

# PHYSICAL SPECIFICATIONS

## Fan Coil Units EC Motor

### AP.DS-DE Series

### Cooling/ Heating - 2 Rows & 3 Rows

Model		02	03	04	05	06	07	08	10	12	14		
<b>2 Rows</b>													
Air Flow m <sup>3</sup> /h	High Speed	357	532	683	875	1035	1272	1362	1704	2050	2390		
	Medium Speed	270	406	518	661	770	964	1016	1307	1552	1770		
	Low Speed	176	261	348	447	509	651	687	880	1009	1173		
Noise Level dB(A)	12Pa (DE)	35.5	36.5	38.5	42	44	46	46	48	49	52		
	30Pa (YE)	39.5	41	42.5	45.5	46	48	48	50	52	54		
	50Pa (YET)	42	44	45	47	48	50	50	52	54	56		
	70Pa (YEW)	44	46.5	48	49	50	53	53	54	56	58		
Sensible Cooling		kW		1.2	1.7	2.2	2.8	3.1	3.8	4.1	5.0	6.3	7.4
Total Cooling		kW		1.7	2.5	3.2	4.0	4.4	5.4	5.9	7.1	9.1	10.7
Heating		kW		3.0	4.4	5.7	7.0	8.0	9.7	10.7	12.6	15.6	18.1
Water Flowrate		l/min		4.9	7.2	9.2	11.5	12.6	15.5	16.9	20.4	26.1	30.7
Water Pressure Drop		kPa		7.9	13.2	22.1	30.0	16.4	26.3	17.3	23.3	40.0	50.0
Blower Qty				1	2	2	2	2	4	4	4	4	
Motor Qty				1	1	1	1	1	2	2	2	2	
Power Input (W)	12Pa (DE)	16	21	28	41	55	78	61	97	116	156		
	30Pa (YE)	21	28	39	54	65	92	77	115	145	182		
	50Pa (YET)	27	37	52	70	80	109	99	130	176	219		
	70Pa (YEW)	35	49	66	88	96	130	121	156	180	246		
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	10.3	11.9	16.8	17.6	18.5	21	26.6	29.2	33.8	35.6		
	Ceiling Concealed with R/A Plenum	14.4	16.4	21.7	22.9	24.2	27.3	33.7	36.6	42.5	45.1		
<b>3 Rows</b>													
Air Flow m <sup>3</sup> /h	High Speed	357	532	683	875	1035	1272	1362	1704	2050	2390		
	Medium Speed	270	406	518	661	770	964	1016	1307	1552	1770		
	Low Speed	176	261	348	447	509	651	687	880	1009	1173		
Noise Level dB(A)	12Pa (DE)	35.5	36.5	38.5	42	44	46.5	45.5	48	49	52		
	30Pa (YE)	39.5	41	42.5	45.5	46	48.6	47	50	52	54		
	50Pa (YET)	42	44	45	47	48	51	49	52	54	56		
	70Pa (YEW)	44	46.5	48	49	50	53.4	53	54	56	58		
Sensible Cooling		kW		1.6	2.1	2.7	3.3	3.9	4.6	5.1	6.4	7.6	8.8
Total Cooling		kW		2.4	3.2	4.1	4.9	5.8	6.8	7.7	9.4	11.1	13.1
Heating		kW		3.6	5.3	6.8	8.4	9.8	11.7	13.1	15.6	18.7	21.7
Water Flow rate		l/min		6.9	9.2	11.8	14.0	16.6	19.5	22.1	26.9	31.8	37.6
Water Pressure Drop		kPa		19.8	30.0	30.0	25.8	38.6	27.1	39.7	40.0	31.2	44.9
Blower Qty				1	2	2	2	2	4	4	4	4	
Motor Qty				1	1	1	1	1	2	2	2	2	
Power Input (W)	12Pa (DE)	16	21	28	41	55	78	61	97	116	156		
	30Pa (YE)	21	28	39	54	65	92	77	115	145	182		
	50Pa (YET)	27	37	52	70	80	109	99	130	176	219		
	70Pa (YEW)	35	49	66	88	96	130	121	156	180	246		
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	11.2	12.9	17.8	18.8	20.2	23.2	28.6	31.2	36.3	39.1		
	Ceiling Concealed with R/A Plenum	15.3	17.4	22.7	24.1	25.9	29.5	35.7	38.6	45.0	48.6		

- Notes:
- 1.) Motor is 220V/1pH/50-60Hz 3 speed motor as standard.
  - 2.) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
  - 3.) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
  - 4.) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
  - 5.) Refer to Page 19: Total Capacity Correction Factor for other airflow.
  - 6.) Noise data is based on high speed under lab testing condition.

### Cooling/ Heating - 4 Rows

Model		02	03	04	05	06	07	08	10	12	14
Noise Level dB(A)	DE- 12Pa, DEQ/ DEQE- 0Pa	36.5	37	41	43	44	46	46	48	50	52
	YE- 30Pa, YEQ/ HDPD- 20Pa	40	41	43	46	46	47	48	50	52	54
	YET- 50Pa, YEQE/ YETQE- 40Pa	42	44	46	47	49	50	50	52	54	56
	YEW- 70Pa, YEWQ/ YEWQE- 60Pa	43.5	46.4	46.4	48.5	49.7	52	53	54.3	55.1	57
Power Input (W)	DE- 12Pa, DEQ/ DEQE- 0Pa	16	21	28	41	55	78	61	97	116	156
	YE- 30Pa, YEQ/ HDPD- 20Pa	21	28	39	54	65	92	77	115	145	182
	YET- 50Pa, YEQE/ YETQE- 40Pa	27	37	52	70	80	109	99	130	176	219
	YEW- 70Pa, YEWQ/ YEWQE- 60Pa	35	49	66	88	96	130	121	156	180	246
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	12.1	13.9	18.8	20.0	21.4	24.8	30.8	33.2	38.8	42.6
	Ceiling Concealed with R/A Plenum	16.2	18.4	23.7	25.3	27.1	31.1	37.9	40.6	47.5	52.1

- Notes:
- 1.) Motor is 220V/1pH/50-60Hz 3 speed motor as standard.
  - 2.) 4 Rows model includes type 2+2 and 3+1. Refer to respective tables of 1 row, 2 rows and 3 rows cooling/ heating coils for the airflow, capacity, water flowrate and water pressure drop.
  - 3.) Noise data is based on high speed under lab testing condition.