0		17.9		7.2				
2000				31.6	37.1	24.9	30.4	14.4	20.0	5.8	10.2			
2500				30.6		21.6		10.0		1.5				
3150	4000			28.3		18.2		6.4		0.8				
4000				26.1	31.2	16.9	21.7	6.7	11.3	3.1	7.7			
5000				23.8		15.1		6.6		4.2				
6300	8000			21.7		12.4		5.8		4.1				
8000				18.6	23.9	10.4	15.6	6.9	11.5	5.4	10.0			
10000				13.8		8.9		7.4		6.1				
dB(A)				45.6		40.1		31.7		23.4				

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.3		50.5		50.6		45.4			
125				42.9	55.8	36.2	50.9	32.3	50.8	26.6	45.5		
160				43.1		38.3		35.8		24.3			
200	250			42.7		41.7		31.5		24.1			
250				48.7	50.8	40.5	45.3	33.7	37.9	26.5	30.4		
315				44.6		39.0		33.7		26.0			
400	500			43.7		39.4		32.2		24.3			
500				45.1	49.2	40.0	44.4	33.3	37.2	24.9	28.7		
630				44.3		39.4		31.6		22.1			
800	1000			41.6		36.3		27.5		17.5			
1000				41.4	45.5	35.5	39.9	26.5	30.8	15.9	20.5		
1250				38.8		33.0		23.1		12.6			
1600	2000			38.4		31.7		22.1		12.3			
2000				37.8	43.0	29.9	34.7	20.4	25.0	14.4	17.1		
2500				38.3		27.0		16.3		8.0			
3150	4000			35.5		24.0		12.2		4.6			
4000				33.9	38.5	22.2	27.0	11.8	16.4	7.8	11.9		
5000				30.2		19.3		10.9		8.1			
6300	8000			28.5		15.9		8.4		6.8			
8000				24.0	30.3	14.5	19.2	10.9	14.9	9.4	13.7		
10000				20.8		12.2		10.7		10.0			
dB(A)						51.3		45.3		38.3		30.7	

4D149949A

11 Sound data

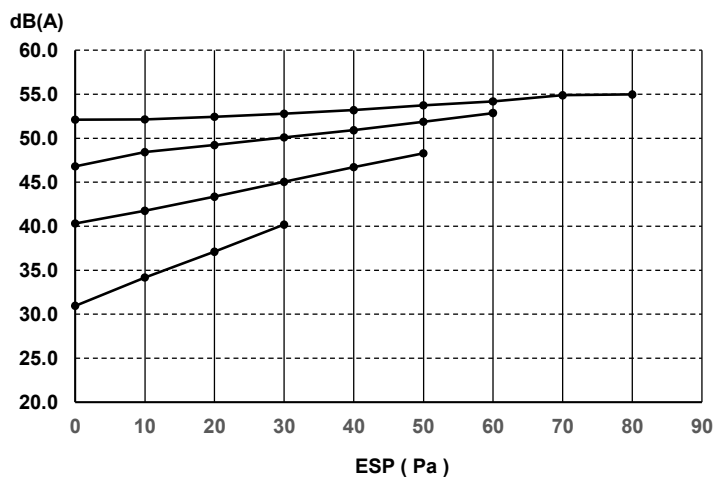
11 - 1 Sound Power Spectrum

FWE05FT
FWE05FTR

Sound Power overall (dBA): FWE05F(A/B)T(N/T/V)5V1-(-/R)

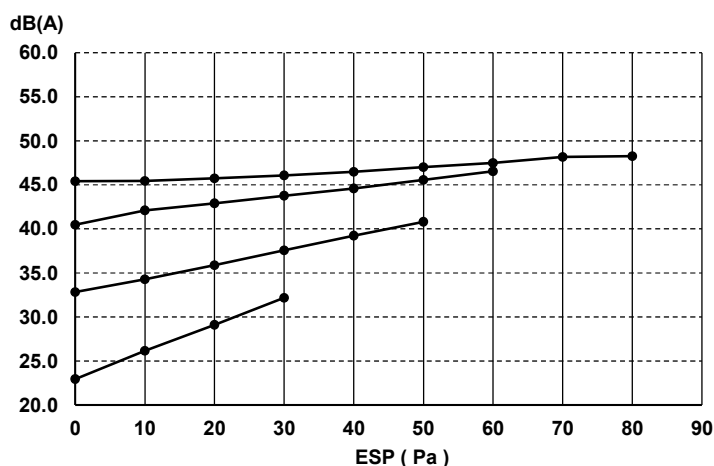
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		52.1	46.8	40.3	31.0
10		52.1	48.4	41.8	34.2
20		52.4	49.2	43.4	37.1
30		52.8	50.1	45.1	40.2
40		53.2	50.9	46.7	
50		53.7	51.9	48.3	
60		54.2	52.9		
70		54.9			
80		55.0			



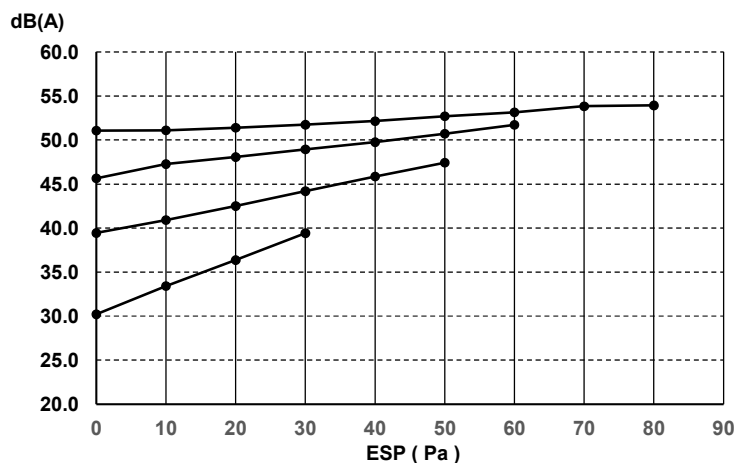
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		45.4	40.5	32.8	23.0
10		45.4	42.1	34.3	26.2
20		45.7	42.9	35.9	29.1
30		46.1	43.8	37.6	32.2
40		46.5	44.6	39.2	
50		47.0	45.5	40.8	
60		47.5	46.5		
70		48.2			
80		48.3			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		51.1	45.6	39.5	30.2
10		51.1	47.3	40.9	33.4
20		51.4	48.1	42.5	36.4
30		51.7	48.9	44.2	39.4
40		52.2	49.8	45.9	
50		52.7	50.7	47.4	
60		53.2	51.7		
70		53.8			
80		53.9			



4D149950A

11 Sound data

11 - 1 Sound Power Spectrum

FWE05FT
FWE05FTR

Sound Power Spectrum : FWE05F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed				4		3		2		1			
				H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1		
100	125			55.3		51.3		51.9		44.9			
125				44.0	55.9	39.0	51.8	34.7	52.1	28.2	45.1		
160				43.5		39.4		37.3		24.8			
200	250			43.2		42.5		33.2		24.3			
250				49.3	51.5	42.0	46.6	35.9	40.0	27.1	30.9		
315				45.5		40.8		35.9		26.6			
400	500			45.2		41.6		35.0		25.5			
500				46.0	50.2	41.5	46.0	35.4	39.5	25.3	29.4		
630				45.0		40.6		33.5		22.5			
800	1000			42.4		37.7		29.7		18.2			
1000				42.6	46.5	37.4	41.5	29.1	33.2	17.1	21.4		
1250				39.7		34.5		25.5		13.2			
1600	2000			39.6		33.6		24.7		13.0			
2000				38.5	43.8	31.5	36.5	22.6	27.3	14.5	17.4		
2500				38.8		28.5		18.4		8.4			
3150	4000			36.0		25.4		14.4		5.6			
4000				34.3	39.0	23.7	28.5	14.1	18.8	8.6	12.8		
5000				30.9		21.1		13.5		9.1			
6300	8000			29.1		17.9		11.5		8.2			
8000				24.9	31.0	16.3	21.1	13.6	17.7	10.4	14.8		
10000				21.3		14.2		13.6		11.0			
dB(A)				52.1		46.8		40.3		31.0			

ESP=0Pa		Sound Power Spectrum (dB) : Discharge											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			42.9		41.4		31.1		22.6			
125				38.2	44.7	35.3	42.7	28.6	33.7	24.1	27.0		
160				34.8		31.1		25.7		17.7			
200				34.4		31.7		23.5		15.4			
250	250			41.4	43.9	35.3	39.1	29.0	32.7	20.4	23.9		
315				39.1		35.2		29.4		20.0			
400				40.4		37.0		30.0		20.7			
500				39.5	44.1	35.0	40.0	27.9	32.9	17.8	23.1		
630	500			37.5		32.9		25.4		14.8			
800				35.5		30.9		23.0		12.1			
1000				37.2	40.4	32.1	35.4	23.8	27.2	12.0	15.6		
1250				33.1		28.0		19.1		6.6			
1600	1000			33.9		28.4		19.1		6.7			
2000				31.3	36.9	25.3	30.7	15.6	21.2	5.4	9.7		
2500				30.3		22.0		11.1		1.0			
3150				28.1		18.6		7.6		0.4			
4000	4000			25.9	31.0	17.3	22.1	7.8	12.5	2.6	7.2		
5000				23.6		15.5		7.8		3.7			
6300				21.5		12.8		7.0		3.7			
8000				18.4	23.7	10.8	16.0	8.1	12.7	4.9	9.6		
10000	8000			13.6		9.3		8.6		5.6			
dB(A)				45.4		40.5		32.8		23.0			

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			55.1		50.8		51.8		44.9			
125				42.7	55.5	36.6	51.3	33.5	52.0	26.1	45.0		
160				42.9		38.7		37.0		23.9			
200	250			42.5		42.1		32.7		23.7			
250				48.5	50.6	40.9	45.7	34.9	39.1	26.1	30.0		
315				44.4		39.4		34.9		25.6			
400	500			43.5		39.8		33.3		23.8			
500				44.9	49.0	40.4	44.8	34.5	38.4	24.4	28.2		
630				44.1		39.8		32.7		21.7			
800	1000			41.4		36.6		28.7		17.0			
1000				41.2	45.3	35.9	40.3	27.6	32.0	15.5	20.1		
1250				38.6		33.4		24.3		12.2			
1600	2000			38.2		32.1		23.2		11.8			
2000				37.6	42.7	30.3	35.1	21.6	26.1	13.9	16.6		
2500				38.1		27.3		17.4		7.6			
3150	4000			35.3		24.4		13.4		4.1			
4000				33.6	38.2	22.6	27.4	13.0	17.6	7.4	11.4		
5000				30.0		19.7		12.1		7.6			
6300	8000			28.3		16.3		9.6		6.3			
8000				23.8	30.1	14.8	19.6	12.1	16.1	8.9	13.2		
10000				20.5		12.6		11.9		9.5			
dB(A)				51.1		45.6		39.5		30.2			

4D149950A

11 Sound data

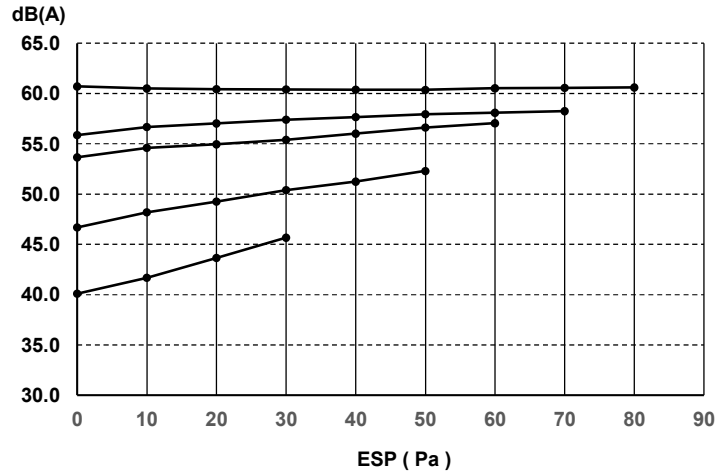
11 - 1 Sound Power Spectrum

FWE06FT
FWE06FTR

Sound Power overall (dBA): FWE06F(A/B)T(N/T/V)5V1-(-/R)

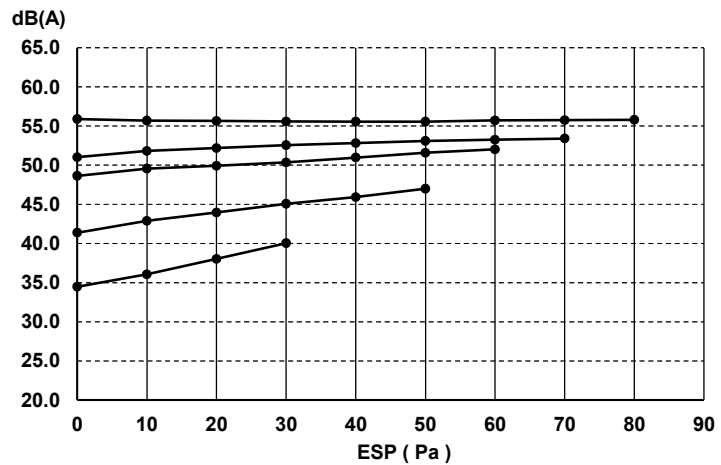
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	60.7	55.9	53.7	46.7	40.1
10	60.5	56.7	54.6	48.2	41.7
20	60.4	57.0	55.0	49.3	43.7
30	60.4	57.4	55.4	50.4	45.7
40	60.4	57.7	56.0	51.2	
50	60.4	57.9	56.6	52.3	
60	60.5	58.1	57.0		
70	60.6	58.2			
80	60.6				



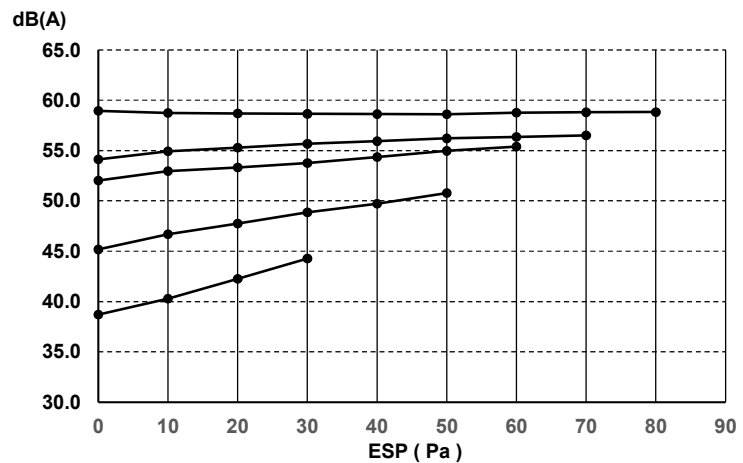
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	55.9	51.0	48.6	41.4	34.5
10	55.7	51.8	49.6	42.9	36.1
20	55.6	52.2	49.9	44.0	38.0
30	55.6	52.6	50.4	45.1	40.0
40	55.6	52.8	51.0	45.9	
50	55.6	53.1	51.6	47.0	
60	55.7	53.3	52.0		
70	55.8	53.4			
80	55.8				



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	59.0	54.1	52.0	45.2	38.7
10	58.7	54.9	53.0	46.7	40.3
20	58.7	55.3	53.3	47.8	42.3
30	58.6	55.7	53.8	48.9	44.3
40	58.6	55.9	54.4	49.7	
50	58.6	56.2	55.0	50.8	
60	58.8	56.4	55.4		
70	58.8	56.5			
80	58.8				



4D149951A

11 Sound data

11 - 1 Sound Power Spectrum

FWE06FT
FWE06FTR

Sound Power Spectrum : FWE06F(A/B)T(N/T/V)5V1(-/R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.3		54.8		57.6		54.2		53.0	
125		52.9	58.8	48.9	56.8	46.3	58.3	40.0	54.6	34.9	53.2
160		54.7		50.1		47.7		41.3		38.4	
200	250	53.8		49.7		47.5		43.2		34.2	
250		56.6	61.9	53.7	56.8	52.8	55.1	43.2	47.8	36.5	40.5
315		59.4		51.8		48.8		42.5		36.3	
400	500	54.7		50.2		48.2		42.3		35.3	
500		54.8	59.0	50.6	54.7	48.7	52.7	42.3	46.5	35.3	39.2
630		53.1		48.7		46.6		40.0		32.1	
800	1000	51.0		46.5		44.0		36.7		28.1	
1000		51.3	55.1	46.7	50.5	44.1	47.9	36.2	40.3	27.4	31.4
1250		48.2		43.2		40.5		32.5		23.1	
1600	2000	47.5		42.4		39.6		31.2		21.8	
2000		45.7	50.6	40.5	45.4	37.5	42.4	29.3	34.0	21.1	24.9
2500		43.4		37.9		34.5		25.2		14.4	
3150	4000	41.3		35.4		31.6		21.5		11.3	
4000		40.1	44.9	34.0	38.8	30.0	34.8	19.6	24.7	11.9	16.7
5000		38.7		32.2		27.8		17.8		12.5	
6300	8000	36.5		29.7		25.0		16.0		12.7	
8000		33.9	39.0	26.8	32.1	22.2	27.6	15.3	20.6	13.4	18.7
10000		30.2		23.3		19.6		16.2		15.2	
dB(A)		60.7		55.9		53.7		46.7		40.1	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	44.9		48.1		47.8		47.5		45.3	
125		47.9	50.9	43.2	49.8	40.7	48.9	34.2	47.8	28.9	45.4
160		44.8		39.8		38.3		31.4		25.3	
200	250	44.3		40.1		38.3		33.7		24.6	
250		50.9	55.2	48.0	50.7	47.2	49.1	36.7	40.8	30.4	34.2
315		52.5		46.4		43.4		36.9		31.1	
400	500	50.1		45.5		43.7		37.6		30.8	
500		49.5	54.0	45.2	49.6	43.1	47.5	36.4	41.1	29.4	34.1
630		47.9		43.3		41.0		34.1		26.7	
800	1000	45.8		41.1		38.5		31.2		23.5	
1000		47.6	50.9	42.6	46.0	39.9	43.3	32.3	35.8	24.1	27.6
1250		44.3		39.2		36.5		28.6		19.8	
1600	2000	44.4		39.3		36.5		28.3		19.2	
2000		42.2	47.4	37.0	42.1	34.1	39.2	25.7	30.8	17.1	21.7
2500		40.1		34.5		31.2		21.6		10.9	
3150	4000	37.5		31.4		27.5		17.1		7.4	
4000		36.7	41.4	30.2	34.9	26.1	30.9	15.4	20.4	7.7	12.5
5000		35.3		28.5		24.1		13.8		8.1	
6300	8000	33.3		26.0		21.1		11.5		7.9	
8000		30.5	35.5	22.8	28.1	17.9	23.4	10.4	15.7	8.5	13.4
10000		25.3		17.7		14.4		10.7		9.4	
dB(A)		55.9		51.0		48.6		41.4		34.5	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M		L		L		L	
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.7		53.8		57.1		53.2		52.2	
125		51.2	58.0	47.5	55.9	45.0	57.7	38.7	53.5	33.7	52.5
160			54.2		49.7		47.1		40.8		38.2
200	250	53.2		49.2		46.9		42.7		33.7	
250		55.2	60.9	52.4	55.6	51.4	53.9	42.1	46.8	35.2	39.4
315			58.4		50.4		47.3		41.1		34.7
400	500	52.8		48.4		46.3		40.5		33.5	
500		53.3	57.3	49.2	53.1	47.3	51.2	41.1	45.0	34.0	37.7
630			51.5		47.2		45.3		38.7		30.6
800	1000	49.4		45.0		42.5		35.2		26.3	
1000		48.9	53.1	44.5	48.6	42.0	46.1	34.0	38.4	24.6	29.1
1250			45.9		41.0		38.2		30.2		20.4
1600	2000	44.5		39.6		36.6		28.1		18.4	
2000		43.1	47.8	38.0	42.7	34.8	39.6	26.8	31.1	19.0	22.1
2500			40.6		35.2		31.8		22.6		11.8
3150	4000	38.9		33.2		29.5		19.6		9.0	
4000		37.5	42.4	31.6	36.5	27.7	32.6	17.5	22.6	9.8	14.6
5000			35.9		29.7		25.4		15.6		10.5
6300	8000	33.7		27.2		22.7		14.1		11.0	
8000		31.2	36.4	24.6	29.9	20.2	25.5	13.5	18.9	11.8	17.2
10000			28.5		22.0		18.1		14.7		13.9
dB(A)		59.0		54.1		52.0		45.2		38.7	

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11 Sound data

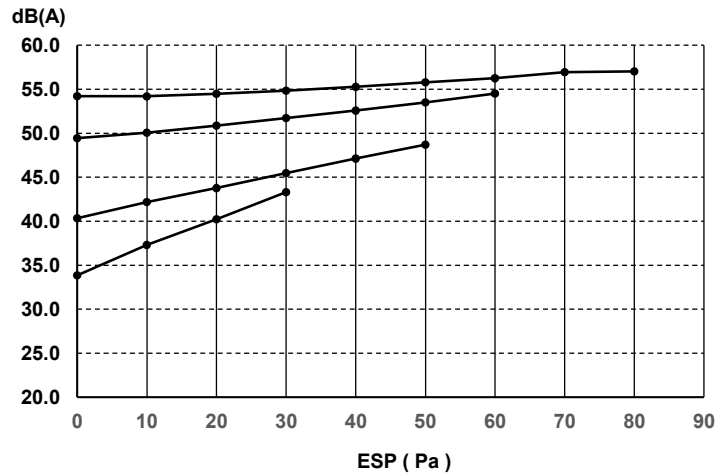
11 - 1 Sound Power Spectrum

FWE08FT
FWE08FTR

Sound Power overall (dBA): FWE08F(A/B)T(N/T/V)5V1-(-/R)

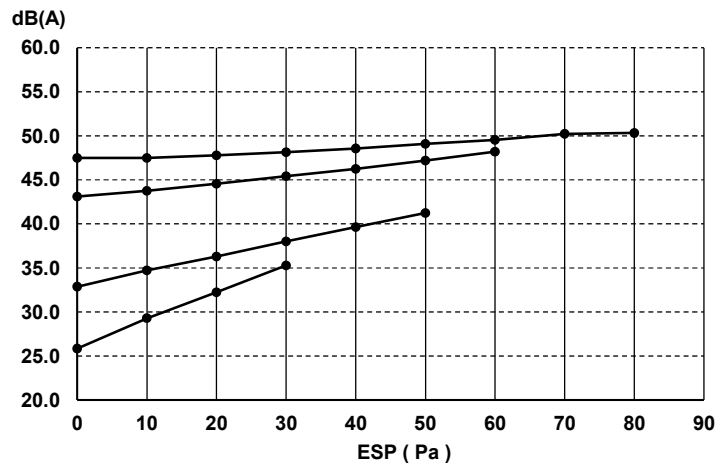
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		54.2	49.4	40.3	33.9
10		54.2	50.1	42.2	37.3
20		54.5	50.9	43.8	40.2
30		54.8	51.7	45.5	43.3
40		55.3	52.6	47.1	
50		55.8	53.5	48.7	
60		56.3	54.5		
70		56.9			
80		57.0			



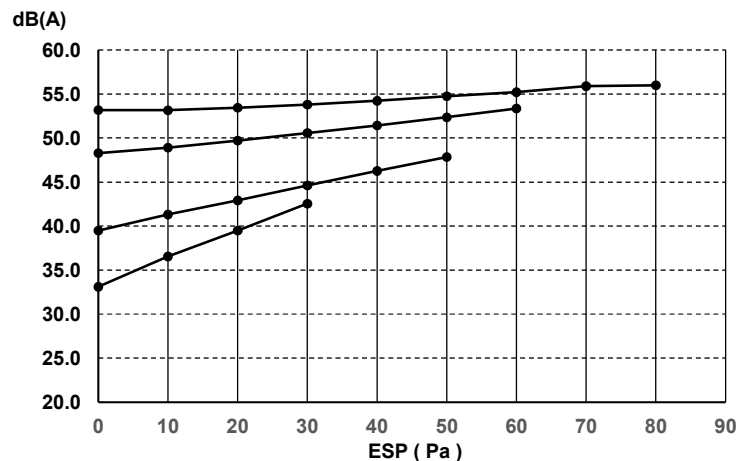
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		47.5	43.1	32.9	25.9
10		47.5	43.7	34.7	29.3
20		47.8	44.6	36.3	32.2
30		48.1	45.4	38.0	35.3
40		48.6	46.2	39.7	
50		49.1	47.2	41.2	
60		49.5	48.2		
70		50.2			
80		50.3			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		53.2	48.3	39.5	33.1
10		53.2	48.9	41.3	36.6
20		53.5	49.7	42.9	39.5
30		53.8	50.6	44.6	42.6
40		54.2	51.4	46.3	
50		54.7	52.4	47.8	
60		55.2	53.4		
70		55.9			
80		56.0			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE08FT
FWE08FTR

Sound Power Spectrum : FWE08F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			57.4		54.0		51.9		47.8			
125				46.1	58.0	41.6	54.5	34.7	52.1	31.1	48.0		
160				45.6		42.1		37.3		27.7			
200				45.2		45.1		33.2		27.2			
250	250			51.3	53.6	44.6	49.2	35.9	40.0	30.0	33.8		
315				47.6		43.4		36.0		29.5			
400				47.3		44.3		35.0		28.4			
500				48.1	52.3	44.2	48.7	35.4	39.5	28.2	32.3		
630	500			47.1		43.3		33.5		25.4			
800				44.5		40.3		29.7		21.1			
1000				44.7	48.6	40.1	44.2	29.2	33.3	20.0	24.3		
1250				41.8		37.1		25.5		16.1			
1600	2000			41.7		36.3		24.7		15.9			
2000				40.6	45.8	34.1	39.1	22.6	27.4	17.4	20.3		
2500				40.8		31.1		18.4		11.3			
3150				38.1		28.0		14.4		8.5			
4000	4000			36.4	41.1	26.3	31.1	14.1	18.8	11.5	15.7		
5000				33.0		23.7		13.5		12.0			
6300				31.2		20.5		11.5		11.1			
8000				27.0	33.1	18.9	23.8	13.6	17.8	13.3	17.7		
10000				23.4		16.9		13.6		13.9			
dB(A)		54.2				49.4		40.3		33.9			

ESP=0Pa			Sound Power Spectrum (dB) : Discharge											
Fan Speed				4		3		2		1				
				H		M		L						
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1			
100	125			45.0		44.1		31.1		25.5				
125				40.3	46.7	38.0	45.3	28.6	33.8	27.0	29.9			
160				36.9		33.8		25.7		20.6				
200				36.5		34.4		23.5		18.3				
250				43.5	46.0	37.9	41.8	29.0	32.8	23.3	26.8			
315	250			41.2		37.8		29.4		22.9				
400				42.5		39.6		30.0		23.6				
500				41.6	46.2	37.6	42.7	28.0	32.9	20.7	26.0			
630				39.6		35.5		25.4		17.7				
800				37.6		33.5		23.1		15.0				
1000	1000			39.3	42.5	34.7	38.0	23.8	27.2	14.9	18.5			
1250				35.2		30.7		19.1		9.5				
1600				36.0		31.0		19.2		9.6				
2000	2000			33.4	39.0	27.9	33.4	15.7	21.2	8.3	12.6			
2500				32.4		24.7		11.2		3.9				
3150				30.2		21.3		7.6		3.3				
4000	4000			28.0	33.1	19.9	24.7	7.9	12.5	5.5	10.1			
5000				25.7		18.1		7.8		6.6				
6300				23.6		15.4		7.0		6.6				
8000	8000			20.5	25.8	13.5	18.6	8.1	12.7	7.8	12.5			
10000				15.7		11.9		8.6		8.5				
dB(A)				47.5		43.1		32.9		25.9				

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			57.1		53.5		51.8		47.8			
125				44.7	57.6	39.2	53.9	33.5	52.0	29.0	47.9		
160				45.0		41.4		37.0		26.8			
200	250			44.6		44.7		32.8		26.6			
250				50.6	52.7	43.5	48.4	34.9	39.1	29.0	32.9		
315				46.4		42.0		34.9		28.5			
400	500			45.6		42.4		33.4		26.7			
500				47.0	51.1	43.1	47.4	34.5	38.4	27.3	31.1		
630				46.2		42.5		32.8		24.6			
800	1000			43.5		39.3		28.7		19.9			
1000				43.2	47.4	38.6	42.9	27.7	32.0	18.4	23.0		
1250				40.7		36.0		24.4		15.1			
1600	2000			40.3		34.8		23.3		14.7			
2000				39.7	44.8	32.9	37.7	21.6	26.2	16.8	19.5		
2500				40.2		30.0		17.5		10.5			
3150	4000			37.4		27.0		13.4		7.0			
4000				35.7	40.3	25.2	30.0	13.0	17.6	10.3	14.3		
5000				32.1		22.3		12.1		10.5			
6300	8000			30.4		18.9		9.6		9.2			
8000				25.9	32.2	17.5	22.2	12.1	16.2	11.8	16.1		
10000				22.6		15.2		11.9		12.4			
dB(A)						53.2		48.3		39.5		33.1	

4D149952A

11 Sound data

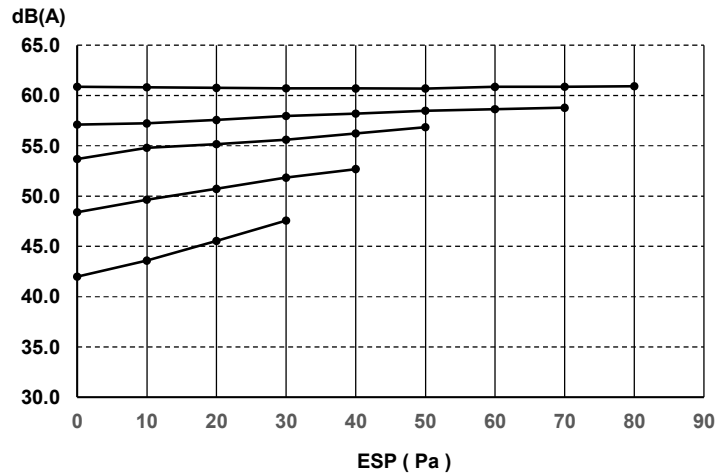
11 - 1 Sound Power Spectrum

FWE10FT
FWE10FTR

Sound Power overall (dBA): FWE10F(A/B)T(N/T/V)5V1-(-/R)

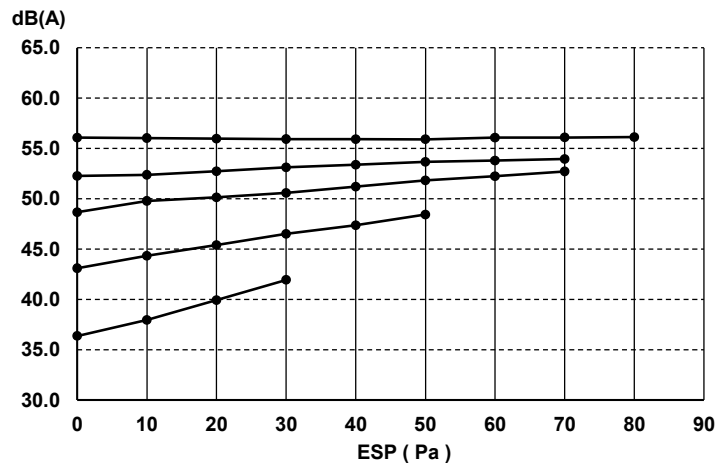
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	60.9	57.1	53.7	48.4	42.0
10	60.8	57.2	54.8	49.6	43.6
20	60.8	57.6	55.2	50.7	45.5
30	60.7	58.0	55.6	51.8	47.6
40	60.7	58.2	56.2	52.7	
50	60.7	58.5	56.8	53.7	
60	60.9	58.6	57.3		
70	60.9	58.8	57.7		
80	60.9				



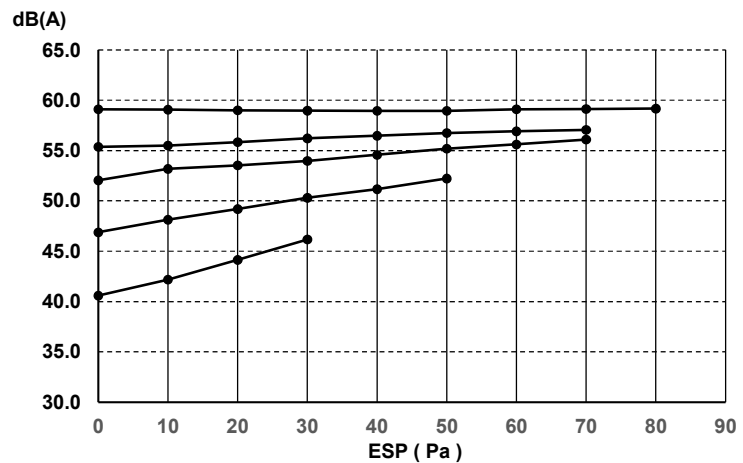
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	56.1	52.3	48.7	43.1	36.4
10	56.0	52.4	49.8	44.3	38.0
20	56.0	52.7	50.1	45.4	39.9
30	55.9	53.1	50.6	46.5	41.9
40	55.9	53.4	51.2	47.4	
50	55.9	53.7	51.8	48.4	
60	56.1	53.8	52.2		
70	56.1	54.0	52.7		
80	56.1				



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	59.1	55.4	52.1	46.9	40.6
10	59.1	55.5	53.2	48.1	42.2
20	59.0	55.8	53.5	49.2	44.2
30	59.0	56.2	54.0	50.3	46.2
40	59.0	56.5	54.6	51.2	
50	58.9	56.8	55.2	52.2	
60	59.1	56.9	55.6		
70	59.1	57.1	56.1		
80	59.2				



4D149953A

11 Sound data

11 - 1 Sound Power Spectrum

FWE10FT
FWE10FTR

Sound Power Spectrum : FWE10F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.4		56.1		57.6		55.9		54.9	
125		53.1	59.0	50.1	58.1	46.4	58.3	41.7	56.3	36.8	55.1
160		54.9		51.3		47.7		43.0		40.3	
200	250	53.9		50.9		47.5		44.9		36.1	
250		56.7	62.1	55.0	58.1	52.9	55.1	44.9	49.5	38.4	42.4
315		59.6		53.1		48.8		44.2		38.1	
400	500	54.8		51.5		48.2		44.0		37.2	
500		55.0	59.2	51.9	55.9	48.8	52.8	44.0	48.2	37.2	41.1
630		53.2		50.0		46.7		41.7		34.0	
800	1000	51.1		47.7		44.0		38.4		30.0	
1000		51.5	55.3	47.9	51.7	44.2	47.9	37.9	42.0	29.3	33.3
1250		48.3		44.4		40.5		34.2		25.0	
1600	2000	47.7		43.7		39.6		32.9		23.7	
2000		45.9	50.8	41.8	46.7	37.5	42.5	31.0	35.7	23.0	26.8
2500		43.6		39.1		34.6		26.9		16.3	
3150	4000	41.4		36.7		31.6		23.2		13.2	
4000		40.3	45.1	35.2	40.1	30.0	34.9	21.3	26.4	13.7	18.6
5000		38.8		33.4		27.9		19.5		14.4	
6300	8000	36.7		30.9		25.0		17.7		14.6	
8000		34.1	39.2	28.0	33.3	22.2	27.6	17.0	22.3	15.3	20.6
10000		30.4		24.6		19.7		17.9		17.1	
dB(A)		60.9		57.1		53.7		48.4		42.0	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	45.0		49.4		47.8		49.2		47.2	
125		48.0	51.0	44.5	51.0	40.7	49.0	35.9	49.5	30.8	47.3
160		45.0		41.0		38.3		33.1		27.2	
200	250	44.5		41.3		38.3		35.4		26.5	
250		51.0	55.3	49.2	51.9	47.2	49.1	38.4	42.5	32.3	36.1
315		52.7		47.6		43.4		38.6		32.9	
400	500	50.3		46.8		43.7		39.3		32.7	
500		49.6	54.2	46.4	50.8	43.2	47.6	38.1	42.8	31.3	35.9
630		48.1		44.5		41.0		35.8		28.6	
800	1000	46.0		42.3		38.6		32.9		25.3	
1000		47.8	51.1	43.9	47.2	40.0	43.3	34.0	37.5	26.0	29.5
1250		44.5		40.5		36.5		30.3		21.7	
1600	2000	44.6		40.5		36.6		30.0		21.1	
2000		42.4	47.6	38.3	43.4	34.1	39.3	27.4	32.5	19.0	23.5
2500		40.3		35.8		31.3		23.4		12.8	
3150	4000	37.7		32.6		27.5		18.9		9.3	
4000		36.8	41.5	31.4	36.2	26.1	30.9	17.1	22.1	9.6	14.4
5000		35.5		29.8		24.2		15.5		10.0	
6300	8000	33.4		27.2		21.2		13.2		9.8	
8000		30.7	35.7	24.1	29.3	17.9	23.4	12.1	17.4	10.4	15.3
10000		25.4		18.9		14.4		12.4		11.2	
dB(A)		56.1		52.3		48.7		43.1		36.4	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	53.9		55.0		57.1		54.9		54.1	
125		51.4	58.2	48.7	57.1	45.0	57.8	40.4	55.3	35.6	54.3
160		54.4		50.9		47.2		42.6		40.1	
200	250	53.4		50.4		46.9		44.4		35.5	
250		55.4	61.1	53.6	56.9	51.5	53.9	43.8	48.5	37.1	41.2
315		58.6		51.6		47.4		42.8		36.6	
400	500	53.0		49.7		46.3		42.2		35.4	
500		53.4	57.5	50.4	54.4	47.4	51.2	42.8	46.7	35.8	39.6
630		51.6		48.5		45.3		40.4		32.5	
800	1000	49.5		46.2		42.5		36.9		28.2	
1000		49.0	53.2	45.7	49.8	42.1	46.1	35.7	40.1	26.5	31.0
1250		46.1		42.2		38.2		31.9		22.3	
1600	2000	44.7		40.8		36.6		29.8		20.3	
2000		43.3	48.0	39.2	43.9	34.9	39.7	28.5	32.9	20.8	24.0
2500		40.8		36.5		31.9		24.3		13.7	
3150	4000	39.1		34.5		29.5		21.3		10.9	
4000		37.7	42.6	32.9	37.8	27.7	32.6	19.2	24.3	11.7	16.5
5000		36.1		30.9		25.5		17.3		12.4	
6300	8000	33.9		28.5		22.7		15.8		12.9	
8000		31.4	36.6	25.8	31.1	20.2	25.5	15.2	20.6	13.7	19.1
10000		28.7		23.2		18.1		16.4		15.8	
dB(A)		59.1		55.4		52.1		46.9		40.6	

4D149953A

11 Sound data

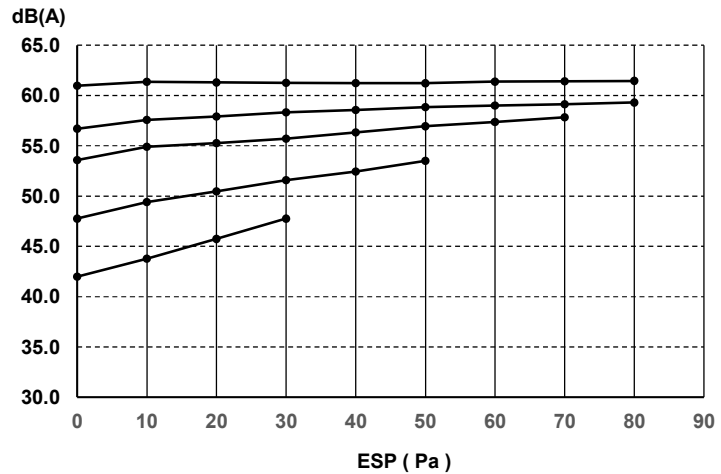
11 - 1 Sound Power Spectrum

FWE12FT
FWE12FTR

Sound Power overall (dBA): FWE12F(A/B)T(N/T/V)5V1-(-/R)

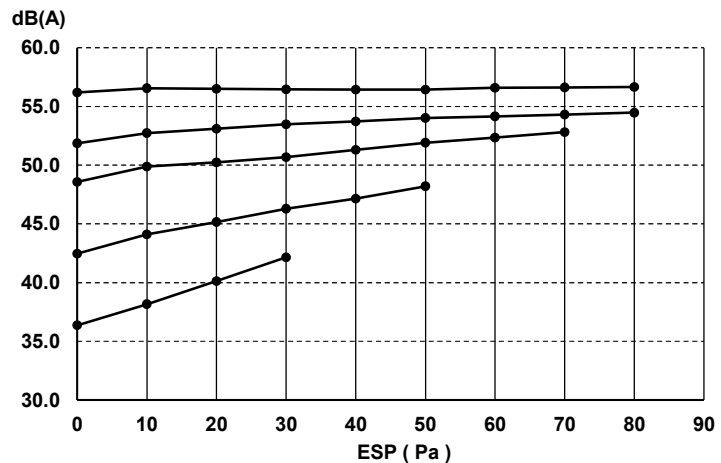
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	61.0	56.7	53.6	47.8	42.0
10	61.4	57.6	54.9	49.4	43.8
20	61.3	57.9	55.3	50.5	45.8
30	61.3	58.3	55.7	51.6	47.8
40	61.2	58.6	56.3	52.5	
50	61.2	58.8	56.9	53.5	
60	61.4	59.0	57.4		
70	61.4	59.1	57.8		
80	61.5	59.3			



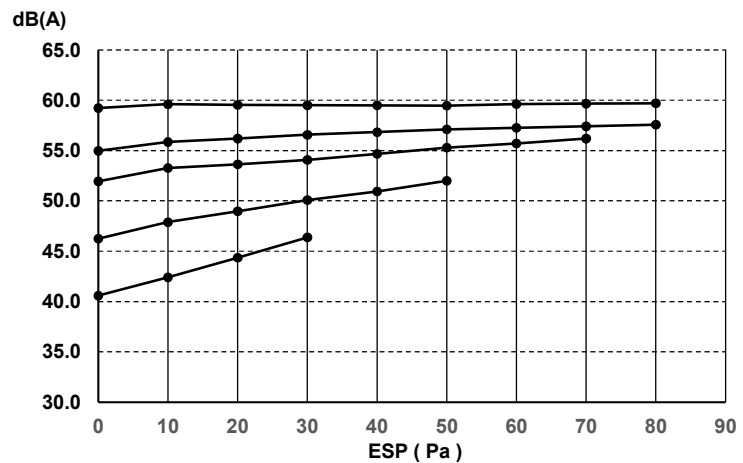
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	56.2	51.9	48.6	42.5	36.4
10	56.6	52.7	49.9	44.1	38.2
20	56.5	53.1	50.2	45.2	40.1
30	56.5	53.5	50.7	46.3	42.1
40	56.4	53.7	51.3	47.1	
50	56.4	54.0	51.9	48.2	
60	56.6	54.2	52.3		
70	56.6	54.3	52.8		
80	56.7	54.5			



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	59.2	55.0	52.0	46.3	40.6
10	59.6	55.9	53.3	47.9	42.4
20	59.5	56.2	53.6	49.0	44.4
30	59.5	56.6	54.1	50.1	46.4
40	59.5	56.8	54.7	50.9	
50	59.5	57.1	55.3	52.0	
60	59.6	57.3	55.7		
70	59.7	57.4	56.2		
80	59.7	57.6			



4D149954A

11 Sound data

11 - 1 Sound Power Spectrum

FWE12FT
FWE12FTR

Sound Power Spectrum : FWE12F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.5		55.7		57.5		55.3		54.9	
125		53.2	59.1	49.7	57.7	46.3	58.2	41.1	55.6	36.8	55.1
160		55.0		50.9		47.6		42.4		40.3	
200		54.0		50.5		47.4		44.3		36.1	
250	250	56.8	62.2	54.6	57.7	52.8	55.0	44.3	48.8	38.4	42.4
315		59.7		52.7		48.7		43.6		38.1	
400		54.9		51.1		48.1		43.4		37.2	
500		55.1	59.3	51.5	55.5	48.7	52.7	43.4	47.5	37.2	41.1
630	500	53.3		49.6		46.6		41.1		34.0	
800		51.2		47.3		43.9		37.8		30.0	
1000		51.6	55.4	47.5	51.3	44.1	47.8	37.3	41.3	29.3	33.3
1250		48.5		44.0		40.4		33.6		25.0	
1600	1000	47.8		43.3		39.5		32.3		23.7	
2000		46.0	50.9	41.4	46.3	37.4	42.4	30.4	35.0	23.0	26.8
2500		43.7		38.7		34.5		26.2		16.3	
3150		41.5		36.3		31.5		22.6		13.2	
4000	4000	40.4	45.2	34.8	39.7	29.9	34.8	20.7	25.8	13.7	18.6
5000		38.9		33.0		27.8		18.9		14.4	
6300		36.8		30.5		24.9		17.1		14.6	
8000		34.2	39.3	27.6	32.9	22.1	27.5	16.3	21.7	15.3	20.6
10000		30.5		24.2		19.6		17.2		17.1	
dB(A)		61.0		56.7		53.6		47.8		42.0	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	45.2		49.0		47.7		48.5		47.2	
125		48.1	51.1	44.1	50.6	40.6	48.9	35.3	48.8	30.8	47.3
160		45.1		40.6		38.2		32.5		27.2	
200	250	44.6		40.9		38.2		34.8		26.5	
250		51.2	55.4	48.8	51.5	47.1	49.0	37.8	41.8	32.3	36.1
315		52.8		47.2		43.3		38.0		32.9	
400	500	50.4		46.4		43.6		38.7		32.7	
500		49.8	54.3	46.0	50.4	43.1	47.5	37.5	42.1	31.3	35.9
630		48.2		44.1		40.9		35.2		28.6	
800	1000	46.1		41.9		38.5		32.3		25.3	
1000		47.9	51.2	43.5	46.8	39.9	43.2	33.4	36.8	26.0	29.5
1250		44.6		40.1		36.4		29.7		21.7	
1600	2000	44.7		40.1		36.5		29.4		21.1	
2000		42.5	47.7	37.9	43.0	34.0	39.2	26.8	31.8	19.0	23.5
2500		40.4		35.4		31.2		22.7		12.8	
3150	4000	37.8		32.2		27.4		18.2		9.3	
4000		36.9	41.6	31.0	35.8	26.0	30.8	16.4	21.5	9.6	14.4
5000		35.6		29.4		24.1		14.8		10.0	
6300	8000	33.5		26.8		21.1		12.6		9.8	
8000		30.8	35.8	23.7	28.9	17.8	23.3	11.5	16.8	10.4	15.3
10000		25.5		18.5		14.3		11.8		11.2	
dB(A)		56.2		51.9		48.6		42.5		36.4	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	54.0		54.6		57.0		54.2		54.1	
125		51.5	58.3	48.3	56.7	44.9	57.7	39.8	54.6	35.6	54.3
160		54.5		50.5		47.1		41.9		40.1	
200	250	53.5		50.0		46.8		43.8		35.5	
250		55.5	61.2	53.2	56.5	51.4	53.8	43.2	47.9	37.1	41.2
315		58.7		51.2		47.3		42.2		36.6	
400	500	53.1		49.3		46.2		41.6		35.4	
500		53.5	57.6	50.0	54.0	47.3	51.1	42.1	46.1	35.8	39.6
630		51.7		48.1		45.2		39.8		32.5	
800	1000	49.6		45.8		42.4		36.3		28.2	
1000		49.1	53.3	45.3	49.4	42.0	46.0	35.0	39.4	26.5	31.0
1250		46.2		41.8		38.1		31.2		22.3	
1600	2000	44.8		40.4		36.5		29.2		20.3	
2000		43.4	48.1	38.8	43.5	34.8	39.6	27.9	32.2	20.8	24.0
2500		40.9		36.1		31.8		23.7		13.7	
3150	4000	39.2		34.1		29.4		20.6		10.9	
4000		37.8	42.7	32.5	37.4	27.6	32.5	18.6	23.7	11.7	16.5
5000		36.2		30.5		25.4		16.7		12.4	
6300	8000	34.0		28.1		22.6		15.2		12.9	
8000		31.5	36.7	25.4	30.7	20.1	25.4	14.6	20.0	13.7	19.1
10000		28.8		22.8		18.0		15.8		15.8	
dB(A)		59.2		55.0		52.0		46.3		40.6	

4D149954A

11 Sound data

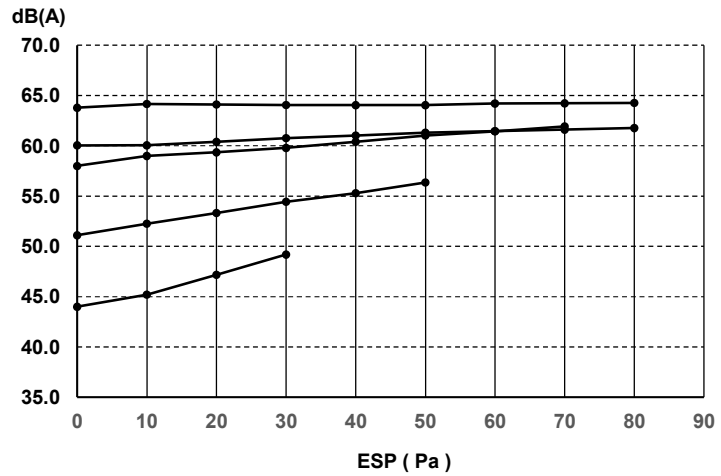
11 - 1 Sound Power Spectrum

FWE14FT
FWE14FTR

Sound Power overall (dBA): FWE14F(A/B)T(N/T/V)5V1-(-/R)

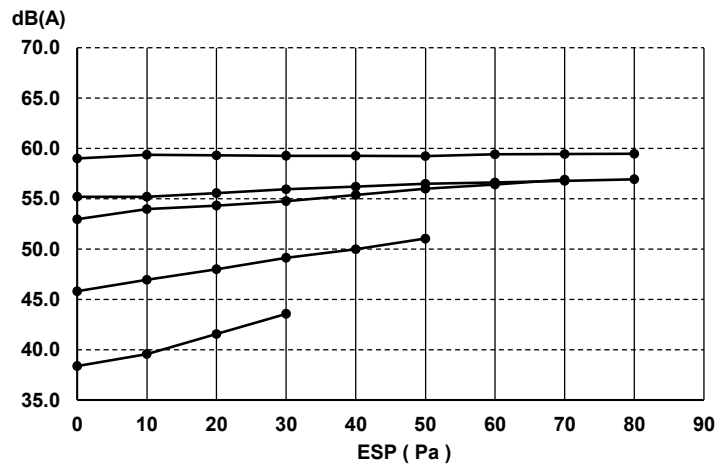
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	63.8	60.0	58.0	51.1	44.0
10	64.2	60.0	59.0	52.3	45.2
20	64.1	60.4	59.4	53.3	47.2
30	64.1	60.8	59.8	54.4	49.2
40	64.0	61.0	60.4	55.3	
50	64.0	61.3	61.0	56.4	
60	64.2	61.5	61.4		
70	64.2	61.6	61.9		
80	64.3	61.8			



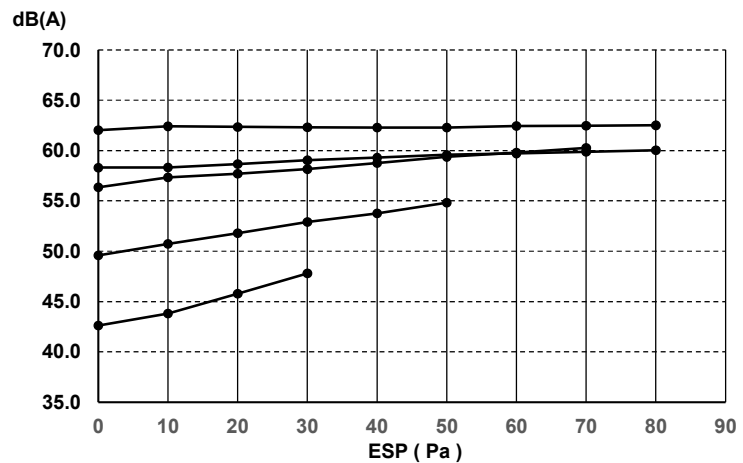
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	59.0	55.2	53.0	45.8	38.4
10	59.4	55.2	54.0	46.9	39.6
20	59.3	55.6	54.3	48.0	41.5
30	59.3	55.9	54.8	49.1	43.6
40	59.3	56.2	55.4	50.0	
50	59.2	56.5	56.0	51.0	
60	59.4	56.6	56.4		
70	59.4	56.8	56.9		
80	59.5	56.9			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0	62.0	58.3	56.4	49.6	42.6
10	62.4	58.3	57.4	50.7	43.8
20	62.4	58.7	57.7	51.8	45.8
30	62.3	59.0	58.2	52.9	47.8
40	62.3	59.3	58.8	53.8	
50	62.3	59.6	59.4	54.8	
60	62.4	59.7	59.8		
70	62.5	59.9	60.3		
80	62.5	60.0			



4D149955A

11 Sound data

11 - 1 Sound Power Spectrum

FWE14FT
FWE14FTR

Sound Power Spectrum : FWE14F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.3		59.0		61.9		58.6		56.9	
125		56.0	61.9	53.0	61.0	50.7	62.6	44.5	59.0	38.8	57.1
160		57.8		54.3		52.0		45.7		42.3	
200	250	56.9		53.8		51.8		47.6		38.1	
250		59.6	65.0	57.9	61.0	57.2	59.4	47.6	52.2	40.4	44.4
315		62.5		56.0		53.1		46.9		40.2	
400	500	57.8		54.4		52.5		46.7		39.2	
500		57.9	62.1	54.8	58.9	53.1	57.1	46.8	50.9	39.2	43.1
630		56.1		52.9		51.0		44.4		36.0	
800	1000	54.1		50.6		48.3		41.1		32.0	
1000		54.4	58.2	50.8	54.6	48.5	52.3	40.6	44.7	31.3	35.3
1250		51.3		47.4		44.8		36.9		27.0	
1600	2000	50.6		46.6		43.9		35.6		25.7	
2000		48.8	53.7	44.7	49.6	41.8	46.8	33.7	38.4	25.0	28.8
2500		46.5		42.1		38.9		29.6		18.3	
3150	4000	44.3		39.6		36.0		25.9		15.2	
4000		43.2	48.0	38.2	43.0	34.3	39.2	24.0	29.1	15.8	20.6
5000		41.8		36.3		32.2		22.2		16.4	
6300	8000	39.6		33.8		29.3		20.4		16.6	
8000		37.0	42.1	31.0	36.3	26.5	31.9	19.7	25.0	17.3	22.6
10000		33.3		27.5		24.0		20.6		19.1	
dB(A)		63.8		60.0		58.0		51.1		44.0	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.0		52.3		52.1		51.9		49.2	
125		51.0	54.0	47.4	54.0	45.0	53.3	38.6	52.2	32.8	49.3
160		47.9		44.0		42.6		35.8		29.2	
200	250	47.4		44.2		42.6		38.1		28.5	
250		54.0	58.2	52.2	54.9	51.5	53.4	41.1	45.2	34.3	38.1
315		55.6		50.6		47.7		41.3		35.0	
400	500	53.2		49.7		48.0		42.1		34.7	
500		52.6	57.1	49.4	53.7	47.5	51.9	40.8	45.5	33.3	38.0
630		51.0		47.5		45.3		38.5		30.6	
800	1000	48.9		45.3		42.9		35.7		27.4	
1000		50.7	54.0	46.8	50.2	44.3	47.6	36.7	40.2	28.0	31.5
1250		47.4		43.4		40.9		33.1		23.7	
1600	2000	47.5		43.5		40.9		32.7		23.1	
2000		45.3	50.5	41.2	46.3	38.4	43.6	30.1	35.2	21.0	25.6
2500		43.2		38.7		35.6		26.1		14.8	
3150	4000	40.6		35.6		31.9		21.6		11.3	
4000		39.7	44.4	34.3	39.1	30.5	35.2	19.8	24.8	11.6	16.4
5000		38.4		32.7		28.5		18.2		12.0	
6300	8000	36.4		30.1		25.5		15.9		11.8	
8000		33.6	38.6	27.0	32.3	22.2	27.7	14.8	20.1	12.4	17.3
10000		28.3		21.9		18.7		15.1		13.3	
dB(A)		59.0		55.2		53.0		45.8		38.4	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M		L					
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	56.8		58.0		61.4		57.6		56.1	
125		54.3	61.1	51.7	60.1	49.3	62.1	43.1	58.0	37.6	56.4
160		57.3		53.9		51.5		45.3		42.1	
200	250	56.3		53.3		51.3		47.1		37.6	
250		58.3	64.0	56.5	59.8	55.8	58.2	46.5	51.2	39.1	43.3
315		61.5		54.6		51.7		45.5		38.6	
400	500	55.9		52.6		50.6		44.9		37.4	
500		56.4	60.4	53.4	57.3	51.7	55.5	45.5	49.4	37.9	41.6
630		54.5		51.4		49.6		43.1		34.5	
800	1000	52.5		49.2		46.8		39.7		30.2	
1000		52.0	56.1	48.6	52.7	46.4	50.4	38.4	42.8	28.5	33.0
1250		49.0		45.1		42.6		34.6		24.3	
1600	2000	47.6		43.7		41.0		32.5		22.3	
2000		46.2	50.9	42.1	46.9	39.2	44.0	31.2	35.6	22.9	26.0
2500		43.7		39.4		36.2		27.0		15.7	
3150	4000	42.0		37.4		33.8		24.0		12.9	
4000		40.6	45.5	35.8	40.7	32.0	36.9	21.9	27.0	13.7	18.5
5000		39.0		33.9		29.8		20.0		14.4	
6300	8000	36.8		31.4		27.1		18.5		14.9	
8000		34.3	39.5	28.8	34.1	24.5	29.9	17.9	23.3	15.7	21.1
10000		31.6		26.2		22.4		19.1		17.8	
dB(A)		62.0		58.3		56.4		49.6		42.6	

4D149955A

11 Sound data

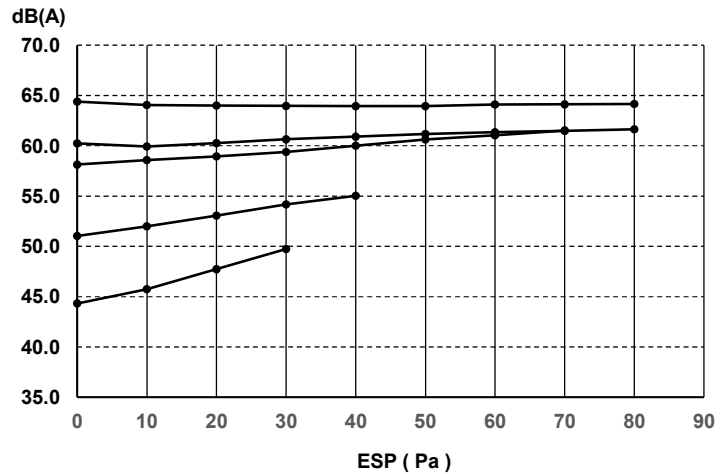
11 - 1 Sound Power Spectrum

FWE16FT
FWE16FTR

Sound Power overall (dBA): FWE16F(A/B)T(N/T/V)5V1-(-/R)

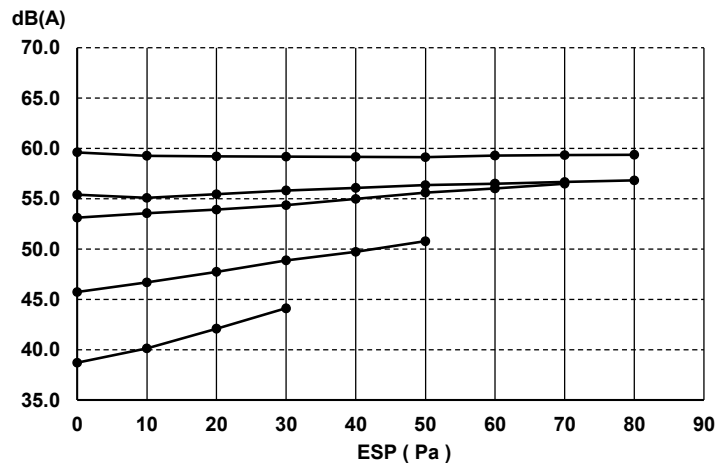
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	64.4	60.2	58.1	51.0	44.3
10	64.1	59.9	58.6	52.0	45.8
20	64.0	60.3	59.0	53.1	47.7
30	64.0	60.7	59.4	54.2	49.7
40	63.9	60.9	60.0	55.0	
50	63.9	61.2	60.6	56.1	
60	64.1	61.3	61.0		
70	64.1	61.5	61.5		
80	64.2	61.7			



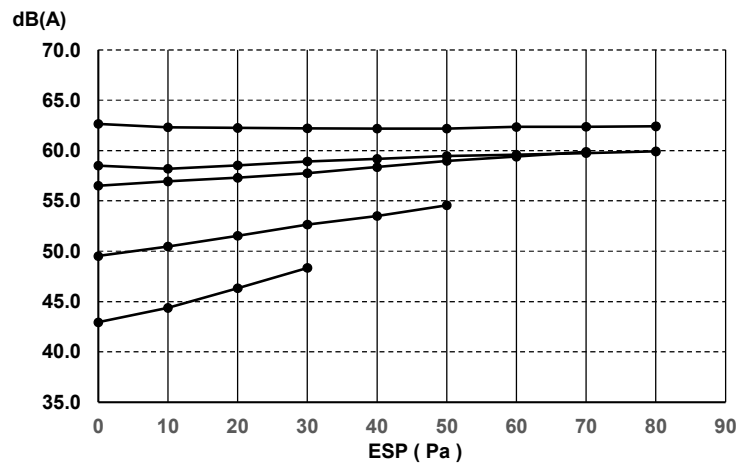
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	59.6	55.4	53.1	45.7	38.7
10	59.3	55.1	53.6	46.7	40.1
20	59.2	55.4	53.9	47.7	42.1
30	59.2	55.8	54.4	48.9	44.1
40	59.2	56.1	55.0	49.7	
50	59.1	56.4	55.6	50.8	
60	59.3	56.5	56.0		
70	59.3	56.7	56.5		
80	59.4	56.8			



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1 L
0	62.7	58.5	56.5	49.5	42.9
10	62.3	58.2	57.0	50.5	44.4
20	62.3	58.5	57.3	51.5	46.3
30	62.2	58.9	57.8	52.7	48.3
40	62.2	59.2	58.4	53.5	
50	62.2	59.5	59.0	54.6	
60	62.3	59.6	59.4		
70	62.4	59.8	59.9		
80	62.4	59.9			



4D149956A

11 Sound data

11 - 1 Sound Power Spectrum

FWE16FT
FWE16FTR

Sound Power Spectrum : FWE16F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	58.0		59.2		62.1		58.5		57.3	
125		56.6	62.5	53.2	61.2	50.8	62.8	44.4	58.9	39.2	57.5
160		58.4		54.5		52.1		45.7		42.6	
200	250	57.5		54.0		52.0		47.6		38.4	
250		60.3	65.6	58.1	61.2	57.3	59.6	47.5	52.1	40.7	44.7
315		63.1		56.2		53.3		46.9		40.5	
400	500	58.4		54.6		52.7		46.7		39.6	
500		58.5	62.7	55.0	59.1	53.2	57.2	46.7	50.8	39.5	43.5
630		56.8		53.1		51.1		44.3		36.3	
800	1000	54.7		50.8		48.4		41.0		32.3	
1000		55.0	58.8	51.0	54.8	48.6	52.4	40.6	44.6	31.6	35.7
1250		51.9		47.6		44.9		36.8		27.3	
1600	2000	51.2		46.8		44.1		35.6		26.1	
2000		49.4	54.3	44.9	49.8	42.0	46.9	33.6	38.3	25.4	29.1
2500		47.1		42.3		39.0		29.5		18.6	
3150	4000	45.0		39.8		36.1		25.9		15.5	
4000		43.8	48.6	38.4	43.2	34.5	39.3	23.9	29.0	16.1	20.9
5000		42.4		36.5		32.3		22.2		16.7	
6300	8000	40.2		34.0		29.5		20.4		17.0	
8000		37.6	42.7	31.2	36.5	26.7	32.1	19.6	24.9	17.7	22.9
10000		33.9		27.7		24.1		20.5		19.5	
dB(A)		64.4		60.2		58.1		51.0		44.3	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.6		52.5		52.3		51.8		49.5	
125		51.6	54.6	47.6	54.2	45.2	53.4	38.5	52.1	33.2	49.7
160			48.5		44.2		42.8		35.7		29.5
200	250	48.0		44.4		42.7		38.1		28.8	
250		54.6	58.9	52.4	55.1	51.7	53.6	41.1	45.1	34.6	38.5
315			56.2		50.8		47.9		41.2		35.3
400	500	53.8		49.9		48.2		42.0		35.0	
500		53.2	57.7	49.6	53.9	47.6	52.0	40.8	45.4	33.7	38.3
630			51.6		47.7		45.4		38.4		31.0
800	1000	49.5		45.5		43.0		35.6		27.7	
1000		51.3	54.6	47.0	50.4	44.4	47.8	36.7	40.1	28.4	31.8
1250			48.0		43.6		41.0		33.0		24.0
1600	2000	48.1		43.7		41.0		32.6		23.4	
2000		45.9	51.1	41.4	46.5	38.6	43.7	30.1	35.1	21.3	25.9
2500			43.8		38.9		35.7		26.0		15.2
3150	4000	41.2		35.8		32.0		21.5		11.6	
4000		40.4	45.1	34.5	39.3	30.6	35.4	19.7	24.8	11.9	16.7
5000			39.0		32.9		28.6		18.1		12.4
6300	8000	37.0		30.3		25.6		15.8		12.1	
8000		34.2	39.2	27.2	32.5	22.4	27.9	14.8	20.0	12.7	17.6
10000			29.0		22.1		18.9		15.1		13.6
dB(A)		59.6		55.4		53.1		45.7		38.7	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.4		58.2		61.6		57.5		56.5	
125		54.9	61.7	51.9	60.3	49.4	62.2	43.1	57.9	37.9	56.7
160		57.9		54.1		51.6		45.2		42.4	
200	250	56.9		53.5		51.4		47.1		37.9	
250		58.9	64.6	56.7	60.0	55.9	58.3	46.4	51.1	39.5	43.6
315		62.1		54.8		51.8		45.5		38.9	
400	500	56.5		52.8		50.8		44.9		37.7	
500		57.0	61.0	53.6	57.5	51.8	55.6	45.4	49.3	38.2	41.9
630		55.2		51.6		49.8		43.0		34.8	
800	1000	53.1		49.4		47.0		39.6		30.5	
1000		52.6	56.8	48.8	52.9	46.5	50.5	38.3	42.7	28.8	33.4
1250		49.6		45.3		42.7		34.5		24.6	
1600	2000	48.2		43.9		41.1		32.4		22.6	
2000		46.8	51.5	42.3	47.1	39.3	44.1	31.1	35.5	23.2	26.4
2500		44.3		39.6		36.3		26.9		16.0	
3150	4000	42.6		37.6		34.0		23.9		13.2	
4000		41.2	46.1	36.0	40.9	32.1	37.1	21.9	27.0	14.0	18.8
5000		39.6		34.1		29.9		20.0		14.7	
6300	8000	37.4		31.6		27.2		18.5		15.2	
8000		34.9	40.1	29.0	34.3	24.7	30.0	17.9	23.3	16.0	21.4
10000		32.2		26.4		22.6		19.0		18.2	
dB(A)		62.7		58.5		56.5		49.5		42.9	

4D149956A

11 Sound data

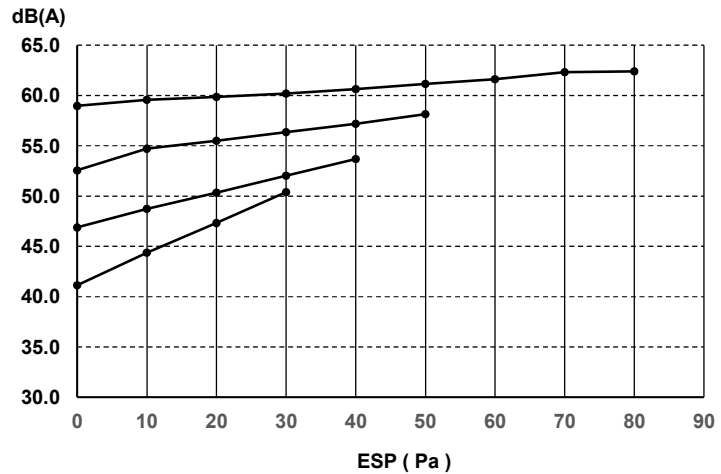
11 - 1 Sound Power Spectrum

FWE20FT
FWE20FTR

Sound Power overall (dBA): FWE20F(A/B)T(N/T/V)5V1-(-/R)

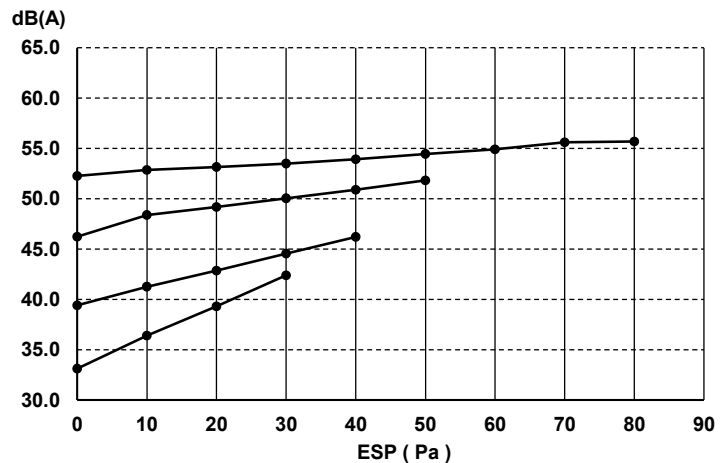
Whole casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		59.0	52.6	46.9	41.1
10		59.6	54.7	48.7	44.4
20		59.9	55.5	50.3	47.3
30		60.2	56.4	52.0	50.4
40		60.6	57.2	53.7	
50		61.2	58.1	55.3	
60		61.6	59.1		
70		62.3	60.2		
80		62.4			



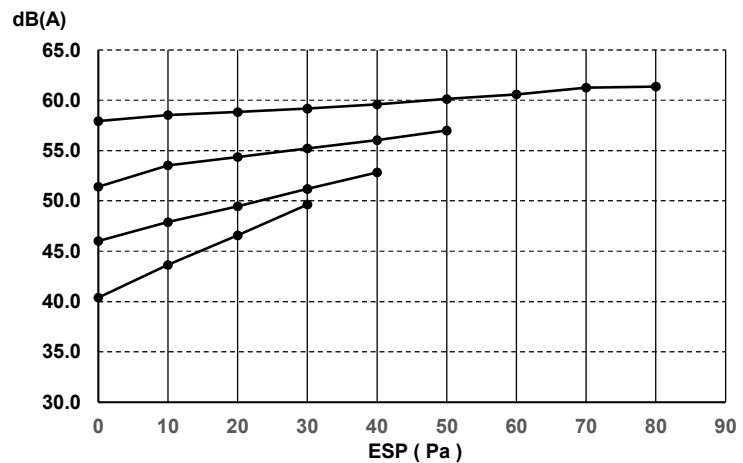
Discharge

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		52.3	46.2	39.4	33.1
10		52.9	48.4	41.3	36.4
20		53.2	49.2	42.9	39.3
30		53.5	50.0	44.6	42.4
40		53.9	50.9	46.2	
50		54.5	51.8	47.8	
60		54.9	52.8		
70		55.6	53.9		
80		55.7			



Inlet + casing

ESP (Pa)	Fan speed				
	5	4	3	2	1
		H	M	L	
0		57.9	51.4	46.0	40.4
10		58.5	53.5	47.9	43.6
20		58.8	54.4	49.5	46.6
30		59.2	55.2	51.2	49.6
40		59.6	56.0	52.8	
50		60.1	57.0	54.4	
60		60.6	58.0		
70		61.3	59.0		
80		61.4			



4D149957A

11 Sound data

11 - 1 Sound Power Spectrum

FWE20FT
FWE20FTR

Sound Power Spectrum : FWE20F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing												
Fan Speed						4		3		2		1		
						H		M		L				
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	
100	125			62.2		57.1		58.4		55.1				
125				50.8	62.7	44.8	57.6	41.3	58.7	38.4	55.2			
160				50.4		45.2		43.9		35.0				
200				50.0		48.2		39.8		34.4				
250	250			56.1	58.3	47.7	52.3	42.5	46.5	37.3	41.1			
315				52.3		46.6		42.5		36.8				
400				52.1		47.4		41.5		35.7				
500				52.9	57.0	47.3	51.8	41.9	46.0	35.4	39.6			
630	500			51.8		46.4		40.1		32.6				
800				49.2		43.4		36.3		28.4				
1000				49.5	53.4	43.2	47.3	35.7	39.8	27.3	31.6			
1250				46.5		40.2		32.0		23.4				
1600	1000			46.4		39.4		31.2		23.2				
2000				45.4	50.6	37.2	42.2	29.1	33.9	24.7	27.6			
2500				45.6		34.2		24.9		18.6				
3150				42.9		31.1		21.0		15.8				
4000	2000			41.2	45.9	29.4	34.3	20.7	25.3	18.8	23.0			
5000				37.8		26.9		20.0		19.3				
6300				36.0		23.6		18.1		18.4				
8000				31.7	37.9	22.1	26.9	20.1	24.3	20.6	25.0			
10000	4000			28.2		20.0		20.1		21.2				
dB(A)				59.0				52.6				46.9		
												41.1		

ESP=0Pa		Sound Power Spectrum (dB) : Discharge												
Fan Speed						4		3		2		1		
						H		M		L				
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	
100	125			49.8		47.2		37.6		32.8				
125				45.1	51.5	41.1	48.5	35.1	40.3	34.3	37.2			
160				41.6		36.9		32.2		27.9				
200				41.3		37.5		30.0		25.6				
250	250			48.3	50.8	41.1	44.9	35.6	39.3	30.6	34.0			
315				45.9		40.9		35.9		30.2				
400				47.2		42.7		36.5		30.8				
500				46.4	50.9	40.8	45.8	34.5	39.5	27.9	33.3			
630	500			44.4		38.7		32.0		24.9				
800				42.3		36.6		29.6		22.2				
1000				44.1	47.2	37.8	41.2	30.4	33.8	22.2	25.8			
1250				40.0		33.8		25.6		16.8				
1600	1000			40.8		34.2		25.7		16.9				
2000				38.2	43.8	31.0	36.5	22.2	27.8	15.5	19.9			
2500				37.2		27.8		17.7		11.2				
3150				35.0		24.4		14.1		10.5				
4000	4000			32.7	37.9	23.0	27.8	14.4	19.1	12.8	17.4			
5000				30.5		21.3		14.4		13.9				
6300				28.3		18.5		13.5		13.8				
8000				25.2	30.5	16.6	21.7	14.6	19.2	15.1	19.7			
10000	8000			20.5		15.0		15.1		15.8				
dB(A)				52.3				46.2				39.4		
												33.1		

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing											
Fan Speed						4		3		2		1	
						H		M		L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125			61.9		56.6		58.4		55.1			
125				49.5	62.4	42.3	57.0	40.0	58.6	36.3	55.2		
160				49.8		44.5		43.6		34.0			
200				49.4		47.9		39.3		33.8			
250	250			55.3	57.5	46.7	51.5	41.5	45.6	36.3	40.2		
315				51.2		45.2		41.4		35.7			
400				50.3		45.6		39.9		34.0			
500				51.8	55.8	46.2	50.6	41.1	44.9	34.6	38.4		
630	500			51.0		45.6		39.3		31.8			
800				48.3		42.4		35.2		27.2			
1000				48.0	52.2	41.7	46.0	34.2	38.6	25.7	30.3		
1250				45.5		39.1		30.9		22.3			
1600	2000			45.1		37.9		29.8		22.0			
2000				44.4	49.6	36.1	40.9	28.1	32.7	24.1	26.8		
2500				44.9		33.1		24.0		17.7			
3150				42.1		30.1		20.0		14.3			
4000	4000			40.5	45.1	28.3	33.1	19.5	24.2	17.5	21.6		
5000				36.9		25.5		18.6		17.8			
6300				35.2		22.0		16.2		16.5			
8000				30.6	37.0	20.6	25.3	18.7	22.7	19.1	23.4		
10000					27.4		18.3		18.5		19.7		
dB(A)						57.9		51.4		46.0		40.4	

4D149957A

11 Sound data

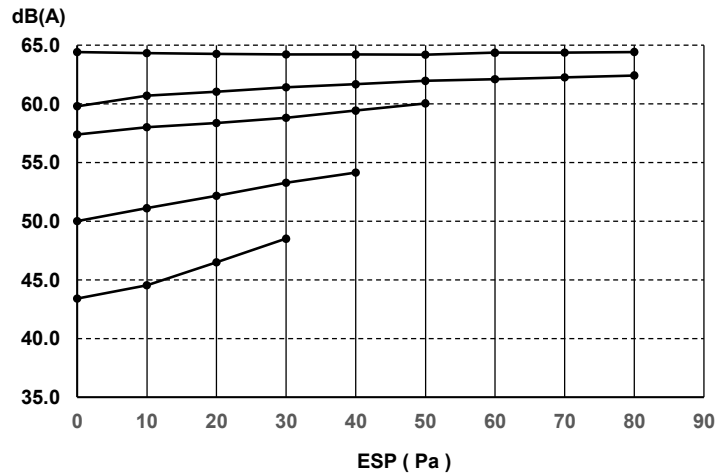
11 - 1 Sound Power Spectrum

FWE24FT
FWE24FTR

Sound Power overall (dBA): FWE24F(A/B)T(N/T/V)5V1-(-/R)

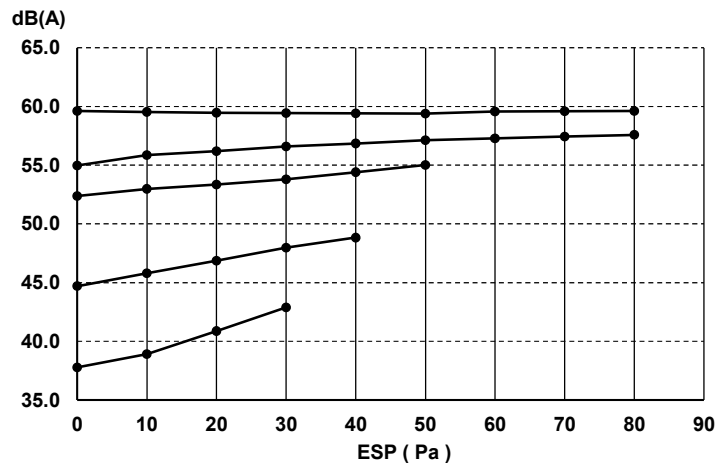
Whole casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	64.4	59.8	57.4	50.0	43.4
10	64.3	60.7	58.0	51.1	44.5
20	64.3	61.0	58.4	52.2	46.5
30	64.2	61.4	58.8	53.3	48.5
40	64.2	61.7	59.4	54.1	
50	64.2	62.0	60.0	55.2	
60	64.4	62.1	60.5		
70	64.4	62.3	60.9		
80	64.4	62.4			



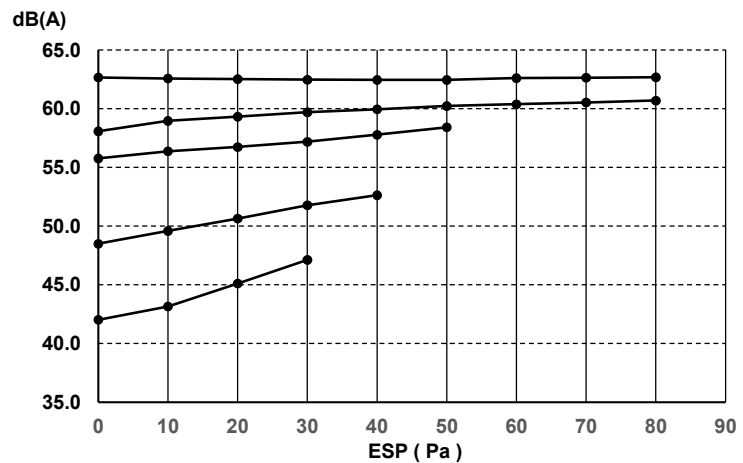
Discharge

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	59.6	55.0	52.4	44.7	37.8
10	59.5	55.9	53.0	45.8	38.9
20	59.5	56.2	53.3	46.9	40.9
30	59.4	56.6	53.8	48.0	42.9
40	59.4	56.8	54.4	48.8	
50	59.4	57.1	55.0	49.9	
60	59.6	57.3	55.4		
70	59.6	57.4	55.9		
80	59.6	57.6			



Inlet + casing

ESP (Pa)	Fan speed				
	5 H	4 M	3 L	2 L	1
0	62.7	58.1	55.8	48.5	42.0
10	62.6	59.0	56.4	49.6	43.1
20	62.5	59.3	56.7	50.7	45.1
30	62.5	59.7	57.2	51.8	47.1
40	62.5	60.0	57.8	52.6	
50	62.4	60.2	58.4	53.7	
60	62.6	60.4	58.8		
70	62.6	60.5	59.3		
80	62.7	60.7			



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11 Sound data

11 - 1 Sound Power Spectrum

FWE24FT
FWE24FTR

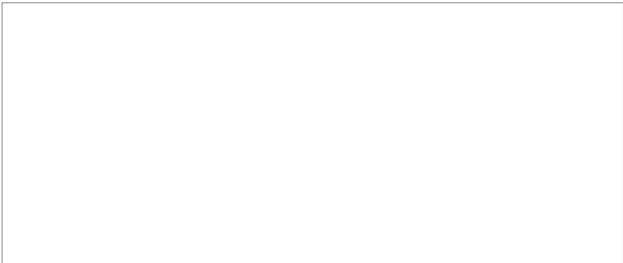
Sound Power Spectrum : FWE24F(A/B)T(N/T/V)5V1-(-R)

ESP=0Pa		Sound Power Spectrum (dB) : Whole casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	58.0		58.8		61.3		57.5		56.3	
125		56.6	62.5	52.8	60.8	50.1	62.0	43.4	57.9	38.2	56.6
160		58.4		54.0		51.4		44.6		41.7	
200	250	57.5		53.6		51.2		46.5		37.5	
250		60.3	65.7	57.7	60.8	56.6	58.8	46.5	51.1	39.8	43.8
315		63.1		55.8		52.5		45.8		39.6	
400	500	58.4		54.2		51.9		45.6		38.7	
500		58.5	62.7	54.6	58.6	52.5	56.5	45.7	49.8	38.6	42.6
630		56.8		52.7		50.4		43.3		35.4	
800	1000	54.7		50.4		47.7		40.0		31.4	
1000		55.0	58.8	50.6	54.4	47.9	51.7	39.5	43.6	30.7	34.8
1250		51.9		47.1		44.2		35.8		26.4	
1600	2000	51.2		46.4		43.3		34.5		25.1	
2000		49.4	54.3	44.5	49.4	41.2	46.2	32.6	37.3	24.4	28.2
2500		47.1		41.8		38.3		28.5		17.7	
3150	4000	45.0		39.4		35.4		24.8		14.6	
4000		43.8	48.6	37.9	42.8	33.7	38.6	22.9	28.0	15.2	20.0
5000		42.4		36.1		31.6		21.1		15.8	
6300	8000	40.2		33.6		28.7		19.3		16.0	
8000		37.6	42.7	30.7	36.0	25.9	31.3	18.6	23.9	16.8	22.0
10000		33.9		27.3		23.4		19.5		18.5	
dB(A)		64.4		59.8		57.4		50.0		43.4	

ESP=0Pa		Sound Power Spectrum (dB) : Discharge									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	48.6		52.1		51.5		50.8		48.6	
125		51.6	54.6	47.2	53.7	44.4	52.7	37.5	51.1	32.3	48.7
160			48.5		43.7		42.0		34.7		28.6
200	250	48.0		44.0		42.0		37.0		27.9	
250		54.6	58.9	51.9	54.6	50.9	52.8	40.0	44.1	33.7	37.5
315			56.2		50.3		47.1		40.2		34.4
400	500	53.8		49.5		47.4		41.0		34.1	
500		53.2	57.8	49.1	53.5	46.9	51.3	39.7	44.4	32.7	37.4
630			51.6		47.2		44.7		37.4		30.1
800	1000	49.5		45.0		42.3		34.6		26.8	
1000		51.3	54.6	46.6	49.9	43.7	47.0	35.6	39.1	27.5	30.9
1250			48.0		43.2		40.3		32.0		23.1
1600	2000	48.2		43.2		40.3		31.6		22.5	
2000		45.9	51.1	41.0	46.1	37.8	43.0	29.0	34.1	20.4	25.0
2500			43.8		38.5		35.0		25.0		14.3
3150	4000	41.2		35.3		31.3		20.5		10.7	
4000		40.4	45.1	34.1	38.9	29.9	34.6	18.7	23.7	11.0	15.8
5000			39.0		32.5		27.9		17.1		11.5
6300	8000	37.0		29.9		24.9		14.8		11.2	
8000		34.2	39.3	26.8	32.0	21.6	27.1	13.7	19.0	11.8	16.7
10000			29.0		21.6		18.1		14.0		12.7
dB(A)		59.6		55.0		52.4		44.7		37.8	

ESP=0Pa		Sound Power Spectrum (dB) : Inlet and casing									
Fan Speed		5		4		3		2		1	
		H		M				L			
1/3 Oct	1/1 Oct	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1	1/3	1/1
100	125	57.4		57.7		60.8		56.5		55.5	
125		55.0	61.7	51.4	59.8	48.7	61.5	42.0	56.9	37.0	55.8
160			57.9		53.6		50.9		44.2		41.5
200	250	56.9		53.1		50.7		46.0		37.0	
250		58.9	64.6	56.3	59.6	55.2	57.6	45.4	50.1	38.6	42.7
315			62.1		54.3		51.1		44.4		38.0
400	500	56.5		52.4		50.0		43.8		36.8	
500		57.0	61.0	53.1	57.1	51.1	54.9	44.4	48.3	37.3	41.0
630			55.2		51.2		49.0		42.0		33.9
800	1000	53.1		48.9		46.2		38.6		29.6	
1000		52.6	56.8	48.4	52.5	45.8	49.8	37.3	41.7	27.9	32.4
1250			49.6		44.9		42.0		33.5		23.7
1600	2000	48.2		43.5		40.4		31.4		21.7	
2000		46.8	51.5	41.9	46.6	38.6	43.4	30.1	34.5	22.3	25.4
2500			44.3		39.2		35.6		25.9		15.1
3150	4000	42.6		37.2		33.2		22.9		12.3	
4000		41.2	46.1	35.6	40.5	31.4	36.3	20.8	25.9	13.1	17.9
5000			39.7		33.6		29.2		18.9		13.8
6300	8000	37.4		31.2		26.5		17.4		14.3	
8000		35.0	40.1	28.5	33.8	23.9	29.3	16.8	22.2	15.1	20.5
10000			32.3		25.9		21.8		18.0		17.2
dB(A)		62.7		58.1		55.8		48.5		42.0	

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