

“  
**Perfect integration,**  
*the cassettes adapt to aesthetic,*  
*financial and material constraints*”



Nominal Cooling capacity : 1.5 to 8.7 kW  
 Nominal heating capacity : 1.3 to 11.6 kW



## USE

**MELODY 2** cassette is a non-independent terminal air conditioning unit installed in suspended ceilings which combines low cost installation and operating advantages

of central hot/chilled water production with individual temperature controls in each room.

## RANGE

The MELODY2 cassette type fan coil unit range consists of 6 sizes covering a range of air flow from 360 à 1450 m<sup>3</sup>/h which meet the most stringent sound level requirements.

2 models:

- Compact cassette 600 x 600, type 61 - 62 - 63
- Large cassette 900 x 900, type 92 - 93 - 94.

The MELODY 2 cassettes are available in 3 versions:

- 2 pipe system, heating or cooling operation
- 2 pipe + 2 wire system, cooling cooling + electrical heating or heating/cooling + electrical heating
- 4 pipe system, cooling and heating operation.

The MELODY 2 cassettes are available either with a AC 3-speed motor or a variable speed EC motor that meet the new building energy performance objectives.

## OPERATING PRINCIPLE

The fan takes the air from the room through a grille.

Filtered to be purified, dehumidified, heated or refrigerated through a chilled or hot water exchanger coil, this air is then

discharged into the room to be air conditioned through 4 directional louvres so as to obtain a maximum increase of the air stream and ensure the diffusion by Coanda effect.

## RANGE

### Recovery/Discharge grille

- Fits perfectly within the suspended ceiling tile dimensions.
- White color.
- The manual deflectors are adjustable (2 positions) allowing homogeneous air distribution throughout the room.

### Water coil (2-pipe or 4-pipe system)

- Galvanized sheet metal.
- Copper tubes, aluminum fins.
- Air vent and partial drain.
- Nominal pressure: 14bar.
- Minimum water inlet temperature : 5 °C.
- Maximum water inlet temperature : 70 °C in 2 pipe and 80 °C in 4 pipes.

### Electrical heater (system 2 pipe + electrical)

- Heating element, stainless steel tubes, inserted in the finned block
- 2 temperature limiter thermostats (1 auto + 1 manual).

### Condensates drain pan

- A condensate drain pan in expanded polystyrene, covered with a waterproof film.
- Recovery is provided by a draining pump equipped with a safety float and mounted on anti-vibration mounts.
- The auxiliary pan is supplied as a standard accessory to recover the valve condensates.

### Fan motor assembly

#### ■ AC Motor

- 3-speeds motor.
- Closed type, with protected shaft.
- Permanent capacitor in the electrical box.
- Automatic open thermal protection in series.
- Resilient mounts.
- Supply 230V-1Ph-50/60 Hz
- Reduced consumption.

#### ■ HEE Motor

- 0 -10V variable speed motor.
- BLAC (Brushless Alternating Current) brushless technology offering more linear torque progression and a lower operating sound level than BLDC ( Brushless Direct Current) technology
- Sealed, tropicalised with protected shaft
- ball bearings
- internal automatic overload protection as standard on winding
- resilient mounts
- Supply 230V-1Ph - 50/60Hz

#### ■ Fan

- Balanced centrifugal impeller with profiled blades.
- Polymer impeller.

### Air filter

- Located on the detachable grille, easy to remove without dismantling.
- Washable filter made of polypropylene with efficiency EU1 regarding EN13779.

### Casing

- Galvanized sheet metal.
- Thermal and acoustic insulation of the internal surfaces.
- Pre-cut (Ø 70 mm for size 600 and Ø 100 for size 900) Pre-cut Ø 150 mm on the side for air discharge in adjacent room.

### Electrical box

- Large ABS electrical box with a hinge to keep it open and screw closure.
- Protection rating IP20
- Terminal block on DIN rail in accordance with EN 50022, dept 7.5 mm
- Junction block located with tension clamp. Cross section 0.5 to 2.5 mm<sup>2</sup>
- Cable routing for customer connections

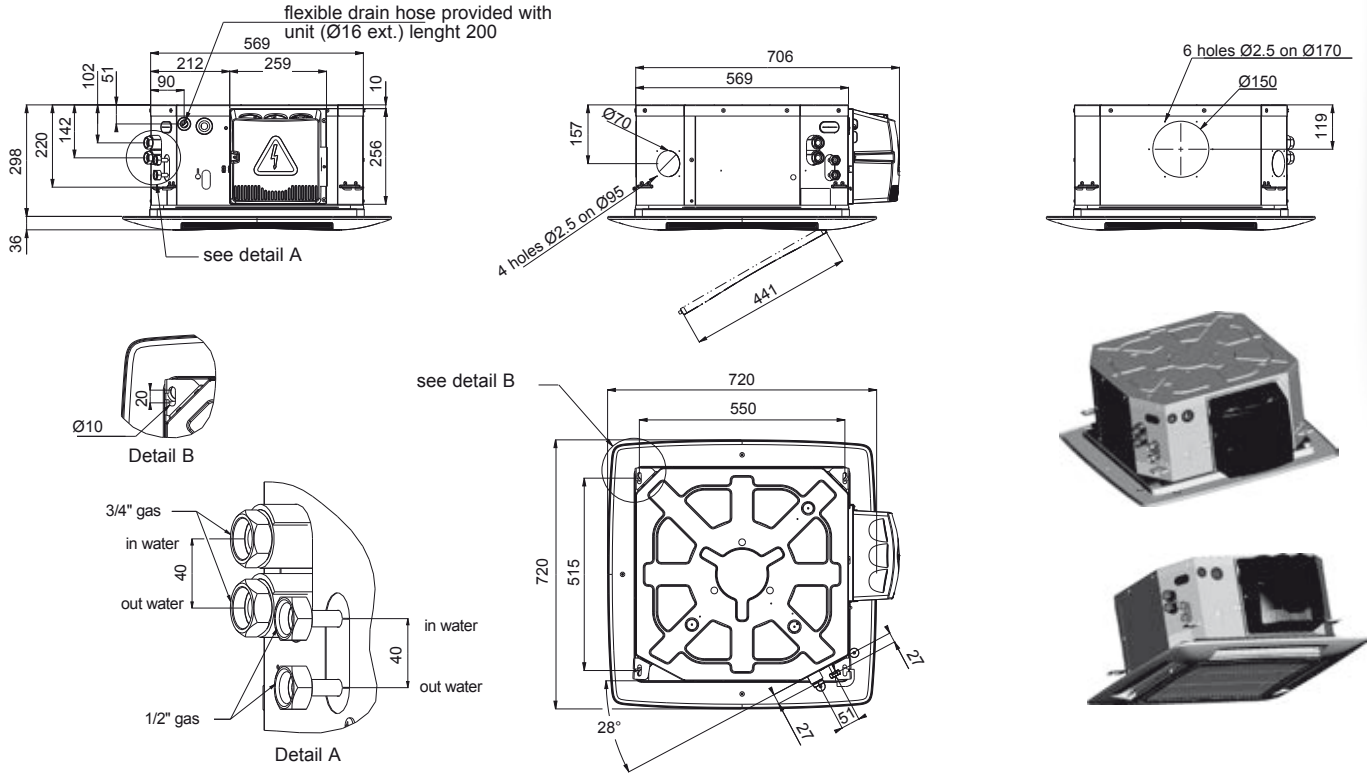
### Accessories

- Resilents mounts
- Valve kit. 2-ways or 3-ways
- Valve kit. 2-ways and 3-ways with bypass 230V On/Off
- Valve kit. 2-ways and 3-ways 2-ways and 3-ways with bypass 24V 3 pts
- Thermostat RTR-E & V30 (AC version only)
- Kit V300 & V3000

## DIMENSIONS (mm)

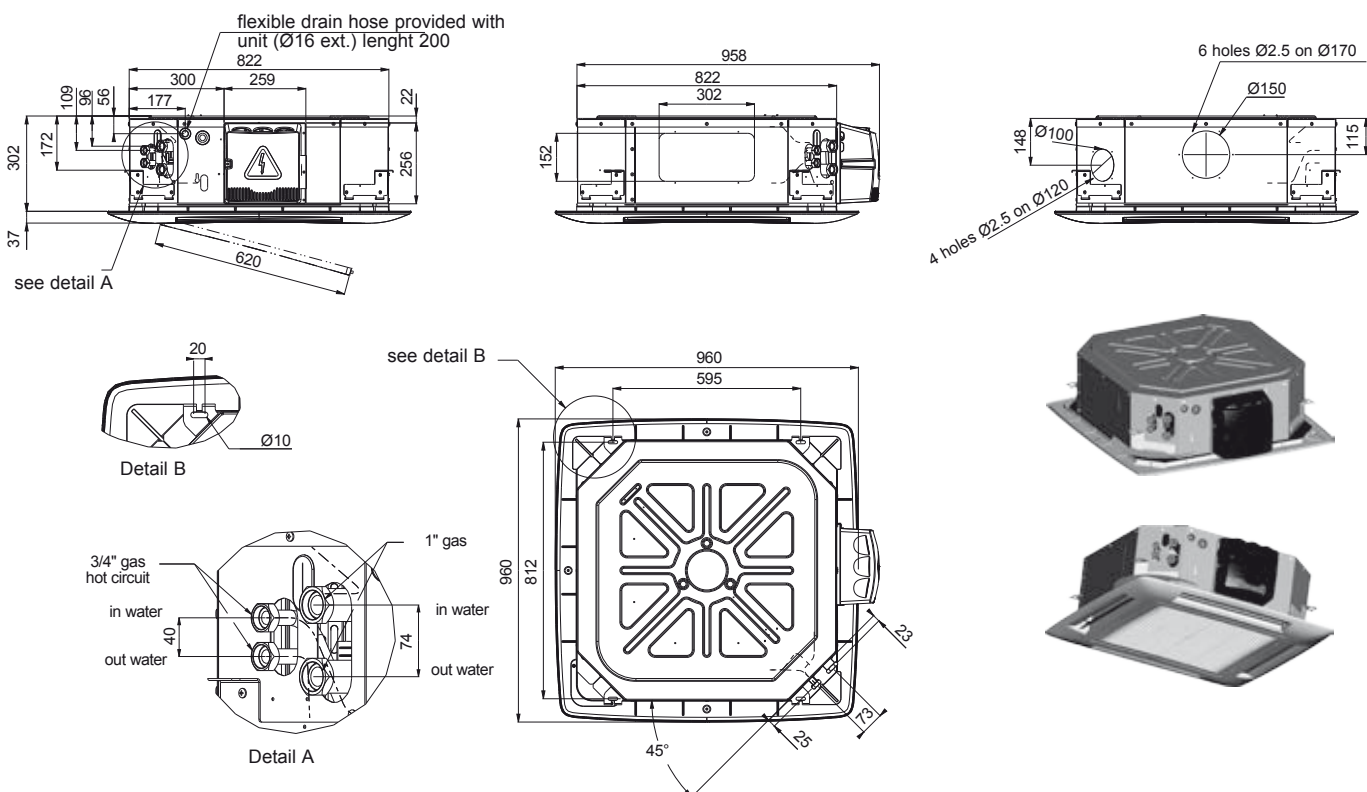
### Size 600

Unit without valves



### Size 900

Unit without valves



## PERFORMANCES AC MOTOR

### 2 pipe

Size	Speed V	Air flow m <sup>3</sup> /h	Heating capacity W	Pressure Drop kPa	Cooling Capacity		Pressure Drop kPa	Lw dB(A)	Lp dB(A)*	NR*	EUROVENT	EUROVENT
					Total W	Sensible W					FCEER	FCCOP
											Class	Class
61 AC	1	660	3 200	8	2 390	2 010	10	49	40	36	D	D
	2	450	2 500	5	1 780	1 500	5	40	31	27		
	3	360	2 200	4	1 550	1 300	4	36	27	24		
62 AC	1	735	4 530	13	4 020	3 070	14	53	44	40	C	C
	2	505	3 720	7	2 890	2 190	7	44	35	31		
	3	320	2 320	3	1 880	1 420	3	35	26	20		
63 AC	1	900	6 200	14	4 740	3 670	18	57	48	43	D	D
	2	625	4 610	8	3 520	2 700	10	48	39	35		
	3	485	3 700	5	2 800	2 100	6	42	33	29		
92 AC	1	980	8 070	17	6 100	4 500	22	49	40	35	C	C
	2	720	5 970	10	4 450	3 370	12	40	31	26		
	3	530	4 480	6	3 360	2 530	7	35	26	20		
93 AC	1	1160	9 990	10	7 220	5 460	11	54	44	39	C	C
	2	825	7 400	6	5 490	4 090	6	46	37	32		
	3	500	4 610	3	3 710	2 690	3	38	28	22		
94 AC	1	1450	11 700	18	8 670	6 400	20	59	50	43	C	C
	2	1080	9 300	11	6 530	4 900	12	52	43	36		
	3	600	5 210	5	4 060	2 990	5	40	31	23		

### 4 pipe

Size	Speed	Air flow m <sup>3</sup> /h	Heating capacity W	Pressure Drop kPa	Cooling Capacity		Pressure Drop kPa	Lw dB(A)	Lp dB(A)	NR*	EUROVENT	EUROVENT
					Total W	Sensible W					FCEER	FCCOP
											Class	Class
61 AC	1	660	1 900	35	2 000	1 870	13	49	40	36	E	E
	2	450	1 440	21	1 500	1 400	8	40	31	27		
	3	360	1 240	16	1 300	1 190	6	36	27	24		
62 AC	1	735	6 370	25	3 400	2 680	11	53	44	40	C	B
	2	505	5 100	17	2 700	2 090	7	44	35	31		
	3	320	3 610	9	2 000	1 500	4	35	26	20		
63 AC	1	900	6 810	29	4 050	3 350	15	57	48	43	D	C
	2	625	5 810	22	3 240	2 610	10	48	39	35		
	3	485	5 010	17	2 570	2 050	6	42	33	29		
93 AC	1	1160	11 500	13	6 670	5 100	24	54	44	39	C	B
	2	825	8 900	9	4 990	3 800	14	46	37	32		
	3	500	6 010	4	2 990	2 250	5	38	28	22		
94 AC	1	1450	14 610	20	7 610	6 010	30	59	50	43	D	C
	2	1080	11 500	13	6 060	4 730	20	52	43	36		
	3	600	7 310	6	3 190	2 400	6	40	31	23		

#### EUROVENT conditions

Cooling mode : (2 pipes & 4 pipes) : Entering air temperature : 27°C/19°C<sub>BH</sub>, entering/leaving water temperature : 7°C/12°C

Heating mode : (2 pipes) : Entering air temperature : 20°C, entering water temperature: 50°C, water flow as cooling mode

Heating mode : (4 pipes) : Entering air temperature : 20°C, entering/leaving water temperature : 70°C/60°C

\*Acoustic pressure level and NR values are based on a hypothetical sound attenuation of the room of 9 dB(A)

## PERFORMANCES EC MOTOR

### 2 pipe

Size	Speed	Air flow m <sup>3</sup> /h	Heating capacity W	Pressure Drop kPa	Cooling Capacity		Pressure Drop kPa	Lw dB(A)	Lp dB(A)*	NR*	EUROVENT	EUROVENT
					Total W	Sensible W					FCEER	FCCOP
											Class	Class
61 HEE	10	660	3 200	8	2 390	2 010	10	49	40	36	B	B
	6	450	2 500	5	1 780	1 500	5	40	31	27		
	2	360	2 200	4	1 550	1 300	4	36	27	24		
62 HEE	10	735	4 530	13	4 020	3 070	14	53	44	39	A	A
	6	505	3 720	7	2 890	2 190	7	44	35	30		
	2	320	2 320	3	1 880	1 420	3	35	26	20		
63 HEE	10	900	6 200	14	4 740	3 670	18	57	48	43	B	B
	6	625	4 610	8	3 520	2 700	10	48	39	34		
	2	485	3 700	5	2 800	2 100	6	42	33	28		
92 HEE	10	980	8 070	17	6 100	4 500	22	49	40	35	A	A
	6	720	5 970	10	4 450	3 370	12	40	31	26		
	2	530	4 480	6	3 360	2 530	7	35	26	21		
93 HEE	10	1160	9 990	10	7 220	5 460	11	54	45	40	A	A
	6	825	7 400	6	5 490	4 090	6	46	37	32		
	2	500	4 610	3	3 710	2 690	3	38	29	22		
94 HEE	10	1598	12 990	22	9 670	7 270	25	61	52	47	A	A
	6	1080	9 300	11	6 530	4 900	12	52	43	38		
	2	600	5 210	5	4 060	2 990	5	40	31	25		

### 4 pipe

Size	Speed	Air flow m <sup>3</sup> /h	Heating capacity W	Pressure Drop kPa	Cooling Capacity		Pressure Drop kPa	Lw dB(A)	Lp dB(A)	NR*	EUROVENT	EUROVENT
					Total W	Sensible W					FCEER	FCCOP
											Class	Class
61 HEE	10	660	1 900	35	2 000	1 870	13	49	40	36	B	C
	6	450	1 440	21	1 500	1 400	8	40	31	27		
	2	360	1 240	16	1 300	1 190	6	36	27	24		
62 HEE	10	735	6 370	25	3 400	2 680	11	53	44	39	A	A
	6	505	5 100	17	2 700	2 090	7	44	35	30		
	2	320	3 610	9	2 000	1 500	4	35	26	20		
63 HEE	10	900	6 810	29	4 050	3 350	15	57	48	43	B	A
	6	625	5 810	22	3 240	2 610	10	48	39	34		
	2	485	5 010	17	2 570	2 050	6	42	33	28		
93 HEE	10	1160	11 500	13	6 670	5 100	24	54	45	40	A	A
	6	825	8 900	9	4 990	3 800	14	46	37	32		
	2	500	6 010	4	2 990	2 250	5	38	29	22		
94 HEE	10	1598	15 990	24	8 030	6 400	33	61	52	47	B	A
	6	1080	11 500	13	6 060	4 730	20	52	43	38		
	2	600	7 310	6	3 190	2 400	6	40	31	25		

#### EUROVENT conditions

Cooling mode : (2 pipes & 4 pipes) : Entering air temperature : 27°C/19°CBH, entering/leaving water temperature : 7°C/12°C

Heating mode : (2 pipes) : Entering air temperature : 20°C, entering water temperature: 50°C, water flow as cooling mode

Heating mode : (4 pipes) : Entering air temperature : 20°C, entering/leaving water temperature : 70°C/60°C

\*Acoustic pressure level and NR values are based on a hypothetical sound attenuation of the room of 9 dB(A)

## TECHNICAL AND ELECTRICAL CHARACTERISTICS

### Coil content (litres)

		61	62	63	92	93	94
Standard 2-pipe systeme coil		0.55	1.1	1.1	1.6	2.4	2.4
4-pipe system coil	Cooling	0.4	1.1	1.1		2.4	2.4
	Heating	0.1	0.6	0.6		1.2	1.2

### Supply pipe diameter

		61	62	63	92	93	94
Standard 2-pipe systeme coil		G 3/4"	G 3/4"	G 3/4"	G 1"	G 1"	G 1"
4-pipe system coil	Cooling	G 3/4"	G 3/4"	G 3/4"		G 1"	G 1"
	Heating	G 1/2"	G 1/2"	G 1/2"		G 3/4"	G 3/4"

### Electrical characteristics (230 V - 1 ph - 50 Hz / 60 Hz) – Fan-motor AC

		Speed	61 AC	62 AC	63 AC	92 AC	93 AC	94 AC
Power input (W)	1		58	58	99	66	88	125
	2		35	34	58	41	61	92
	3		25	17	38	28	34	44
Absorbed current (A)	1		0.27	0.24	0.41	0.3	0.46	0.63
	2		0.17	0.14	0.24	0.17	0.27	0.41
	3		0.12	0.07	0.16	0.12	0.14	0.19

### Electrical characteristics (230 V - 1 ph - 50 Hz / 60 Hz) – HEE motor

		Speed	61 HEE	62 HEE	63 HEE	92 HEE	93 HEE	94 HEE
Power input (W)	2V		29	33	57	25	45	115
	6V		13	14	23	12	23	40
	10V		9	7	13	7	9	11
Absorbed current (A)	2V		0.19	0.27	0.46	0.23	0.4	0.89
	6V		0.1	0.13	0.2	0.12	0.22	0.35
	10V		0.08	0.08	0.12	0.08	0.1	0.12

### Electrical characteristics (230 V - 1 ph - 50 Hz) – Electrical heater

		61	62	63	92	93	94
Electrical power		1500	2500	2500	3000	3000	3000
Absorbed current (A)		6.3	10.4	10.4	12.5	12.5	12.5

### Dimensions and weights

	MELODY2 61	MELODY2 62	MELODY2 63	MELODY2 92	MELODY2 93	MELODY2 94
Dimensions *(H x L x D) mm	298 x 706 x 706			302 x 958 x 958		
Grille dimensions (H x L x D)	36 x 720 x 720	36 x 720 x 720	36 x 720 x 720	37 x 960 x 960	37 x 960 x 960	37 x 960 x 960
Weight unit/weight grille	14.8/3	16.5/3	16.5/3	37/5	39.6/5	39.6/5

\* With electrical box and without valves

## COOLING CAPACITIES IN kW, 2 PIPE

EAT	EWT	ΔT	Size	61 AC			62 AC			63 AC			92 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			92 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
23°DB/17°CWB	5	3	Total	2.81	2.16	1.89	4.27	3.11	2.08	5.06	3.80	3.06	6.93	5.14	3.92	7.88	6.03	4.04	9.10	6.94	4.34
			Sensible	1.97	1.50	1.31	2.93	2.11	1.40	3.50	2.60	2.08	4.70	3.48	2.63	5.28	4.00	2.64	6.14	4.66	2.87
	5	5	Total	2.18	1.60	1.39	3.71	2.67	1.72	4.36	3.22	2.55	5.71	4.15	3.13	6.69	5.06	3.40	8.05	6.09	3.76
			Sensible	1.70	1.26	1.09	2.67	1.90	1.23	3.17	2.32	1.84	4.13	3.02	2.26	4.73	3.55	2.34	5.66	4.27	2.60
	5	7	Total	1.32	0.87	0.75	3.09	2.14	1.33	3.55	2.46	1.86	4.40	3.00	2.24	5.01	3.61	2.38	6.73	4.96	2.94
			Sensible	1.28	0.87	0.75	2.35	1.64	1.04	2.78	1.95	1.50	3.55	2.50	1.86	3.98	2.90	1.88	5.08	3.77	2.23
	5	9	Total	0.80	0.63	0.59	2.32	1.54	0.93	2.46	1.59	1.16	3.12	2.16	1.63	3.13	2.24	1.72	5.30	3.70	2.04
			Sensible	0.80	0.63	0.59	1.97	1.34	0.83	2.20	1.49	1.11	2.82	2.00	1.51	3.01	2.15	1.57	4.42	3.18	1.81
	7	3	Total	2.27	1.73	1.52	3.50	2.54	1.70	4.14	3.11	2.50	5.63	4.18	3.17	6.47	4.95	3.34	7.51	5.73	3.58
			Sensible	1.73	1.31	1.14	2.58	1.85	1.23	3.08	2.28	1.82	4.10	3.04	2.28	4.63	3.50	2.30	5.42	4.11	2.52
	7	5	Total	1.53	1.09	0.94	2.95	2.09	1.34	3.45	2.52	1.95	4.42	3.19	2.35	5.13	3.85	2.58	6.33	4.75	2.91
			Sensible	1.42	1.02	0.88	2.31	1.63	1.05	2.74	2.00	1.55	3.56	2.60	1.92	4.04	3.01	1.97	4.90	3.68	2.22
	7	7	Total	0.99	0.66	0.60	2.25	1.54	0.93	2.52	1.72	1.26	3.26	2.24	1.68	3.53	2.49	1.70	5.05	3.65	2.06
			Sensible	0.99	0.66	0.60	1.95	1.35	0.84	2.26	1.57	1.19	2.96	2.06	1.54	3.28	2.35	1.57	4.32	3.17	1.82
	7	9	Total	0.62	0.50	0.47	1.67	1.10	0.67	1.73	1.12	0.87	2.30	1.60	1.22	2.20	1.73	1.34	3.95	2.68	1.54
			Sensible	0.62	0.50	0.47	1.58	1.06	0.66	1.71	1.12	0.87	2.25	1.59	1.21	2.20	1.73	1.30	3.69	2.58	1.49
	9	3	Total	1.67	1.26	1.10	2.74	1.98	1.30	3.24	2.41	1.93	4.34	3.20	2.42	4.96	3.78	2.56	5.81	4.41	2.75
			Sensible	1.49	1.12	0.97	2.23	1.59	1.04	2.67	1.96	1.56	3.54	2.61	1.95	3.97	2.98	1.96	4.68	3.53	2.15
	9	5	Total	1.14	0.80	0.69	2.17	1.49	0.93	2.53	1.76	1.34	3.31	2.35	1.72	3.67	2.70	1.81	4.70	3.47	2.06
			Sensible	1.14	0.80	0.69	1.94	1.34	0.85	2.30	1.61	1.25	3.05	2.18	1.59	3.37	2.49	1.62	4.17	3.10	1.83
	9	7	Total	0.66	0.50	0.47	1.62	1.09	0.67	1.81	1.21	0.89	2.34	1.64	1.24	2.54	1.77	1.31	3.79	2.69	1.51
			Sensible	0.66	0.50	0.47	1.57	1.06	0.66	1.78	1.21	0.89	2.30	1.64	1.23	2.54	1.77	1.29	3.62	2.61	1.47
	9	9	Total	0.45	0.36	0.35	1.18	0.79	0.48	1.15	0.80	0.61	1.62	1.13	0.92	1.57	1.26	1.01	2.88	1.92	1.13
			Sensible	0.45	0.36	0.35	1.18	0.79	0.48	1.15	0.80	0.61	1.62	1.13	0.92	1.57	1.26	1.01	2.88	1.92	1.13
	11	3	Total	1.20	0.88	0.76	1.98	1.41	0.90	2.36	1.72	1.36	3.20	2.34	1.76	3.55	2.68	1.80	4.24	3.18	1.94
			Sensible	1.20	0.88	0.76	1.87	1.33	0.85	2.24	1.63	1.29	3.03	2.22	1.66	3.34	2.49	1.63	3.97	2.98	1.79
	11	5	Total	0.85	0.58	0.50	1.55	1.06	0.65	1.83	1.26	0.96	2.45	1.69	1.26	2.71	1.97	1.29	3.55	2.59	1.49
			Sensible	0.85	0.58	0.50	1.53	1.06	0.65	1.82	1.26	0.96	2.45	1.69	1.26	2.71	1.97	1.29	3.49	2.56	1.48
	11	7	Total	0.45	0.36	0.34	1.18	0.78	0.48	1.26	0.82	0.63	1.66	1.16	0.88	1.61	1.27	0.97	2.83	1.94	1.11
			Sensible	0.45	0.36	0.34	1.18	0.78	0.48	1.26	0.82	0.63	1.66	1.16	0.88	1.61	1.27	0.97	2.83	1.94	1.11
	11	9	Total	0.28	0.24	0.23	0.76	0.50	0.30	0.67	0.47	0.37	0.97	0.76	0.63	0.98	0.81	0.68	1.81	1.24	0.74
			Sensible	0.28	0.24	0.23	0.76	0.50	0.30	0.67	0.47	0.37	0.97	0.76	0.63	0.98	0.81	0.68	1.81	1.24	0.74
	13	3	Total	0.94	0.68	0.58	1.50	1.03	0.65	1.80	1.29	0.98	2.43	1.77	1.31	2.69	1.99	1.32	3.26	2.42	1.43
			Sensible	0.94	0.68	0.58	1.50	1.03	0.65	1.80	1.29	0.98	2.43	1.77	1.31	2.69	1.99	1.32	3.26	2.42	1.43
	13	5	Total	0.53	0.37	0.34	1.14	0.77	0.48	1.31	0.89	0.66	1.69	1.19	0.90	1.91	1.34	0.94	2.69	1.93	1.08
			Sensible	0.53	0.37	0.34	1.14	0.77	0.48	1.31	0.89	0.66	1.69	1.19	0.90	1.91	1.34	0.94	2.69	1.93	1.08
13	7	Total	0.28	0.23	0.22	0.74	0.50	0.30	0.69	0.48	0.37	0.98	0.70	0.58	0.97	0.79	0.64	1.81	1.22	0.72	
		Sensible	0.28	0.23	0.22	0.74	0.50	0.30	0.69	0.48	0.37	0.98	0.70	0.58	0.97	0.79	0.64	1.81	1.22	0.72	
13	9	Total	0.13	0.12	0.11	0.31	0.20	0.12	0.24	0.18	0.15	0.50	0.39	0.33	0.43	0.38	0.34	0.75	0.50	0.32	
		Sensible	0.13	0.12	0.11	0.31	0.20	0.12	0.24	0.18	0.15	0.50	0.39	0.33	0.43	0.38	0.34	0.75	0.50	0.32	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

COOLING CAPACITIES IN kW, 2 PIPE

EAT	EWT	ΔT	Size	61 AC			62 AC			63 AC			92 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			92 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
25°DB/19°CWB	5	3	Total	3.55	2.74	2.41	5.34	3.89	2.61	6.35	4.76	3.85	8.78	6.53	4.96	9.84	7.54	5.04	11.31	8.64	5.40
			Sensible	2.21	1.69	1.48	3.27	2.37	1.58	3.91	2.90	2.34	5.31	3.94	2.98	5.92	4.50	2.98	6.85	5.21	3.22
	5	5	Total	3.01	2.26	1.98	4.76	3.45	2.27	5.62	4.19	3.35	7.46	5.49	4.15	8.79	6.70	4.51	10.33	7.85	4.89
			Sensible	1.97	1.48	1.29	3.02	2.17	1.42	3.60	2.66	2.12	4.73	3.48	2.61	5.44	4.11	2.73	6.41	4.86	2.98
	5	7	Total	2.21	1.53	1.32	4.14	2.93	1.88	4.82	3.52	2.71	6.08	4.37	3.20	7.30	5.47	3.65	9.09	6.83	4.18
			Sensible	1.65	1.19	1.02	2.74	1.93	1.24	3.23	2.35	1.83	4.12	2.99	2.20	4.80	3.57	2.34	5.87	4.41	2.67
	5	9	Total	1.14	0.79	0.73	3.40	2.35	1.42	3.85	2.62	1.92	4.57	3.09	2.31	5.20	3.58	2.39	7.54	5.50	3.17
			Sensible	1.14	0.79	0.73	2.39	1.67	1.04	2.79	1.94	1.47	3.49	2.45	1.83	3.92	2.79	1.82	5.23	3.86	2.24
	7	3	Total	3.01	2.32	2.04	4.55	3.33	2.23	5.41	4.06	3.28	7.43	5.52	4.21	8.45	6.48	4.35	9.72	7.43	4.65
			Sensible	1.97	1.51	1.32	2.92	2.11	1.41	3.50	2.59	2.08	4.70	3.48	2.63	5.29	4.01	2.65	6.13	4.66	2.87
	7	5	Total	2.40	1.78	1.56	3.96	2.86	1.85	4.66	3.46	2.76	6.12	4.47	3.37	7.25	5.52	3.72	8.62	6.54	4.07
			Sensible	1.72	1.29	1.12	2.67	1.91	1.24	3.17	2.33	1.86	4.14	3.03	2.28	4.77	3.59	2.37	5.66	4.28	2.62
	7	7	Total	1.46	0.96	0.83	3.33	2.31	1.46	3.83	2.72	2.06	4.70	3.27	2.39	5.54	4.06	2.70	7.20	5.35	3.22
			Sensible	1.34	0.93	0.80	2.38	1.65	1.06	2.80	1.99	1.54	3.55	2.54	1.87	4.07	2.99	1.94	5.08	3.80	2.26
	7	9	Total	0.84	0.65	0.60	2.49	1.67	0.99	2.68	1.75	1.23	3.25	2.28	1.72	3.43	2.33	1.79	5.60	4.01	2.17
			Sensible	0.84	0.65	0.60	1.99	1.37	0.85	2.26	1.54	1.14	2.83	2.02	1.52	3.14	2.19	1.56	4.42	3.23	1.82
	9	3	Total	2.44	1.87	1.65	3.73	2.72	1.82	4.41	3.32	2.68	6.02	4.47	3.41	6.96	5.34	3.60	8.03	6.13	3.85
			Sensible	1.74	1.32	1.15	2.57	1.85	1.23	3.08	2.28	1.82	4.10	3.04	2.29	4.64	3.51	2.32	5.41	4.11	2.52
	9	5	Total	1.71	1.22	1.06	3.15	2.26	1.44	3.68	2.71	2.13	4.71	3.41	2.56	5.55	4.20	2.83	6.76	5.10	3.16
			Sensible	1.46	1.07	0.92	2.31	1.65	1.06	2.75	2.01	1.58	3.56	2.60	1.94	4.08	3.05	2.00	4.90	3.69	2.24
	9	7	Total	1.04	0.69	0.61	2.40	1.65	0.99	2.73	1.86	1.38	3.43	2.35	1.77	3.82	2.71	1.80	5.36	3.90	2.24
			Sensible	1.04	0.69	0.61	1.96	1.37	0.85	2.31	1.61	1.22	3.00	2.08	1.56	3.34	2.42	1.57	4.32	3.19	1.86
	9	9	Total	0.63	0.51	0.47	1.76	1.14	0.70	1.82	1.16	0.89	2.39	1.65	1.25	2.30	1.76	1.37	4.12	2.82	1.59
			Sensible	0.63	0.51	0.47	1.60	1.07	0.67	1.76	1.15	0.89	2.28	1.61	1.21	2.30	1.76	1.31	3.71	2.62	1.50
	11	3	Total	1.81	1.38	1.21	2.91	2.11	1.41	3.44	2.57	2.06	4.61	3.43	2.59	5.33	4.09	2.77	6.21	4.73	2.97
			Sensible	1.50	1.13	0.98	2.23	1.60	1.05	2.67	1.96	1.56	3.53	2.61	1.96	3.99	3.00	1.97	4.68	3.54	2.17
	11	5	Total	1.17	0.83	0.71	2.31	1.59	1.01	2.67	1.91	1.44	3.46	2.48	1.80	3.91	2.89	1.94	4.95	3.68	2.21
			Sensible	1.17	0.83	0.71	1.95	1.35	0.87	2.31	1.65	1.27	3.04	2.21	1.60	3.39	2.51	1.64	4.17	3.11	1.85
	11	7	Total	0.72	0.51	0.47	1.69	1.13	0.69	1.87	1.26	0.92	2.41	1.69	1.27	2.66	1.85	1.34	3.91	2.78	1.55
			Sensible	0.72	0.51	0.47	1.58	1.08	0.67	1.81	1.24	0.92	2.32	1.65	1.24	2.63	1.85	1.30	3.62	2.63	1.48
	11	9	Total	0.45	0.37	0.35	1.21	0.81	0.49	1.21	0.82	0.63	1.66	1.15	0.92	1.61	1.29	1.02	2.95	1.96	1.16
			Sensible	0.45	0.37	0.35	1.21	0.81	0.49	1.21	0.82	0.63	1.66	1.15	0.92	1.61	1.29	1.02	2.92	1.96	1.16
	13	3	Total	1.24	0.91	0.79	2.09	1.50	0.96	2.47	1.82	1.45	3.33	2.44	1.84	3.73	2.82	1.91	4.42	3.33	2.05
			Sensible	1.23	0.91	0.78	1.87	1.33	0.86	2.25	1.64	1.30	3.02	2.21	1.66	3.33	2.49	1.63	3.96	2.97	1.79
	13	5	Total	0.88	0.61	0.52	1.59	1.09	0.67	1.88	1.29	0.98	2.52	1.72	1.29	2.79	2.03	1.34	3.60	2.64	1.53
			Sensible	0.88	0.61	0.52	1.54	1.07	0.67	1.85	1.28	0.98	2.47	1.70	1.27	2.75	2.01	1.32	3.48	2.57	1.49
13	7	Total	0.46	0.37	0.34	1.20	0.79	0.49	1.30	0.84	0.64	1.69	1.19	0.90	1.71	1.29	0.99	2.88	2.00	1.13	
		Sensible	0.46	0.37	0.34	1.20	0.79	0.49	1.30	0.84	0.64	1.69	1.19	0.90	1.71	1.29	0.99	2.88	2.00	1.13	
13	9	Total	0.29	0.24	0.23	0.78	0.52	0.31	0.69	0.49	0.38	0.98	0.76	0.63	1.00	0.83	0.69	1.86	1.27	0.76	
		Sensible	0.29	0.24	0.23	0.78	0.52	0.31	0.69	0.49	0.38	0.98	0.76	0.63	1.00	0.83	0.69	1.86	1.27	0.76	

EAT : Entering Air temperature °C  
 EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
 WB : Wet bulb

DB : Dry bulb





## COOLING CAPACITIES IN kW, 2 PIPE

EAT	EWT	ΔT	Size	61 AC			62 AC			63 AC			92 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			92 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
27°DB/19°CWB	5	3	Total	3.55	2.74	2.41	5.33	3.89	2.61	6.35	4.75	3.84	8.77	6.52	4.96	9.84	7.53	5.04	11.30	8.64	5.40
			Sensible	2.49	1.91	1.66	3.67	2.65	1.76	4.40	3.26	2.62	5.94	4.41	3.32	6.61	5.01	3.30	7.67	5.83	3.59
	5	5	Total	3.00	2.26	1.98	4.79	3.46	2.28	5.66	4.21	3.37	7.54	5.55	4.19	8.78	6.69	4.51	10.32	7.85	4.88
			Sensible	2.26	1.70	1.48	3.42	2.46	1.61	4.09	3.01	2.40	5.38	3.97	2.97	6.13	4.62	3.05	7.23	5.47	3.35
	5	7	Total	2.20	1.50	1.29	4.22	2.99	1.91	4.92	3.60	2.78	6.25	4.52	3.33	7.32	5.48	3.68	9.08	6.83	4.18
			Sensible	1.93	1.37	1.18	3.15	2.23	1.43	3.73	2.72	2.11	4.81	3.51	2.59	5.50	4.09	2.68	6.69	5.03	3.04
	5	9	Total	1.49	1.00	0.88	3.53	2.44	1.49	4.04	2.77	2.06	5.03	3.43	2.57	5.53	3.97	2.63	7.74	5.67	3.29
			Sensible	1.49	1.00	0.88	2.81	1.96	1.23	3.31	2.31	1.77	4.28	2.98	2.23	4.71	3.42	2.22	6.10	4.52	2.64
	7	3	Total	3.01	2.32	2.04	4.54	3.32	2.23	5.41	4.05	3.28	7.44	5.52	4.21	8.44	6.47	4.35	9.71	7.42	4.65
			Sensible	2.26	1.72	1.50	3.32	2.40	1.59	3.98	2.94	2.36	5.34	3.95	2.98	5.98	4.52	2.97	6.95	5.28	3.24
	7	5	Total	2.40	1.80	1.55	4.00	2.90	1.90	4.70	3.50	2.85	6.30	4.50	3.40	7.20	5.50	3.70	8.61	6.60	4.05
			Sensible	2.01	1.49	1.31	3.10	2.20	1.41	3.70	2.70	2.10	4.80	3.60	2.70	5.50	4.10	2.70	6.48	4.85	3.00
	7	7	Total	1.69	1.16	1.00	3.44	2.39	1.51	3.97	2.84	2.16	5.04	3.60	2.63	5.74	4.23	2.83	7.37	5.49	3.30
			Sensible	1.65	1.16	1.00	2.79	1.94	1.24	3.30	2.36	1.83	4.29	3.11	2.28	4.81	3.55	2.31	5.94	4.44	2.65
	7	9	Total	1.21	0.81	0.74	2.72	1.85	1.12	3.05	2.08	1.52	3.94	2.74	2.06	4.27	3.02	2.07	6.09	4.39	2.46
			Sensible	1.21	0.81	0.74	2.41	1.67	1.03	2.79	1.94	1.46	3.65	2.58	1.93	4.06	2.90	1.95	5.35	3.93	2.25
	9	3	Total	2.44	1.87	1.64	3.77	2.74	1.83	4.47	3.35	2.70	6.11	4.53	3.45	6.95	5.33	3.60	8.01	6.12	3.84
			Sensible	2.02	1.53	1.34	2.97	2.13	1.41	3.57	2.63	2.10	4.76	3.52	2.65	5.34	4.02	2.64	6.23	4.72	2.89
	9	5	Total	1.82	1.32	1.14	3.24	2.33	1.49	3.81	2.80	2.21	5.00	3.63	2.74	5.70	4.31	2.91	6.90	5.19	3.20
			Sensible	1.73	1.27	1.10	2.72	1.94	1.24	3.24	2.36	1.87	4.28	3.13	2.35	4.80	3.58	2.34	5.75	4.32	2.61
	9	7	Total	1.37	0.95	0.82	2.63	1.81	1.12	3.08	2.12	1.61	4.02	2.80	2.07	4.42	3.22	2.13	5.79	4.24	2.48
			Sensible	1.37	0.95	0.82	2.39	1.66	1.04	2.86	1.98	1.53	3.77	2.65	1.96	4.17	3.05	2.00	5.23	3.87	2.28
	9	9	Total	0.90	0.66	0.61	2.12	1.42	0.87	2.37	1.59	1.17	3.06	2.15	1.62	3.34	2.33	1.69	4.91	3.50	1.96
			Sensible	0.90	0.66	0.61	2.04	1.39	0.86	2.33	1.59	1.17	3.01	2.14	1.61	3.34	2.33	1.68	4.68	3.39	1.19
	11	3	Total	1.83	1.37	1.19	2.99	2.16	1.44	3.55	2.64	2.12	4.81	3.57	2.70	5.41	4.14	2.80	6.29	4.78	2.98
			Sensible	1.76	1.31	1.14	2.63	1.88	1.24	3.15	2.31	1.84	4.22	3.12	2.34	4.69	3.52	2.30	5.51	4.16	2.52
	11	5	Total	1.46	1.05	0.91	2.49	1.73	1.10	2.94	2.12	1.62	3.95	2.87	2.12	4.38	3.25	2.18	5.37	3.99	2.40
			Sensible	1.46	1.05	0.91	2.35	1.63	1.04	2.81	2.02	1.56	3.77	2.75	2.02	4.18	3.10	2.03	5.05	3.77	2.25
	11	7	Total	1.09	0.73	0.63	2.04	1.40	0.85	2.38	1.64	1.24	3.18	2.19	1.64	3.52	2.54	1.67	4.67	3.39	1.94
			Sensible	1.09	0.73	0.63	2.00	1.38	0.85	2.36	1.64	1.24	3.16	2.19	1.64	3.52	2.54	1.67	4.56	3.34	1.92
	11	9	Total	0.65	0.51	0.48	1.66	1.10	0.68	1.83	1.20	0.90	2.38	1.67	1.26	2.46	1.79	1.36	3.95	2.76	1.56
			Sensible	0.65	0.51	0.48	1.66	1.10	0.68	1.83	1.20	0.90	2.38	1.67	1.26	2.46	1.79	1.36	3.95	2.76	1.56
	13	3	Total	1.48	1.09	0.94	2.29	1.63	1.05	2.75	2.01	1.59	3.78	2.78	2.09	4.14	3.10	2.07	4.89	3.66	2.20
			Sensible	1.48	1.09	0.94	2.26	1.60	1.03	2.73	1.98	1.57	3.71	2.73	2.05	4.07	3.04	1.99	4.82	3.60	2.15
	13	5	Total	1.19	0.85	0.73	1.98	1.35	0.85	2.37	1.66	1.27	3.18	2.30	1.66	3.53	2.60	1.72	4.37	3.23	1.90
			Sensible	1.19	0.85	0.73	1.98	1.35	0.85	2.37	1.66	1.27	3.18	2.30	1.66	3.53	2.60	1.72	4.37	3.23	1.90
13	7	Total	0.77	0.52	0.48	1.62	1.10	0.67	1.86	1.27	0.94	2.41	1.70	1.28	2.73	1.93	1.33	3.79	2.72	1.53	
		Sensible	0.77	0.52	0.48	1.62	1.10	0.67	1.86	1.27	0.94	2.41	1.70	1.28	2.73	1.93	1.33	3.79	2.72	1.53	
13	9	Total	0.46	0.38	0.35	1.24	0.82	0.50	1.27	0.84	0.64	1.70	1.18	0.92	1.64	1.31	1.03	3.02	2.01	1.18	
		Sensible	0.46	0.38	0.35	1.24	0.82	0.50	1.27	0.84	0.64	1.70	1.18	0.92	1.64	1.31	1.03	3.02	2.01	1.18	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

COOLING CAPACITIES IN kW, 2 PIPE

EAT	EWT	ΔT	Size	61 AC			62 AC			63 AC			92 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			92 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
29°DB/21°CWB	5	3	Total	4.34	3.36	2.96	6.49	4.72	3.18	7.73	5.80	4.68	10.76	8.01	6.08	11.94	9.14	6.11	13.68	10.46	6.54
			Sensible	2.72	2.09	1.83	4.01	2.90	1.94	4.81	3.57	2.87	6.55	4.87	3.67	7.24	5.50	3.64	8.36	6.37	3.93
	5	5	Total	3.85	2.93	2.57	5.93	4.31	2.88	7.00	5.25	4.22	9.45	7.02	5.32	10.97	8.39	5.64	12.74	9.72	6.07
			Sensible	2.51	1.90	1.66	3.77	2.72	1.80	4.50	3.33	2.67	5.97	4.42	3.33	6.81	5.16	3.42	7.95	6.04	3.72
	5	7	Total	3.17	2.33	2.03	5.31	3.83	2.48	6.24	4.62	3.67	8.13	5.91	4.46	9.68	7.34	4.95	11.60	8.79	5.45
			Sensible	2.24	1.66	1.44	3.51	2.51	1.62	4.17	3.06	2.43	5.41	3.95	2.96	6.25	4.70	3.10	7.46	5.64	3.44
	5	9	Total	2.16	1.39	1.20	4.69	3.28	2.08	5.41	3.90	2.98	6.67	4.73	3.42	7.92	5.85	3.91	10.19	7.62	4.62
			Sensible	1.86	1.29	1.11	3.22	2.26	1.45	3.79	2.74	2.11	4.80	3.47	2.54	5.54	4.08	2.66	6.88	5.16	3.10
	7	3	Total	3.80	2.94	2.60	5.70	4.16	2.80	6.78	5.09	4.12	9.42	7.01	5.33	10.55	8.09	5.43	12.08	9.24	5.80
			Sensible	2.49	1.91	1.67	3.67	2.65	1.77	4.39	3.26	2.62	5.95	4.41	3.33	6.61	5.02	3.31	7.65	5.82	3.59
	7	5	Total	3.26	2.47	2.17	5.11	3.71	2.47	6.03	4.51	3.62	8.07	5.99	4.53	9.47	7.25	4.89	11.05	8.42	5.27
			Sensible	2.28	1.72	1.49	3.42	2.46	1.62	4.08	3.01	2.41	5.38	3.98	2.99	6.16	4.66	3.08	7.22	5.48	3.36
	7	7	Total	2.49	1.78	1.54	4.51	3.24	2.07	5.27	3.88	3.06	6.74	4.87	3.66	7.99	6.03	4.05	9.76	7.37	4.55
			Sensible	1.98	1.45	1.25	3.15	2.25	1.45	3.74	2.74	2.16	4.83	3.52	2.63	5.56	4.16	2.72	6.70	5.05	3.07
	7	9	Total	1.60	1.06	0.92	3.83	2.65	1.64	4.38	3.04	2.29	5.36	3.68	2.73	6.14	4.42	2.91	8.29	6.12	3.63
			Sensible	1.57	1.06	0.92	2.85	1.98	1.26	3.35	2.36	1.82	4.28	3.03	2.25	4.81	3.51	2.27	6.11	4.54	2.69
	9	3	Total	3.23	2.50	2.20	4.86	3.55	2.39	5.78	4.34	3.52	7.98	5.94	4.53	9.06	6.97	4.69	10.38	7.95	5.00
			Sensible	2.26	1.73	1.51	3.32	2.39	1.59	3.98	2.94	2.36	5.34	3.96	2.98	5.98	4.53	2.99	6.94	5.27	3.24
	9	5	Total	2.62	1.97	1.72	4.29	3.10	2.04	5.06	3.76	3.01	6.69	4.92	3.72	7.85	6.00	4.06	9.24	7.03	4.39
			Sensible	2.03	1.52	1.32	3.07	2.20	1.44	3.67	2.70	2.15	4.82	3.55	2.66	5.50	4.14	2.72	6.49	4.91	3.00
	9	7	Total	1.82	1.26	1.09	3.67	2.59	1.64	4.26	3.10	2.37	5.37	3.85	2.81	6.27	4.67	3.14	7.87	5.89	3.58
			Sensible	1.69	1.21	1.04	2.79	1.96	1.26	3.31	2.41	1.86	4.29	3.12	2.30	4.87	3.61	2.35	5.95	4.45	2.67
	9	9	Total	1.28	0.85	0.75	2.88	1.98	1.19	3.28	2.23	1.64	4.20	2.85	2.14	4.54	3.22	2.15	6.46	4.68	2.65
			Sensible	1.28	0.85	0.75	2.43	1.69	1.05	2.86	1.98	1.50	3.75	2.59	1.93	4.13	2.98	1.96	5.36	3.95	2.28
	11	3	Total	2.62	2.02	1.78	4.00	2.93	1.97	4.75	3.57	2.89	6.52	4.84	3.70	7.47	5.75	3.89	8.58	6.57	4.14
			Sensible	2.03	1.54	1.34	2.97	2.14	1.42	3.56	2.63	2.11	4.75	3.52	2.65	5.34	4.04	2.65	6.22	4.72	2.89
	11	5	Total	1.92	1.40	1.21	3.45	2.48	1.60	4.06	3.00	2.38	5.31	3.86	2.92	6.14	4.67	3.17	7.35	5.55	3.44
			Sensible	1.75	1.29	1.11	2.72	1.94	1.25	3.25	2.38	1.89	4.27	3.13	2.34	4.82	3.61	2.36	5.74	4.32	2.62
	11	7	Total	1.41	0.99	0.85	2.80	1.92	1.20	3.24	2.25	1.71	4.19	2.96	2.17	4.68	3.43	2.29	6.07	4.47	2.64
			Sensible	1.41	0.99	0.85	2.42	1.67	1.06	2.87	2.01	1.55	3.79	2.70	1.97	4.20	3.09	2.02	5.21	3.88	2.29
	11	9	Total	0.97	0.67	0.62	2.20	1.48	0.89	2.45	1.66	1.21	3.17	2.22	1.66	3.50	2.44	1.73	5.06	3.61	2.01
			Sensible	0.97	0.67	0.62	2.05	1.40	0.87	2.36	1.62	1.21	3.04	2.16	1.62	3.44	2.44	1.68	4.68	3.40	1.93
	13	3	Total	1.96	1.50	1.32	3.16	2.30	1.53	3.75	2.81	2.26	5.10	3.78	2.87	5.79	4.44	3.02	6.69	5.09	3.20
			Sensible	1.79	1.35	1.17	2.63	1.88	1.24	3.15	2.32	1.85	4.20	3.10	2.33	4.70	3.53	2.31	5.50	4.16	2.53
	13	5	Total	1.48	1.07	0.92	2.61	1.84	1.16	3.07	2.23	1.73	4.09	2.97	2.23	4.59	3.44	2.32	5.60	4.18	2.53
			Sensible	1.48	1.07	0.92	2.36	1.66	1.06	2.82	2.04	1.59	3.77	2.76	2.05	4.19	3.11	2.03	5.04	3.76	2.25
13	7	Total	1.13	0.77	0.66	2.09	1.44	0.88	2.46	1.69	1.27	3.29	2.23	1.68	3.62	2.62	1.73	4.76	3.46	2.00	
		Sensible	1.13	0.77	0.66	2.01	1.39	0.86	2.40	1.66	1.27	3.20	2.20	1.65	3.56	2.59	1.70	4.55	3.34	1.94	
13	9	Total	0.66	0.52	0.49	1.68	1.12	0.69	1.88	1.24	0.92	2.42	1.70	1.29	2.60	1.83	1.38	3.99	2.82	1.58	
		Sensible	0.66	0.52	0.49	1.68	1.12	0.69	1.88	1.24	0.92	2.42	1.70	1.29	2.60	1.83	1.38	3.99	2.82	1.58	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb



COOLING CAPACITIES IN kW , 4 PIPE

EAT	EWT	ΔT	Size	61 AC			62AC			63 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V
23°DB/17°CWb	5	3	Total	2,75	2,08	1,80	3,78	2,97	2,21	4,72	3,80	3,09	7,40	5,60	3,52	8,91	7,47	4,25
			Sensible	1,99	1,48	1,26	2,63	2,03	1,48	3,34	2,63	2,12	5,05	3,79	2,37	6,10	5,03	2,85
	5	5	Total	2,02	1,52	1,34	3,18	2,47	1,81	3,58	2,85	2,20	6,08	4,52	2,61	7,39	6,26	3,32
			Sensible	1,68	1,24	1,06	2,34	1,79	1,29	2,80	2,18	1,70	4,44	3,28	1,95	5,41	4,47	2,42
	5	7	Total	1,43	1,08	0,97	2,43	1,83	1,36	1,93	1,54	1,19	4,45	3,02	1,58	5,61	4,77	2,10
			Sensible	1,39	1,03	0,90	1,96	1,48	1,07	1,90	1,50	1,17	3,69	2,57	1,42	4,58	3,79	1,82
	5	9	Total	1,09	0,83	0,76	1,58	1,17	0,93	1,16	1,06	0,90	2,73	1,88	1,08	3,59	3,08	1,32
			Sensible	1,09	0,83	0,76	1,49	1,11	0,85	1,16	1,06	0,90	2,61	1,83	1,07	3,38	2,83	1,31
	7	3	Total	2,17	1,65	1,43	3,08	2,41	1,80	3,80	3,06	2,47	6,00	4,54	2,82	7,23	6,08	3,43
			Sensible	1,74	1,29	1,10	2,31	1,78	1,29	2,92	2,29	1,84	4,41	3,30	2,05	5,35	4,39	2,47
	7	5	Total	1,52	1,14	1,01	2,49	1,88	1,40	2,61	2,02	1,51	4,66	3,41	1,84	5,73	4,85	2,41
			Sensible	1,45	1,08	0,93	2,02	1,51	1,10	2,33	1,78	1,37	3,79	2,78	1,59	4,66	3,83	2,01
	7	7	Total	1,16	0,88	0,78	1,70	1,25	0,94	1,41	1,14	0,92	3,08	2,13	1,14	4,06	3,39	1,48
			Sensible	1,16	0,88	0,78	1,58	1,17	0,86	1,41	1,14	0,92	2,90	2,02	1,13	3,79	3,09	1,44
	7	9	Total	0,82	0,64	0,60	1,12	0,87	0,69	0,88	0,81	0,70	1,90	1,33	0,85	2,52	2,16	1,01
			Sensible	0,82	0,64	0,60	1,12	0,87	0,68	0,88	0,81	0,70	1,90	1,33	0,85	2,52	2,15	1,01
	9	3	Total	1,60	1,18	1,03	2,38	1,86	1,39	2,89	2,31	1,85	4,61	3,48	2,12	5,57	4,70	2,60
			Sensible	1,51	1,10	0,93	1,98	1,52	1,10	2,49	1,94	1,55	3,79	2,83	1,74	4,60	3,77	2,10
	9	5	Total	1,22	0,91	0,80	1,73	1,31	0,97	1,79	1,38	1,07	3,34	2,39	1,29	4,15	3,51	1,65
			Sensible	1,22	0,91	0,80	1,62	1,22	0,89	1,79	1,37	1,07	3,14	2,25	1,25	3,89	3,20	1,57
	9	7	Total	0,89	0,67	0,61	1,21	0,89	0,68	0,92	0,83	0,71	2,15	1,50	0,84	2,81	2,33	1,07
			Sensible	0,89	0,67	0,61	1,21	0,89	0,68	0,92	0,83	0,71	2,15	1,50	0,84	2,81	2,31	1,07
	9	9	Total	0,57	0,49	0,47	0,79	0,62	0,50	0,61	0,58	0,51	1,15	0,92	0,62	1,55	1,41	0,74
			Sensible	0,57	0,49	0,47	0,79	0,62	0,50	0,61	0,58	0,51	1,15	0,92	0,62	1,55	1,41	0,74
	11	3	Total	1,26	0,93	0,81	1,70	1,31	0,95	2,07	1,61	1,26	3,32	2,46	1,46	4,04	3,39	1,81
			Sensible	1,26	0,93	0,81	1,64	1,25	0,89	2,05	1,58	1,25	3,18	2,35	1,41	3,88	3,18	1,73
	11	5	Total	0,94	0,71	0,63	1,26	0,94	0,68	1,25	0,99	0,77	2,45	1,66	0,93	3,08	2,55	1,19
			Sensible	0,94	0,71	0,63	1,26	0,94	0,68	1,25	0,99	0,77	2,45	1,66	0,93	3,08	2,55	1,19
	11	7	Total	0,60	0,47	0,44	0,81	0,63	0,50	0,63	0,58	0,50	1,38	0,96	0,61	1,83	1,57	0,73
			Sensible	0,60	0,47	0,44	0,81	0,63	0,50	0,63	0,58	0,50	1,38	0,96	0,61	1,83	1,57	0,73
	11	9	Total	0,39	0,34	0,33	0,46	0,37	0,31	0,38	0,37	0,33	0,70	0,59	0,41	0,81	0,81	0,48
			Sensible	0,39	0,34	0,33	0,46	0,37	0,31	0,38	0,37	0,33	0,70	0,59	0,41	0,81	0,81	0,48
	13	3	Total	0,98	0,73	0,63	1,30	0,95	0,69	1,57	1,20	0,92	2,51	1,84	1,04	3,10	2,54	1,33
			Sensible	0,98	0,73	0,63	1,30	0,95	0,69	1,57	1,20	0,92	2,51	1,84	1,04	3,10	2,54	1,33
	13	5	Total	0,65	0,49	0,45	0,89	0,65	0,49	0,71	0,60	0,51	1,59	1,12	0,61	2,13	1,70	0,79
			Sensible	0,65	0,49	0,45	0,89	0,65	0,49	0,71	0,60	0,51	1,59	1,12	0,61	2,13	1,70	0,79
13	7	Total	0,37	0,32	0,30	0,47	0,38	0,31	0,37	0,36	0,31	0,68	0,57	0,39	0,81	0,79	0,46	
		Sensible	0,37	0,32	0,30	0,47	0,38	0,31	0,37	0,36	0,31	0,68	0,57	0,39	0,81	0,79	0,46	
13	9	Total	0,21	0,18	0,18	0,16	0,14	0,14	0,17	0,17	0,15	0,32	0,28	0,20	0,37	0,38	0,23	
		Sensible	0,21	0,18	0,18	0,16	0,14	0,14	0,17	0,17	0,15	0,32	0,28	0,20	0,37	0,38	0,23	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

## COOLING CAPACITIES IN kW , 4 PIPE

EAT	EWT	ΔT	Size	61 AC			62AC			63 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
25°DB/19° CWB	5	3	Total	3,53	2,67	2,30	4,74	3,73	2,77	6,03	4,84	3,95	9,34	7,09	4,48	11,22	9,40	5,36
			Sensible	2,24	1,67	1,42	2,93	2,28	1,67	3,76	2,97	2,41	5,68	4,28	2,69	6,86	5,67	3,23
	5	5	Total	2,83	2,13	1,86	4,15	3,25	2,41	4,93	3,95	3,16	8,02	6,07	3,68	9,68	8,17	4,52
			Sensible	1,95	1,44	1,23	2,68	2,07	1,51	3,29	2,58	2,06	5,10	3,82	2,33	6,18	5,12	2,84
	5	7	Total	2,01	1,53	1,37	3,48	2,63	1,96	3,45	2,64	1,97	6,48	4,74	2,50	7,99	6,76	3,31
			Sensible	1,62	1,20	1,04	2,37	1,78	1,30	2,63	1,99	1,53	4,42	3,24	1,82	5,44	4,50	2,32
	5	9	Total	1,41	1,07	0,98	2,58	1,91	1,42	1,60	1,36	1,14	4,44	2,96	1,47	5,85	5,03	1,99
			Sensible	1,34	1,00	0,89	1,96	1,46	1,06	1,60	1,33	1,11	3,55	2,45	1,33	4,52	3,76	1,71
	7	3	Total	2,95	2,24	1,94	4,03	3,18	2,37	5,08	4,09	3,34	7,95	6,04	3,81	9,55	8,02	4,57
			Sensible	1,99	1,48	1,26	2,62	2,03	1,49	3,35	2,64	2,14	5,06	3,80	2,39	6,11	5,04	2,86
	7	5	Total	2,21	1,67	1,47	3,42	2,67	1,97	3,93	3,14	2,49	6,56	4,92	2,93	7,93	6,73	3,63
			Sensible	1,70	1,25	1,07	2,36	1,81	1,31	2,85	2,23	1,77	4,47	3,32	2,01	5,42	4,48	2,46
	7	7	Total	1,51	1,14	1,02	2,67	2,02	1,50	2,16	1,71	1,29	4,90	3,46	1,74	6,14	5,23	2,30
			Sensible	1,41	1,05	0,91	2,01	1,51	1,10	2,01	1,57	1,22	3,76	2,71	1,48	4,65	3,84	1,88
	7	9	Total	1,13	0,85	0,75	1,72	1,25	0,99	1,18	1,07	0,91	2,92	2,01	1,10	3,96	3,34	1,40
			Sensible	1,13	0,85	0,74	1,54	1,14	0,86	1,18	1,07	0,91	2,71	1,90	1,08	3,57	2,92	1,35
	9	3	Total	2,34	1,78	1,54	3,28	2,58	1,94	4,08	3,30	2,68	6,45	4,89	3,07	7,75	6,54	3,71
			Sensible	1,75	1,30	1,10	2,30	1,78	1,30	2,93	2,30	1,85	4,42	3,31	2,07	5,35	4,40	2,49
	9	5	Total	1,60	1,20	1,04	2,67	2,06	1,52	2,88	2,28	1,71	5,06	3,74	2,03	6,18	5,24	2,72
			Sensible	1,47	1,09	0,91	2,03	1,54	1,11	2,39	1,86	1,42	3,83	2,83	1,63	4,68	3,86	2,08
	9	7	Total	1,19	0,90	0,76	1,83	1,36	1,00	1,50	1,20	0,94	3,39	2,27	1,21	4,36	3,72	1,57
			Sensible	1,19	0,90	0,76	1,61	1,21	0,88	1,50	1,20	0,94	3,05	2,08	1,16	3,85	3,19	1,47
	9	9	Total	0,85	0,65	0,61	1,16	0,90	0,71	0,89	0,82	0,71	2,00	1,39	0,85	2,63	2,28	1,02
			Sensible	0,85	0,65	0,61	1,15	0,89	0,69	0,89	0,82	0,71	2,00	1,39	0,85	2,62	2,22	1,02
	11	3	Total	1,70	1,28	1,12	2,53	1,99	1,49	3,10	2,49	2,00	4,93	3,74	2,30	5,95	5,03	2,80
			Sensible	1,50	1,11	0,94	1,99	1,53	1,11	2,51	1,96	1,57	3,79	2,83	1,75	4,61	3,78	2,12
	11	5	Total	1,24	0,93	0,79	1,86	1,40	1,04	1,91	1,45	1,11	3,56	2,58	1,37	4,43	3,74	1,76
			Sensible	1,24	0,93	0,78	1,66	1,24	0,90	1,87	1,42	1,10	3,18	2,33	1,28	3,92	3,22	1,61
	11	7	Total	0,91	0,69	0,62	1,25	0,91	0,70	0,97	0,84	0,72	2,22	1,56	0,86	2,99	2,44	1,10
			Sensible	0,91	0,69	0,62	1,24	0,91	0,69	0,97	0,84	0,72	2,21	1,56	0,86	2,93	2,36	1,10
	11	9	Total	0,58	0,49	0,47	0,81	0,63	0,51	0,62	0,59	0,51	1,22	0,93	0,63	1,66	1,49	0,75
			Sensible	0,58	0,49	0,47	0,81	0,63	0,51	0,62	0,59	0,51	1,22	0,93	0,63	1,66	1,49	0,75
	13	3	Total	1,27	0,94	0,79	1,79	1,39	1,03	2,15	1,69	1,34	3,48	2,60	1,55	4,22	3,56	1,92
			Sensible	1,27	0,94	0,79	1,66	1,27	0,91	2,06	1,60	1,28	3,18	2,36	1,43	3,88	3,18	1,75
	13	5	Total	0,96	0,72	0,64	1,28	0,96	0,70	1,31	1,03	0,80	2,51	1,70	0,96	3,15	2,63	1,22
			Sensible	0,96	0,72	0,64	1,28	0,95	0,70	1,31	1,03	0,80	2,50	1,70	0,96	3,12	2,57	1,22
	13	7	Total	0,62	0,47	0,44	0,84	0,65	0,50	0,64	0,59	0,51	1,45	1,01	0,61	1,91	1,63	0,73
			Sensible	0,62	0,47	0,44	0,84	0,65	0,50	0,64	0,59	0,51	1,45	1,01	0,61	1,91	1,63	0,73
	13	9	Total	0,40	0,34	0,33	0,47	0,38	0,32	0,38	0,37	0,33	0,71	0,59	0,41	0,82	0,82	0,49
			Sensible	0,40	0,34	0,33	0,47	0,38	0,32	0,38	0,37	0,33	0,71	0,59	0,41	0,82	0,82	0,49

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

COOLING CAPACITIES IN kW , 4 PIPE

EAT	EWT	ΔT	Size	61 AC			62 AC			63 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
27°DB/17°CWB	5	3	Total	3.53	2.67	2.30	4.73	3.73	2.77	6.03	4.84	3.95	9.34	7.09	4.47	11.22	9.39	5.36
			Sensible	2.54	1.89	1.60	3.30	2.56	1.86	4.25	3.34	2.70	6.37	4.79	3.01	7.70	6.33	3.60
	5	5	Total	2.83	2.13	1.86	4.17	3.26	2.43	5.00	3.99	3.19	8.05	6.08	3.69	9.74	8.20	4.53
			Sensible	2.25	1.66	1.41	3.04	2.34	1.70	3.78	2.95	2.36	5.79	4.33	2.65	7.03	5.79	3.22
	5	7	Total	2.12	1.59	1.37	3.56	2.69	2.00	3.67	2.84	2.14	6.65	4.88	2.59	8.19	6.92	3.44
			Sensible	1.96	1.45	1.22	2.75	2.06	1.50	3.15	2.40	1.86	5.15	3.78	2.15	6.32	5.20	2.73
	5	9	Total	1.70	1.24	1.11	2.72	2.03	1.50	2.20	1.76	1.37	5.01	3.38	1.77	6.36	5.41	2.34
			Sensible	1.70	1.24	1.08	2.33	1.74	1.27	2.20	1.75	1.37	4.38	3.02	1.68	5.48	4.53	2.14
	7	3	Total	2.95	2.24	1.94	4.02	3.18	2.37	5.09	4.09	3.34	7.94	6.03	3.81	9.54	8.01	4.56
			Sensible	2.30	1.70	1.45	2.98	2.31	1.68	3.83	3.00	2.43	5.74	4.31	2.70	6.95	8.01	4.56
	7	5	Total	2.20	1.65	1.45	3.50	2.70	2.00	4.10	3.25	2.60	6.70	5.00	3.00	8.08	6.80	3.80
			Sensible	2.00	1.48	1.27	2.70	2.10	1.50	3.30	2.60	2.05	5.10	3.80	2.20	6.29	5.20	2.70
	7	7	Total	1.73	1.29	1.15	2.79	2.10	1.56	2.70	2.08	1.58	5.22	3.78	1.99	6.48	5.48	2.58
			Sensible	1.73	1.27	1.10	2.38	1.79	1.30	2.61	2.00	1.55	4.51	3.29	1.82	5.57	4.57	2.30
	7	9	Total	1.43	1.08	0.97	2.06	1.51	1.13	1.71	1.39	1.14	3.74	2.59	1.39	4.94	4.09	1.81
			Sensible	1.43	1.08	0.97	1.95	1.44	1.07	1.71	1.39	1.14	3.57	2.51	1.39	4.68	3.80	1.78
	9	3	Total	2.34	1.78	1.54	3.31	2.60	1.95	4.15	3.34	2.71	6.49	4.92	3.09	7.82	6.58	3.73
			Sensible	2.05	1.52	1.28	2.67	2.05	1.49	3.41	2.67	2.15	5.11	3.82	2.38	6.20	5.08	2.87
	9	5	Total	1.79	1.34	1.17	2.76	2.13	1.56	3.11	2.47	1.88	5.26	3.89	2.23	6.41	5.43	2.85
			Sensible	1.77	1.31	1.12	2.39	1.82	1.30	2.89	2.25	1.75	4.55	3.36	1.99	5.56	4.56	2.48
	9	7	Total	1.49	1.11	0.98	2.10	1.57	1.15	2.09	1.63	1.26	4.03	2.81	1.53	5.05	4.24	1.97
			Sensible	1.49	1.11	0.98	1.99	1.49	1.08	2.09	1.63	1.26	3.85	2.69	1.51	4.80	3.95	1.91
	9	9	Total	1.16	0.88	0.79	1.58	1.16	0.89	1.23	1.09	0.92	2.84	1.99	1.10	3.73	3.07	1.41
			Sensible	1.16	0.88	0.79	1.58	1.16	0.89	1.23	1.09	0.92	2.84	1.99	1.10	3.73	3.04	1.41
11	3	Total	1.83	1.37	1.18	2.61	2.04	1.53	3.24	2.59	2.08	5.07	3.83	2.36	6.13	5.16	2.88	
		Sensible	1.81	1.34	1.14	2.35	1.80	1.30	2.99	2.33	1.87	4.50	3.35	2.07	5.47	4.47	2.50	
11	5	Total	1.53	1.14	0.99	2.11	1.57	1.15	2.44	1.86	1.43	4.06	2.98	1.67	5.01	4.17	2.13	
		Sensible	1.53	1.14	0.99	2.04	1.51	1.10	2.44	1.85	1.43	3.92	2.87	1.63	4.83	3.96	2.06	
11	7	Total	1.21	0.91	0.81	1.63	1.21	0.89	1.58	1.25	0.97	3.13	2.15	1.20	3.99	3.31	1.53	
		Sensible	1.21	0.91	0.81	1.63	1.21	0.89	1.58	1.25	0.97	3.13	2.15	1.20	3.99	3.29	1.53	
11	9	Total	0.88	0.67	0.62	1.19	0.91	0.70	0.91	0.83	0.72	2.08	1.45	0.86	2.73	2.32	1.03	
		Sensible	0.88	0.67	0.62	1.19	0.91	0.70	0.91	0.83	0.72	2.08	1.45	0.86	2.73	2.32	1.03	
13	3	Total	1.56	1.15	0.99	2.01	1.54	1.12	2.55	1.97	1.57	3.93	2.92	1.78	4.79	3.95	2.17	
		Sensible	1.56	1.15	0.99	2.00	1.53	1.09	2.55	1.97	1.57	3.88	2.88	1.76	4.74	3.87	2.14	
13	5	Total	1.25	0.94	0.82	1.66	1.24	0.90	1.93	1.45	1.13	3.25	2.36	1.31	4.03	3.32	1.64	
		Sensible	1.25	0.94	0.82	1.66	1.24	0.90	1.93	1.45	1.13	3.25	2.36	1.31	4.03	3.32	1.64	
13	7	Total	0.93	0.70	0.63	1.27	0.93	0.70	1.05	0.87	0.73	2.28	1.61	0.88	3.07	2.45	1.13	
		Sensible	0.93	0.70	0.63	1.27	0.93	0.70	1.05	0.87	0.73	2.28	1.61	0.88	3.07	2.45	1.13	
13	9	Total	0.59	0.49	0.47	0.83	0.65	0.52	0.63	0.60	0.52	1.30	0.94	0.63	1.75	1.55	0.75	
		Sensible	0.59	0.49	0.47	0.83	0.65	0.52	0.63	0.60	0.52	1.30	0.94	0.63	1.75	1.55	0.75	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

## COOLING CAPACITIES IN kW , 4 PIPE

EAT	EWT	ΔT	Size	61 AC			62AC			63 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 HEE			62 HEE			63 HEE			93 HEE			94 HEE		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	9 V	6 V	2 V
29°DB/19°CWB	5	3	Total	4.38	3.31	2.84	5.78	4.54	3.38	7.42	5.95	4.86	11.41	8.67	5.49	13.70	11.45	6.57
			Sensible	2.80	2.08	1.77	3.61	2.80	2.05	4.66	3.68	2.98	6.99	5.27	3.32	8.44	6.96	3.97
	5	5	Total	3.68	2.79	2.42	5.21	4.09	3.05	6.40	5.15	4.16	10.16	7.70	4.78	12.24	10.30	5.81
			Sensible	2.51	1.86	1.58	3.37	2.60	1.90	4.23	3.33	2.68	6.45	4.84	3.01	7.81	6.45	3.63
	5	7	Total	2.89	2.19	1.93	4.56	3.56	2.61	5.13	4.10	3.19	8.74	6.50	3.80	10.58	8.98	4.78
			Sensible	2.20	1.62	1.39	3.09	2.37	1.71	3.68	2.87	2.26	5.84	4.33	2.58	7.10	5.88	3.19
	5	9	Total	2.13	1.59	1.41	3.84	2.90	2.16	3.28	2.60	1.89	7.06	5.11	2.53	8.79	7.47	3.40
			Sensible	1.92	1.42	1.20	2.76	2.07	1.50	2.84	2.21	1.69	5.12	3.74	2.05	6.33	5.23	2.62
	7	3	Total	3.79	2.87	2.48	5.06	3.99	2.98	6.47	5.21	4.25	10.02	7.62	4.82	12.02	10.08	5.78
			Sensible	2.55	1.89	1.61	3.30	2.55	1.87	4.25	3.35	2.71	6.37	4.80	3.02	7.70	6.34	3.61
	7	5	Total	3.08	2.32	2.02	4.46	3.50	2.62	5.42	4.35	3.50	8.66	6.56	4.03	10.45	8.82	4.92
			Sensible	2.27	1.67	1.43	3.05	2.35	1.71	3.82	2.99	2.39	5.81	4.35	2.68	7.05	5.80	3.25
	7	7	Total	2.22	1.69	1.51	3.82	2.95	2.17	4.09	3.25	2.43	7.23	5.34	2.94	8.83	7.49	3.88
			Sensible	1.95	1.44	1.23	2.76	2.10	1.51	3.24	2.52	1.93	5.20	3.84	2.23	6.36	5.25	2.82
	7	9	Total	1.72	1.30	1.17	2.98	2.25	1.67	2.36	1.88	1.44	5.44	3.74	1.91	6.87	5.87	2.56
			Sensible	1.68	1.25	1.09	2.38	1.79	1.30	2.32	1.83	1.41	4.46	3.15	1.72	5.55	4.57	2.21
	9	3	Total	3.17	2.41	2.08	4.30	3.40	2.55	5.46	4.40	3.60	8.53	6.49	4.11	10.23	8.61	4.92
			Sensible	2.30	1.71	1.45	2.99	2.31	1.68	3.84	3.01	2.44	5.75	4.32	2.71	6.95	5.71	3.25
	9	5	Total	2.41	1.82	1.60	3.71	2.91	2.17	4.40	3.53	2.81	7.16	5.41	3.27	8.66	7.32	4.02
			Sensible	2.02	1.49	1.26	2.73	2.10	1.52	3.39	2.64	2.11	5.18	3.87	2.36	6.30	5.18	2.88
	9	7	Total	1.80	1.36	1.20	3.05	2.29	1.71	3.00	2.28	1.71	5.63	4.10	2.17	6.96	5.91	2.83
			Sensible	1.74	1.29	1.11	2.43	1.82	1.32	2.74	2.07	1.60	4.55	3.34	1.88	5.60	4.60	2.37
	9	9	Total	1.47	1.10	0.98	2.19	1.62	1.19	1.83	1.46	1.16	4.02	2.74	1.46	5.19	4.43	1.91
			Sensible	1.47	1.10	0.98	1.99	1.48	1.08	1.83	1.46	1.16	3.73	2.57	1.43	4.75	3.94	1.82
11	3	Total	2.52	1.92	1.67	3.52	2.79	2.09	4.44	3.59	2.92	6.96	5.29	3.34	8.36	7.06	4.01	
		Sensible	2.06	1.52	1.29	2.66	2.06	1.49	3.42	2.68	2.16	5.12	3.83	2.40	6.20	5.08	2.88	
11	5	Total	1.87	1.40	1.22	2.95	2.30	1.70	3.36	2.68	2.10	5.64	4.19	2.46	6.82	5.81	3.08	
		Sensible	1.79	1.32	1.13	2.41	1.84	1.32	2.94	2.29	1.81	4.58	3.38	2.04	5.57	4.57	2.50	
11	7	Total	1.52	1.13	1.00	2.21	1.66	1.23	2.18	1.70	1.31	4.22	3.00	1.61	5.28	4.47	2.06	
		Sensible	1.52	1.13	1.00	2.02	1.52	1.11	2.18	1.69	1.31	3.91	2.79	1.54	4.84	3.98	1.95	
11	9	Total	1.19	0.90	0.81	1.64	1.19	0.92	1.31	1.11	0.94	2.93	2.06	1.13	3.97	3.23	1.45	
		Sensible	1.19	0.90	0.81	1.62	1.19	0.90	1.31	1.11	0.94	2.91	2.06	1.13	3.89	3.11	1.45	
13	3	Total	1.90	1.43	1.22	2.77	2.17	1.63	3.44	2.77	2.24	5.41	4.10	2.55	6.51	5.50	3.10	
		Sensible	1.82	1.34	1.13	2.35	1.80	1.31	3.01	2.34	1.88	4.51	3.36	2.09	5.47	4.47	2.52	
13	5	Total	1.55	1.15	1.00	2.20	1.66	1.22	2.52	1.95	1.48	4.22	3.11	1.73	5.20	4.37	2.26	
		Sensible	1.55	1.15	1.00	2.06	1.54	1.11	2.48	1.91	1.46	3.95	2.90	1.65	4.85	3.97	2.12	
13	7	Total	1.24	0.93	0.82	1.67	1.24	0.91	1.66	1.30	1.01	3.25	2.20	1.23	4.09	3.43	1.57	
		Sensible	1.24	0.93	0.82	1.66	1.24	0.90	1.66	1.30	1.01	3.22	2.20	1.23	4.03	3.33	1.57	
13	9	Total	0.91	0.69	0.63	1.24	0.92	0.71	0.92	0.85	0.72	2.17	1.51	0.87	2.83	2.39	1.06	
		Sensible	0.91	0.69	0.63	1.24	0.92	0.71	0.92	0.85	0.72	2.17	1.51	0.87	2.83	2.39	1.06	

EAT : Entering Air temperature °C  
EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C  
WB : Wet bulb

DB : Dry bulb

HEATING CAPACITIES IN kW , 4 PIPES

EAT	EWT	ΔT	Size	61 AC			62AC			63 AC			93 AC			94 AC		
			Speed	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
			Size	61 AC			62AC			63 AC			93 AC			94 AC		
			Voltage	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V	10 V	6 V	2 V
19	50	5	Totale	1.21	0.92	0.79	4.10	3.28	2.31	4.39	3.73	3.21	7.33	5.67	3.82	9.24	7.32	4.64
	50	10	Totale	1.01	0.77	0.67	2.79	2.24	1.51	2.87	2.57	2.21	5.89	4.58	3.13	7.55	6.01	3.88
	60	5	Totale	1.67	1.26	1.08	5.89	4.67	3.26	6.36	5.34	4.56	10.22	7.87	5.26	12.86	10.16	6.39
	60	10	Totale	1.48	1.13	0.97	4.72	3.83	2.68	4.99	4.33	3.75	8.86	6.89	4.66	11.21	8.91	5.71
	70	5	Totale	2.13	1.61	1.38	7.69	6.06	4.22	8.35	6.96	5.91	13.11	10.07	6.70	16.47	13.00	8.13
	70	10	Totale	1.95	1.47	1.27	6.54	5.24	3.69	6.99	5.96	5.13	11.78	9.12	6.14	14.87	11.78	7.48
	80	5	Totale	2.60	1.96	1.68	9.49	7.45	5.17	10.34	8.58	7.27	16.00	12.27	8.14	20.09	15.84	9.86
	80	10	Totale	2.41	1.82	1.57	8.36	6.65	4.66	8.99	7.60	6.51	14.70	11.34	7.60	18.52	14.65	9.23
20	50	5	Totale	1.16	0.88	0.76	3.93	3.14	2.21	4.20	3.58	3.08	7.05	5.45	3.67	8.89	7.04	4.47
	50	10	Totale	0.97	0.74	0.64	2.61	2.08	1.42	2.68	2.38	2.05	5.60	4.35	2.98	7.20	5.72	3.70
	60	5	Totale	1.63	1.23	1.05	5.72	4.53	3.17	6.17	5.19	4.43	9.93	7.65	5.12	12.50	9.88	6.21
	60	10	Totale	1.44	1.09	0.94	4.56	3.69	2.58	4.81	4.18	3.61	8.58	6.68	4.52	10.86	8.63	5.54
	70	5	Totale	2.09	1.58	1.35	7.52	5.92	4.12	8.16	6.80	5.78	12.82	9.85	6.56	16.11	12.72	7.95
	70	10	Totale	1.90	1.44	1.24	6.37	5.10	3.60	6.80	5.80	5.00	11.50	8.90	6.00	14.51	11.50	7.30
	80	5	Totale	2.55	1.92	1.65	9.32	7.31	5.08	10.15	8.42	7.14	15.71	12.05	8.00	19.73	15.55	6.69
	80	10	Totale	2.37	1.79	1.54	8.19	6.52	4.57	8.81	7.44	6.37	14.42	11.12	7.45	18.16	14.36	9.05
21	50	5	Totale	1.12	0.85	0.73	3.75	3.01	2.12	4.02	3.42	2.95	6.76	5.24	3.53	8.53	6.76	4.30
	50	10	Totale	0.92	0.71	0.61	2.40	1.92	1.34	2.45	2.19	1.89	5.30	4.13	2.83	6.84	5.43	3.52
	60	5	Totale	1.58	1.19	1.03	5.54	4.40	3.07	5.98	5.03	4.30	9.65	7.43	4.97	12.14	9.60	6.04
	60	10	Totale	1.39	1.06	0.91	4.39	3.55	2.48	4.63	4.03	3.48	8.30	6.46	4.37	10.50	8.35	5.36
	70	5	Totale	2.04	1.54	1.32	7.34	5.79	4.03	7.96	6.65	5.65	12.54	9.63	6.41	15.75	12.43	7.77
	70	10	Totale	1.86	1.41	1.21	6.20	4.97	3.51	6.62	5.65	4.87	11.22	8.68	5.86	14.15	11.22	7.13
	80	5	Totale	2.50	1.89	1.62	9.14	7.18	4.98	9.96	8.26	7.00	15.42	11.83	7.85	19.37	15.27	9.51
	80	10	Totale	2.32	1.76	1.51	8.01	6.38	4.47	8.62	7.29	6.24	14.13	10.90	7.31	17.80	14.08	8.88

EAT : Entering Air temperature °C  
 EWT : Entering Water Temperature °C

ΔT : Available temperature difference °C

ACOUSTIC DATA

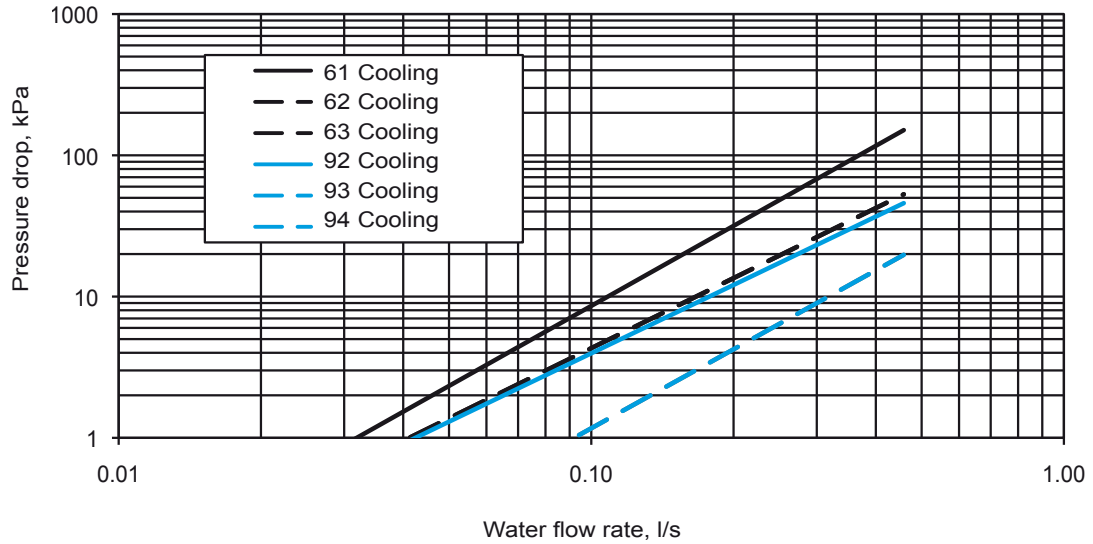
Size	AC motor	HEE motor	Frequencies Level (Hz) / Levels per octave (dB Lin)					TOTAL LEVEL		
	Speed	Voltage (V)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	Lw dB(A)	Lp dB(A)	NR dB(A)
61 AC/HEE	1	10	50	51	49	43	34	49	40	35
	2	6	43	44	40	30	23	40	31	26
	3	2	40	38	37	25	20	36	27	22
62 AC/HEE	1	10	55	54	53	48	40	53	44	39
	2	6	45	46	44	37	30	44	35	30
	3	2	38	38	33	27	26	35	26	21
63 AC/HEE	1	10	60	56	56	52	44	57	48	43
	2	6	52	50	48	42	34	48	39	34
	3	2	46	44	42	35	28	42	33	28
92 AC/HEE	1	10	52	53	48	41	32	49	40	35
	2	6	44	44	39	33	24	40	31	26
	3	2	41	39	33	28	21	35	26	21
93 AC/HEE	1	10	55	57	52	47	40	54	45	40
	2	6	49	50	45	39	32	46	37	32
	3	2	46	41	34	29	27	38	29	24
94 AC	1		63	61	58	53	47	59	50	45
	2		55	56	51	45	38	52	43	38
	3		47	44	38	31	28	40	31	26
94 HEE		10	61	63	60	55	49	61	52	47
		6	55	56	51	45	38	52	43	38
		2	47	44	38	31	28	40	31	26

Sound pressure level and NR values are based on a hypothetical sound attenuation for the room of - 9dB(A)

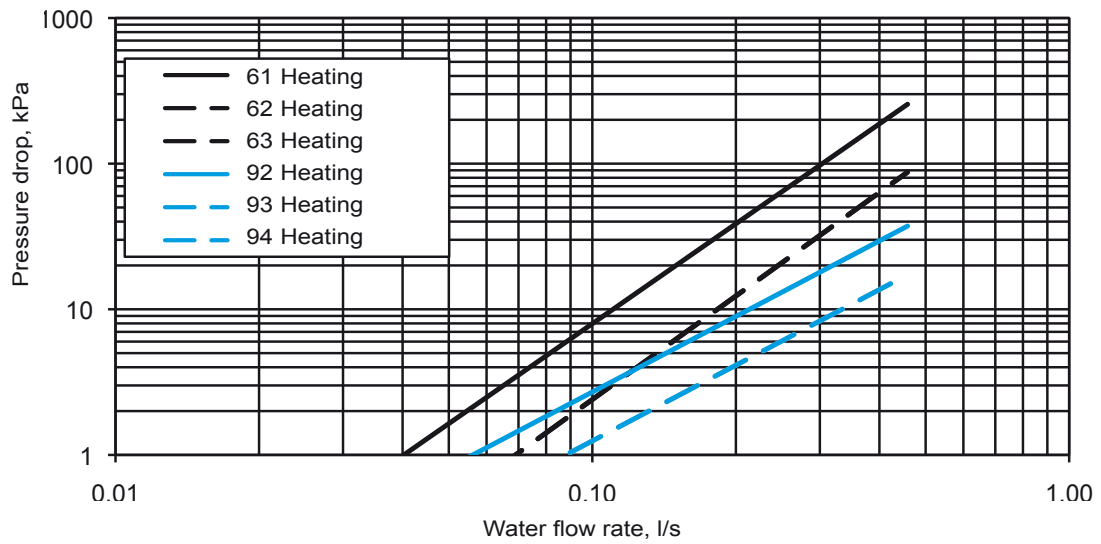


## COIL PRESSURE DROPS

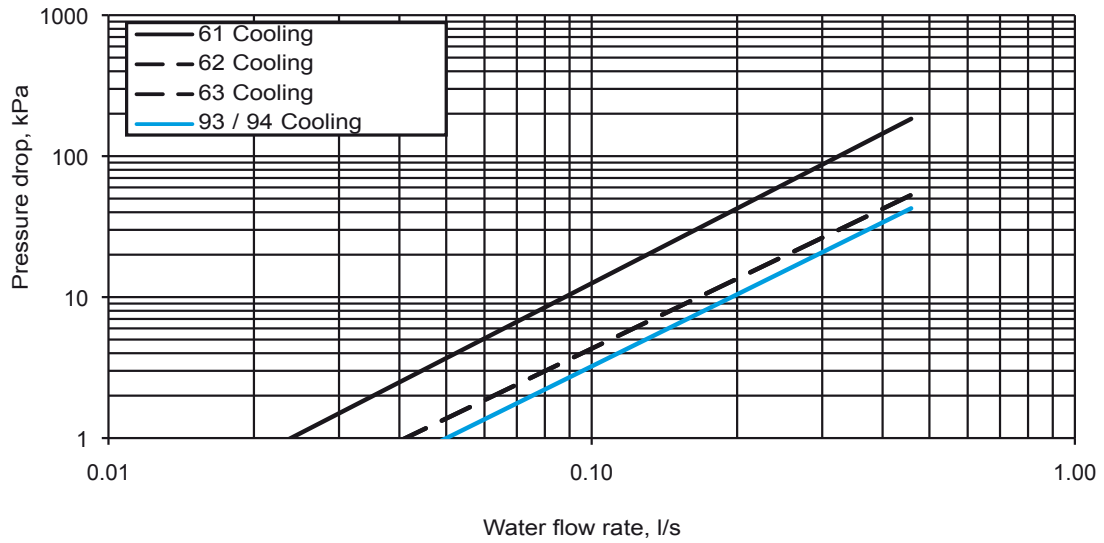
### Two-pipe, Cooling



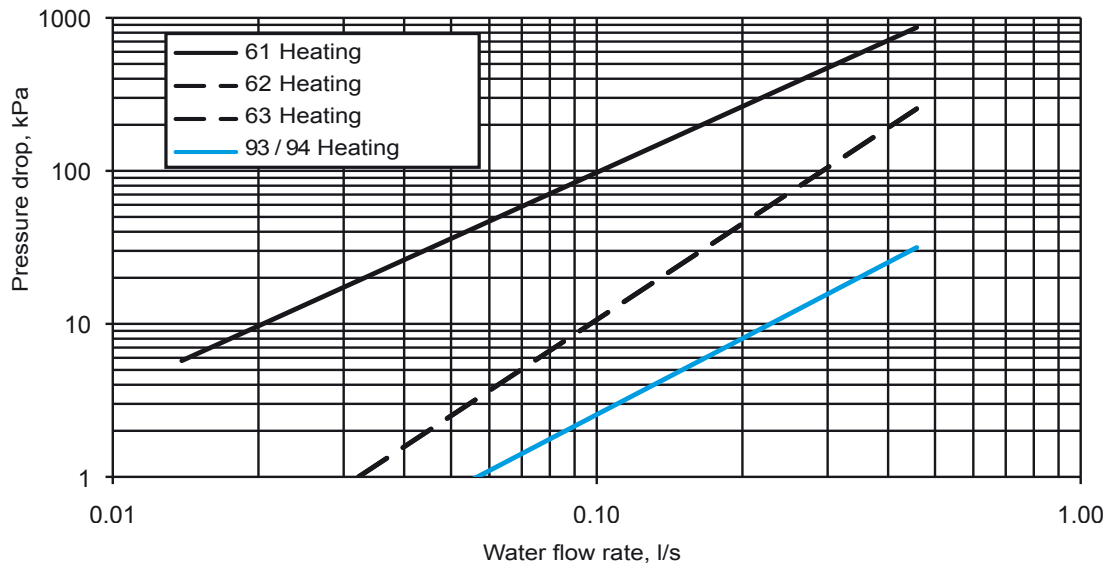
### Two-pipe, Heating



### Four-pipe units, Cooling



### Four-pipe units, Heating



## AIR THROW (meters)

MELODY2	Louvres all open		
	High speed	Medium speed	Low speed
61	3.8	3.2	2.7
62	4.0	3.4	2.8
63	4.8	4.1	3.4
92	3.0	2.6	2.1
93	3.4	2.9	2.4
94	4.3	3.7	3.0

Notes:

1. The louvres were adjusted to use the Coanda effect to obtain an air flow pattern that adheres as closely as possible and parallel to the ceiling.
2. The air throw is defined as the distance at which air flow speed falls to 0,2 m/s, when the air flow leaves the unit parallel to the ceiling.
3. The values are to be considered as indicative, as they may vary according to the type of ceiling, room dimensions and even the furniture used.

## OPERATING LIMITS

Water circuit	Maximum water-side pressure: 1400 kPa (142 m WG)	Minimum entering water temperature: 5°C
		Maximum entering water temperature: 80°C
Indoor temperature		Minimum temperature: 5°C
		Maximum temperature: 32°C for units with electric heaters
Power supply	Nominal operating limits	230 V - 1 ph - 50/60 Hz
		Min.207 - Max253 V for units without electric heaters
		Min.216 - Max244 V for units with electric heaters

This document is non-contractual. As part of its policy of continual product improvement, CIAT reserves the right to make any technical modification it feels appropriate without prior notification.

### Head office

700 Avenue Jean Falconnier - B.P. 14  
 01350 - Culoz - France  
 Tel.: +33 (0)4 79 42 42 42  
 Fax: +33 (0)4 79 42 42 10  
 www.ciat.com

