

Engineering Data

Four-way Cassette VRF IDU



MIH28Q4HN18 MIH90Q4HN18
MIH36Q4HN18 MIH100Q4HN18
MIH45Q4HN18 MIH112Q4HN18
MIH56Q4HN18 MIH140Q4HN18
MIH71Q4HN18 MIH160Q4HN18
MIH80Q4HN18 MIH180Q4HN18



Four-way Cassette

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1 Specifications

Table 1.1: MIH28(36,45,56)Q4HN18 specifications

Model			MIH28Q4HN18	MIH36Q4HN18	MIH45Q4HN18	MIH56Q4HN18			
Power supply				1-phase, 2	20-240V, 50/60Hz				
		kW	2.8	3.6	4.5	5.6			
Cooling ¹	Capacity	kBtu/h	9.6	9.6 12.3		19.1			
	Power input	W	17	17	36	23			
	Canaditu	kW	3.2	4.0	5.0	6.3			
Heating ²	Capacity	kBtu/h	10.9	13.7	17.1	21.5			
	Power input	W	17	17	36	23			
Fan motor type					DC				
	Number of rows		1	1	1	2			
	Tube pitch × row pitch	mm		1	8×10.72				
Indoor coil	Fin spacing and type	mm		1.2 Hydro	philic aluminum				
indoor coil	Tube OD and type	mm	Φ5 Inner-groove						
	Dimensions (L×H×W)	mm		2165	×144×10.72				
	Number of circuits		4	4	4	8			
Air flow rate ³		m³/h	700/740/601/64	1/501/542/402	910/840/770/701/6	840/791/741/692/6			
Air flow rates		m³/n	790/740/691/64	1/591/542/492	31/561/491	42/593/543			
Sound pressure le	vo14	dB(A)	30/29/28/27	E /27/26/2E	37/35/34/32/30/29/	33/32/31/30/29/28/			
Souria pressure le	vei	UB(A)	30/29/28/27	.3/27/20/23	27	27			
Sound power leve	I	dB(A)	44/43/42/42	2/41/40/30	52/51/49/47/45/43/	49/48/47/47/46/45/			
Souria power leve		UD(A)	44/43/42/42	2/41/40/33	40	44			
	Net dimensions ⁵ (W×H×D)	mm		840)×204×840				
Main body	Packed dimensions (W×H×D)	mm		940)×250×940				
	Net/Gross weight	kg		18/20.5		19.5/22			
	Net dimensions (W×H×D)	mm		95	0×50×950				
Danal	Packed dimensions			103	0001020				
Panel	(W×H×D)	mm		102	0×90×1020				
	Net/Gross weight	kg	5.8/7.6						
Refrigerant type			R410A/R32						
Design pressure (H		MPa			4.4/1.5				
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7						
Fipe confidentions	Drain pipe	mm			OD Φ25				

- 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- 3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- 4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semi-anechoic chamber.
- 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Table 1.2: MIH71(80,90)Q4HN18 specifications

Model			MIH71Q4HN18	MIH80Q4HN18	MIH90Q4HN18			
Power supply				1-phase, 220-240V, 50/60H	łz			
	Compatible	kW	7.1	8.0	9.0			
Cooling ¹	Capacity	kBtu/h	24.2	27.3	30.7			
	Power input	W	32	41	43			
	Compositor	kW	8.0	9.0	10.0			
Heating ²	Capacity	kBtu/h	27.3	30.7	34.1			
	Power input	W	32	41	43			
Fan motor type				DC				
	Number of rows		2	3	2			
	Tube pitch × row pitch	mm						
Indoorooil	Fin spacing and type	mm						
Indoor coil	Tube OD and type	mm						
	Dimensions (L×H×W)	mm	2165×:	144×21.44	2165×198×21.44			
	Number of circuits		8	8	11			
Air flow rate ³		m³/h	1000/943/886/829/772	1100/1019/939/858/777/	1330/1239/1148/1057/965			
			/715/658	697/616	/874/783			
Sound pressure le		dB(A)	37/36/34/33/31/30/28	42.5/40/38/36/34/32/30	38/37/35/34/32/31/29			
Sound power leve	T	dB(A)	52/51/50/48/47/45/44	57/55/53/51/49/47/45	55/54/52/51/50/48/47			
	Net dimensions ⁵ (W×H×D)	mm	840×	204×840	840×246×840			
Main body	Packed dimensions (W×H×D)	mm	940×	250×940	940×295×940			
	Net/Gross weight	kg	19	0.5/22	21.5/24			
	Net dimensions (W×H×D)	mm		950×950×50	l			
Panel	Packed dimensions (W×H×D)	mm		1020×1020×90				
Net/Gross weight		kg		5.8/7.6				
Refrigerant type			R410A/R32					
Design pressure (H/L) MPa			4.4/1.5					
Dina sangasatia	Liquid/Gas pipe	mm	Ф9.52/Ф15.9					
Pipe connections	Drain pipe	mm	OD Φ25					

- 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
- 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
- 3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semianechoic chamber.
- 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Table 1.3: MIH100(112,140)Q4HN18 specifications

Model			MIH100Q4HN18	MIH112Q4HN18	MIH140Q4HN18			
Power supply				1-phase, 220-240V, 50/60H	łz			
		kW	10.0	11.2	14.0			
Cooling ¹	Capacity	kBtu/h	34.1	38.2	47.8			
	Power input	W	74	61	118			
	Caracitus	kW	11.2	12.5	16.0			
Heating ²	Capacity	kBtu/h	38.2	42.7	54.6			
	Power input	W	74	61	118			
Fan motor type				DC				
	Number of rows		2	2	2			
	Tube pitch × row pitch	mm						
Indoor coil	Fin spacing and type	mm	1.2 Hydrophilic aluminum					
indoor con	Tube OD and type	mm						
	Dimensions (L×H×W)	mm	2165×198×21.44	2165×2	252×21.44			
	Number of circuits		11	14	14			
Air flow rate ³		m³/h	1470/1360/1250/1141/10	1600/1497/1393/1290/	1900/1787/1673/1560/144			
Air now rate		111-711	31/921/811	1186/1083/979	6/1333/1219			
Sound pressure le	vel ⁴	dB(A)	43/41/40/38/36/35/33	41/40/38/37/36/34/33	47.5/46/44/42/40/38/36.5			
Sound power leve	I	dB(A)	58/57/55/53/51/49/47	57/56/55/54/53/52/51	64/63/61/60/58/56/54			
	Net dimensions ⁵ (W×H×D)	mm	840×246×840	840×2	288×840			
Main body	Packed dimensions (W×H×D)	mm	940×295×940	940×:	335×940			
	Net/Gross weight	kg	21.5	/24	21.5/24			
	Net dimensions (W×H×D)	mm		950×950×50				
Panel	Packed dimensions (W×H×D)	mm		1020×1020×90				
	Net/Gross weight	kg		5.8/7.6				
Refrigerant type	Refrigerant type			R410A/R32				
Design pressure (H	H/L)	MPa	4.4/1.5					
Dina connections	Liquid/Gas pipe	mm		Ф9.52/Ф15.9				
Pipe connections	Drain pipe	mm	OD Φ25					

- 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- 3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- 4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semi-anechoic chamber.
- 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Table 1.4: MIH160(180)Q4HN18 specifications

Model			MIH160Q4HN18	MIH180Q4HN18
Power supply			1-phase, 220-2	240V, 50/60Hz
	Compaile	kW	16.0	18.0
Cooling ¹	Capacity	kBtu/h	54.6	61.4
	Power input	W	110.0	145.0
	Compatible	kW	18.0	20.0
Heating ²	Capacity	kBtu/h	61.4	68.2
	Power input	W	110.0	145.0
Fan motor type			D	С
	Number of rows		3	3
	Tube pitch × row pitch	mm	18×1	0.72
Indoor coil	Fin spacing and type	mm	1.2 Hydrophi	lic aluminum
	Tube OD and type	mm	Ф5 Inne	r-groove
	Dimensions (L×H×W)	mm	2165×144×10.72	2165×144×10.72
	Number of circuits		14	14
Air flow rate ³		m³/h	2100/1900/1760/1630/1500/1380	2300/2140/1960/1770/1600/143
Air flow rates		m³/n	/1270	0/1270
Sound pressure le	vel ⁴	dB(A)	48/46/44/43/41/39/37	52/49/47/45/42/39/38
Sound power leve	I	dB(A)	56/53/51/49/47/46/45	59/56/54/51/49/46/45
	Net dimensions ⁵ (W×H×D)	mm	950×300×950	950×300×950
Main body	Packed dimensions (W×H×D)	mm	1050×335×1050	1050×335×1050
	Net/Gross weight	kg	32.6/37.2	32.7/37.3
	Net dimensions (W×H×D)	mm	1050×65×1050	1050×65×1050
Panel	Packed dimensions (W×H×D)	mm	1115×100×1115	1115×100×1115
	Net/Gross weight	kg	7.4/9.7	7.4/9.7
Refrigerant type			R410	4/R32
Design pressure (H/L)		MPa	4.4,	/1.5
Dino connections	Liquid/Gas pipe	mm	Ф9.52/Ф15.9	Ф9.52/Ф19.1
Pipe connections	Drain pipe	mm	OD	Ф25

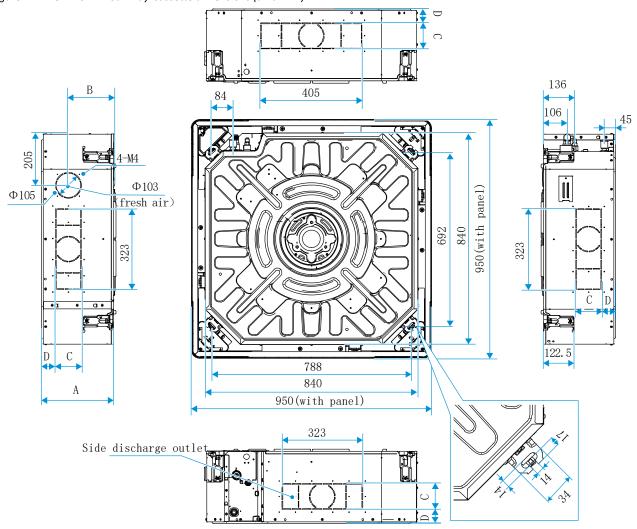
- $1. \quad Indoor\ temperature\ 27^{\circ}C\ DB,\ 19^{\circ}C\ WB;\ outdoor\ temperature\ 35^{\circ}C\ DB;\ equivalent\ refrigerant\ piping\ length\ 7.5m\ with\ zero\ level\ difference.$
- 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- 3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- 4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semi-anechoic chamber.
- 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



2 Dimensions

2.1 Unit Dimensions

Figure 2.1: 2.8-14.0kW Four-way Cassette dimensions (unit: mm)



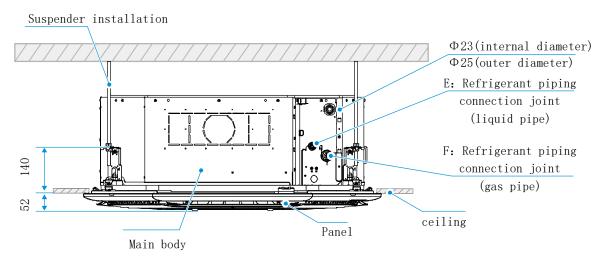


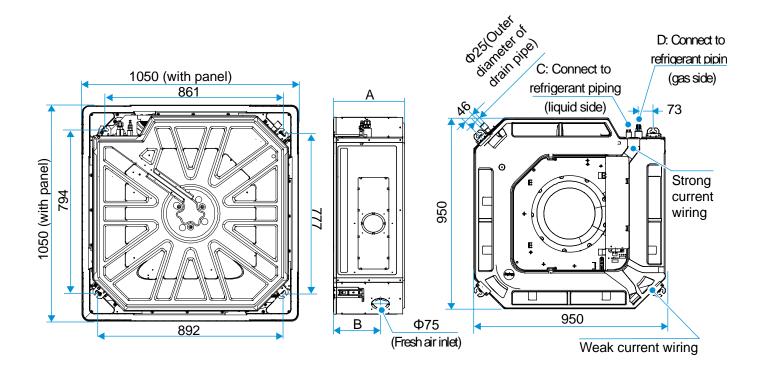
Table 2.1: 2.8-14.0kW Four-way Cassette dimensions (unit: mm)

	,,	(,					
Model(kW)	lodel(kW) A		odel(kW) A		С	D	E	F
2.8~5.6	204	141	63	41.5	Ф12.7	Ф6.35		
7.1~8.0	204	141	63	41.5	Ф15.9	Ф9.52		
9.0~10.0	246	163	103	41.5	Ф15.9	Ф9.52		
11.2~14.0	288	190	103	56.5	Ф15.9	Ф9.52		



2.2 Unit Dimensions

Figure 2.1: 16.0-18.0kW Four-way Cassette dimensions (unit: mm)



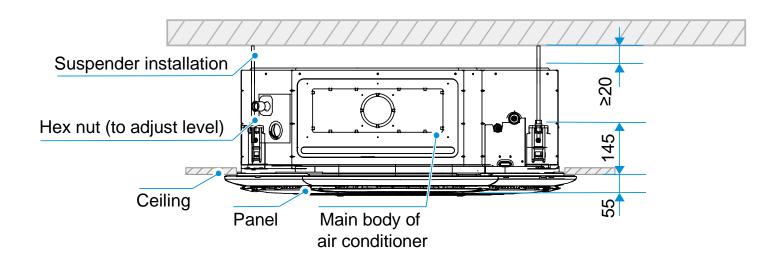


Table 2.1: 16.0-18.0kW Four-way Cassette dimensions (unit: mm)

Model(kW)	Α	В	С	D
16.0	300	200	Ф9.5	Ф15.9
18.0	300	200	Ф9.5	Ф19.1



3 Unit Placement

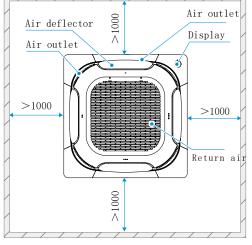
3.1 Placement Considerations

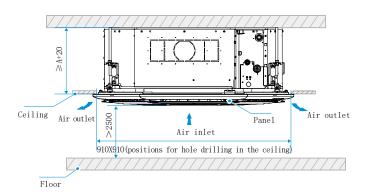
Unit placement should take account of the following considerations:

- Units should not be installed in the following locations:
 - A place filled with mineral oil, fumes or mist, like a kitchen.
 - A place where there are corrosive gases, such as acid or alkaline gases..
 - A place exposed to combustible gases and using volatile combustible gases such as diluent or gasoline.
 - A place where there is equipment emitting electromagnetic radiation.
 - A place where there is a high salt content in the air like a coast.
 - Do not use the air conditioner in an environment where an explosion may occur.
 - Places like in vehicles or cabin rooms.
 - Factories with major voltage fluctuations in the power supplies.
 - Other special environmental conditions.
- Units should be installed in positions where:
 - Ensure that the airflow in and out of the IDU is reasonably organized to form an air circulation in the room.
 - Ensure IDU maintenance space.
 - The nearer the drainage pipe and copper pipe are to the ODU, the lower the pipe cost is.
 - Prevent the air conditioner from blowing directly to the human body.
 - The closer the wiring to the power cabinet, the lower the wiring cost is.
 - Keep the air-conditioning return air away from the setting sun of the room.
 - Be careful not to interfere with the light tank, fire pipe, gas pipe and other facilities.
 - The IDU should not be lifted in the places like load-bearing beam and columns that affect the structural safety of the house.
 - The wired controller and the IDU should be in the same installation space; otherwise, the sampling point setting of the wired controller need to be changed.

3.2 Space Requirements

Figure 3.1: Four-way Cassette space requirements (unit: mm)



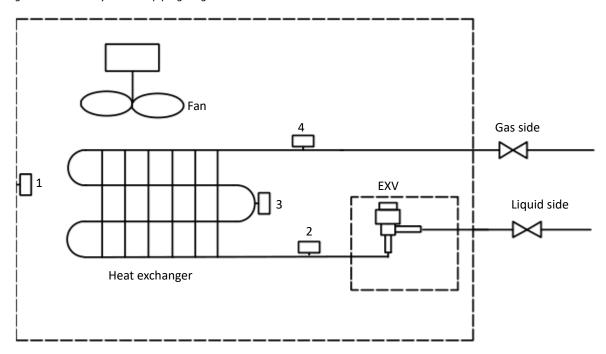


- 1. The centerline of the maintenance hole should be in the same position as the centerline of the indoor unit.
- 2. The dimensions of A are shown in Table 2,1



4 Piping Diagram

Figure 4.1: Four-way Cassette piping diagram

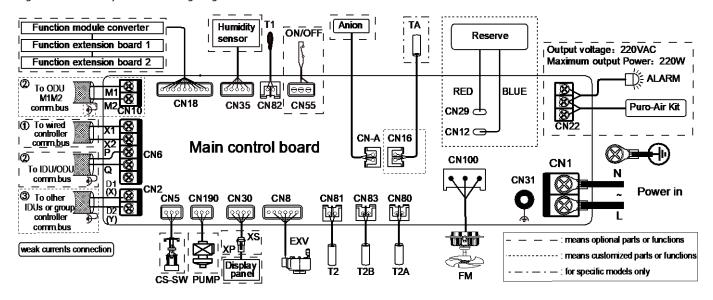


Legend		
1	T1	Indoor ambient temperature sensor
2	T2A	Indoor heat exchanger liquid side temperature sensor
3	T2	Indoor heat exchanger mid-point temperature sensor
4	Т2В	Indoor heat exchanger gas side temperature sensor



5 Wiring Diagram

Figure 5.1: Four-way Cassette wiring diagram



Notes for installers and service engineers 🛠

Caution

- All installation, servicing and maintenance must be carried out by competent and suitably qualified, certified and accredited professionals and in accordance with all applicable legislation.
- Units should be grounded in accordance with all applicable legislation. Metal and other conductive components should be insulated in accordance with all applicable legislation.
- Power supply wiring should be securely fastened at the power supply terminals loose power supply wiring would represent a fire risk.
- After installation, servicing or maintenance, the electric control box cover should be closed. Failing to close the
 electric control box cover risks fire or electric shock.
- The dotted lines indicate the field wiring or optional function.
- PQ and M1M2 communication ports both are used for indoor and outdoor communication, and only one of them can be used at a time. Meanwhile, be sure to connect the same communication ports (PQ to PQ; M1M2 to M1M2) in case of damage of the main control board.
- D1D2 communication ports are used for group control communication. When connecting the group controller, the D1D2 port of the indoor units that are to be group controlled must be connected in daisy chain, and the group controller must be connected to the X1X2 port of one of the indoor units in the group control, and set to group control mode. In addition, D1D2 communication ports can also be connected to the central controller.



6 Capacity Tables

6.1 Cooling Capacity Table

Table 6.1: Four-way Cassette cooling capacity

					In	door air	temper	ature (°0	C WB/DE	3)				
Model	14/20		16/23 18/		/26	19/27		20/28		22/30		24/32		
	тс	sc	TC	sc	тс	sc	TC	sc	TC	sc	TC	sc	TC	sc
MIH28Q4HN18	2.5	2.5	2.7	2.6	2.8	2.5	2.8	2.4	2.9	2.4	2.9	2.2	3.0	2.1
MIH36Q4HN18	3.2	3.2	3.4	3.2	3.6	3.2	3.6	3.0	3.7	3.0	3.8	2.8	3.9	2.7
MIH45Q4HN18	4.0	4.0	4.3	4.1	4.5	4.0	4.5	3.8	4.6	3.7	4.7	3.5	4.8	3.3
MIH56Q4HN18	5.0	4.8	5.3	4.8	5.6	4.8	5.6	4.6	5.7	4.5	5.8	4.2	6.0	4.1
MIH71Q4HN18	6.3	6.1	6.7	6.1	7.0	6.0	7.1	5.8	7.2	5.7	7.4	5.4	7.6	5.2
MIH80Q4HN18	7.1	6.9	7.6	6.9	7.9	6.8	8.0	6.6	8.1	6.4	8.3	6.1	8.5	5.8
MIH90Q4HN18	8.0	7.7	8.5	7.7	8.9	7.6	9.0	7.4	9.1	7.1	9.4	6.8	9.6	6.5
MIH100Q4HN18	8.9	8.6	9.5	8.6	9.9	8.5	10.0	8.2	10.1	8.0	10.4	7.6	10.6	7.2
MIH112Q4HN18	9.9	9.5	10.6	9.5	11.1	9.5	11.2	9.1	11.3	8.8	11.6	8.4	11.9	8.1
MIH140Q4HN18	12.4	12.0	13.2	12.0	13.8	11.9	14.0	11.5	14.2	11.2	14.5	10.6	14.9	10.1
MIH160Q4HN18	14.2	12.7	15.1	12.5	15.8	12.4	16.0	12.0	16.2	11.8	16.6	11.0	17.0	10.3
MIH180Q4HN18	15.9	14.3	17.0	14.3	17.8	14.3	18.0	14.0	18.2	13.5	18.7	12.6	19.1	11.8

Abbreviations:

TC: Total capacity (kW) SC: Sensible capacity(kW)

Notes:

1. Shaded cells indicate rating condition.

6.2 Heating Capacity Table

Table 6.2: Four-way Cassette heating capacity

	Indoor air temperature (°C DB)										
Model	16	18	20	21	22	24					
	тс	тс	тс	тс	TC	тс					
MIH28Q4HN18	3.4	3.4	3.2	3.1	3.0	2.8					
MIH36Q4HN18	4.2	4.2	4.0	3.8	3.8	3.5					
MIH45Q4HN18	5.3	5.3	5.0	4.8	4.7	4.4					
MIH56Q4HN18	6.7	6.6	6.3	6.1	5.9	5.5					
MIH71Q4HN18	8.5	8.4	8.0	7.8	7.5	7.0					
MIH80Q4HN18	9.5	9.5	9.0	8.7	8.5	7.8					
MIH90Q4HN18	10.6	10.5	10.0	9.7	9.4	8.8					
MIH100Q4HN18	11.8	11.7	11.1	10.8	10.4	9.7					
MIH112Q4HN18	13.3	13.1	12.5	12.1	11.8	10.9					
MIH140Q4HN18	17.0	16.8	16.0	15.5	15.0	13.9					
MIH160Q4HN18	19.0	18.9	18.0	17.5	17.0	15.8					
MIH180Q4HN18	21.0	20.9	20.0	19.5	19.0	17.8					

Abbreviations:

TC: Total capacity (kW)

Notes

1. Shaded cells indicate rating condition.



7 Electrical Characteristics

Table 7.1: Four-way Cassette electrical characteristics

			Indoor fan motors					
Model name	Hz	Volts	Min. volts	Max. volts	MCA	MFA	Rated motor output (kW)	FLA
MIH28Q4HN18	50/60	220-240	198	264	0.27	15	0.045	0.22
MIH36Q4HN18	50/60	220-240	198	264	0.27	15	0.045	0.22
MIH45Q4HN18	50/60	220-240	198	264	0.52	15	0.045	0.41
MIH56Q4HN18	50/60	220-240	198	264	0.33	15	0.045	0.26
MIH71Q4HN18	50/60	220-240	198	264	0.42	15	0.045	0.33
MIH80Q4HN18	50/60	220-240	198	264	0.63	15	0.045	0.51
MIH90Q4HN18	50/60	220-240	198	264	0.58	15	0.045	0.46
MIH100Q4HN18	50/60	220-240	198	264	0.91	15	0.045	0.72
MIH112Q4HN18	50/60	220-240	198	264	0.78	15	0.125	0.62
MIH140Q4HN18	50/60	220-240	198	264	1.42	15	0.125	1.10
MIH160Q4HN18	50/60	220-240	198	264	2.30	15	0.125	1.83
MIH180Q4HN18	50/60	220-240	198	264	2.73	15	0.125	2.10

Abbreviations:

MCA: Minimum Circuit Amps MFA: Maximum Fuse Amps FLA: Full Load Amps



8 Sound Levels

8.1 Overall

Table 8.1: Four-way Cassette sound pressure levels¹

Model name		So	und pr	essure	levels	dB	
wiodei name	SSH	SH	Н	М	L	SL	SSL
MIH28Q4HN18	30	29	28	27.5	27	26	25
MIH36Q4HN18	30	29	28	27.5	27	26	25
MIH45Q4HN18	37	35	34	32	30	29	27
MIH56Q4HN18	33	32	31	30	29	28	27
MIH71Q4HN18	37	36	34	33	31	30	28
MIH80Q4HN18	42.5	40	38	36	34	32	30
MIH90Q4HN18	38	37	35	34	32	31	29
MIH100Q4HN18	43	41	40	38	36	35	33
MIH112Q4HN18	41	40	38	37	36	34	33
MIH140Q4HN18	47.5	46	44	42	40	38	36.5
MIH160Q4HN18	48	46	44	43	41	39	37
MIH180Q4HN18	52	49	47	45	42	39	38

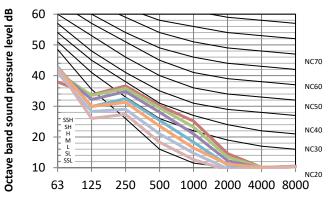
1.5m

Figure 8.1: Four-way Cassette sound pressure level measurement

Notes:

8.2 Octave Band Levels

Figure 8.2: MIH28Q4HN18 octave band levels



Octave band center frequency (Hz)

Figure 8.4: MIH45Q4HN18 octave band levels

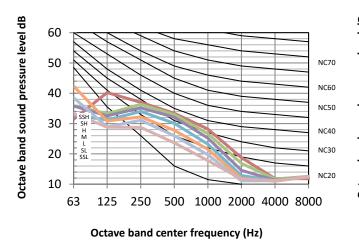
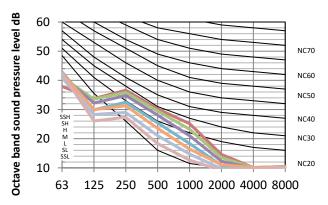
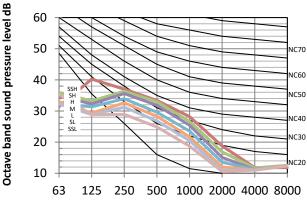


Figure 8.3: MIH36Q4HN18 octave band levels



Octave band center frequency (Hz)

Figure 8.5: MIH56Q4HN18 octave band levels

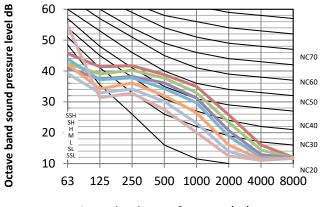


Octave band center frequency (Hz)

Sound pressure levels are measured 1.5m below the unit in a semi-anechoic chamber. During in-situ operation, sound pressure levels may be higher as a result of ambient noise.

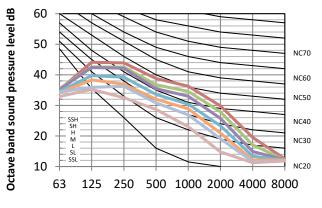


Figure 8.6: MIH71Q4HN18 octave band levels



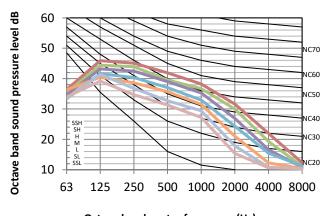
Octave band center frequency (Hz)

Figure 8.8: MIH90Q4HN18 octave band levels



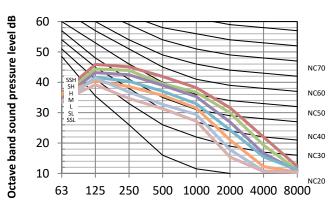
Octave band center frequency (Hz)

Figure 8.10: MIH112Q4HN18 octave band levels



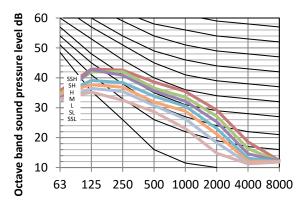
Octave band center frequency (Hz)

Figure 8.2: MIH28Q4HN18 octave band levels



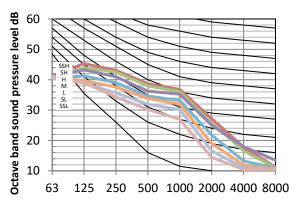
Octave band center frequency (Hz)

Figure 8.7: MIH80Q4HN18 octave band levels



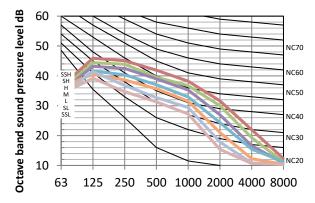
Octave band center frequency (Hz)

Figure 8.9: MIH100Q4HN18 octave band levels



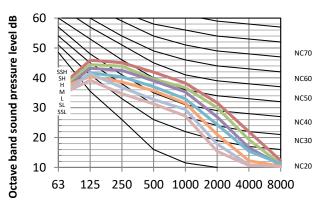
Octave band center frequency (Hz)

Figure 8.11: MIH140Q4HN18 octave band levels



Octave band center frequency (Hz)

Figure 8.3: MIH36Q4HN18 octave band levels



Octave band center frequency (Hz)



9 Temperature and Airflow Distributions

9.1 Simulate condition

Table 9.1: Four-way Cassette simulate condition

Model name	Room size (m)	Ceiling height (m)	Flow angle (Cooling/Heating)	Placing
MIH28Q4HN18	6×6	2.7	30° /65°	Center
MIH36Q4HN18	6×6	2.7	30° /65°	Center
MIH45Q4HN18	6×6	2.7	30° /65°	Center
MIH56Q4HN18	8×8	2.7	30° /65°	Center
MIH71Q4HN18	8×8	2.7	30° /65°	Center
MIH80Q4HN18	8×8	2.7	30° /65°	Center
MIH90Q4HN18	10×10	2.7	30°/65°	Center
MIH100Q4HN18	10×10	2.7	30° /65°	Center
MIH112Q4HN18	10×10	2.7	30° /65°	Center
MIH140Q4HN18	10×10	2.7	30° /65°	Center
MIH160Q4HN18	10×10	2.7	30° /65°	Center
MIH180Q4HN18	10×10	2.7	30° /65°	Center

Note:

9.2 Airflow distributions

Figure 9.1: MIH28Q4HN18 cooling at 300s

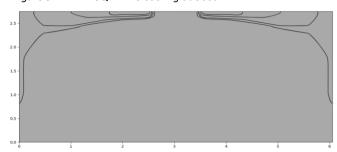


Figure 9.3: MIH36Q4HN18 cooling at 300s

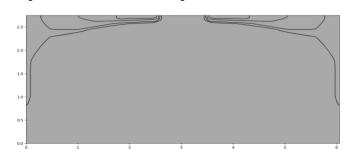


Figure 9.5: MIH45Q4HN18 cooling at 300s

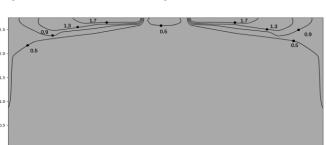


Figure 9.2: MIH28Q4HN18 heating at 300s

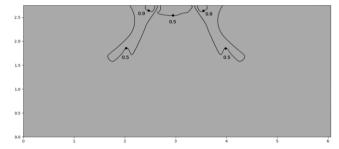


Figure 9.4: MIH36Q4HN18 heating at 300s

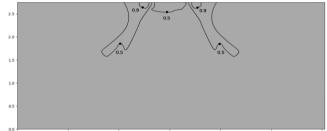
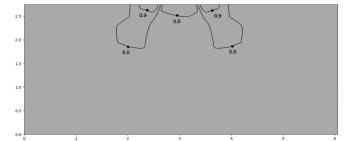


Figure 9.6: MIH45Q4HN18 heating at 300s



^{1.} These figures and videos are based on software simulation. They show typical temperature and airflow distributions in the conditions above. In the actual installation, they may differ from these figures and videos under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.



Figure 9.7: MIH56Q4HN18 cooling at 300s

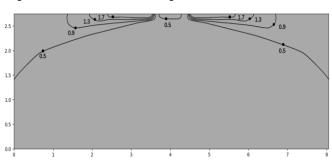


Figure 9.8: MIH56Q4HN18 heating at 300s

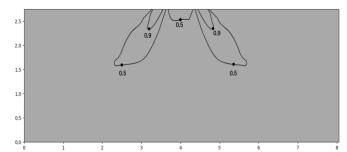


Figure 9.9: MIH71Q4HN18 cooling at 300s

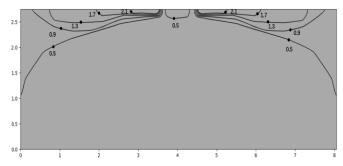


Figure 9.10: MIH71Q4HN18 heating at 300s

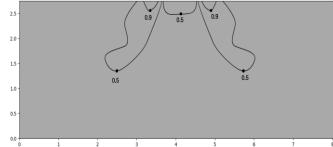


Figure 9.11: MIH80Q4HN18 cooling at 300s

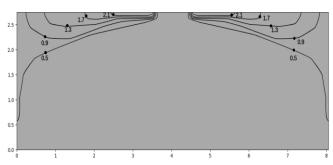


Figure 9.12: MIH80Q4HN18 heating at 300s

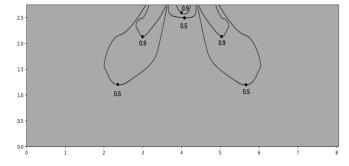


Figure 9.13: MIH90Q4HN18 cooling at 300s

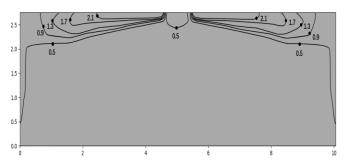


Figure 9.14: MIH90Q4HN18 heating at 300s

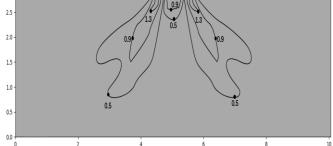


Figure 9.15: MIH100Q4HN18 cooling at 300s

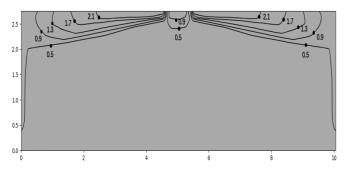


Figure 9.16: MIH100Q4HN18 heating at 300s

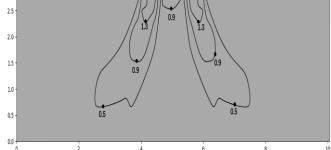
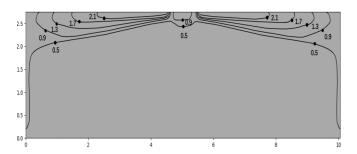






Figure 9.17: MIH112Q4HN18 cooling at 300s

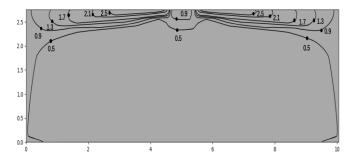
Figure 9.18: MIH112Q4HN18 heating at 300s



2.5 - 2.0 - 1.3 -

Figure 9.19: MIH140Q4HN18 cooling at 300s

Figure 9.20: MIH140Q4HN18 heating at 300s



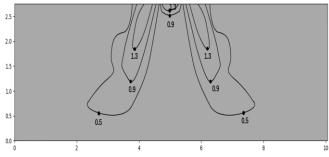
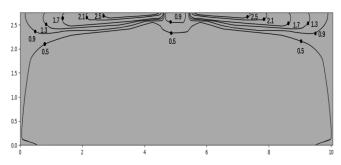


Figure 9.19: MIH160Q4HN18 cooling at 300s

Figure 9.20: MIH160Q4HN18 heating at 300s



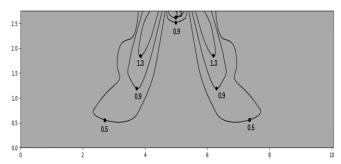
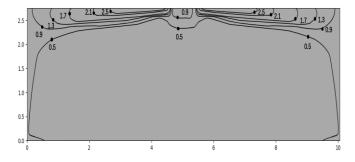
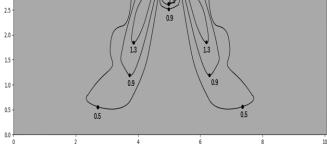


Figure 9.19: MIH180Q4HN18 cooling at 300s

Figure 9.20: MIH180Q4HN18 heating at 300s





9.3 Temperature distributions

Figure 9.21: MIH28Q4HN18 cooling at 300s



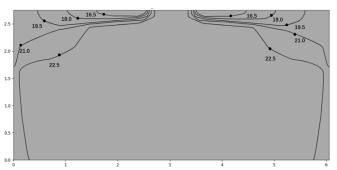


Figure 9.22: MIH28Q4HN18 heating at 300s

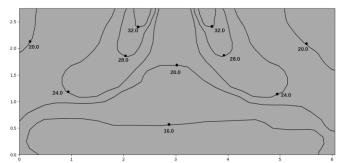


Figure 9.23: MIH36Q4HN18 cooling at 300s

Figure 9.24: MIH36Q4HN18 heating at 300s

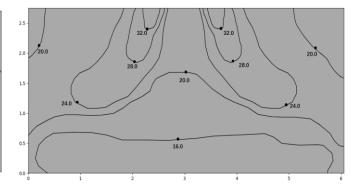


Figure 9.25: MIH45Q4HN18 cooling at 300s

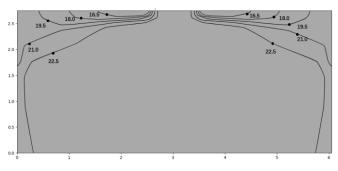


Figure 9.26: MIH45Q4HN18 heating at 300s

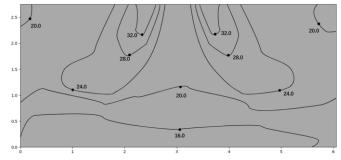


Figure 9.27: MIH56Q4HN18 cooling at 300s

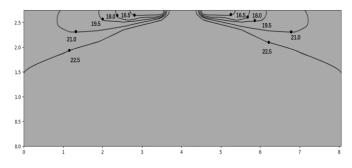


Figure 9.28: MIH56Q4HN18 heating at 300s

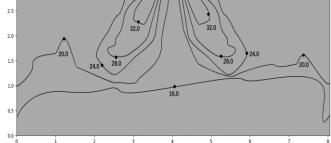


Figure 9.29: MIH71Q4HN18 cooling at 300s

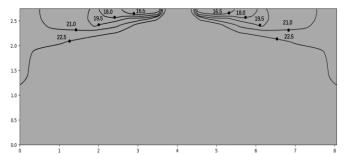


Figure 9.30: MIH71Q4HN18 heating at 300s

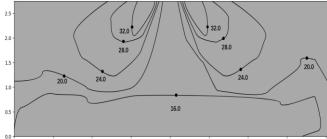
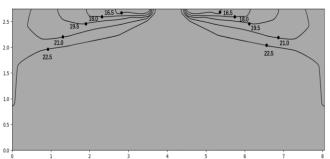




Figure 9.31: MIH80Q4HN18 cooling at 300s



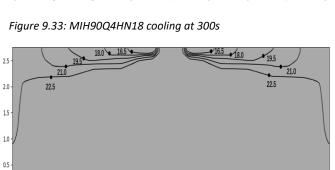


Figure 9.35: MIH100Q4HN18 cooling at 300s

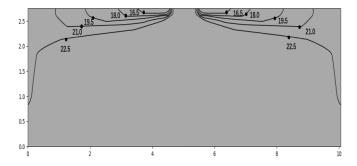


Figure 9.37: MIH112Q4HN18 cooling at 300s

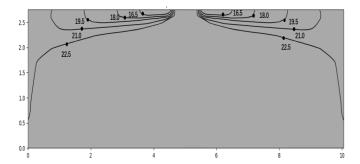


Figure 9.39: MIH140Q4HN18 cooling at 300s

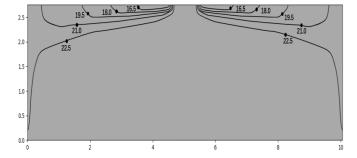


Figure 9.32: MIH80Q4HN18 heating at 300s

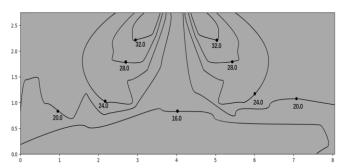


Figure 9.34: MIH90Q4HN18 heating at 300s

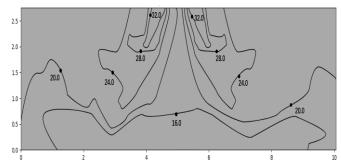


Figure 9.36: MIH100Q4HN18 heating at 300s

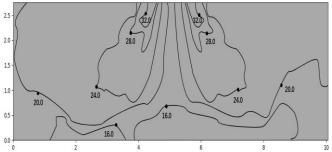


Figure 9.38: MIH112Q4HN18 heating at 300s

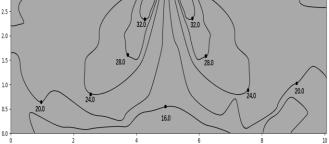


Figure 9.40: MIH140Q4HN18 heating at 300s

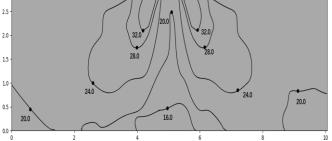
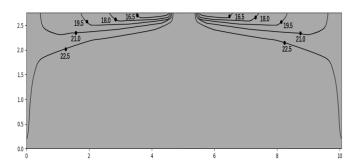


Figure 9.39: MIH160Q4HN18 cooling at 300s

Figure 9.40: MIH160Q4HN18 heating at 300s



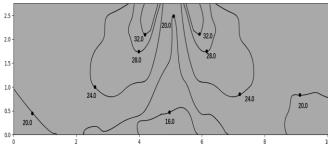
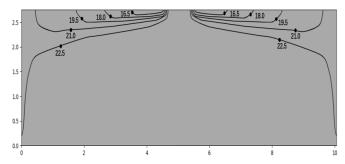
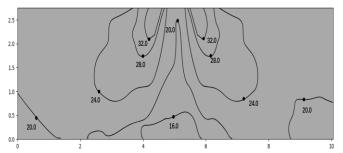


Figure 9.39: MIH180Q4HN18 cooling at 300s

Figure 9.40: MIH180Q4HN18 heating at 300s







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Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.