



AirTrojan[®]

1 WAY CASSETTE FAN COIL UNIT



Unit description

KM1 1-way cassette fan coils are terminals of a hydronic system for installation in false ceilings. They can be used with chilled or hot water to form an air conditioning system.

The air flow range: 200 - 600 CFM.

The output available range: 1.9 - 4.7 KW in the standard configuration.

Unit composition

- 1-way discharge decorative panel in ABS material;
- Motor drive auto-swing louvers;
- Synthetic moveable and washable air filter;
- High efficiency coils made from 3/8" copper tubes & hydrophilic aluminium fins;
- Air purging vent;
- Integral 700mm head condensate drain pump;
- With 3-speed motor;
- Wireless remote controller
- Wired wall pad (optional)
- Pre-stamped lateral hole for fresh air connection (optional)
- Rs485 remote communication serial port (optional)
- The on/off 3-way or 2-way valve (optional)



remote controller wired wall pad

1-WAY CASSETTE FAN COILS
2 PIPE UNIT
MODEL: FP-xxKM1

model code		34	51	68	80	85	102
Total cooling capacity							
speed high	kW	1.9	2.7	3.6	4.0	4.5	4.7
speed medium	kW	1.5	2.1	2.8	3.3	3.4	3.6
speed low	kW	1.0	1.6	2.1	2.6	2.7	2.8
Sensible cooling capacity							
speed high	kW	1.3	1.9	2.5	2.8	3.2	3.3
speed medium	kW	1.1	1.6	2.1	2.3	2.5	2.6
speed low	kW	0.8	1.3	1.7	1.8	2.0	2.1
Water flow Rate	l/h	327	464	619	688	774	808
Water pressure drop	kPa	10	15	18	20	22	25
Heating capacity							
speed high	kW	2.1	3.2	4.2	5.1	5.6	5.8
speed medium	kW	1.7	2.5	3.2	4.0	4.5	4.7
speed low	kW	1.2	1.9	2.5	3.0	3.4	3.6
Evaporator coil							
rows		2	2	3	3	3	3
FPI		15.9	15.9	15.9	15.9	15.9	15.9
copper diameter	inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
water content	l	0.65	0.65	0.92	0.92	1.07	1.07
Centrifugal fan blower							
fan blower diameter	mm	Φ142	Φ142	Φ142	Φ142	Φ155	Φ155
fan blower nr.		2	2	2	2	2	2
Electrical power							
power input	W	45	54	62	70	70	85
running current	A	0.20	0.24	0.28	0.31	0.31	0.38
Air flow rate							
high speed	m ³ /h	340	510	680	800	850	1,020
medium speed	m ³ /h	270	400	520	650	640	760
low speed	m ³ /h	190	300	400	500	490	600
Sound pressure (1m)							
high speed	dB(A)	39	39	40	42	44	45
medium speed	dB(A)	36	36	37	39	40	41
low speed	dB(A)	30	30	31	37	36	37
Unit dimensions							
Lenth	mm	850	850	850	850	850	850
Width	mm	400	400	400	400	420	420
Hight	mm	235	235	235	235	235	235
Panel dimensions							
Lenth	mm	1045	1045	1045	1045	1045	1045
Width	mm	465	465	465	465	465	465
Hight	mm	30	30	30	30	30	30
Net weight	kg	23	23	24	24	25	25
Water connection (FPT)	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical power supply	220-240V/1Phase/50(60)HZ						

Cooling:
Entering air temperature: Dry bulb 27°C, Wet bulb 19°C;
Inlet water temp. 7°C; Outlet water temp. 12°C;

Heating:
Entering air temperature: 20°C; Inlet water temp. 50°C;
Same water flow rate as for the cooling;



2 WAY CASSETTE FAN COIL UNIT



Unit description

KM2 2-way cassette fan coils are terminals of a hydronic system for installation in false ceilings. They can be used with chilled or hot water to form an air conditioning system.

The air flow range: 260 - 1000 CFM.

The output available range: 3.0 - 9.0 KW in the standard configuration.

Unit composition

- 2-way discharge decorative panel composed of ABS, steel, aluminium parts;
- Motor drive auto-swing louvers;
- Synthetic moveable and washable air filter;
- High efficiency coils made from 3/8" copper tubes & hydrophilic aluminium fins;
- Air purging vent;
- Integral 700mm head condensate drain pump;
- With 3-speed motor;
- Wireless remote controller
- Wired wall pad (optional)
- Pre-stamped lateral hole for fresh air connection (optional)
- Rs485 remote communication serial port (optional)
- The on/off 3-way or 2-way valve (optional)



remote controller



wired wall pad

2-WAY CASSETTE FAN COILS
2 PIPE UNIT
MODEL: FP-xxKM2

model code		45	51	68	85	102	136	170
Total cooling capacity								
speed high	kW	3.00	3.80	4.10	4.50	5.40	7.20	9.00
speed medium	kW	2.20	3.20	3.40	3.50	4.10	5.70	7.65
speed low	kW	1.85	2.75	2.85	2.70	3.20	4.40	6.90
Sensible cooling capacity								
speed high	kW	2.40	2.70	3.00	3.20	3.80	5.00	7.00
speed medium	kW	1.65	2.20	2.60	2.60	3.10	4.30	6.26
speed low	kW	1.40	1.85	1.95	2.20	2.60	3.50	5.50
Water flow Rate	l/h	516	653	705	774	929	1,238	1,548
Water pressure drop	kPa	2	2.5	4.5	12	14	15	16
Heating capacity								
speed high	kW	4.0	5.4	5.5	5.3	6.3	8.4	12.3
speed medium	kW	3.2	4.1	4.3	4.0	4.7	6.5	10.5
speed low	kW	2.7	3.2	3.3	3.0	3.7	5.0	9.2
Evaporator coil								
rows		2	2	2	2	2	2	2
FPI		15.9	15.9	15.9	12.7	12.7	12.7	15.9
copper diameter	inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
water content	l	1.4	1.4	1.4	1.7	1.7	1.7	2.64
Centrifugal fan blower								
fan blower diameter	mm	Φ315	Φ315	Φ315	Φ155	Φ155	Φ155	Φ315
fan blower nr.		1	1	1	2	2	2	2
Electrical power								
power input	W	54	58	64	70	85	110	195
running current	A	0.24	0.27	0.29	0.31	0.38	0.49	0.89
Air flow rate								
high speed	m ³ /h	450	510	680	850	1,020	1,360	1,700
medium speed	m ³ /h	360	410	520	640	765	1,050	1,350
low speed	m ³ /h	300	350	400	490	600	800	1,100
Sound pressure (1m)								
high speed	dB(A)	34	39	43	43	44	45	59
medium speed	dB(A)	30	33	37	39	40	42	56
low speed	dB(A)	29	29	31	35	36	37	51
Unit dimensions								
Lenth	mm	581	581	581	1,080	1,080	1,080	1,133
Width	mm	581	581	581	590	590	590	575
Hight	mm	290	290	290	290	290	290	290
Panel dimensions								
Lenth	mm	842	842	842	1342	1342	1342	1342
Width	mm	680	680	680	680	680	680	680
Hight	mm	46	46	46	46	46	46	46
Net weight	kg	28	28	28	47	47	47	47
Water connection (FPT)	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical power supply		220-240V/1Phase/50(60)HZ						

Cooling:
Entering air temperature: Dry bulb 27°C, Wet bulb 19°C;
Inlet water temp. 7°C; Outlet water temp. 12°C;

Heating:
Entering air temperature: 20°C; Inlet water temp. 50°C;
Same water flow rate as for the cooling;



4 WAY CASSETTE FAN COIL UNIT



Unit description

KM44-way cassette fan coils are terminals of a hydronic system for installation in false ceilings. They can be used with chilled and/or hot water to form an air conditioning system.

The air flow range: 200 - 1700 CFM.
The output available range: 2.0 - 15.3 KW in the standard configuration.

2 versions:

KM4-2T 2 pipe connections with chilled/hot water
KM4-4T 4 pipe connections with chilled and hot water

Unit composition

Air grille-module (cassette panel assembly)

Aesthetic panel design, in ABS material with high mechanical characteristics and resistance to ageing, with synthetic washable and removable air filter, motor-drive louvers.

Unit body casing

Made of galvanized steel sheet metal, with pre-formed expanded polystyrene air passages suitable shaped to allow passage of air, thickness enough for thermal and acoustical insulation.

Heat exchanger

The high efficiency coils, made from 3/8" copper tubes and high exchange surface area aluminium hydrophilic fins, are 100% tested against leaks with dried air at 30 bars. With 3/4" pipe connections and air vent.

Condensate recovery tray

In thermoforming high density expanded polystyrene, covered with a vacuum forming polyvinyl chloride, fitted with a condensates draining pump and a safety float.

Condensate drain pump

The drain pump with 700 mm of maximum head, with no return valve, integral with the unit and wired to the electronic board.

Float switch is connected with the electronic board to control the condensate and alarm level.

Fan motor assembly

The centrifugal balanced fan blower with 3-speed motor.

Electrical box

Composed of a box outside the unit which contains the electronic control board whose connection terminals are easily accessible.

Microprocessor control system

- wireless remote control
 - wired wall pad control*
 - master-slave network control*
 - BMS computer net control*
 - on/off valve control
 - electric heater control*
 - daily timer
 - weekly timer*
 - auto restart
 - operation mode control
 - auto-diagnose, protections and error code display
 - jumpers configurations on electronic board
 - DIP switches configurations on electronic board*
 - with room sensor & coil sensor
 - RS485 remote communication serial port*
- (Items with * mark are optional.)

CASSETTE FAN COILS



remote controller



wired wall pad

4-WAY CASSETTE FAN COILS

2 PIPE UNIT

MODEL: FP-xxKM4-2T

model code		34	51	68	85	102	136	170	204	238	289
Total cooling capacity											
speed high	kW	2.0	2.7	3.7	5.0	5.6	7.0	9.1	10.8	12.8	15.3
speed medium	kW	1.8	2.3	3.1	4.2	4.3	5.7	7.9	8.6	10.0	11.7
speed low	kW	1.6	1.8	2.6	3.5	3.6	4.5	6.0	6.8	8.0	9.3
Sensible cooling capacity											
speed high	kW	1.5	1.9	2.6	3.5	3.9	5.0	6.4	7.7	9.0	11.5
speed medium	kW	1.3	1.7	2.0	3.2	3.3	4.3	5.9	6.5	7.5	8.4
speed low	kW	1.2	1.4	1.8	2.8	2.9	3.6	4.8	5.4	6.4	6.4
Water flow Rate	l/h	344	464	636	860	963	1,204	1,565	1,857	2,201	2,631
Water pressure drop	kPa	7	9	11	16	18	19	17	19	22	36
Heating capacity											
speed high	kW	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	17.1
speed medium	kW	1.7	2.3	3.1	3.8	4.7	6.1	7.6	8.9	10.6	12.4
speed low	kW	1.1	1.5	2.1	2.8	3.1	4.1	5.1	6.1	7.1	9.4
Evaporator coil											
rows		2	2	2	2	2	2	2	2	2	2
FPI		12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
copper diameter	inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
water content	l	0.86	0.86	1.14	1.46	1.64	1.64	2.16	2.4	2.4	2.98
Centrifugal fan blower											
fan blower diameter	mm	Φ315	Φ315	Φ315	Φ380	Φ380	Φ380	Φ476	Φ476	Φ476	Φ530
fan blower nr.		1	1	1	1	1	1	1	1	1	1
Electrical power											
power input	W	39	54	58	71	84	127	170	175	234	330
running current	A	0.18	0.24	0.27	0.33	0.38	0.58	0.78	0.80	1.07	1.43
Air flow rate											
high speed	m ³ /h	340	510	680	850	1,020	1,360	1,700	2,040	2,380	2,890
medium speed	m ³ /h	280	390	520	640	790	1,030	1,290	1,500	1,800	2,100
low speed	m ³ /h	180	260	350	430	520	690	860	1,030	1,200	1,600
Sound pressure (1m)											
high speed	dB(A)	37	39	41	43	45	46	47	50	52	57
medium speed	dB(A)	34	36	38	39	42	43	44	46	48	52
low speed	dB(A)	30	32	35	36	38	39	40	42	44	48
Unit dimensions											
Lenth	mm	580	580	580	710	710	710	832	832	832	950
Width	mm	580	580	580	710	710	710	832	832	832	950
Hight	mm	250	250	250	290	290	290	290	290	290	290
Panel dimensions											
Lenth	mm	680	680	680	830	830	830	980	980	980	1140
Width	mm	680	680	680	830	830	830	980	980	980	1140
Hight	mm	30	30	30	30	30	30	30	30	30	30
Net weight	kg	24	24	24	26	26	26	33.5	33.5	33.5	52
Water connection (FPT)	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical power supply		220-240V/1Phase/50(60)HZ									

Cooling:
 Entering air temperature: Dry bulb 27°C, Wet bulb 19°C;
 Inlet water temp. 7°C; Outlet water temp. 12°C;

Heating:
 Entering air temperature: 20°C; Inlet water temp. 50°C;
 Same water flow rate as for the cooling;

4-WAY CASSETTE FAN COILS
4 PIPE UNIT
MODEL: FP-xxKM4-4T

model code		68	85	102	136	170	204	238	289
Total cooling capacity									
speed high	kW	2.6	3.1	3.6	4.8	6.0	7.0	8.4	10.3
speed medium	kW	2.0	2.4	2.8	3.7	4.7	6.0	6.5	7.5
speed low	kW	1.4	1.8	2.1	3.0	3.6	4.6	5.0	5.7
Sensible cooling capacity									
speed high	kW	1.8	2.2	2.5	3.4	4.2	4.9	5.9	8.5
speed medium	kW	1.5	1.8	2.1	2.8	3.5	4.5	4.9	6.2
speed low	kW	1.1	1.4	1.7	2.4	2.9	3.7	4.0	4.7
Chilled water flow rate	l/h	447	533	619	825	1,032	1,204	1,445	1,771
Chilled water pressure drop	kPa	11	17	22	24	27	30	35	40
Heating capacity									
speed high	kW	3.0	4.0	4.9	5.6	7.5	8.3	10.0	13.7
speed medium	kW	2.3	3.1	3.7	5.0	6.2	6.4	8.7	10.0
speed low	kW	1.6	2.4	2.9	4.0	4.8	4.9	6.7	7.6
Hot water flow rate	l/h	258	344	421	482	645	714	860	1,178
Evaporator coil									
rows		2	2	2	2	2	2	2	2
FPI		12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
copper diameter	inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
chilled water content	l	0.71	1.09	1.09	1.09	1.68	1.68	1.68	2.09
hot water content	l	0.43	0.55	0.55	0.55	0.72	0.72	0.72	0.89
Centrifugal fan blower									
fan blower diameter	mm	Φ315	Φ380	Φ380	Φ380	Φ476	Φ476	Φ476	Φ530
fan blower nr.		1	1	1	1	1	1	1	1
Electrical power									
power input	W	58	71	84	127	170	175	234	330
running current	A	0.27	0.33	0.38	0.58	0.78	0.80	1.07	1.43
Air flow rate									
high speed	m ³ /h	680	850	1,020	1,360	1,700	2,040	2,380	2,890
medium speed	m ³ /h	520	640	790	1,030	1,290	1,500	1,800	2,100
low speed	m ³ /h	350	430	520	690	860	1,030	1,200	1,600
Sound pressure (1m)									
high speed	dB(A)	41	43	45	46	47	50	52	57
medium speed	dB(A)	38	39	42	43	44	46	48	52
low speed	dB(A)	35	36	38	39	40	42	44	48
Unit dimensions									
Lenth	mm	580	710	710	710	832	832	832	950
Width	mm	580	710	710	710	832	832	832	950
Hight	mm	250	290	290	290	290	290	290	290
Panel dimensions									
Lenth	mm	680	830	830	830	980	980	980	1140
Width	mm	680	830	830	830	980	980	980	1140
Hight	mm	30	30	30	30	30	30	30	30
Net weight	kg	24	26	26	26	33.5	33.5	33.5	52
Water connection (FPT)	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical power supply	220-240V/1Phase/50(60)HZ								

Cooling:
Entering air temperature: Dry bulb 27°C, Wet bulb 19°C;
Inlet water temp. 7°C; Outlet water temp. 12°C;

Heating:
Entering air temperature: 20°C;
Inlet water temp. 70°C; Outlet water temp. 60°C;