

F2 TYPE
VARIABLE
STATIC
PRESSURE
HIDE AWAY



S-22MF2E5 // S-28MF2E5 // S-36MF2E5 // S-45MF2E5 // S-56MF2E5

S-60MF2E5 // S-73MF2E5 // S-90MF2E5

S-106MF2E5 // S-140MF2E5 // S-160MF2E5

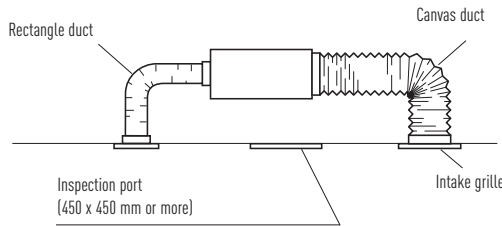
The new F2 type is designed specifically for applications requiring fixed square ducting. The internal filter is equipped as standard.

Technical focus

- Industry-leading low sound levels from 25 dB(A)
- Built-in drain pump provides 785 mm lift
- Easy to install and maintain
- Air off sensor avoids cold air dumping
- Configurable air temperature control
- Anti-mould washable filters included

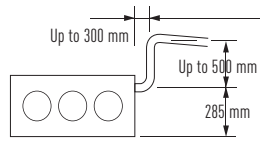
System example

An inspection port (450 x 450 mm or more) is required at the lower side of the indoor unit body.



More powerful drain pump

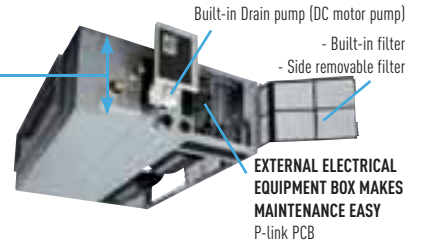
Using a high-lift drain pump, drain piping can be elevated up to 785 mm from the base of the unit.



New Variable Static Pressure Hide Away MF2 series

STANDARDIZED HEIGHT OF 290 mm FOR ALL MODELS

Height standardization enables easy and uniform installation for models with different capacities.



Lowest noise levels in the industry.

The static pressure outside the unit can be increased. New DC fan motor is adopted to new unit. External static pressure is available up to 150 Pa.

*No booster cable is needed.

TYPE	22-90	106-160
Standard	70 Pa	100 Pa
Range	10-150 Pa	10-150 Pa

Circle duct flange (option)

Model	Diameters	Model Code
S-22MF2E5 to S-56MF2E5	2 x ø 200	CZ-56DAF2 (2 SA outlet)
S-60MF2E5 to S-90MF2E5	3 x ø 200	CZ-90DAF2 (3 SA outlet)
S-106MF2E5 to S-160MF2E5	4 x ø 200	CZ-160DAF2 (4 SA outlet)

Plenums

AIR OUTLET PLENUM			AIR INLET PLENUM		
Model	Diameters	Model Code	Model	Diameters	Model Code
22/28/36	2 x ø 160	CZ-DUMPAF10ES2	22/28/36	2 x ø 200	CZ-DUMPAF10ER2
45/56	2 x ø 160	CZ-DUMPAF15ES2	45/56	2 x ø 200	CZ-DUMPAF15ER2



OPTIONAL CONTROLLER
Simplified remote controller
CZ-RELC2

OPTIONAL CONTROLLER
Simplified remote controller
CZ-RE2C2

MODEL NAME		S-22MF2E5	S-28MF2E5	S-36MF2E5	S-45MF2E5	S-56MF2E5	S-60MF2E5	S-73MF2E5	S-90MF2E5	S-106MF2E5	S-140MF2E5	S-160MF2E5	
Power source		230 V / 1 phase / 50 Hz											
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	6.0	7.3	9.0	10.6	14.0	16.0	
Cooling power input	W	70	70	70	70	100	120	120	135	195	215	225	
Cooling operating current	A	0.57	0.57	0.57	0.57	0.74	0.89	0.89	0.97	1.30	1.44	1.50	
Heating capacity	kW	2.5	3.2	4.2	5.0	6.3	7.1	8.0	10.0	11.4	16.0	18.0	
Heating power input	W	70	70	70	100	100	120	120	135	200	210	225	
Heating operating current	A	0.57	0.57	0.57	0.57	0.74	0.89	0.89	0.97	1.30	1.44	1.50	
Fan	Type	Sirocco fan											
	Air flow rate (Hi)	m ³ /h	840	840	840	840	960	1,260	1,260	1,500	1,920	2,040	2,160
	External static pressure	Pa	70 (10-150)	70 (10-150)	70 (10-150)	70 (10-150)	70 (10-150)	70 (10-150)	70 (10-150)	70 (10-150)	100 (10-150)	100 (10-150)	100 (10-150)
Sound power level (L/M/H)	dB	47/51/55	47/51/55	47/51/55	50/54/56	50/54/56	48/54/57	48/54/57	50/56/59	53/56/60	54/57/61	55/58/62	
Sound pressure level (L/M/H/(H-booster))	dB(A)	25/29/33	25/29/33	25/29/33	28/32/34	28/32/34	26/32/35	26/32/35	28/34/37	31/34/38	32/35/39	33/36/40	
Dimensions	H x W x D	290x800x700											
	Pipe connections	Liquid	inches (mm) 1/4 (6.35)										
	Gas	inches (mm) 1/2 (12.7)											
	Drain piping	VP-25											
Net weight	Kg	29	29	29	29	29	34	34	34	46	46	46	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Cooling Outdoor 7 °C DB / 6 °C WB. DB: Dry Bulb; WB: Wet Bulb

Energy saving INVERTER+	Environmentally friendly refrigerant R410A	Easy maintenance SELF-DIAGNOSING	For more comfort AUTOMATIC FAN	Perfect humidity control MILD DRY	Practical operation AUTOMATIC RESTART	Easy to install BUILT-IN DRAIN PUMP	Easy control CONNECTIVITY
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3. Low Silhouette Ducted Type (F2 Type)

3-1. Specifications

Unit specifications (A)

INDOOR		MODEL	S-22MF2E5			S-28MF2E5			S-36MF2E5		
PANEL		MODEL	-			-			-		
PERFORMANCE TEST CONDITION			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1		
POWER SUPPLY		φ, Hz	1φ 50Hz			1φ 50Hz			1φ 50Hz		
C O O L I N G	CAPACITY	V	220	230	240	220	230	240	220	230	240
		kW	2.2	2.2	2.2	2.8	2.8	2.8	3.6	3.6	3.6
		BTU/h	7500	7500	7500	9600	9600	9600	12300	12300	12300
	CURRENT	A	0.60	0.57	0.56	0.60	0.57	0.56	0.60	0.57	0.56
	INPUT POWER	W	70	70	70	70	70	70	70	70	70
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	33/29/25			33/29/25			33/29/25		
	Power Level dB	55/51/47			55/51/47			55/51/47			
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
H E A T I N G	CAPACITY	kW	2.5	2.5	2.5	3.2	3.2	3.2	4.2	4.2	4.2
		BTU/h	8500	8500	8500	10900	10900	10900	14300	14300	14300
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	0.60	0.57	0.56	0.60	0.57	0.56	0.60	0.57	0.56
	INPUT POWER	W	70	70	70	70	70	70	70	70	70
	COP/COP CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	33/29/25			33/29/25			33/29/25		
		Power Level dB	55/51/47			55/51/47			55/51/47		
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP	-			-			-			
Cooling	MAX CURRENT(A)/MAX INPUT POWER(W)	0.86 / 105	0.82 / 105	0.79 / 105	0.86 / 105	0.82 / 105	0.79 / 105	0.86 / 105	0.82 / 105	0.79 / 105	
Heating	MAX CURRENT(A)/MAX INPUT POWER(W)	0.86 / 105	0.82 / 105	0.79 / 105	0.86 / 105	0.82 / 105	0.79 / 105	0.86 / 105	0.82 / 105	0.79 / 105	
STARTING CURRENT(A)/COMP OUTPUT(W)		-			-			-			
NETWORK IMPEDANCE (ΩMAX.) *3		-			-			-			
FM OUTPUT (ID/OD) W		119			119			119			
MOISTURE REMOVAL VOLUME		L/h(Pt/h)	1.3	(2.7)	1.6	(3.4)	2.1	(4.4)			
External static pressure		Pa (mmAq)	70 (MIN10 - MAX150)			70 (MIN10 - MAX150)			70 (MIN10 - MAX150)		
I/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	14 (494)			14 (494)			14 (494)		
	HEAT	m ³ /min (ft ³ /min)	14 (494)			14 (494)			14 (494)		
O/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	-			-			-		
	HEAT	m ³ /min (ft ³ /min)	-			-			-		
REFRIGERANT TYPE, AMOUNT g(oz)		-			-			-			
P R I M E R Y	HEIGHT : H mm(inch)	290	(11-13/32)		290	(11-13/32)		290	(11-13/32)		
	WIDTH : W mm(inch)	800	(31-1/2)		800	(31-1/2)		800	(31-1/2)		
	DEPTH : D mm(inch)	700	(27-9/16)		700	(27-9/16)		700	(27-9/16)		
P A C K A G E	HEIGHT : H mm	355			355			355			
	WIDTH : W mm	1014			1014			1014			
	DEPTH : D mm	850			850			850			
M A S S	(NET) kg(lb)	29	(64)		29	(64)		29	(64)		
	(GROSS) kg(lb)	36	(80)		36	(80)		36	(80)		
LAYERS LIMIT (actually)		9 (10)			9 (10)			9 (10)			
O p e r a t i o n C o n d i t i o n	Cool (DBT)	-			-			-			
	Heat (DBT)	-			-			-			
P I P E I N G	PIPE DIAMETER mm (inch)	(Liquid) ø6.35 (1/4) (Gas) ø12.7 (1/2)			(Liquid) ø6.35 (1/4) (Gas) ø12.7 (1/2)			(Liquid) ø6.35 (1/4) (Gas) ø12.7 (1/2)			
	CONNECT METHOD, STD LENGTH m (ft)	flared type			flared type			flared type			
	PIPE LENGTH RANGE m (ft)	5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			
	I/D & O/D HEIGHT DIFFERENCE m (ft)	-			-			-			
	ADD GAS AMOUNT g/m (oz/ft)	-			-			-			
PIPE LENGTH FOR ADDITIONAL GAS m (ft)	-			-			-				

*3: Network Impedance shall be applicable for EUROPE and CHINA models.

*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope: Cooling capacity less than 12kW)

*: In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*: If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

3. Low Silhouette Ducted Type (F2 Type)

3-1. Specifications

Unit specifications (B)

INDOOR		MODEL	S-45MF2E5			S-56MF2E5					
PANEL		MODEL	-			-					
PERFORMANCE TEST CONDITION			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1					
POWER SUPPLY		φ, Hz	1φ 50Hz			1φ 50Hz					
		V	220	230	240	220	230	240			
C O L I N G	CAPACITY	kW	4.5	4.5	4.5	5.6	5.6	5.6			
		BTU/h	15400	15400	15400	19100	19100	19100			
		kcal/h(Fri./h)	-	-	-	-	-	-			
	CURRENT	A	0.60	0.57	0.56	0.77	0.74	0.71			
	INPUT POWER	W	70	70	70	100	100	100			
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-			
	EER/EER CLASS	(W/W)*5("A"~"G")	-	-	-	-	-	-			
	EER	BTU/hW	-	-	-	-	-	-			
	POWER FACTOR	%	-	-	-	-	-	-			
	NOISE INDOOR (H/M/L)	dB-A	34/32/28			34/32/28					
Power Level dB		56/54/50			56/54/50						
NOISE OUTDOOR (H/L)	dB-A	-			-						
	Power Level dB	-			-						
H E A T I N G	CAPACITY	kW	5.0	5.0	5.0	6.3	6.3	6.3			
		BTU/h	17100	17100	17100	21500	21500	21500			
		kcal/h(Fri./h)	-	-	-	-	-	-			
	CURRENT	A	0.60	0.57	0.56	0.77	0.74	0.71			
	INPUT POWER	W	70	70	70	100	100	100			
	COP/COP CLASS	(W/W)*5("A"~"G")	-	-	-	-	-	-			
	COP	BTU/hW	-	-	-	-	-	-			
	POWER FACTOR	%	-	-	-	-	-	-			
	NOISE INDOOR (H/M/L)	dB-A	34/32/28			34/32/28					
		Power Level dB	56/54/50			56/54/50					
NOISE OUTDOOR (H/L)	dB-A	-			-						
	Power Level dB	-			-						
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP	-			-						
Cooling	MAX CURRENT(A)/MAX INPUT POWER(W)	0.86 / 105	0.82 / 105	0.79 / 105	1.00 / 125	0.96 / 125	0.92 / 125				
Heating	MAX CURRENT(A)/MAX INPUT POWER(W)	0.86 / 105	0.82 / 105	0.79 / 105	1.00 / 125	0.96 / 125	0.92 / 125				
STARTING CURRENT(A)/COMP OUTPUT(W)		-	-	-	-	-	-				
NETWORK IMPEDANCE (ΩMAX.) *3		-			-						
FM OUTPUT (ID/OD) W		119			119						
MOISTURE REMOVAL VOLUME		L/h(Pt/h)	2.5 (5.3)		3.2 (6.7)						
External static pressure		Pa (mmAq)	70 (MIN10 - MAX150)			70 (MIN10 - MAX150)					
I/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	14 (494)			16 (565)					
	HEAT	m ³ /min (ft ³ /min)	14 (494)			16 (565)					
O/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	-			-					
	HEAT	m ³ /min (ft ³ /min)	-			-					
REFRIGERANT TYPE, AMOUNT g(oz)		-			-						
P R I M E R Y	HEIGHT : H mm(inch)	290	(11-13/32)		290	(11-13/32)					
	WIDTH : W mm(inch)	800	(31-1/2)		800	(31-1/2)					
	DEPTH : D mm(inch)	700	(27-9/16)		700	(27-9/16)					
P A C K A G E	HEIGHT : H mm	355			355						
	WIDTH : W mm	1014			1014						
	DEPTH : D mm	850			850						
MASS	(NET) kg(lb)	29	(64)		29	(64)					
	(GROSS) kg(lb)	36	(80)		36	(80)					
LAYERS LIMIT (actually)		9 (10)			9 (10)						
Operation Condition	Cool (DBT)	-			-						
	Heat (DBT)	-			-						
P I P E I N G	PIPE DIAMETER mm (inch)	(Liquid) ø6.35 (1/4) (Gas) ø12.7 (1/2)			(Liquid) ø6.35 (1/4) (Gas) ø12.7 (1/2)						
	CONNECT METHOD, STD LENGTH m (ft)	flared type			flared type						
	PIPE LENGTH RANGE m (ft)	5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)						
	I/D & O/D HEIGHT DIFFERENCE m (ft)	-	-		-	-					
	ADD GAS AMOUNT g/m (oz/ft)	-	-		-	-					
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	-	-		-	-					

*3: Network Impedance shall be applicable for EUROPE and CHINA models.

*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope: Cooling capacity less than 12kW)

*: In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*: If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

3. Low Silhouette Ducted Type (F2 Type)

3-1. Specifications

Unit specifications (C)

INDOOR		MODEL	S-60MF2E5			S-73MF2E5			S-90MF2E5		
PANEL		MODEL	-			-			-		
PERFORMANCE TEST CONDITION			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1		
POWER SUPPLY		φ, Hz	1φ 50Hz			1φ 50Hz			1φ 50Hz		
		V	220	230	240	220	230	240	220	230	240
C O O L I N G	CAPACITY	kW	6.0	6.0	6.0	7.3	7.3	7.3	9.0	9.0	9.0
		BTU/h	20500	20500	20500	24900	24900	24900	30700	30700	30700
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	0.91	0.89	0.87	0.91	0.89	0.87	0.99	0.97	0.95
	INPUT POWER	W	120	120	120	120	120	120	135	135	135
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	35/32/26			35/32/26			37/34/28		
Power Level dB		57/54/48			57/54/48			59/56/50			
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
H E A T I N G	CAPACITY	kW	7.1	7.1	7.1	8.0	8.0	8.0	10.0	10.0	10.0
		BTU/h	24200	24200	24200	27300	27300	27300	34100	34100	34100
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	0.91	0.89	0.87	0.91	0.89	0.87	0.99	0.97	0.95
	INPUT POWER	W	120	120	120	120	120	120	135	135	135
	COP/COP CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	35/32/26			35/32/26			37/34/28		
		Power Level dB	57/54/48			57/54/48			59/56/50		
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP	-			-			-			
Cooling	MAX CURRENT(A)/MAX INPUT POWER(W)	1.26 / 160	1.20 / 160	1.15 / 160	1.26 / 160	1.20 / 160	1.15 / 160	1.42 / 200	1.36 / 200	1.30 / 200	
Heating	MAX CURRENT(A)/MAX INPUT POWER(W)	1.26 / 160	1.20 / 160	1.15 / 160	1.26 / 160	1.20 / 160	1.15 / 160	1.42 / 200	1.36 / 200	1.30 / 200	
STARTING CURRENT(A)/COMP OUTPUT(W)		-			-			-			
NETWORK IMPEDANCE (ΩMAX.) *3		-			-			-			
FM OUTPUT (ID/OD) W		124			124			124			
MOISTURE REMOVAL VOLUME		L/h(Pt/h)	3.4 (7.1)			4.4 (9.2)			5.4 (11.3)		
External static pressure		Pa (mmAq)	70 (MIN10 - MAX150)			70 (MIN10 - MAX150)			70 (MIN10 - MAX150)		
I/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	21 (741)			21 (741)			25 (883)		
	HEAT	m ³ /min (ft ³ /min)	21 (741)			21 (741)			25 (883)		
O/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	-			-			-		
	HEAT	m ³ /min (ft ³ /min)	-			-			-		
REFRIGERANT TYPE, AMOUNT g(oz)		-			-			-			
P R O M	HEIGHT : H mm(inch)	290	(11-13/32)		290	(11-13/32)		290	(11-13/32)		
	WIDTH : W mm(inch)	1000	(39-3/8)		1000	(39-3/8)		1000	(39-3/8)		
	DEPTH : D mm(inch)	700	(27-9/16)		700	(27-9/16)		700	(27-9/16)		
P A C M	HEIGHT : H mm	355			355			355			
	WIDTH : W mm	1214			1214			1214			
	DEPTH : D mm	850			850			850			
MASS	(NET) kg(lb)	34	(75)		34	(75)		34	(75)		
	(GROSS) kg(lb)	42	(93)		42	(93)		42	(93)		
LAYERS LIMIT (actually)		9 (10)			9 (10)			9 (10)			
Operation Condition	Cool (DBT)	-			-			-			
	Heat (DBT)	-			-			-			
P I P I N G	PIPE DIAMETER mm (inch)	(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			
	CONNECT METHOD, STD LENGTH m (ft)	flared type			flared type			flared type			
	PIPE LENGTH RANGE m (ft)	5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			
	I/D & O/D HEIGHT DIFFERENCE m (ft)	-			-			-			
	ADD GAS AMOUNT g/m (oz/ft)	-			-			-			
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	-			-			-			

*3: Network Impedance shall be applicable for EUROPE and CHINA models.

*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope: Cooling capacity less than 12kW)

*: In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*: If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

3. Low Silhouette Ducted Type (F2 Type)

3-1. Specifications

Unit specifications (D)

INDOOR		MODEL	S-106MF2E5			S-140MF2E5			S-160MF2E5		
PANEL		MODEL	-			-			-		
PERFORMANCE TEST CONDITION		ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1			ISO5151 / AS/NZS3823.1			
POWER SUPPLY		φ, Hz	1φ 50Hz			1φ 50Hz			1φ 50Hz		
		V	220	230	240	220	230	240	220	230	240
C O O L I N G	CAPACITY	kW	10.6	10.6	10.6	14.0	14.0	14.0	16.0	16.0	16.0
		BTU/h	36200	36200	36200	47800	47800	47800	54600	54600	54600
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	1.35	1.30	1.27	1.48	1.44	1.39	1.55	1.50	1.47
	INPUT POWER	W	195	195	195	215	215	215	225	225	225
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	38/34/31			39/35/32			40/36/33		
Power Level dB		60/56/53			61/57/54			62/58/55			
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
H E A T I N G	CAPACITY	kW	11.4	11.4	11.4	16.0	16.0	16.0	18.0	18.0	18.00
		BTU/h	38900	38900	38900	54600	54600	54600	61400	61400	61400
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	1.37	1.34	1.29	1.46	1.42	1.38	1.55	1.50	1.46
	INPUT POWER	W	200	200	200	210	210	210	225	225	225
	COP/COP CLASS	(W/W)*5/("A"~"G")	-	-	-	-	-	-	-	-	-
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/M/L)	dB-A	38/34/31			39/35/32			40/36/33		
		Power Level dB	60/56/53			61/57/54			62/58/55		
NOISE OUTDOOR (H/L)	dB-A	-			-			-			
	Power Level dB	-			-			-			
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP	-			-			-			
Cooling	MAX CURRENT(A)/MAX INPUT POWER(W)	1.80 / 265	1.75 / 265	1.70 / 265	1.80 / 265	1.75 / 265	1.70 / 265	1.91 / 285	1.86 / 285	1.81 / 285	
Heating	MAX CURRENT(A)/MAX INPUT POWER(W)	1.80 / 265	1.75 / 265	1.70 / 265	1.80 / 265	1.75 / 265	1.70 / 265	1.91 / 285	1.86 / 285	1.81 / 285	
STARTING CURRENT(A)/COMP OUTPUT(W)		-			-			-			
NETWORK IMPEDANCE (ΩMAX.) *3		-			-			-			
FM OUTPUT (ID/OD) W		235			235			235			
MOISTURE REMOVAL VOLUME		L/h(Pt/h)	6.4 (13.4)		9.0 (18.9)		10.7 (22.5)				
External static pressure		Pa (mmAq)	100 (MIN10 - MAX150)			100 (MIN10 - MAX150)			100 (MIN10 - MAX150)		
I/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	32 (1130)			34 (1201)			36 (1271)		
	HEAT	m ³ /min (ft ³ /min)	32 (1130)			34 (1201)			36 (1271)		
O/D AIR FLOW	COOL	m ³ /min (ft ³ /min)	-			-			-		
	HEAT	m ³ /min (ft ³ /min)	-			-			-		
REFRIGERANT TYPE, AMOUNT g(oz)		-			-			-			
P R O M	HEIGHT : H mm(inch)	290	(11-13/32)		290	(11-13/32)		290	(11-13/32)		
	WIDTH : W mm(inch)	1400	(55-1/8)		1400	(55-1/8)		1400	(55-1/8)		
	DEPTH : D mm(inch)	700	(27-9/16)		700	(27-9/16)		700	(27-9/16)		
P A C M	HEIGHT : H mm	355			355			355			
	WIDTH : W mm	1614			1614			1614			
	DEPTH : D mm	850			850			850			
MASS	(NET) kg(lb)	46	(102)		46	(102)		46	(102)		
	(GROSS) kg(lb)	55	(122)		55	(122)		55	(122)		
LAYERS LIMIT (actually)		9 (10)			9 (10)			9 (10)			
Operation Condition	Cool (DBT)	-			-			-			
	Heat (DBT)	-			-			-			
P I P I N G	PIPE DIAMETER mm (inch)	(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			(Liquid) ø9.52 (3/8) (Gas) ø15.88 (5/8)			
	CONNECT METHOD, STD LENGTH m (ft)	flared type			flared type			flared type			
	PIPE LENGTH RANGE m (ft)	5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			5 ~ 75 (16.4 ~ 246.1)			
	I/D & O/D HEIGHT DIFFERENCE m (ft)	-			-			-			
	ADD GAS AMOUNT g/m (oz/ft)	-			-			-			
PIPE LENGTH FOR ADDITIONAL GAS m (ft)	-			-			-				

*3: Network Impedance shall be applicable for EUROPE and CHINA models.

*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope: Cooling capacity less than 12kW)

*: In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*: If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

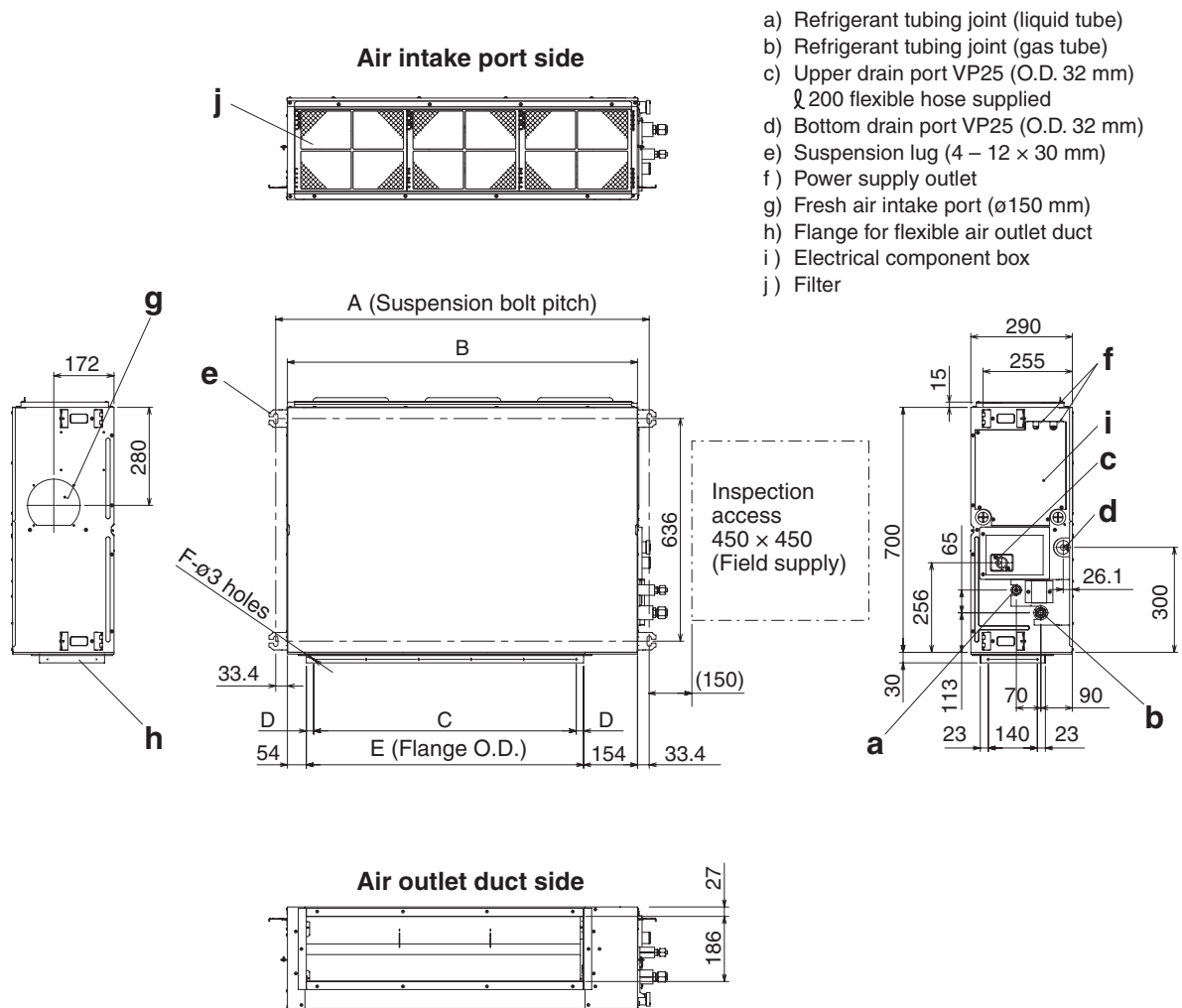
3. Low Silhouette Ducted Type (F2 Type)

3-3. Dimensional Data

Indoor unit: S-22MF2E5/28MF2E5/36MF2E5/45MF2E5/56MF2E5/60MF2E5/
73MF2E5/90MF2E5/106MF2E5/140MF2E5/160MF2E5

Unit: mm

Type	A	B	C	D	E	F
22, 28, 36, 45, 56	867	800	450 (Pitch 150 × 3)	71	592	12
60, 73, 90	1,067	1,000	750 (Pitch 150 × 5)	21	792	16
106, 140, 160	1,467	1,400	1,050 (Pitch 150 × 7)	71	1,192	20

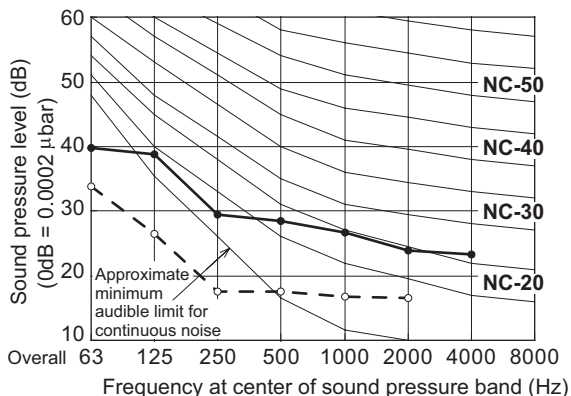


3. Low Silhouette Ducted Type (F2 Type)

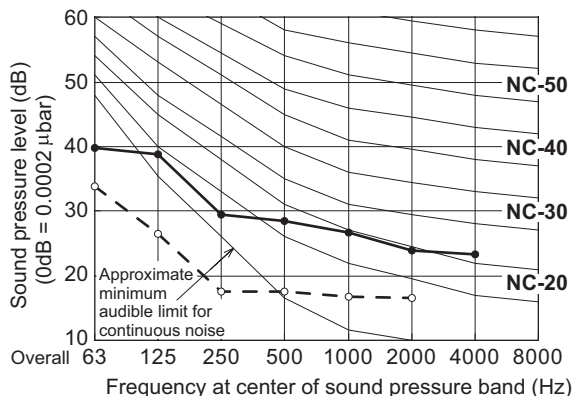
3-4. Noise Criterion Curves

Only 50Hz
 —●— High
 - -○- - Low

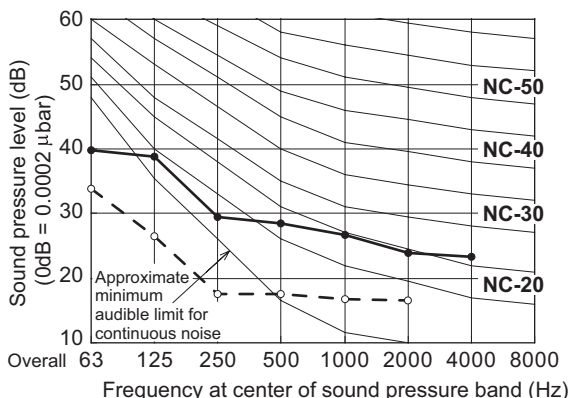
MODEL	: S-22MF2E5
SOUND LEVEL : HIGH	33 dB(A)
LOW	25 dB(A)
CONDITION	: 1.5 m directly below unit



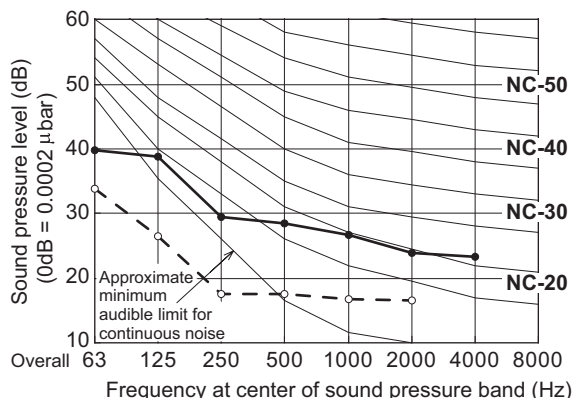
MODEL	: S-28MF2E5
SOUND LEVEL : HIGH	33 dB(A)
LOW	25 dB(A)
CONDITION:	1.5 m directly below unit



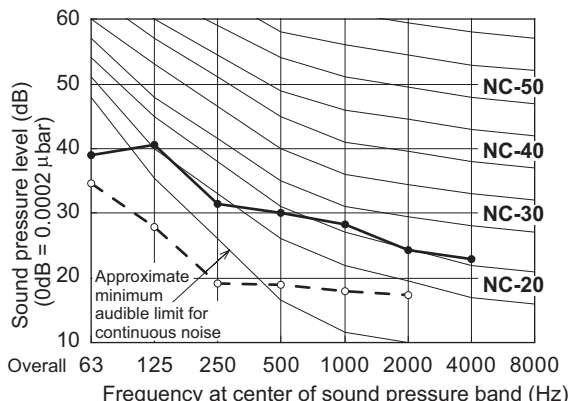
MODEL	: S-36MF2E5
SOUND LEVEL : HIGH	33 dB(A)
LOW	25 dB(A)
CONDITION	: 1.5 m directly below unit



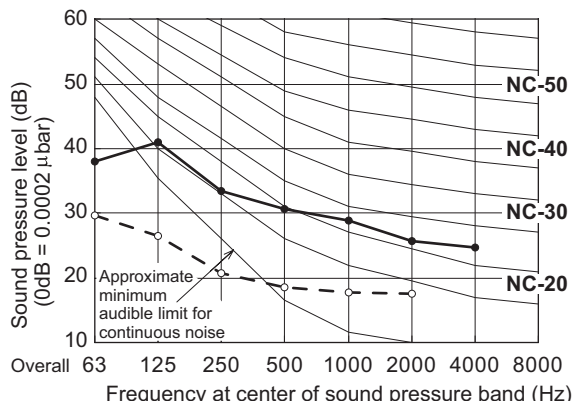
MODEL	: S-45MF2E5
SOUND LEVEL : HIGH	33 dB(A)
LOW	25 dB(A)
CONDITION:	1.5 m directly below unit



MODEL	: S-56MF2E5
SOUND LEVEL : HIGH	34 dB(A)
LOW	26 dB(A)
CONDITION	: 1.5 m directly below unit



MODEL	S-60MF2E5
SOUND LEVEL: HIGH	35 dB(A)
LOW	26 dB(A)
CONDITION:	1.5 m directly below unit

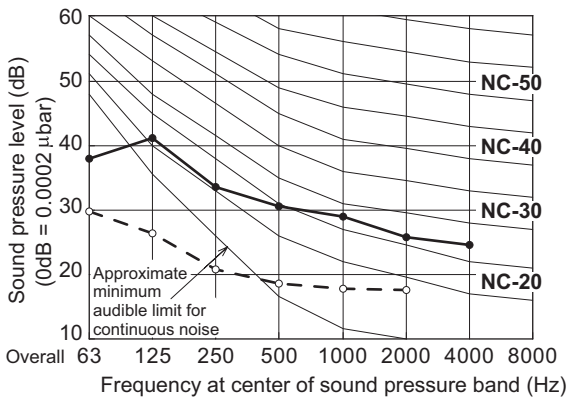


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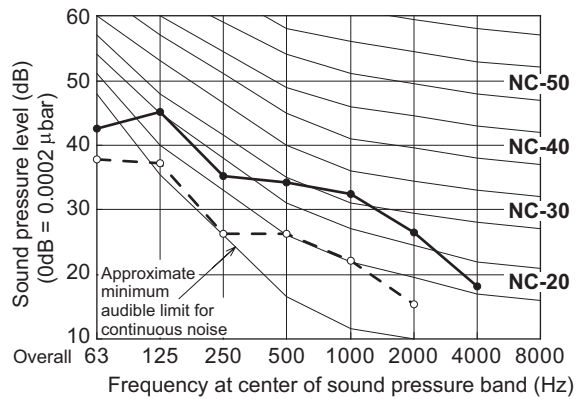
3. Low Silhouette Ducted Type (F2 Type)

Only 50Hz
 —●— High
 - -○- - Low

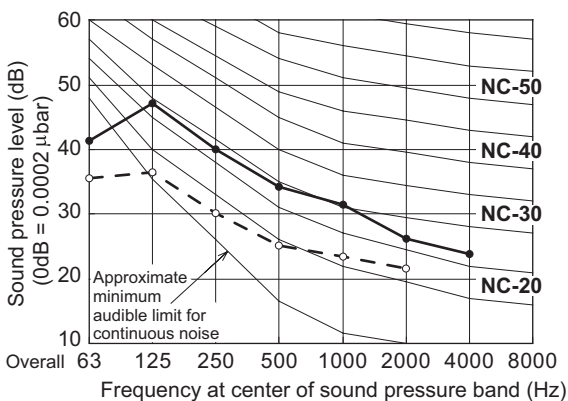
MODEL	: S-73MF2E5
SOUND LEVEL : HIGH	35 dB(A)
LOW	26 dB(A)
CONDITION	: 1.5 m directly below unit



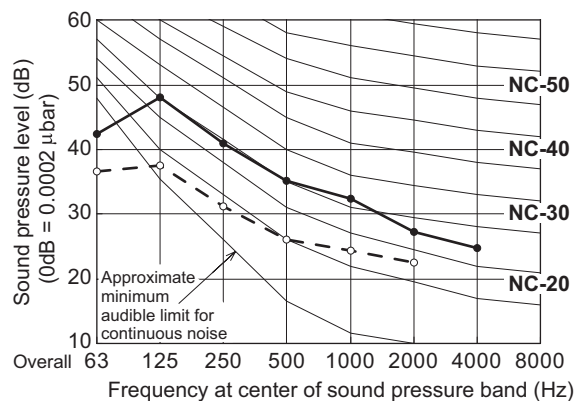
MODEL	: S-90MF2E5
SOUND LEVEL : HIGH	37 dB(A)
LOW	28 dB(A)
CONDITION:	1.5 m directly below unit



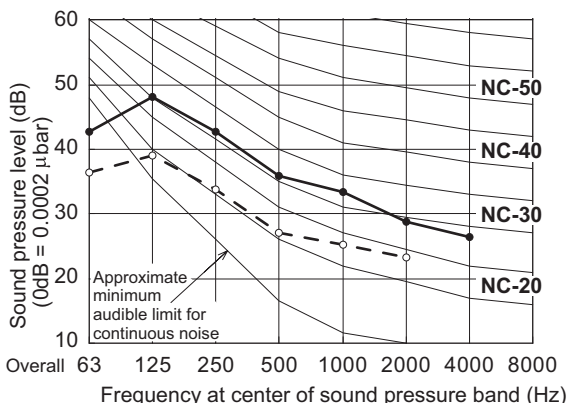
MODEL	: S-106MF2E5
SOUND LEVEL : HIGH	38 dB(A)
LOW	31 dB(A)
CONDITION	: 1.5 m directly below unit



MODEL	: S-140MF2E5
SOUND LEVEL : HIGH	39 dB(A)
LOW	32 dB(A)
CONDITION:	1.5 m directly below unit



MODEL	: S-160MF2E5
SOUND LEVEL : HIGH	40 dB(A)
LOW	33 dB(A)
CONDITION	: 1.5 m directly below unit



- REMARKS:**
- Value obtained in the actual place where the unit is installed may be slightly higher than the values shown in this graph because of the conditions of operation, the structure of the building, the background noise and other factors.
 - The test results were obtained from an anechoic room.

NOTE

To evaluate the noise level, the maximum value of the measured sound pressure level is used. Read the value at each frequency level (on horizontal axis, center of the sound pressure band) from 63 Hz to 8000 Hz, and select the corresponding maximum value indicated on the vertical axis.