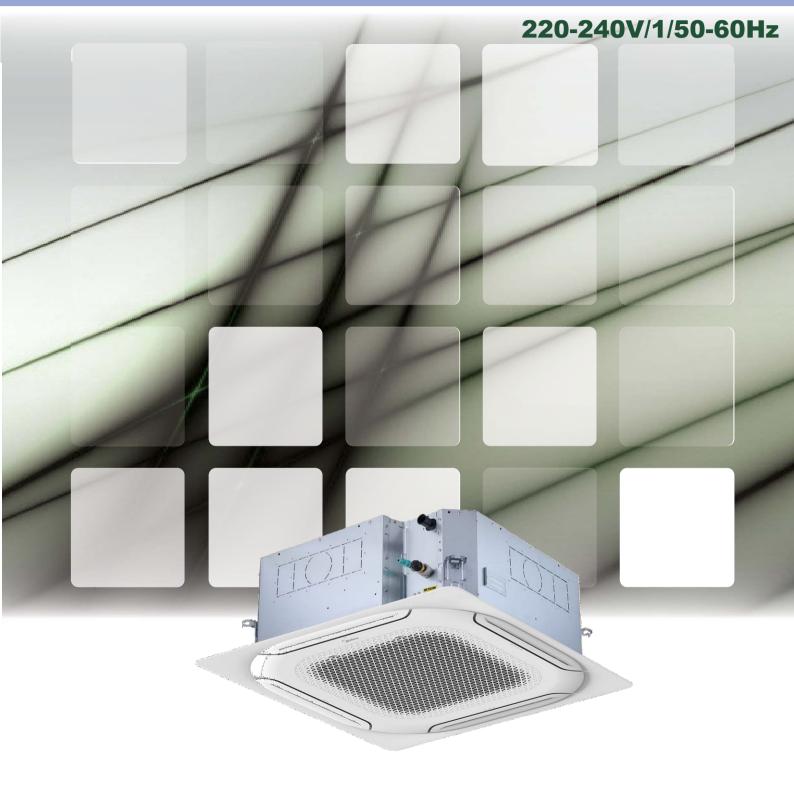




BECR Ultima Series Four-way Cassette VRF Indoor Unit

Technical Manual





Four-way Cassette

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BECR024N0A-DWV071BECR027N0A-DWV08BECR031N0A-DWV090BECR036N0A-DWV10BECR038N0A-DWV112BECR048N0A-DWV14	BECR010N0A-DWV028	BECR012N0A-DWV036
BECR031N0A-DWV090 BECR036N0A-DWV10 BECR038N0A-DWV112 BECR048N0A-DWV14	BECR015N0A-DWV045	BECR019N0A-DWV056
BECR038N0A-DWV112 BECR048N0A-DWV14	BECR024N0A-DWV071	BECR027N0A-DWV080
	BECR031N0A-DWV090	BECR036N0A-DWV100
BECR060N0A-DWV160 BECR062N0A-DWV18	BECR038N0A-DWV112	BECR048N0A-DWV140
	BECR060N0A-DWV160	BECR062N0A-DWV180



1 Specifications

Table 1.1: BECR010(012,015,019) specifications

Model		BECR010N0A- DWV028	BECR012N0A- DWV036	BECR015N0A- DWV045	BECR019N0A- DWV056			
Power supply			1-phase, 220-240V, 50/60Hz					
		kW	2.8	3.6	4.5	5.6		
Cooling ¹	Capacity	kBtu/h	9.6	12.3	15.4	19.1		
	Power input	W	17	17	36	23		
	Constitut	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	ophilic aluminum			
	Tube OD and type	mm		Φ5 I	nner-groove	ler-groove		
	Dimensions (L×H×W)	mm		2165×144×10.72				
	Number of circuits		4	4	4	8		
A: (I			700/740/001/041/501/542/402		910/840/770/701/6	840/791/741/692/6		
Air flow rate ³		m³/h	790/740/691/641/591/542/492		31/561/491	42/593/543		
Sound pressure level ⁴		dB(A)	30/29/28/27.5/27/26/25		37/35/34/32/30/29/	33/32/31/30/29/28/		
Sound pressure le	ver	ub(A)	50/25/26/27.	5/27/20/25	27	27		
Sound power level	l	dB(A)	A) 44/43/42/42/41/40/39		52/51/49/47/45/43/	49/48/47/47/46/45/		
Sound power level		UD(A)	++/+3/+2/+2	-/+1/+0/33	40	44		
	Net dimensions ⁵ (W×H×D)	mm		840	0×204×840			
Main body	Packed dimensions	mm		9/1	0×250×940			
Iviain body	(W×H×D)							
	Net/Gross weight	kg		18/20.5		19.5/22		
	Net dimensions ⁶ (W×H×D)	mm	950×53×950					
Panel	Packed dimensions (W×H×D)	mm	1020×90×1020					
	Net/Gross weight	kg	5.6/7.3					
Refrigerant type			R410A/R32					
Design pressure (H/L) MPa		4.4/2.6						
Diagonal it	Liquid/Gas pipe	mm	Φ6.35/Φ12.7					
Pipe connections		mm	OD					

Notes:

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 semianechoic chamber.

5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



Table 1.2: BECR024(027,031) specifications

Ultima VRF Indoor Units

Model		BECR024N0A-DWV071	BECR027N0A-DWV080	BECR031N0A-DWV090			
Power supply			1-phase, 220-240V, 50/60Hz				
		kW	7.1	8.0	9.0		
Cooling ¹	Capacity	kBtu/h	24.2	27.3	30.7		
	Power input	W	32	41	43		
		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		18×10.72			
Indoor coil	Fin spacing and type	mm		1.2 Hydrophilic aluminum			
	Tube OD and type	mm		Ф5 Inner-groove			
	Dimensions (L×H×W)		2165×:	2165×198×21.44			
Number of circuits			8	8	11		
Air flow rate ³		m³/h	1000/943/886/829/772 /715/658	1100/1019/939/858/777/ 697/616	1330/1239/1148/1057/965 /874/783		
Sound pressure le	vel ⁴	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 level		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	9.5/22	21.5/24		
	Net dimensions ⁶ (W×H×D)	mm	950×53×950				
Panel	Packed dimensions (W×H×D)	mm	1020×90×1020				
	Net/Gross weight	kg	5.6/7.3				
Refrigerant type		R410A/R32					
Design pressure (H	1/L)	MPa 4.4/2.6					
Pipe connections	Liquid/Gas pipe	mm		Ф9.52/Ф15.9			
ripe connections	Drain pipe	mm		OD Φ25			
			i				

Notes:

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 semianechoic chamber.

5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



Table 1.3: BECR036(038,048) specifications

Model			BECR036N0A-DWV100	BECR038N0A-DWV112	BECR048N0A-DWV140	
Power supply			1-phase, 220-240V, 50/60Hz			
Constitut		kW	10.0	11.2	14.0	
Cooling ¹	Capacity	kBtu/h	34.1	38.2	47.8	
	Power input	W	74	61	118	
	Connaitu	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		18×10.72		
Indoor coil	Fin spacing and type	mm		1.2 Hydrophilic aluminum		
Indoor coll	Tube OD and type	mm		Ф5 Inner-groove		
	Dimensions (L×H×W)	mm	2165×198×21.44 2165×252×21.44			
Number of circuits			11	14	14	
Air flow rate ³		m³/h	1470/1360/1250/1141/10	1600/1497/1393/1290/	1900/1787/1673/1560/14	
		myn	31/921/811	1186/1083/979	46/1333/1219	
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	l	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 ⁶ (W×H×D)	mm	840×246×840	840×2	288×840	
Main body	Packed dimensions	mm	940×295×940	940~	335×940	
	(W×H×D)		540~255~540	540^3		
	Net/Gross weight	kg	21.5/24	24/26.5	24/26.5	
	Net dimensions (W×H×D)	mm	950×53×950			
Panel	Packed dimensions mm		1020~00~1020			
Panel	(W×H×D)		1020×90×1020			
	Net/Gross weight	kg	5.6/7.3			
Refrigerant type		R410A/R32				
Design pressure (H/L) MPa		4.4/2.6				
Pipe connections	Liquid/Gas pipe	mm		Φ9.52/Φ15.9		
	Drain pipe mm		OD			

Notes:

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 semianechoic chamber.

5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



Table 1.4: BECR060(62) specifications
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Model			BECR060N0A-DWV160	BECR062N0A-DWV180	
Power supply			1-phase, 220-240V, 50/60Hz		
		kW	16.0	18.0	
Cooling ¹	Capacity	kBtu/h	54.6	61.4	
	Power input	W	110.0	145.0	
	Connaithe	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	C	
	Number of rows		3	3	
	Tube pitch × row pitch	mm	18×1	10.72	
Indoor coil	Fin spacing and type	mm	1.2 Hydrophi	ilic aluminum	
Tube OD and type Dimensions (L×H×W) Number of circuits	mm	Φ5 Inner-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	
		myn	/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	l	dB(A)	57/56/54/52/50/47/46	60/58/56/54/52/49/46	
	Net dimensions ⁵ (W×H×D)	mm	950×300×950	950×300×950	
Main body	Packed dimensions (W×H×D)	mm	1050×350×1050	1050×350×1050	
	Net/Gross weight	kg	32.6/37.2	32.7/37.3	
	Net dimensions ⁶ (W×H×D)	mm	1050×55×1050	1050×55×1050	
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		R410A/R32			
Design pressure (H/L) MPa		4.4/2.6			
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/Φ15.9	Φ9.52/Φ19.1	
	Drain pipe	mm	OD Φ25		

Notes:

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 semianechoic chamber.

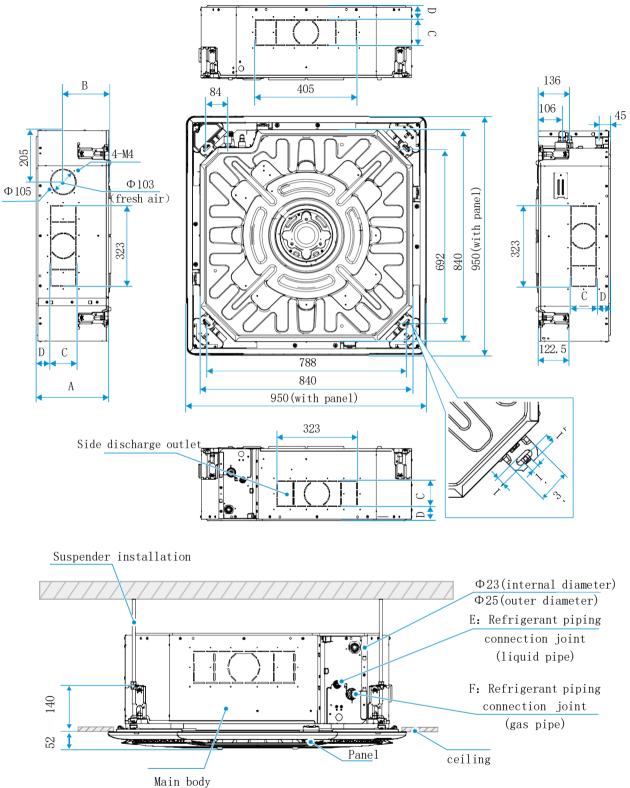
5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



2 Dimensions

2.1 Unit Dimensions

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

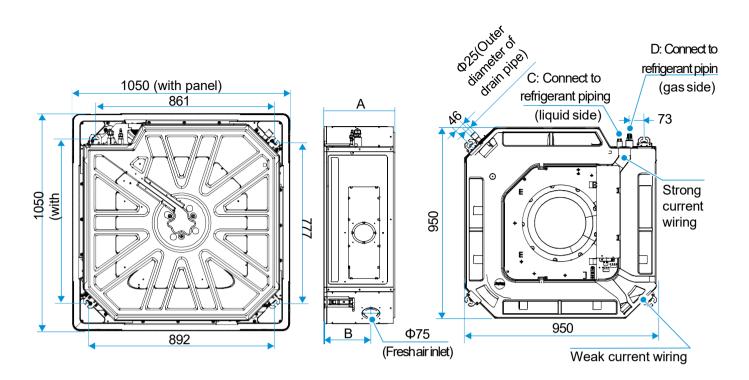


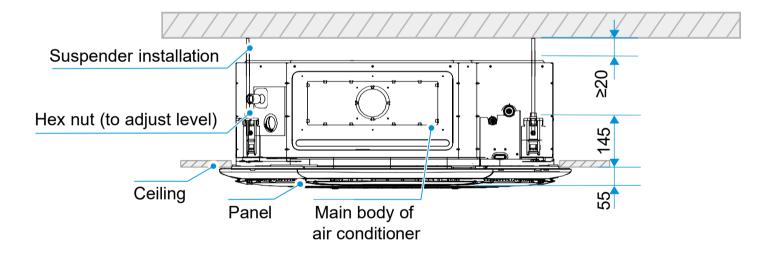
Model(kW)	А	В	С	D	E	F
2.8-5.6	204	141	63	41.5	Ф12.7	Ф6.35
7.1-8.0	204	141	63	41.5	Ф15.9	Ф9.52
9.0-10.0	246	163	103	41.5	Ф15.9	Ф9.52
11.2-14.0	288	190	103	56.5	Ф15.9	Ф9.52



2.2 Unit Dimensions

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





Model(kW)	А	В	С	D
16.0	300	200	Ф9.52	Ф15.9
18.0	300	200	Ф9.52	Ф19.1



3 Unit Placement

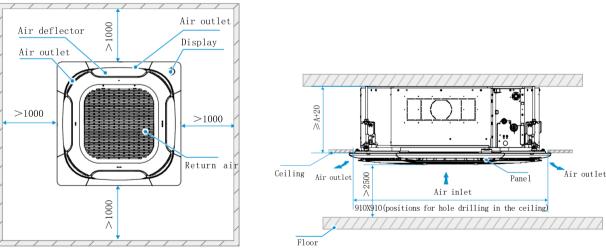
3.1 Placement Considerations

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)



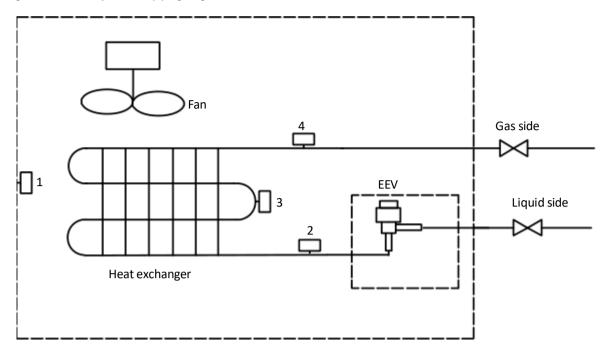
Notes:

- 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

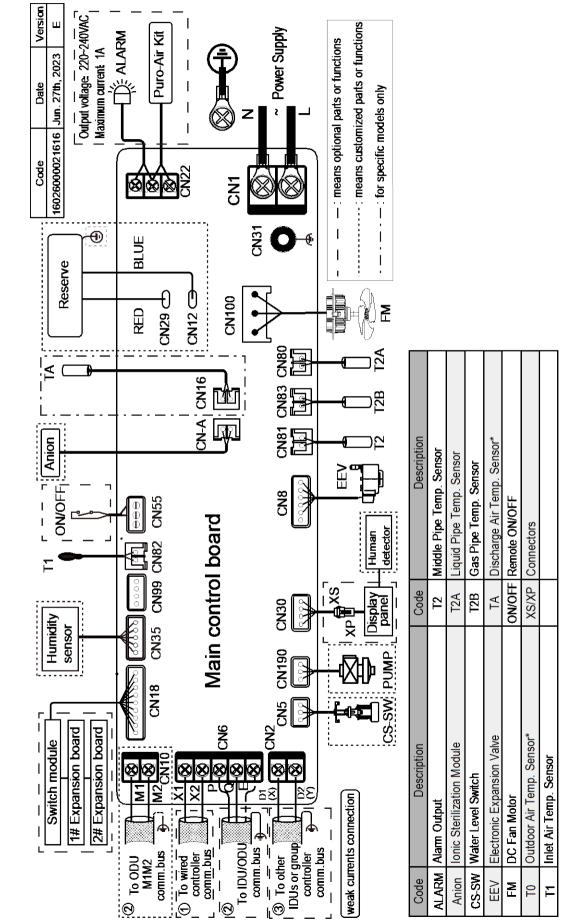
Figure 4.1: Four-way Cassette piping diagram



Legend		
1	T1	Inlet Air Temp. Sensor
2	T2A	Liquid Pipe Temp. Sensor
3	T2	Middle Pipe Temp. Sensor
4	T2B	Gas Pipe Temp. Sensor

5 Wiring Diagram

Figure 5.1: Four-way Cassette wiring diagram



* Indicates that this sensor is only available for Fresh Air Processing Unit.



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

	Indoor air temperature (°C WB/DB)														
Model	14/20		16,	16/23		18/26		19/27		20/28		22/30		24/32	
	тс	SC	тс	SC	тс	SC	тс	SC	тс	SC	тс	SC	тс	SC	
BECR010N0A-DWV028	2.5	2.4	2.7	2.5	2.8	2.5	2.8	2.4	2.9	2.3	2.9	2.2	3.0	2.1	
BECR012N0A-DWV036	3.2	3.1	3.4	3.1	3.6	3.2	3.6	3.0	3.7	3.0	3.8	2.8	3.9	2.7	
BECR015N0A-DWV045	4.0	3.6	4.3	3.8	4.5	3.8	4.5	3.7	4.6	3.6	4.7	3.4	4.8	3.3	
BECR019N0A-DWV056	5.0	4.5	5.3	4.6	5.6	4.7	5.6	4.6	5.7	4.5	5.8	4.2	6.0	4.1	
BECR024N0A-DWV071	6.3	5.7	6.7	5.8	7.0	5.9	7.1	5.8	7.2	5.6	7.4	5.4	7.6	5.2	
BECR027N0A-DWV080	7.1	6.6	7.6	6.7	7.9	6.8	8.0	6.6	8.1	6.4	8.3	6.1	8.5	5.8	
BECR031N0A-DWV090	8.0	7.2	8.5	7.4	8.9	7.5	9.0	7.3	9.1	7.1	9.4	6.8	9.6	6.5	
BECR036N0A-DWV100	8.9	8.1	9.5	8.4	9.9	8.4	10.0	8.2	10.1	7.9	10.4	7.6	10.6	7.2	
BECR038N0A-DWV112	9.9	9.1	10.6	9.3	11.1	9.4	11.2	9.2	11.3	8.9	11.6	8.4	11.9	8.1	
BECR048N0A-DWV140	12.4	11.0	13.2	11.4	13.8	11.5	14.0	11.3	14.2	11.0	14.5	10.5	14.9	10.1	
BECR060N0A-DWV160	14.2	12.6	15.1	13.0	15.8	13.2	16.0	12.9	16.2	12.5	16.6	12.0	17.0	11.5	
BECR062N0A-DWV180	15.9	14.1	17.0	14.7	17.8	14.8	18.0	14.5	18.2	14.1	18.7	13.5	19.1	12.9	

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	тс	тс					
BECR010N0A-DWV028	3.4	3.4	3.2	3.1	3.0	2.8					
BECR012N0A-DWV036	4.2	4.2	4.0	3.8	3.8	3.5					
BECR015N0A-DWV045	5.3	5.3	5.0	4.8	4.7	4.4					
BECR019N0A-DWV056	6.7	6.6	6.3	6.1	5.9	5.5					
BECR024N0A-DWV071	8.5	8.4	8.0	7.8	7.5	7.0					
BECR027N0A-DWV080	9.5	9.5	9.0	8.7	8.5	7.8					
BECR031N0A-DWV090	10.6	10.5	10.0	9.7	9.4	8.8					
BECR036N0A-DWV100	11.9	11.8	11.2	10.9	10.5	9.8					
BECR038N0A-DWV112	13.3	13.1	12.5	12.1	11.8	10.9					
BECR048N0A-DWV140	17.0	16.8	16.0	15.5	15.0	13.9					
BECR060N0A-DWV160	19.1	19.1	18.0	17.4	16.9	15.8					
BECR062N0A-DWV180	21.3	21.3	20.0	19.4	18.8	17.5					

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
BECR010N0A-DWV028	50/60	220-240	198	264	0.27	15	0.045	0.22
BECR012N0A-DWV036	50/60	220-240	198	264	0.27	15	0.045	0.22
BECR015N0A-DWV045	50/60	220-240	198	264	0.52	15	0.045	0.41
BECR019N0A-DWV056	50/60	220-240	198	264	0.33	15	0.045	0.26
BECR024N0A-DWV071	50/60	220-240	198	264	0.42	15	0.045	0.33
BECR027N0A-DWV080	50/60	220-240	198	264	0.63	15	0.045	0.51
BECR031N0A-DWV090	50/60	220-240	198	264	0.58	15	0.045	0.46
BECR036N0A-DWV100	50/60	220-240	198	264	0.91	15	0.045	0.72
BECR038N0A-DWV112	50/60	220-240	198	264	0.78	15	0.125	0.62
BECR048N0A-DWV140	50/60	220-240	198	264	1.42	15	0.125	1.14
BECR060N0A-DWV160	50/60	220-240	198	264	2.30	15	0.125	1.83
BECR062N0A-DWV180	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

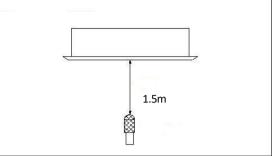
8.1 Overall

Table 8.1: Four-way Cassette sound pressure levels¹

Tuble 8.1. Four-way cusselle sound pressure levels-									
Model name	Sound pressure levels dB								
wodername	SSH	SH	н	м	L	SL	SSL		
BECR010N0A-DWV028	30	29	28	27.5	27	26	25		
BECR012N0A-DWV036	30	29	28	27.5	27	26	25		
BECR015N0A-DWV045	37	35	34	32	30	29	27		
BECR019N0A-DWV056	33	32	31	30	29	28	27		
BECR024N0A-DWV071	37	36	34	33	31	30	28		
BECR027N0A-DWV080	42.5	40	38	36	34	32	30		
BECR031N0A-DWV090	38	37	35	34	32	31	29		
BECR036N0A-DWV100	43	41	40	38	36	35	33		
BECR038N0A-DWV112	41	40	38	37	36	34	33		
BECR048N0A-DWV140	47.5	46	44	42	40	38	36.5		
BECR060N0A-DWV160	48	46	44	43	41	39	37		
BECR062N0A-DWV180	52	49	47	45	42	39	38		



Figure 8.1: Four-way Cassette sound pressure level measurement

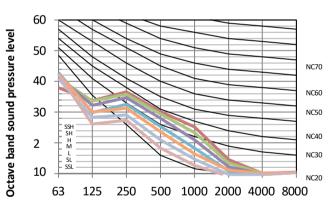


Notes:

 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.

8.2 Octave Band Levels

Figure 8.2: BECR010N0A-DWV028 octave band levels



Octave band center frequency (Hz)

Figure 8.4: BECR015N0A-DWV045 octave band levels

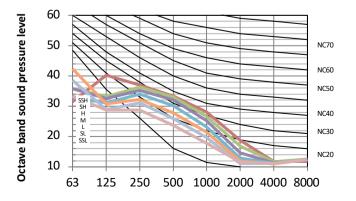
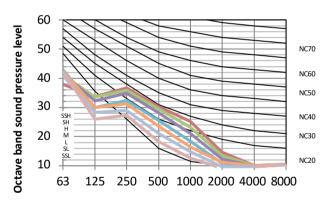
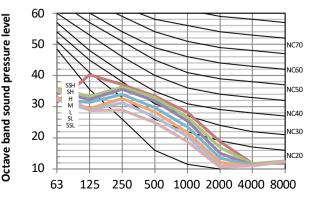


Figure 8.3: BECR012N0A-DWV036octave band levels



Octave band center frequency (Hz)

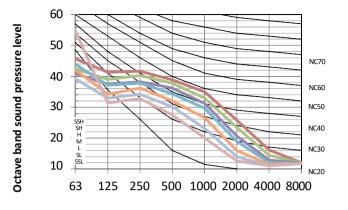
Figure 8.5: BECR019N0A-DWV056 octave band levels



Octave band center frequency (Hz)



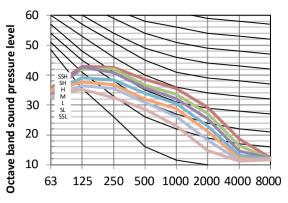
Figure 8.6: BECR024N0A-DWV071 octave band levels

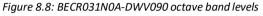


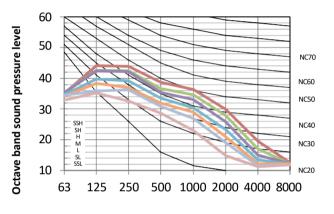
Octave band center frequency (Hz)

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Figure 8.7: BECR027N0A-DWV080 octave band levels

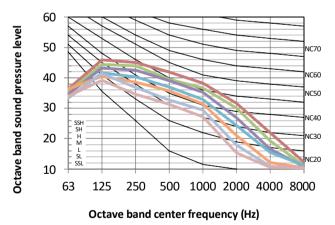


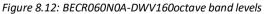


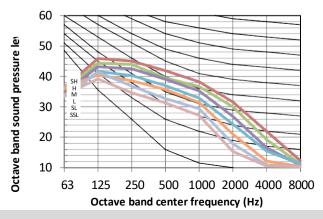


Octave band center frequency (Hz)

Figure 8.10: BECR038N0A-DWV112 octave band levels

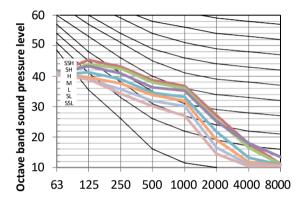




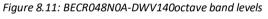


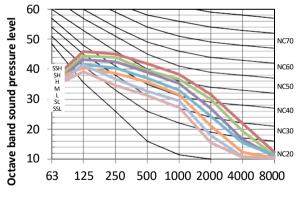
Octave band center frequency (Hz)

Figure 8.9: BECR036N0A-DWV100 octave band levels



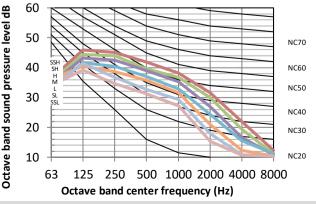
Octave band center frequency (Hz)





Octave band center frequency (Hz)







9 Temperature and Airflow Distributions

9.1 Simulate condition

Table 9.1: Four-way Cassette simulated condition

Model name	Room size (m)	Ceiling height (m)	Flow angle (Cooling/Heating)	Placing
BECR010N0A-DWV028	6×6	2.7	30°/65°	Center
BECR012N0A-DWV036	6×6	2.7	30°/65°	Center
BECR015N0A-DWV045	6×6	2.7	30°/65°	Center
BECR019N0A-DWV056	8×8	2.7	30°/65°	Center
BECR024N0A-DWV071	8×8	2.7	30°/65°	Center
BECR027N0A-DWV080	8×8	2.7	30°/65°	Center
BECR031N0A-DWV090	10×10	2.7	30°/65°	Center
BECR036N0A-DWV100	10×10	2.7	30°/65°	Center
BECR038N0A-DWV112	10×10	2.7	30°/65°	Center
BECR048N0A-DWV140	10×10	2.7	30°/65°	Center
BECR060N0A-DWV160	10×10	2.7	30°/65°	Center
BECR062N0A-DWV180	10×10	2.7	30° /65°	Center

Note:

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.

9.2 Airflow distributions

Figure 9.1: BECR010N0A-DWV028 cooling at 300s

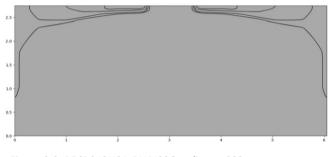


Figure 9.3: BECR012N0A-DWV036cooling at 300s

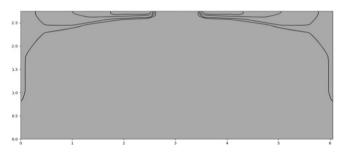


Figure 9.5: BECR015N0A-DWV045 cooling at 300s

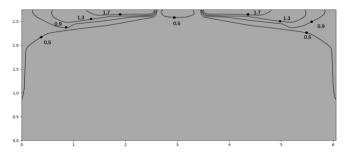


Figure 9.2: BECR010N0A-DWV028 heating at 300s

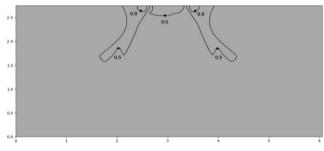


Figure 9.4: BECR012N0A-DWV036heating at 300s

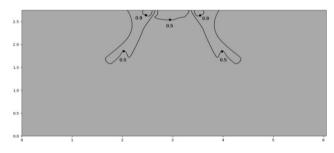


Figure 9.6: BECR015N0A-DWV045 heating at 300s

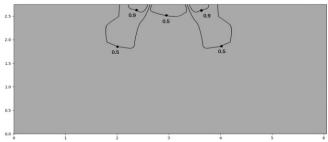




Figure 9.7: BECR019N0A-DWV056 cooling at 300s

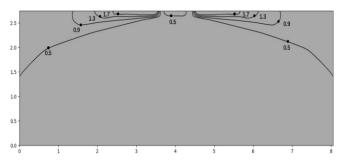


Figure 9.9: BECR024N0A-DWV071 cooling at 300s

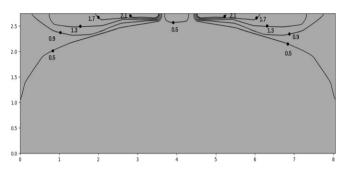


Figure 9.11: BECR027N0A-DWV080 cooling at 300s

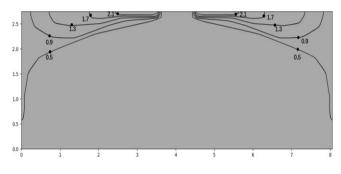


Figure 9.13: BECR031N0A-DWV090 cooling at 300s

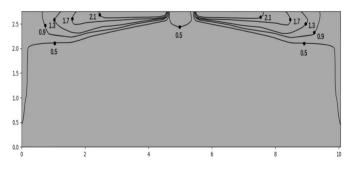


Figure 9.15: BECR036N0A-DWV100 cooling at 300s

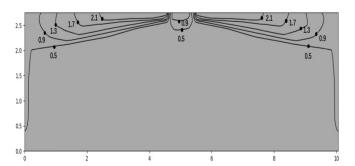
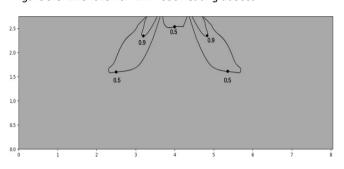
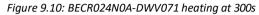


Figure 9.8: BECR019N0A-DWV056 heating at 300s



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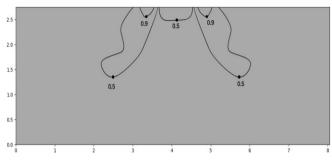
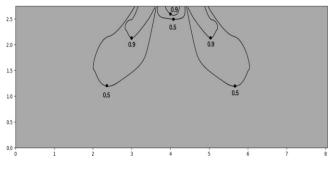
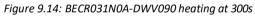
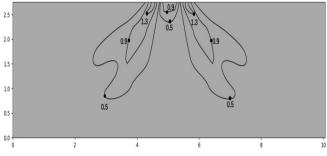
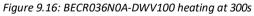


Figure 9.12: BECR027N0A-DWV080 heating at 300s









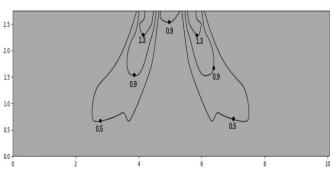




Figure 9.17: BECR038N0A-DWV112 cooling at 300s

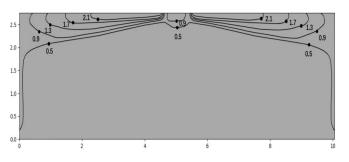


Figure 9.19: BECR048N0A-DWV140cooling at 300s

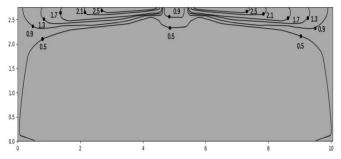


Figure 9.19: BECR060N0A-DWV160cooling at 300s

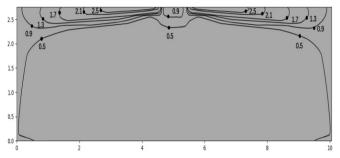


Figure 9.19: BECR062N0A-DWV180 cooling at 300s

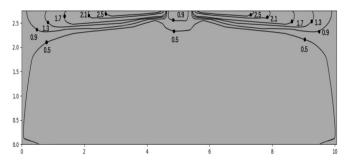


Figure 9.18: BECR038N0A-DWV112 heating at 300s

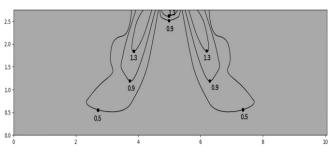
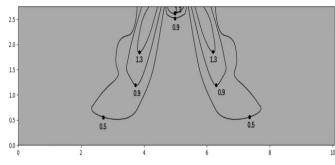
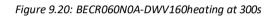
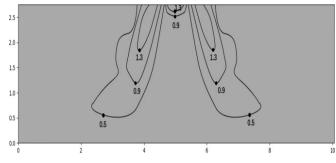
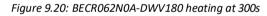


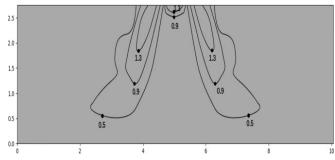
Figure 9.20: BECR048N0A-DWV140heating at 300s













9.3 Temperature distributions

Figure 9.21: BECR010N0A-DWV028 cooling at 300s

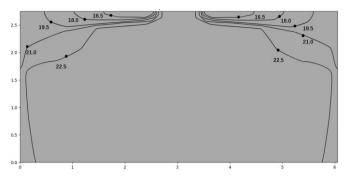


Figure 9.23: BECR012N0A-DWV036cooling at 300s

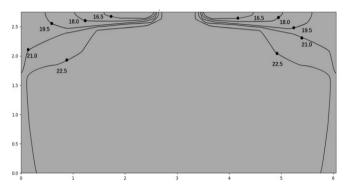


Figure 9.25: BECR015N0A-DWV045 cooling at 300s

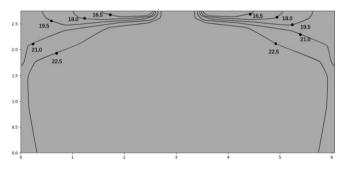
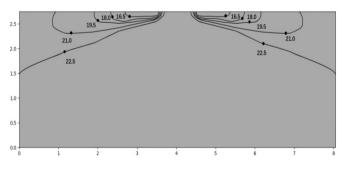
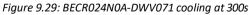
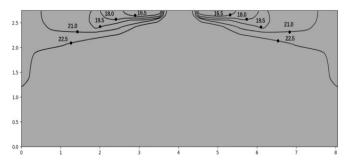


Figure 9.27: BECR019N0A-DWV056 cooling at 300s

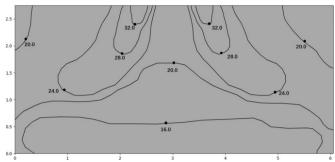


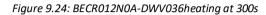




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Figure 9.22: BECR010N0A-DWV028 heating at 300s





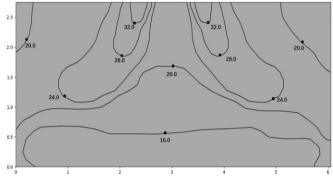


Figure 9.26: BECR015N0A-DWV045 heating at 300s

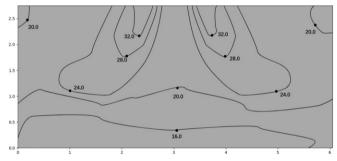


Figure 9.28: BECR019N0A-DWV056 heating at 300s

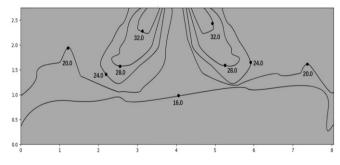


Figure 9.30: BECR024N0A-DWV071 heating at 300s

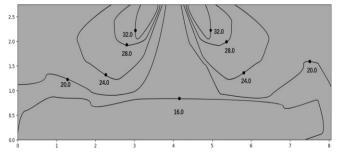


Figure 9.31: BECR027N0A-DWV080 cooling at 300s

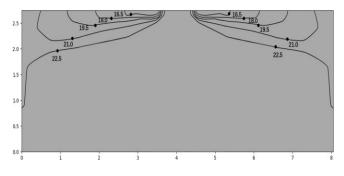


Figure 9.33: BECR031N0A-DWV090 cooling at 300s

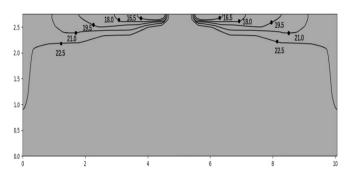


Figure 9.35: BECR036N0A-DWV100 cooling at 300s

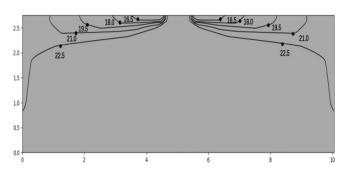


Figure 9.37: BECR038N0A-DWV112 cooling at 300s

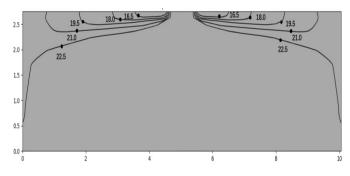


Figure 9.39: BECR048N0A-DWV140cooling at 300s

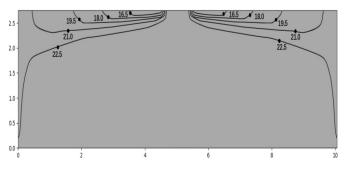


Figure 9.32: BECR027N0A-DWV080 heating at 300s

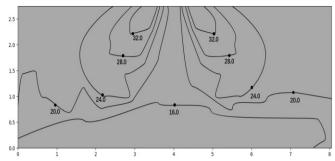
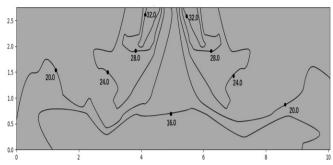
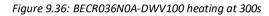


Figure 9.34: BECR031N0A-DWV090 heating at 300s





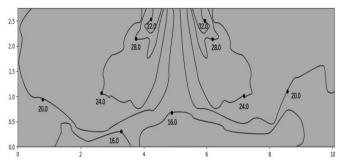


Figure 9.38: BECR038N0A-DWV112 heating at 300s

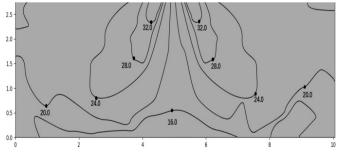


Figure 9.40: BECR048N0A-DWV140heating at 300s

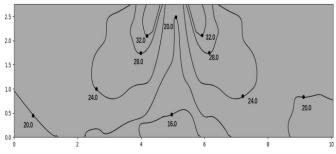




Figure 9.41: BECR060N0A-DWV160cooling at 300s

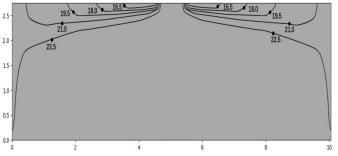


Figure 9.43: BECR062N0A-DWV180 cooling at 300s

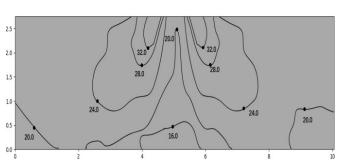
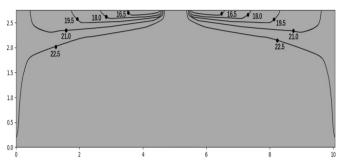
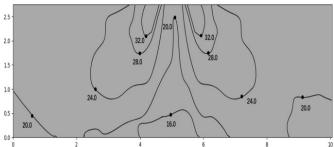


Figure 9.44: BECR062N0A-DWV180 heating at 300s

Figure 9.42: BECR060N0A-DWV160heating at 300s









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