

HIGH STATIC FAN COIL UNITS

YDFC



Product Introduction



INTRODUCTION

Johnson Controls YORK® YDFC fan coil units are ceiling mounted, high air flow, high static pressure air conditioning terminals. They are designed, developed and tested considering the tough weather conditions of the Gulf and their reliability makes them an ideal solution of year round air conditioning, heating and ventilating requirements.

YDFC units are designed and manufactured to the high standards that are expected of a product from Johnson Controls, having an up to date style and advanced structure. They are highly efficient, quiet, cost effective, safe, reliable and offer ease and economy in installation.

YDFC high air flow fan coils are available in 7 models, for customers to choose from for standard or district cooling applications, with multiple row types for each model (the 2 pipe system has 3, 4 and 5 rows and 4 pipe system has 3+1 and 4+1 rows). The air flow ranges from 680 m3/h to 3500 m3/h while the cooling capacity ranges from 6.89 kW to 21.21 kW and the external static pressure ranges from 0 Pa to 100 Pa up to size 12 and 0 Pa to 160 Pa for bigger sizes.

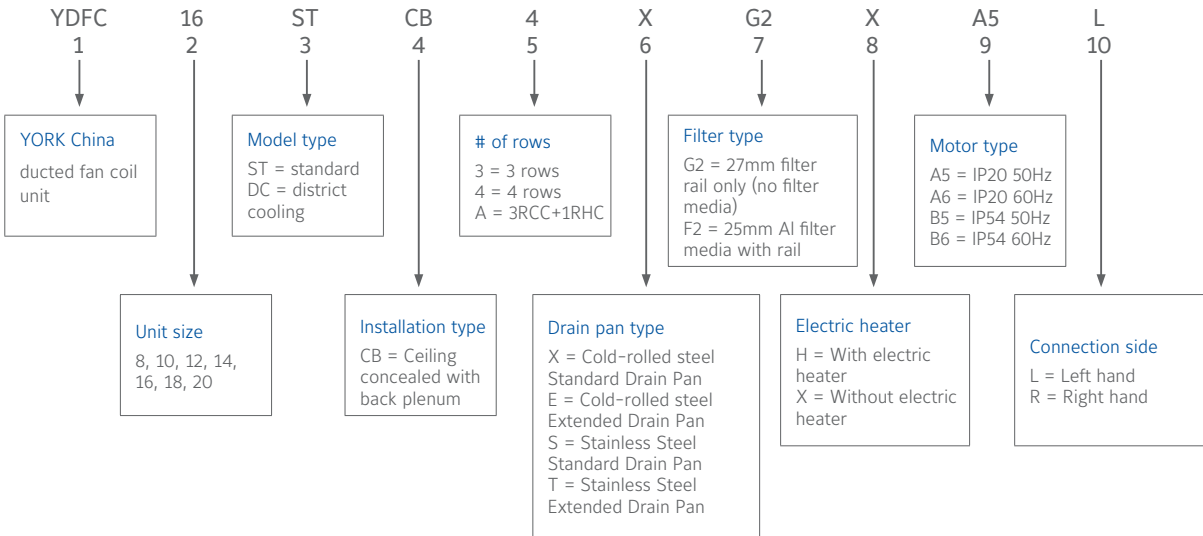
YDFC series fan coil units are certified by AHRI440 .

GENERAL	Coils	Standard Cooling Coil	[Digit - 3]	■
		District Cooling Coil	[Digit - 3]	■
		Cooling + Heating Coil	[Digit - 5]	■
OPTIONS	Motor Protection	IP 20 - 50 Hz	[Digit - 8]	■
		IP 20 - 60 Hz	[Digit - 8]	▲
	Drain Pan	Standard Drain Pan	[Digit - 6]	■
		Extended Drain Pan	[Digit - 6]	▲
	Motor Protection	IP 54 - 50 Hz	[Digit - 8]	▲
		IP 54 - 60 Hz	[Digit - 8]	▲
SPECIAL REQUESTS	Filters & Rails	27mm Rail for Filter	[Digit - 7]	■
		25mm Aluminum Filter + 27mm Rail	[Digit - 7]	▲
	Fin Protection	Blue Fin	[SQ - 1]	●
		Gold Fin	[SQ - 1]	●
		Copper Fin (Case to Case Basis)	[SQ - 1]	●
	Electric Heater	Heater 220/1/50 (with one terminal box)	[SQ - 2]	●
		Heater 220/1/60 (with one terminal box)	[SQ - 2]	●
	Powder Coating	Powder Coating of Casing	[SQ - 3]	●
	Drain Pan	Stainless Steel Drain Pan	[SQ - 4]	●
		Extended Stainless Steel Drain Pan	[SQ - 5]	●
	CE Mark	Additional Safety	[SQ - 6]	●

Legend : ■ Standard ▲ Option ● Special request

Nomenclature & Features

NOMENCLATURE

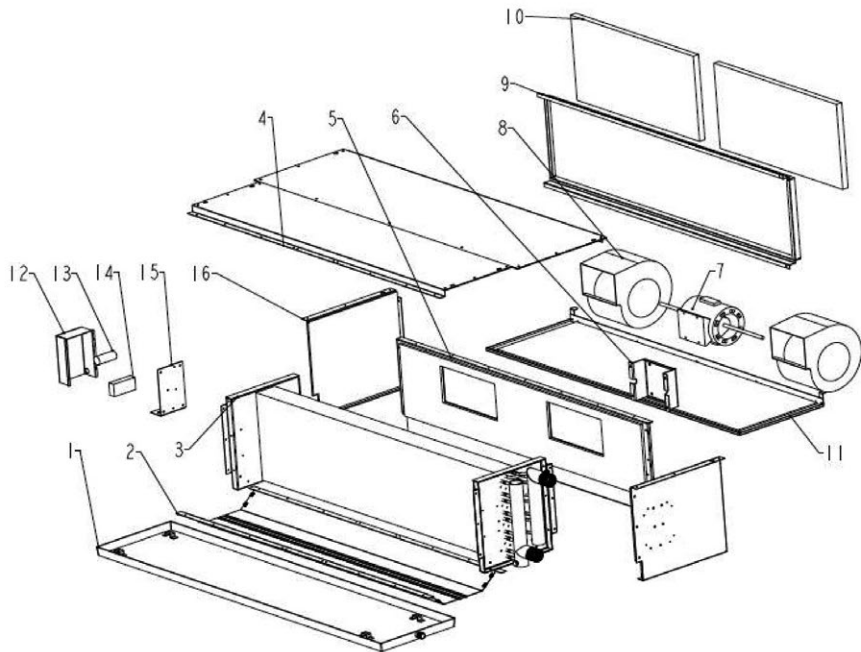


FEATURES & BENEFITS

Low noise level	Units have 3 fan speeds and operate very silently. Sound data of the units at all three speeds are available	Whisper quiet comfort condition results in satisfied occupants.
Large range of sizes	7 different sizes with 3 and 4 rows coils both in standard and district cooling applications to closely match load requirement and provide dehumidification	Better control over comfort conditions results in satisfied occupants
Compact size and low height	Height is restricted to 390 mm	Higher ceiling heights result in optimum comfort to occupants
High static fans	Units can work upto 160 Pa ESP	Covering high ESPs makes unit compatible for longer duct works
Easy installation	Threaded brass connector is provided for easy piping connection. Drain and purge valves are provided on all units to assist in commissioning	Reduce installation and commissioning cost.
Easy maintenance	Filters from units can be removed from any direction. The motor blower assembly can be easily removed for servicing at different locations. Cooling coil is easily accessible	Filters can be cleaned easily and frequently causing healthier comfort conditions. Lower maintenance costs.
Safety	"Motors are internally protected with UL recognized components. CE mark units are available as option.	May qualify for lower insurance premium. Valid for sales in EU countries with this option.

Product Details

EXPLODED VIEW



No.	Component	Material & Speci	Insulation Material	Quantity
1	Drain Pan	Cold Rolled Steel	Powder Coating & Arme ex Insulation	1
2	Coil Bottom Panel	Galvanized Steel	Powder Coating	1
3	Coil Assembly	Galvanized Steel	-----	1
4	Coil & Return Plenum Top Panel	Galvanized Steel	PE Insulation	1
5	Fan Deck Assembly	Galvanized Steel	-----	1
6	Motor Fixing Plate	Galvanized Steel	-----	1
7	Motor	220V / 1 Ph. / 50 Hz	IP20	1
8	Fan	Impeller galvanized steel, Casing galvanized steel	-----	2
9	Filter Flange	Galvanized Steel	PE Insulation	1
10	Filter	Aluminum	25mm Thickness	2
11	Return Plenum Fixing Beam	Galvanized Steel	PE Insulation	1
12	Control Box Top Plate	Galvanized Steel	-----	1
13	Motor Capacitor	-----	-----	1
14	Wiring Terminal	-----	Seven Seated	1
15	Control Box Bottom Plate	Galvanized Steel	-----	1
16	Return Plenum Sided Panel	Galvanized Steel	PE Insulation	2
17	Return Plenum Bottom Panel	Galvanized Steel	PE Insulation	1

Product Specifications

TECHNICAL SPECIFICATIONS

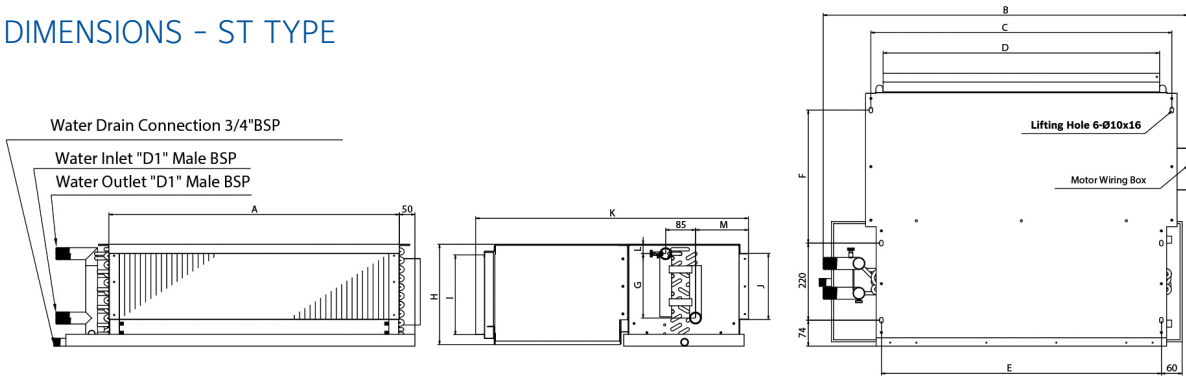
District Cooling								
MODEL [CB]		08	10	12	14	16	18	20
PERFORMANCE								
Nominal Air Flow	m³/h	1369	1777	2095	2471	2965	3124	3645
	CFM	805	1045	1232	1454	1744	1838	2144
Nominal Total Capacity	kW	6.28	8.15	9.44	10.12	12.61	13.64	14.67
	Btuh	21427	27808	32209	34529	43025	46540	50054
Water Flow Rate	m³/h	0.601	0.78	0.903	0.968	1.207	1.305	1.404
	G.P.M.(US)	2.65	3.43	3.98	4.26	5.31	5.75	6.18
Water Pressure Drop	kPa	46.1	53.9	41.9	26.8	40.6	47.1	46.2
	ft.wg.	15.44	18.06	14.04	8.98	13.60	15.78	15.48
COIL								
Face Area	sq.m	0.2	0.24	0.28	0.32	0.38	0.43	0.47
Face Velocity	m/s	1.90	2.06	2.08	2.14	2.17	2.02	2.15
MOTOR								
Type	3 - Speed Permanent Split Capacitor Motor							
No. of motor		1	1	1	1	1	1	1
Total Rating Input	watt	266	293	385	473	616	660	777
Rated Amp. (220-240/ 1 Ph. / 50 - 60 Hz.)	A	1.21	1.33	1.75	2.15	2.80	3.00	3.53
FAN								
Type	Centrifugal Fan (Forward Curve)							
No. of Fans		2	2	2	2	2	2	2
WATER CONTENT								
3 Rows		1.8	2.1	2.5	2.8	3.3	3.6	4
4 Rows		2.3	2.7	3.3	3.7	4.3	4.8	5.2

Standard Cooling								
MODEL [CB]		08	10	12	14	16	18	20
PERFORMANCE								
Nominal Air Flow	m³/h	1374	1806	2117	2486	2991	3200	3689
	CFM	808	1062	1245	1462	1759	1882	2170
Nominal Total Capacity	kW	6.28	8.31	9.72	11.35	12.64	14.31	16.24
	Btuh	21427	28354	33165	38726	43128	48826	55411
Water Flow Rate	m³/h	1.082	1.430	1.674	1.954	2.177	2.464	2.796
	G.P.M.(US)	4.76	6.30	7.37	8.60	9.59	10.85	12.31
Water Pressure Drop	kPa	19.4	35.8	34.5	30.5	30.2	40.0	49.7
	ft.wg.	6.50	11.99	11.56	10.22	10.12	13.40	16.65
COIL								
Face Area	sq.m	0.2	0.24	0.28	0.32	0.38	0.43	0.47
Face Velocity	m/s	1.91	2.09	2.10	2.16	2.19	2.07	2.18
MOTOR								
Type	3 - Speed Permanent Split Capacitor Motor							
No. of motors		1	1	1	1	1	1	1
Total Rating Input	watt	259	294	379	482	594	655	795
Rated Amp. (220-240/ 1 Ph. / 50 - 60 Hz.)	A	1.18	1.34	1.72	2.19	2.70	2.98	3.61
FAN								
Type	Centrifugal Fan (Forward Curve)							
No. of Fans		2	2	2	2	2	2	2
WATER CONTENT								
3 Rows		1.7	2	2.5	2.8	3.3	3.6	4
4 Rows		2.3	2.7	3.2	3.6	4.5	5	5.5

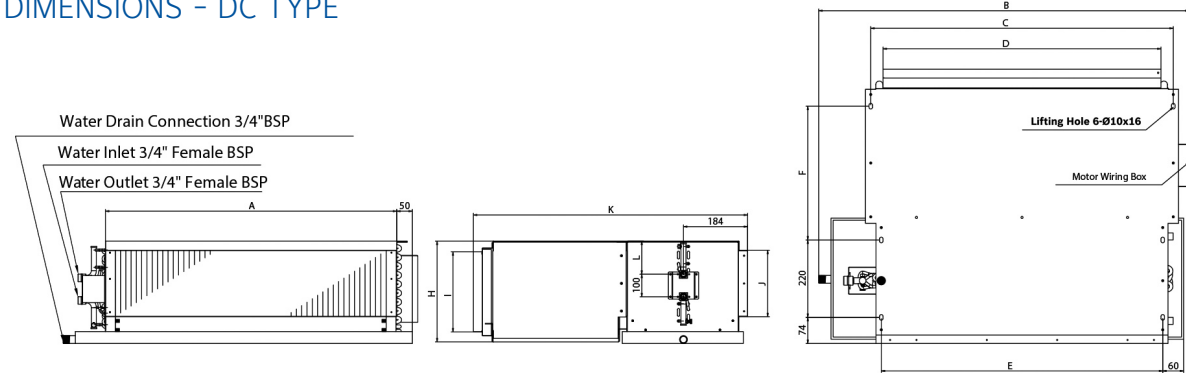
Cooling Capacity For 3 Row Coils at Entering Air Temperature = 24° C DB, 18° C WB
For Standard Cooling Coil: Entering Chilled Water Temperature = 7° C, Leaving Chilled Water Temperature = 12° C
Air Flow : Fan Speed = Medium, 220v /1 Ph. / 50 Hz, Under Dry Coil Conditions at 30 Pa External Static Pressure

Dimensional Data

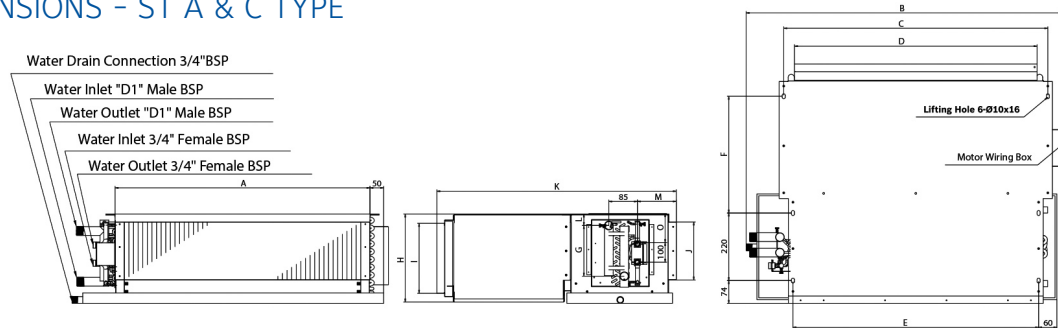
UNIT DIMENSIONS – ST TYPE



UNIT DIMENSIONS – DC TYPE



UNIT DIMENSIONS – ST A & C TYPE



Size	Type	A	B	B1	C	D	E	F	G	H	I	J	K	L	D1	M3R	M4R	N3+1	N4+1	O
08	ST	830	1050	1210	860	768	800	380	184	289	225	190	775	27	25	162	151	101	90	84
10		990	1210	1340	1020	928	960	380	184	289	225	190	775	27	25	162	151	101	90	84
12		990	1210	1340	1020	928	960	380	235	340	275	240	775	27	25	162	151	101	90	109
14		1120	1340	1480	1150	1058	1090	380	235	340	275	240	775	27	25	162	151	101	90	109
16		1120	1340	1480	1150	1058	1090	420	279	390	325	280	815	33	38.1	162	151	101	90	134
18		1260	1480	1610	1290	1198	1230	420	279	390	325	280	815	33	38.1	162	151	101	90	134
20		1390	1610	1710	1420	1328	1360	420	279	390	325	280	815	33	38.1	162	151	101	90	134
08	DC	830	1050	1210	860	768	800	380	-	289	225	190	775	83	19.05	184	184	-	-	-
10		990	1210	1340	1020	928	960	380	-	289	225	190	775	83	19.05	184	184	-	-	-
12		990	1210	1340	1020	928	960	380	-	340	275	240	775	108	19.05	184	184	-	-	-
14		1120	1340	1480	1150	1058	1090	380	-	340	275	240	775	108	19.05	184	184	-	-	-
16		1120	1340	1480	1150	1058	1090	420	-	390	325	280	815	134	19.05	184	184	-	-	-
18		1260	1480	1610	1290	1198	1230	420	-	390	325	280	815	134	19.05	184	184	-	-	-
20		1390	1610	1710	1420	1328	1360	420	-	390	325	280	815	134	19.05	184	184	-	-	-

Note:
(1) B is the length of drain pan. (2) B1 is length of unit inding extended drain pan. (3) All dimensions are in mm.

Dimensional Data

UNIT DIMENSIONS AND WEIGHTS

Model	Width	Length		Height	Weight			
		Standard Drain Pan	Extended Drain Pan		3 Rows	4 Rows	3+1 Rows	4+1 Rows
	mm	mm	mm	mm	kg	kg	kg	kg
08	775	1050	1210	295	36	49	41	54
10	775	1210	1340	295	38	51	43	56
12	775	1210	1340	345	45	59	50	64
14	775	1340	1480	345	50	65	56	70
16	815	1340	1480	396	61	77	67	83
18	815	1480	1610	396	74	92	81	98
20	815	1610	1710	396	78	97	85	103



Performance Data

PERFORMANCE RATINGS

YDFC | STANDARD | CB | 3 ROW | 2 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W
				Total kW	Sensible kW	DB °C	WB °C			
YDFC 08 ST CB 3 X G2 X A5 L	High	20	1461	6.13	4.44	14.6	13.4	1.055	28.4	309
		50	1423	6.03	4.36	14.5	13.4	1.038	27.5	298
		100	1252	5.59	3.99	14.1	13.1	0.962	24.0	262
	Medium	20	1401	5.85	4.31	14.7	13.6	1.007	21.9	294
		50	1374	5.78	4.25	14.7	13.5	0.996	21.4	283
		100	1213	5.36	3.89	14.3	13.3	0.923	18.7	247
	Low	20	831	4.23	2.84	12.4	11.7	0.729	10.4	138
		50	796	4.13	2.76	12.2	11.6	0.712	10.0	125
		100	721	3.88	2.57	11.9	11.3	0.668	9.0	98
YDFC 10 ST CB 3 X G2 X A5 L	High	20	2108	8.52	6.09	14.7	13.4	1.466	70.9	389
		50	1933	8.05	5.73	14.5	13.3	1.386	64.0	341
		100	1636	7.30	5.10	14.0	12.9	1.256	53.5	300
	Medium	20	2002	7.76	5.70	14.9	13.7	1.337	57.0	339
		50	1853	7.42	5.40	14.7	13.5	1.278	52.5	314
		100	1541	6.67	4.76	14.1	13.1	1.148	43.3	265
	Low	20	1098	5.92	4.02	12.9	12.2	1.020	35.8	203
		50	1012	5.64	3.80	12.7	11.9	0.970	32.8	180
		100	864	5.13	3.40	12.1	11.5	0.884	27.7	152
YDFC 12 ST CB 3 X G2 X A5 L	High	20	2405	9.96	7.11	14.6	13.4	1.715	41.7	465
		50	2258	9.59	6.81	14.4	13.3	1.651	38.9	451
		100	2003	8.95	6.27	14.0	13.0	1.542	34.4	423
	Medium	20	2294	9.64	6.89	14.5	13.4	1.660	39.4	437
		50	2159	9.30	6.60	14.4	13.2	1.602	36.9	422
		100	1906	8.68	6.07	14.0	12.9	1.494	32.6	396
	Low	20	1257	6.01	4.27	13.4	12.7	1.036	16.8	172
		50	1139	5.65	3.97	13.2	12.5	0.973	15.1	165
		100	943	4.99	3.45	12.6	12.1	0.860	12.2	133
YDFC 14 ST CB 3 X G2 X A5 L	High	20	2905	11.77	8.50	14.9	13.6	2.028	37.0	660
		50	2745	11.27	8.13	14.7	13.5	1.941	34.2	639
		100	2453	10.36	7.45	14.5	13.4	1.784	29.3	606
	Medium	20	2732	11.17	8.01	14.6	13.4	1.924	34.9	590
		50	2585	10.72	7.66	14.5	13.3	1.845	32.4	568
		100	2323	9.96	7.08	14.2	13.2	1.714	28.3	533
	Low	20	1306	7.35	4.93	12.5	11.8	1.266	16.2	226
		50	1228	7.07	4.72	12.3	11.6	1.218	15.1	210
		100	1100	6.61	4.37	11.9	11.3	1.139	13.4	185
YDFC 16 ST CB 3 X G2 X A5 L	High	20	3332	13.16	9.65	15.0	13.7	2.266	41.0	729
		50	3133	12.68	9.24	14.8	13.6	2.183	38.4	716
		100	2796	11.86	8.54	14.5	13.4	2.043	34.2	689
	Medium	20	3182	12.76	9.33	14.9	13.6	2.196	38.4	681
		50	3022	12.37	9.00	14.7	13.5	2.130	36.4	669
		100	2694	11.56	8.31	14.4	13.3	1.991	32.3	646
	Low	20	1873	8.94	6.24	13.4	12.6	1.539	19.0	307
		50	1751	8.55	5.94	13.2	12.4	1.472	17.6	295
		100	1502	7.75	5.31	12.7	12.1	1.335	14.9	270
YDFC 18 ST CB 3 X G2 X A5 L	High	20	3611	14.74	10.66	14.8	13.5	2.538	44.5	791
		50	3449	14.29	10.30	14.6	13.5	2.460	43.8	776
		100	3152	13.49	9.66	14.4	13.3	2.323	39.6	748
	Medium	20	3426	14.47	10.35	14.6	13.4	2.491	42.5	729
		50	3253	13.95	9.96	14.4	13.3	2.402	39.8	717
		100	2967	13.22	9.35	14.2	13.1	2.277	36.2	692
	Low	20	1874	9.48	6.48	12.8	12.1	1.632	18.8	323
		50	1766	9.15	6.21	12.6	12.0	1.576	17.7	305
		100	1601	8.62	5.80	12.3	11.7	1.485	16.0	274
YDFC 20 ST CB 3 X G2 X A5 L	High	20	4074	16.92	12.21	14.8	13.5	2.914	58.3	945
		50	3917	16.49	11.86	14.7	13.5	2.839	55.7	926
		100	3638	15.73	11.25	14.5	13.3	2.708	51.3	885
	Medium	20	3894	16.40	11.78	14.7	13.4	2.823	50.5	881
		50	3727	15.93	11.41	14.6	13.4	2.744	48.1	855
		100	3431	15.15	10.77	14.3	13.2	2.609	44.0	815
	Low	20	2134	10.68	7.33	12.9	12.2	1.839	24.2	366
		50	2031	10.36	7.08	12.8	12.1	1.785	23.0	347
		100	1786	9.57	6.45	12.4	11.8	1.648	20.1	312

Air Conditions (EDB / EWB) Cooling : 24 / 18°C Water Conditions (EWT / LWT) Cooling : 7 / 12°C
Fin Material / Protection: Aluminum / None Delta T: 5°C

Performance Data

PERFORMANCE RATINGS

YDFC | STANDARD | CB | 4 ROW | 2 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W
				Total kW	Sensible kW	DB °C	WB °C			
YDFC 08 ST CB 4 X G2 X A5 L	High	20	1459	7.10	5.02	13.2	12.5	1.223	21.0	280
		50	1387	6.88	4.84	13.0	12.4	1.185	19.9	262
		100	1152	6.10	4.23	12.6	12.1	1.050	16.1	228
	Medium	20	1419	6.98	4.90	13.1	12.4	1.201	20.0	267
		50	1347	6.75	4.72	12.9	12.3	1.162	18.9	260
		100	1097	5.97	4.13	12.5	12.0	1.028	15.2	216
	Low	20	829	4.79	3.15	11.1	10.8	0.824	10.2	129
		50	726	4.48	2.92	10.7	10.5	0.772	9.1	120
		100	447	3.36	2.14	10.5	10.1	0.610	6.1	100
YDFC 10 ST CB 4 X G2 X A5 L	High	20	2004	9.48	6.63	13.2	12.5	1.632	46.0	366
		50	1884	8.96	6.22	12.9	12.3	1.544	41.6	341
		100	1587	8.00	5.45	12.4	11.8	1.378	33.9	299
	Medium	20	1879	9.22	6.38	12.9	12.3	1.587	41.0	333
		50	1770	8.72	5.98	12.6	12.0	1.502	37.1	309
		100	1448	7.62	5.13	12.0	11.5	1.312	29.1	270
	Low	20	1106	6.34	4.35	12.2	11.8	1.092	22.7	193
		50	960	5.77	3.90	11.7	11.4	0.993	19.2	184
		100	681	4.51	2.97	10.8	10.6	0.776	12.5	155
YDFC 12 ST CB 4 X G2 X A5 L	High	20	2405	11.47	7.90	12.9	12.2	1.976	39.4	461
		50	2256	11.02	7.54	12.7	12.1	1.897	36.7	447
		100	1978	10.16	6.86	12.3	11.7	1.750	31.7	418
	Medium	20	2240	11.15	7.66	12.8	12.1	1.920	36.9	429
		50	2108	10.73	7.32	12.6	12.0	1.848	34.5	417
		100	1832	9.84	6.63	12.1	11.6	1.694	29.5	390
	Low	20	1244	7.39	4.96	11.6	11.3	1.273	18.0	184
		50	1093	6.74	4.48	11.3	11.0	1.160	15.3	178
		100	806	5.39	3.50	10.5	10.3	0.932	10.5	164
YDFC 14 ST CB 4 X G2 X A5 L	High	20	2851	13.63	9.55	13.3	12.6	2.346	42.2	649
		50	2719	12.97	9.08	13.2	12.5	2.234	38.6	637
		100	2429	11.89	8.29	12.9	12.3	2.048	33.0	599
	Medium	20	2727	12.99	9.01	13.0	12.3	2.237	40.1	591
		50	2586	12.46	8.63	12.9	12.3	2.145	37.2	573
		100	2296	11.48	7.88	12.6	12.0	1.977	32.0	533
	Low	20	1315	7.99	5.36	11.6	11.2	1.376	15.9	218
		50	1181	7.42	4.93	11.3	11.0	1.278	14.0	211
		100	935	6.27	4.10	10.6	10.4	1.079	10.4	193
YDFC 16 ST CB 4 X G2 X A5 L	High	20	3323	15.38	10.92	13.5	12.7	2.649	25.9	695
		50	3137	14.81	10.47	13.3	12.6	2.551	24.3	683
		100	2805	13.78	9.63	13.0	12.4	2.372	21.4	654
	Medium	20	3202	15.08	10.65	13.4	12.6	2.596	25.4	653
		50	3024	14.52	10.21	13.2	12.5	2.501	23.8	642
		100	2684	13.45	9.35	12.9	12.3	2.315	20.9	608
	Low	20	1816	10.64	7.10	11.6	11.2	1.832	12.9	314
		50	1675	10.07	6.67	11.4	11.0	1.733	11.8	253
		100	1397	9.08	5.95	10.9	10.6	1.563	9.9	233
YDFC 18 ST CB 4 X G2 X A5 L	High	20	3518	17.13	11.99	13.2	12.5	2.949	35.6	770
		50	3350	16.58	11.56	13.1	12.4	2.855	35.0	756
		100	3023	15.52	10.71	12.7	12.1	2.673	31.2	691
	Medium	20	3344	16.67	11.58	13.0	12.3	2.870	34.6	684
		50	3169	16.11	11.14	12.8	12.2	2.774	32.6	673
		100	2876	15.21	10.40	12.5	12.0	2.620	29.5	641
	Low	20	1875	11.31	7.44	11.2	10.8	1.948	16.7	324
		50	1696	10.67	6.98	10.9	10.6	1.837	15.2	289
		100	1372	9.49	6.14	10.5	10.2	1.637	12.5	261
YDFC 20 ST CB 4 X G2 X A5 L	High	20	4026	18.06	13.06	13.7	12.9	3.110	20.5	887
		50	3856	17.57	12.65	13.5	12.9	3.025	19.6	878
		100	3553	16.68	11.90	13.3	12.7	2.871	18.0	825
	Medium	20	3875	17.53	12.63	13.5	12.9	3.018	19.7	837
		50	3701	17.03	12.20	13.4	12.8	2.932	18.8	821
		100	3400	16.13	11.47	13.2	12.6	2.778	17.2	776
	Low	20	2059	11.58	7.87	11.8	11.5	1.994	9.4	385
		50	1900	11.10	7.50	11.7	11.3	1.911	8.8	347
		100	1636	10.18	6.79	11.3	11.0	1.753	7.7	320

Performance Data

PERFORMANCE RATINGS

YDFC | DISTRICT COOLING | CB | 3 ROW | 2 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W
				Total kW	Sensible kW	DB °C	WB °C			
YDFC 08 DC CB 3 X G2 X A5 L	High	20	1461	6.21	4.50	14.6	13.5	0.594	56.0	309
		50	1423	6.12	4.42	14.5	13.4	0.585	54.4	298
		100	1252	5.66	4.04	14.1	13.1	0.542	47.2	262
	Medium	20	1401	6.08	4.40	14.5	13.4	0.582	52.9	294
		50	1374	5.98	4.31	14.4	13.4	0.572	51.2	283
		100	1213	5.53	3.93	14.1	13.1	0.529	44.2	247
	Low	20	831	4.23	2.84	12.3	11.7	0.405	32.2	138
		50	796	4.03	2.68	12.1	11.5	0.386	29.4	125
		100	721	3.37	2.18	11.1	10.6	0.323	21.1	98
YDFC 10 DC CB 3 X G2 X A5 L	High	20	2108	7.86	5.81	15.0	13.8	0.752	83.8	389
		50	1933	7.39	5.45	14.8	13.7	0.706	74.5	341
		100	1636	6.58	4.79	14.4	13.4	0.629	60.0	300
	Medium	20	2002	8.30	5.86	14.4	13.2	0.794	89.7	339
		50	1853	7.82	5.51	14.3	13.1	0.748	80.2	314
		100	1541	6.97	4.83	13.7	12.7	0.667	64.7	265
	Low	20	1098	5.63	3.92	13.3	12.5	0.539	42.6	203
		50	1012	5.22	3.58	12.9	12.2	0.500	37.0	180
		100	864	4.16	2.75	11.6	11.2	0.398	24.2	152
YDFC 12 DC CB 3 X G2 X A5 L	High	20	2405	9.47	6.88	14.8	13.6	0.906	47.7	465
		50	2258	9.15	6.61	14.6	13.4	0.876	44.8	451
		100	2003	8.52	6.08	14.2	13.2	0.815	39.2	423
	Medium	20	2294	9.27	6.72	14.7	13.5	0.887	47.0	437
		50	2159	8.93	6.42	14.5	13.4	0.854	43.8	422
		100	1906	8.30	5.90	14.1	13.1	0.794	38.3	396
	Low	20	1257	5.85	4.22	13.7	12.9	0.560	18.4	172
		50	1139	5.42	3.85	13.3	12.6	0.518	16.0	165
		100	943	4.71	3.26	12.6	12.1	0.450	12.4	133
YDFC 14 DC CB 3 X G2 X A5 L	High	20	2905	10.55	8.00	15.3	14.0	1.009	34.2	660
		50	2745	10.20	7.68	15.1	13.9	0.976	32.1	639
		100	2453	9.61	7.16	14.8	13.7	0.920	28.9	606
	Medium	20	2732	10.04	7.57	15.1	13.9	0.960	30.1	590
		50	2585	9.72	7.26	14.9	13.8	0.930	28.5	568
		100	2323	9.09	6.73	14.7	13.6	0.870	25.2	533
	Low	20	1306	6.74	4.72	13.2	12.5	0.644	16.3	226
		50	1228	6.39	4.42	12.9	12.2	0.612	14.8	210
		100	1100	5.79	3.93	12.3	11.8	0.554	12.4	185
YDFC 16 DC CB 3 X G2 X A5 L	High	20	3332	13.22	9.65	14.9	13.7	1.265	49.3	729
		50	3133	12.75	9.24	14.7	13.5	1.220	46.1	716
		100	2796	11.90	8.52	14.4	13.3	1.138	40.6	689
	Medium	20	3182	12.72	9.29	14.8	13.6	1.217	44.6	681
		50	3022	12.35	8.96	14.7	13.5	1.181	42.2	669
		100	2694	11.51	8.25	14.4	13.3	1.101	37.0	646
	Low	20	1873	8.88	6.23	13.4	12.6	0.849	22.5	307
		50	1751	8.41	5.85	13.2	12.4	0.805	20.4	295
		100	1502	7.36	5.01	12.5	11.9	0.704	16.0	270
YDFC 18 DC CB 3 X G2 X A5 L	High	20	3611	13.34	10.08	15.2	13.9	1.276	62.5	791
		50	3449	12.91	9.71	15.0	13.8	1.235	58.9	776
		100	3152	12.22	9.10	14.8	13.7	1.169	53.2	748
	Medium	20	3426	13.81	10.03	14.7	13.5	1.321	52.1	729
		50	3253	13.42	9.64	14.5	13.4	1.283	49.3	717
		100	2967	12.67	9.04	14.2	13.2	1.212	44.4	692
	Low	20	1874	9.22	6.45	13.2	12.5	0.882	31.7	323
		50	1766	8.74	6.04	12.9	12.3	0.836	28.7	305
		100	1601	7.99	5.44	12.5	11.9	0.764	24.4	274
YDFC 20 DC CB 3 X G2 X A5 L	High	20	4074	15.38	11.52	15.1	13.9	1.471	54.0	945
		50	3917	15.04	11.22	15.0	13.8	1.438	51.8	926
		100	3638	14.32	10.59	14.8	13.7	1.370	47.5	885
	Medium	20	3894	14.79	11.12	15.1	13.9	1.415	52.1	881
		50	3727	14.44	10.77	14.9	13.8	1.382	49.8	855
		100	3431	13.71	10.16	14.7	13.6	1.312	45.4	815
	Low	20	2134	10.45	7.20	13.0	12.3	0.999	31.0	366
		50	2031	10.05	6.89	12.8	12.1	0.962	28.9	347
		100	1786	9.25	6.25	12.3	11.8	0.885	24.9	312

Air Conditions (EDB / EWB) Cooling : 24 / 18°C Water Conditions (EWT / LWT) Cooling : 5.5 / 14.5t°C
Fin Material / Protection: Aluminum / None Delta T: 9°C

Performance Data

PERFORMANCE RATINGS

YDFC | DISTRICT COOLING | CB | 4 ROW | 2 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W
				Total kW	Sensible kW	DB °C	WB °C			
YDFC 08 DC CB 4 X G2 X A5 L	High	20	1459	6.66	4.84	13.6	12.9	0.637	29.6	280
		50	1387	6.43	4.66	13.4	12.8	0.615	27.8	262
		100	1152	5.57	3.99	13.0	12.6	0.532	21.3	228
	Medium	20	1419	6.49	4.68	13.4	12.8	0.621	27.7	267
		50	1347	6.27	4.51	13.3	12.7	0.600	26.0	260
		100	1097	5.38	3.81	12.8	12.3	0.515	19.7	216
	Low	20	829	4.47	3.03	11.7	11.4	0.428	15.1	129
		50	726	4.08	2.72	11.3	11.0	0.390	12.8	120
		100	447	2.67	1.71	11.0	10.5	0.278	6.9	100
YDFC 10 DC CB 4 X G2 X A5 L	High	20	2004	9.25	6.29	12.6	11.9	0.885	56.8	366
		50	1884	8.90	6.01	12.4	11.8	0.851	52.9	341
		100	1587	8.28	5.54	12.0	11.5	0.792	46.2	299
	Medium	20	1879	8.85	5.97	12.3	11.8	0.846	52.1	333
		50	1770	8.51	5.72	12.1	11.6	0.815	48.5	309
		100	1448	7.90	5.25	11.8	11.3	0.756	42.3	270
	Low	20	1106	6.32	4.27	11.8	11.4	0.605	29.3	193
		50	960	5.85	3.91	11.5	11.2	0.560	25.4	184
		100	681	5.07	3.33	11.0	10.7	0.489	19.9	155
YDFC 12 DC CB 4 X G2 X A5 L	High	20	2405	11.07	7.73	13.1	12.4	1.059	35.7	461
		50	2256	10.62	7.36	12.9	12.2	1.016	33.0	447
		100	1978	9.78	6.69	12.5	11.9	0.936	28.4	418
	Medium	20	2240	10.66	7.43	13.0	12.4	1.020	32.5	429
		50	2108	10.27	7.11	12.8	12.2	0.982	30.4	417
		100	1832	9.39	6.42	12.4	11.9	0.898	25.8	390
	Low	20	1244	6.98	4.70	11.7	11.3	0.667	16.2	184
		50	1093	6.54	4.36	11.3	11.0	0.626	14.4	178
		100	806	5.47	3.57	11.0	10.7	0.539	11.0	164
YDFC 14 DC CB 4 X G2 X A5 L	High	20	2851	12.53	8.91	13.4	12.7	1.198	30.4	649
		50	2719	12.17	8.61	13.3	12.6	1.164	28.9	637
		100	2429	11.25	7.90	13.0	12.4	1.076	25.0	599
	Medium	20	2727	12.03	8.57	13.4	12.7	1.151	29.1	591
		50	2586	11.65	8.25	13.2	12.6	1.115	27.5	573
		100	2296	10.65	7.51	13.0	12.4	1.019	23.4	533
	Low	20	1315	7.42	5.05	11.8	11.5	0.710	12.9	218
		50	1181	6.97	4.69	11.5	11.2	0.666	11.5	211
		100	935	6.42	4.27	11.1	10.9	0.614	10.0	193
YDFC 16 DC CB 4 X G2 X A5 L	High	20	3323	15.54	10.96	13.4	12.6	1.487	47.7	695
		50	3137	14.99	10.51	13.2	12.5	1.434	44.6	683
		100	2805	13.89	9.62	12.8	12.2	1.329	38.8	654
	Medium	20	3202	15.20	10.70	13.3	12.6	1.454	45.6	653
		50	3024	14.65	10.25	13.1	12.5	1.401	42.7	642
		100	2684	13.55	9.36	12.7	12.2	1.296	37.0	608
	Low	20	1816	10.69	7.11	11.5	11.1	1.023	24.8	314
		50	1675	10.14	6.69	11.3	10.9	0.970	22.5	253
		100	1397	8.77	5.69	11.0	10.6	0.859	18.1	233
YDFC 18 DC CB 4 X G2 X A5 L	High	20	3518	17.09	11.86	13.0	12.3	1.634	63.1	770
		50	3350	16.57	11.45	12.9	12.2	1.585	59.6	756
		100	3023	15.60	10.65	12.5	12.0	1.492	53.3	691
	Medium	20	3344	16.54	11.44	12.9	12.2	1.582	60.1	684
		50	3169	15.97	10.98	12.7	12.1	1.528	56.3	673
		100	2876	15.09	10.24	12.4	11.8	1.443	50.7	641
	Low	20	1875	11.29	7.36	11.0	10.6	1.088	29.8	324
		50	1696	10.14	6.55	11.0	10.6	1.003	25.7	289
		100	1372	8.33	5.30	11.0	10.4	0.866	19.7	261
YDFC 20 DC CB 4 X G2 X A5 L	High	20	4026	18.23	12.99	13.4	12.7	1.744	36.4	887
		50	3856	17.76	12.60	13.3	12.6	1.699	34.8	878
		100	3553	16.89	11.87	13.1	12.4	1.616	31.8	825
	Medium	20	3875	17.77	12.60	13.3	12.6	1.700	34.8	837
		50	3701	17.33	12.23	13.2	12.5	1.658	33.3	821
		100	3400	16.42	11.47	12.9	12.3	1.571	30.2	776
	Low	20	2059	11.74	7.91	11.6	11.3	1.124	16.1	385
		50	1900	11.18	7.46	11.4	11.1	1.069	14.8	347
	100	1636	10.06	6.61	11.0	10.7	0.970	12.6	320	

Performance Data

PERFORMANCE RATINGS

YDFC | STANDARD | CB | A(3+1) ROWS | 4 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Cooling Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W	Heating Capacity kW	LDBT °C	Water Flow m³/h	Water Pressure kPa
				Total kW	Sensible kW	DB °C	WB °C							
YDFC 08 ST CB A X G2 X A5 L	High	20	1459	6.06	4.39	14.2	13.0	1.044	24.8	280	3.08	26.7	0.265	4.2
		50	1387	5.89	4.26	14.0	12.9	1.014	23.5	262	3.02	26.9	0.260	4.1
		100	1152	5.29	3.78	13.5	12.5	0.911	19.4	228	2.80	27.6	0.241	3.6
	Medium	20	1419	5.73	4.22	14.2	13.2	0.986	18.8	267	3.04	26.8	0.262	4.1
		50	1347	5.56	4.09	14.1	13.0	0.958	17.8	260	2.97	27.0	0.256	4.0
		100	1097	5.00	3.63	13.6	12.7	0.861	14.7	216	2.76	27.7	0.238	3.5
	Low	20	829	4.23	2.84	12.4	11.7	0.729	10.4	129	2.37	29.8	0.204	2.7
		50	726	3.98	2.66	12.0	11.4	0.686	9.4	120	2.28	30.4	0.196	2.5
		100	447	3.21	2.13	10.9	10.5	0.553	6.5	100	1.93	32.2	0.166	1.9
YDFC 10 ST CB A X G2 X A5 L	High	20	2004	8.14	5.82	14.1	12.9	1.401	42.2	366	3.95	26.5	0.340	7.0
		50	1884	7.72	5.49	13.8	12.7	1.329	38.2	341	3.80	26.8	0.327	6.5
		100	1587	7.00	4.89	13.2	12.2	1.204	31.9	299	3.50	27.5	0.301	5.7
	Medium	20	1879	7.38	5.42	14.2	13.1	1.272	33.6	333	3.85	26.7	0.331	6.7
		50	1770	6.98	5.08	13.9	12.9	1.202	30.5	309	3.70	27.0	0.318	6.2
		100	1448	6.23	4.44	13.2	12.3	1.072	24.6	270	3.36	27.9	0.289	5.3
	Low	20	1106	5.96	4.05	13.0	12.2	1.027	20.1	193	3.15	28.6	0.271	4.7
		50	960	5.49	3.70	12.5	11.8	0.944	17.2	184	2.98	29.4	0.256	4.3
		100	681	4.37	2.90	11.4	10.9	0.753	11.6	155	2.58	31.4	0.222	3.3
YDFC 12 ST CB A X G2 X A5 L	High	20	2405	9.59	6.84	14.3	13.2	1.651	34.8	461	4.80	26.7	0.413	11.8
		50	2256	9.24	6.56	14.1	13.0	1.590	32.5	447	4.65	27.0	0.400	11.2
		100	1978	8.56	6.00	13.7	12.7	1.475	28.4	418	4.39	27.5	0.378	10.1
	Medium	20	2240	9.28	6.63	14.2	13.1	1.598	32.9	429	4.70	26.9	0.405	11.4
		50	2108	8.95	6.35	14.0	13.0	1.541	30.9	417	4.57	27.1	0.393	10.8
		100	1832	8.27	5.78	13.6	12.6	1.423	26.7	390	4.31	27.7	0.371	9.8
	Low	20	1244	5.99	4.26	13.4	12.7	1.033	16.7	184	3.71	29.3	0.319	7.5
		50	1093	5.53	3.89	13.0	12.4	0.952	14.4	178	3.49	29.9	0.301	6.7
		100	806	4.51	3.12	12.2	11.7	0.777	10.2	164	3.04	31.7	0.262	5.3
YDFC 14 ST CB A X G2 X A5 L	High	20	2851	11.40	8.23	14.6	13.4	1.965	31.3	649	5.91	26.6	0.509	18.2
		50	2719	10.89	7.86	14.5	13.3	1.876	28.8	637	5.71	26.8	0.491	17.1
		100	2429	10.04	7.22	14.2	13.1	1.729	24.8	599	5.36	27.2	0.462	15.3
	Medium	20	2727	10.83	7.77	14.4	13.2	1.866	29.6	591	5.63	26.9	0.485	16.7
		50	2586	10.43	7.45	14.3	13.1	1.795	27.6	573	5.47	27.0	0.471	15.8
		100	2296	9.66	6.87	13.9	12.9	1.662	24.0	533	5.14	27.4	0.443	14.1
	Low	20	1315	7.39	4.96	12.5	11.8	1.273	16.4	218	4.20	29.7	0.362	9.8
		50	1181	6.93	4.63	12.1	11.5	1.194	14.5	211	3.99	30.3	0.344	9.0
		100	935	5.94	3.93	11.4	10.9	1.024	11.1	193	3.56	31.6	0.307	7.3
YDFC 16 ST CB A X G2 X A5 L	High	20	3323	12.92	9.47	14.9	13.7	2.225	31.8	695	6.53	26.3	0.562	9.4
		50	3137	12.48	9.09	14.7	13.5	2.149	29.9	683	6.36	26.5	0.548	9.0
		100	2805	11.69	8.42	14.4	13.3	2.014	26.7	654	6.05	26.9	0.521	8.2
	Medium	20	3202	12.59	9.21	14.8	13.6	2.167	30.0	653	6.42	26.4	0.553	9.1
		50	3024	12.18	8.86	14.7	13.5	2.097	28.3	642	6.26	26.6	0.539	8.7
		100	2684	11.34	8.15	14.3	13.2	1.953	25.0	608	5.94	27.1	0.511	8.0
	Low	20	1816	8.80	6.14	13.3	12.5	1.515	14.8	314	5.01	28.7	0.431	5.9
		50	1675	8.37	5.81	13.1	12.4	1.441	13.5	253	4.84	29.2	0.416	5.6
		100	1397	7.57	5.19	12.6	12.0	1.304	11.4	233	4.55	30.0	0.392	5.0
YDFC 18 ST CB A X G2 X A5 L	High	20	3518	14.36	10.39	14.7	13.5	2.473	40.9	770	7.36	26.6	0.633	12.1
		50	3350	13.90	10.02	14.5	13.4	2.393	38.6	756	7.18	26.8	0.618	11.6
		100	3023	13.02	9.32	14.2	13.2	2.242	34.4	691	6.83	27.2	0.588	10.6
	Medium	20	3344	14.09	10.08	14.5	13.3	2.426	38.9	684	7.17	26.8	0.617	11.6
		50	3169	13.65	9.75	14.3	13.2	2.350	36.7	673	6.99	27.0	0.601	11.1
		100	2876	12.88	9.11	14.0	13.0	2.218	33.2	641	6.69	27.4	0.576	10.3
	Low	20	1875	9.48	6.48	12.8	12.1	1.632	18.1	324	5.48	29.5	0.472	7.3
		50	1696	9.02	6.12	12.6	11.9	1.554	16.6	289	5.29	29.9	0.455	6.8
		100	1372	8.14	5.48	12.0	11.5	1.402	13.9	261	4.90	30.8	0.422	6.0
YDFC 20 ST CB A X G2 X A5 L	High	20	4026	16.37	11.81	14.7	13.5	2.819	55.0	887	8.43	26.7	0.726	16.1
		50	3856	15.92	11.45	14.6	13.4	2.741	52.4	878	8.24	26.8	0.709	15.4
		100	3553	15.13	10.82	14.3	13.2	2.605	48.0	825	7.88	27.1	0.679	14.3
	Medium	20	3875	15.94	11.45	14.6	13.4	2.744	48.1	837	8.23	26.8	0.709	15.4
		50	3701	15.49	11.09	14.4	13.3	2.668	45.8	821	8.03	27.0	0.691	14.8
		100	3400	14.73	10.47	14.2	13.1	2.537	41.9	776	7.68	27.2	0.661	13.6
	Low	20	2059	10.53	7.23	12.9	12.2	1.813	23.7	385	6.20	29.6	0.533	9.3
		50	1900	10.15	6.94	12.6	12.0	1.749	22.2	347	6.02	29.9	0.518	8.9
		100	1636	9.31	6.27	12.2	11.7	1.603	19.3	320	5.65	30.6	0.487	8.0

Air Conditions (EDB / EWB)Cooling : 24 / 18°C
Heating : 20°C
Fin Material / Protection: Aluminum / None

Water Conditions (EWT / LWT) Cooling : 7 / 12°C
Heating : 50 / 40°C

Delta T: 5° C
Delta T: 10° C

Performance Data

PERFORMANCE RATINGS

YDFC | STANDARD | CB | B(4+1) ROWS | 4 PIPE

Model	Speed	ESP Pa	Air Flow m³/h	Cooling Capacity		Air Off FCU		Water Flow m³/h	Water Pressure kPa	Power Input W	Heating Capacity kW	LDBT °C	Water Flow m³/h	Water Pressure kPa
				Total kW	Sensible kW	DB °C	WB °C							
YDFC 08 ST CB C X G2 X A5 L	High	20	1404	7.24	5.02	12.9	12.2	1.246	16.4	280	3.06	26.70	0.263	4.2
		50	1302	6.80	4.67	12.6	12.0	1.170	15.1	262	2.96	27.0	0.255	4.0
		100	1040	5.54	3.75	12.1	11.6	0.953	11.3	228	2.70	28.0	0.232	3.4
	Medium	20	1336	6.93	4.78	12.7	12.1	1.195	16.3	267	3.00	26.9	0.258	4.0
		50	1223	6.40	4.38	12.4	11.9	1.102	14.7	260	2.88	27.3	0.248	3.8
		100	978	5.20	3.51	11.9	11.5	0.896	11.0	216	2.63	28.3	0.227	3.2
	Low	20	749	5.01	3.23	10.6	10.3	0.862	6.7	129	2.37	29.8	0.204	2.7
		50	635	4.12	2.63	10.5	10.1	0.732	5.6	120	2.22	30.8	0.191	2.4
		100	324	1.56	0.96	10.5	9.8	0.316	2.4	100	1.51	34.3	0.130	1.3
YDFC 10 ST CB C X G2 X A5 L	High	20	1752	9.47	6.33	12.3	11.7	1.632	31.6	366	3.82	26.7	0.329	6.6
		50	1608	9.03	5.98	12.0	11.4	1.554	28.8	341	3.68	27.1	0.317	6.2
		100	1321	7.80	5.09	11.4	10.9	1.344	22.8	299	3.36	27.9	0.289	5.3
	Medium	20	1633	8.88	5.92	12.2	11.6	1.527	28.1	333	3.70	27.0	0.319	6.2
		50	1467	8.19	5.41	11.8	11.3	1.409	24.9	309	3.53	27.4	0.304	5.7
		100	1160	6.86	4.4									

Acoustics

YDFC SOUND PRESSURE LEVEL

Follows JB standard JB/T 4330 – 1999

Model	Speed	ESP (Pa)	63Hz	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz	dB(A)
YDFC 08	High	20	31.0	44.0	46.8	47.1	51.8	47.8	44.0	38.4	55.7
		50	30.6	42.9	45.9	46.7	51.8	47.7	43.5	37.7	55.4
		100	29.1	40.9	44.1	45.5	51.3	48.1	43.3	36.7	54.8
	Medium	20	30.1	43.1	46.0	46.3	51.0	47.4	43.1	36.9	54.9
		50	29.4	42.1	45.1	46.1	51.1	47.5	42.9	36.5	54.8
		100	28.4	40.6	43.5	45.3	51.1	48.0	42.9	36.0	54.5
	Low	20	17.1	28.7	31.9	34.5	38.4	33.2	28.1	18.7	41.7
		50	28.7	31.1	33.9	36.5	42.0	37.1	31.8	22.1	45.0
		100	28.7	34.8	37.7	39.7	46.7	43.4	36.6	28.4	49.7
YDFC 10	High	20	33.9	44.7	47.2	49.5	51.9	49.1	45.8	38.6	56.6
		50	33.5	44.3	46.5	48.5	51.4	48.5	44.9	37.4	55.9
		100	31.9	43.6	45.9	47.5	50.5	47.4	43.4	35.2	54.9
	Medium	20	31.4	42.0	44.6	46.8	49.6	46.5	42.8	35.5	54.0
		50	31.5	42.0	44.5	46.9	49.6	46.2	42.5	34.7	54.0
		100	31.8	42.8	44.7	46.0	49.1	46.0	41.6	33.0	53.6
	Low	20	27.7	29.6	32.6	34.9	36.9	31.9	25.9	18.9	41.2
		50	26.9	33.6	35.8	37.5	40.3	35.9	30.0	21.1	44.5
		100	29.5	38.7	40.6	41.3	44.2	40.5	35.1	25.3	48.7
YDFC 12	High	20	32.4	44.5	47.1	46.7	50.6	47.7	45.2	39.0	55.3
		50	32.0	44.2	46.7	46.0	50.4	47.4	44.5	38.2	55.0
		100	31.2	44.3	46.5	46.0	50.6	47.8	44.2	37.3	55.0
	Medium	20	32.4	43.3	45.5	45.4	49.3	46.4	43.6	37.0	54.0
		50	31.1	43.0	45.3	45.1	49.6	46.3	43.4	36.7	53.9
		100	31.3	43.7	45.5	45.2	49.9	46.8	43.2	36.3	54.2
	Low	20	24.8	30.3	32.3	33.9	36.5	33.0	27.1	19.2	41.0
		50	28.3	32.4	33.9	35.7	38.9	35.2	29.2	20.8	43.1
		100	30.2	38.2	40.2	39.8	44.2	40.3	34.3	24.2	48.3
YDFC 14	High	20	35.6	48.3	52.1	49.6	54.4	51.9	49.1	43.6	59.3
		50	35.5	47.9	51.6	49.0	54.0	51.1	48.6	43.0	58.8
		100	35.3	47.5	50.8	48.3	53.4	50.5	47.6	41.8	58.1
	Medium	20	35.3	47.5	50.7	48.6	53.4	50.6	48.0	42.3	58.2
		50	34.9	47.3	50.4	48.2	53.0	50.2	47.3	41.6	57.8
		100	34.8	46.8	49.7	47.6	52.7	49.6	46.7	40.7	57.3
	Low	20	30.3	32.4	33.5	34.2	37.3	33.5	28.0	18.7	42.0
		50	38.4	34.3	32.2	34.6	35.5	36.0	31.3	32.4	43.9
		100	32.2	39.6	41.2	39.3	44.8	39.5	34.2	23.7	48.7
YDFC 16	High	20	35.9	45.9	46.9	49.4	51.8	49.4	46.9	39.8	56.8
		50	35.5	47.0	48.2	48.4	52.1	49.4	46.9	39.6	56.9
		100	35.3	47.0	49.0	48.4	52.9	49.3	47.0	38.8	57.3
	Medium	20	35.2	45.7	47.8	48.3	52.0	48.8	46.3	38.7	56.6
		50	35.8	46.4	48.2	47.9	51.5	48.8	46.0	38.5	56.4
		100	35.6	46.2	47.7	48.3	51.7	48.8	45.8	37.5	56.4
	Low	20	28.1	33.5	35.8	37.3	40.9	35.8	31.5	28.0	44.8
		50	30.7	35.3	37.2	38.9	42.5	37.3	32.5	26.1	46.4
		100	33.8	40.0	41.2	41.9	46.0	40.8	36.4	26.5	49.9
YDFC 18	High	20	34.1	46.3	46.5	48.0	50.1	48.9	46.4	39.3	55.8
		50	35.8	46.3	46.4	47.5	50.2	48.7	46.1	38.9	55.7
		100	34.9	46.5	47.1	47.8	50.6	49.1	45.9	38.3	56.0
	Medium	20	34.5	45.3	45.8	47.7	49.5	47.8	45.6	38.7	55.2
		50	34.6	45.1	45.7	47.0	49.7	47.8	45.1	37.8	55.0
		100	33.9	45.6	46.1	47.2	50.1	48.3	44.8	36.9	55.3
	Low	20	30.0	32.7	34.3	36.7	38.7	35.0	29.3	20.2	43.4
		50	30.7	34.5	34.9	38.4	40.6	36.8	30.5	21.2	45.0
		100	31.8	39.5	40.0	42.4	44.1	41.8	35.0	25.1	49.1
YDFC 20	High	20	36.2	48.3	50.1	49.3	52.0	52.1	49.5	43.5	58.4
		50	35.8	48.1	49.7	48.9	51.9	51.7	49.0	43.0	58.1
		100	36.1	47.9	49.3	48.4	51.8	51.3	48.3	42.0	57.7
	Medium	20	35.3	47.1	48.4	47.9	50.8	50.9	48.2	42.0	57.1
		50	35.3	47.2	48.3	47.8	51.2	51.0	48.0	41.9	57.2
		100	35.2	47.1	48.2	47.9	51.2	50.6	47.6	41.2	57.0
	Low	20	30.0	33.7	34.7	37.2	38.1	36.7	31.3	23.4	43.9
		50	29.2	35.1	35.9	39.0	39.8	38.1	32.4	24.0	45.3
		100	30.2	38.8	38.8	41.3	42.8	40.9	35.3	26.3	48.1

Acoustics

YDFC SOUND POWER LEVEL

Follows JB standard JB/T 4330 – 1999

Model	Speed	ESP (Pa)	63Hz	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz	dB(A)
YDFC 08	High	20	44.7	57.7	60.5	60.8	65.5	61.5	57.7	52.1	69.4
		50	44.3	56.6	59.6	60.4	65.5	61.4	57.2	51.4	69.1
		100	42.8	54.7	57.8	59.3	65.0	61.8	57.0	50.4	68.5
	Medium	20	43.8	56.8	59.7	60.0	64.7	61.1	56.8	50.6	68.6
		50	43.1	55.8	58.8	59.8	64.8	61.2	56.6	50.3	68.5
		100	42.1	54.3	57.3	59.0	64.8	61.7	56.6	49.7	68.2
	Low	20	30.8	42.4	45.6	48.2	52.1	46.9	41.8	32.4	55.4
		50	42.5	44.8	47.6	50.2	55.7	50.8	45.5	35.8	58.6
		100	42.4	48.5	51.4	53.4	60.4	57.1	50.3	42.1	63.3
YDFC 10	High	20	47.8	58.6	61.1	63.3	65.7	63.0	59.7	52.4	70.4
		50	47.4	58.2	60.4	62.4	65.3	62.4	58.8	51.3	69.8
		100	45.8	57.4	59.8	61.3	64.4	61.3	57.2	49.1	68.8
	Medium	20	45.3	55.9	58.5	60.6	63.5	60.3	56.7	49.4	67.9
		50	45.4	55.9	58.4	60.8	63.5	60.1	56.3	48.6	67.8
		100	45.7	56.7	58.6	59.9	62.9	59.9	55.5	46.9	67.4
	Low	20	41.5	43.5	46.5	48.7	50.7	45.7	39.8	32.7	54.9
		50	40.8	47.5	49.6	51.4	54.2	49.8	43.9	35.0	58.3
		100	43.3	52.6	54.5	55.1	58.0	54.4	48.9	39.2	62.5
YDFC 12	High	20	46.4	58.5	61.1	60.6	64.5	61.7	59.2	53.0	69.3
		50	46.0	58.2	60.6	59.9	64.3	61.4	58.5	52.1	68.9
		100	45.2	58.3	60.5	60.0	64.6	61.7	58.1	51.3	69.0
	Medium	20	46.4	57.3	59.5	59.4	63.2	60.4	57.6	51.0	67.9
		50	45.1	57.0	59.3	59.1	63.5	60.3	57.4	50.7	67.9
		100	45.3	57.6	59.4	59.2	63.9	60.8	57.2	50.3	68.2
	Low	20	38.8	44.3	46.3	47.9	50.4	46.9	41.0	33.1	54.8
		50	42.3	46.4	47.9	49.6	52.9	49.2	43.1	34.8	57.0
		100	44.1	52.1	54.2	53.7	58.2	54.3	48.3	38.2	62.2
YDFC 14	High	20	49.7	62.4	66.2	63.7	68.5	66.0	63.2	57.7	73.4
		50	49.6	62.0	65.7	63.1	68.1	65.2	62.7	57.0	72.9
		100	49.4	61.6	64.9	62.3	67.5	64.6	61.7	55.9	72.2
	Medium	20	49.4	61.6	64.7	62.7	67.5	64.7	62.1	56.4	72.3
		50	49.0	61.4	64.5	62.3	67.1	64.2	61.4	55.7	71.9
		100	48.8	60.9	63.8	61.7	66.8	63.7	60.8	54.8	71.4
	Low	20	44.4	46.5	47.6	48.3	51.4	47.6	42.1	32.8	55.8
		50	52.5	48.4	46.3	48.7	49.5	50.0	45.4	46.5	56.6
		100	46.3	53.7	55.3	53.4	58.9	53.6	48.3	37.8	62.7
YDFC 16	High	20	50.1	60.1	61.1	63.6	66.0	63.6	61.1	54.0	71.0
		50	49.8	61.2	62.5	62.6	66.3	63.6	61.1	53.8	71.1
		100	49.5	61.2	63.3	62.6	67.1	63.5	61.2	53.0	71.5
	Medium	20	49.4	60.0	62.0	62.5	66.2	63.1	60.5	52.9	70.8
		50	50.0	60.7	62.4	62.2	65.7	63.0	60.2	52.7	70.6
		100	49.8	60.4	62.0	62.6	66.0	63.0	60.0	51.7	70.6
	Low	20	42.4	47.7	50.0	51.6	55.1	50.0	45.7	42.3	58.9
		50	45.0	49.6	51.4	53.1	56.8	51.6	46.7	40.3	60.5
		100	48.0	54.2	55.4	56.1	60.2	55.1	50.6	40.8	64.0
YDFC 18	High	20	48.5	60.6	60.8	62.3	64.4	63.2	60.7	53.7	70.1
		50	50.1	60.6	60.7	61.9	64.6	63.0	60.4	53.2	70.0
		100	49.3	60.9	61.4	62.2	65.0	63.4	60.2	52.7	70.4
	Medium	20	48.8	59.7	60.1	62.1	63.9	62.2	60.0	53.1	69.5
		50	48.9	59.5	60.0	61.3	64.0	62.1	59.5	52.1	69.3
		100	48.3	59.9	60.5	61.6	64.5	62.7	59.2	51.3	69.6
	Low	20	44.4	47.1	48.6	51.1	53.1	49.4	43.7	34.6	57.5
		50	45.1	48.9	49.2	52.8	54.9	51.2	44.8	35.5	59.2
		100	46.2	53.8	54.4	56.8	58.4	56.1	49.4	39.4	63.4
YDFC 20	High	20	50.7	62.8	64.6	63.8	66.5	66.6	64.0	58.0	72.9
		50	50.3	62.6	64.2	63.4	66.4	66.2	63.5	57.4	72.5
		100	50.6	62.4	63.7	62.9	66.3	65.8	62.8	56.5	72.2
	Medium	20	49.8	61.5	62.9	62.4	65.3	65.4	62.6	56.4	71.5
		50	49.8	61.6	62.8	62.2	65.7	65.5	62.5	56.4	71.6
		100	49.7	61.6	62.7	62.4	65.6	65.0	62.1	55.7	71.4
	Low	20	44.5	48.2	49.2	51.7	52.6	51.2	45.8	37.9	58.2
		50	43.7	49.6	50.4	53.5	54.2	52.5	46.8	38.5	59.6
		100	44.7	53.3	53.3	55.8	57.3	55.3	49.8	40.7	62.5

Operation & Controls

CONTROLS OPERATION DATA

2 or 4 PIPE SYSTEM - YDFC08

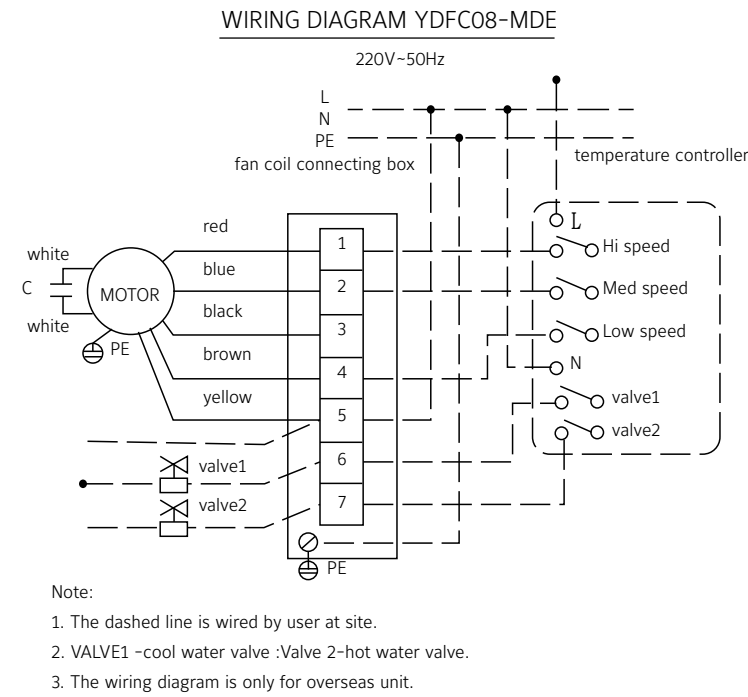


Figure 1

CONTROLS OPERATION DATA

2 or 4 PIPE SYSTEM - YDFC10-20

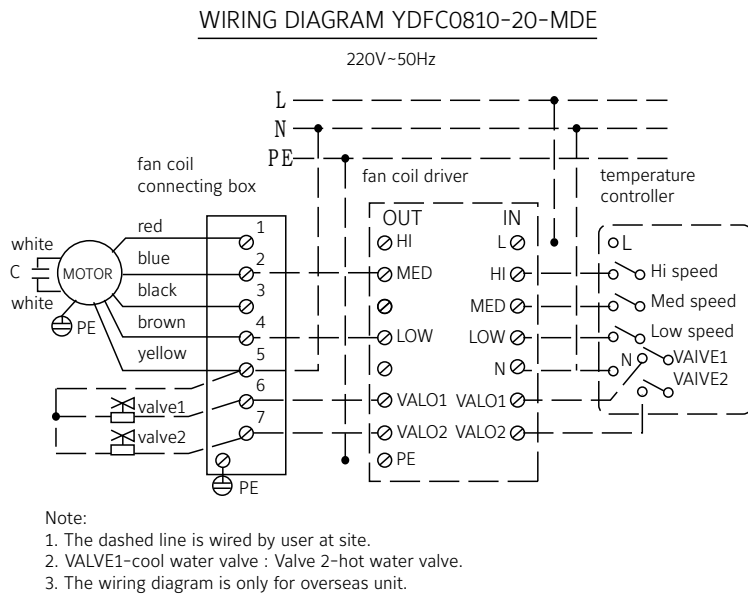


Figure 2

Operation & Controls

CONTROLS OPERATION DATA

2 PIPE SYSTEM WITH ELECTRICAL HEATING AND SPECIAL TERMINAL BOX WITH RELAYS AND FUSE

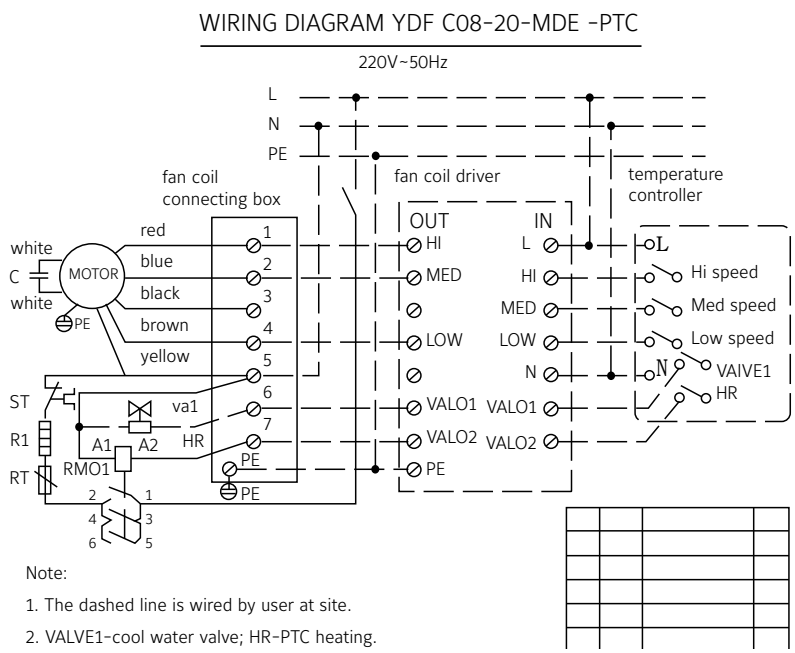


Figure 3

Three Speed Switch	Unit motor is a single-phase, permanent split capacitor type with three speeds tapings High / Medium / Low, wired to the terminal block with colour coded wires.
2 Pipe System Two Port & Three Port Water Valves for Cooling	Cooling is controlled by either modulating of switching On and Off the chilled water supply by means of an electrically operated valve. (Refer Fig.1)
4 Pipe System Hot Water Heating	3+1 (A) and 4+1(B) configurations can be used for hot water heating. A separate hot water valve is required to be installed on the 1 row eating coil. Mode of switching from cooling to heating can be automatic or manual
2 Pipe System with Electric Heating	YDFC can be provided with one step electrical heater of following capacities: Size 08 to 12 - 1500 Watts Size 14 - 2000 Watts Size 16 to 20 - 3000 Watts These heaters are provided as an option at extra cost. It is important that electrical heaters are interlocked to ensure that the heating elements receive no power supply when the fan is not selected to operate. Heater are provided with high temperature cut out at standard and are terminated in a terminal box for field wiring (Refer. Fig.3) The electric heater input power based on the condition: High-speed&0Pa, accuracy: ±10%
Special Terminal Box	A special terminal box equipped with relays and fuse can eb provided at extra cost. This allows the power for the electrical heaters to be supplied separately.

Electrical Data

Power Supply 220 Volt / 1 Phase / 50 Hz

Model	Maximum Absorbed Power (WATT)	No. of Motors	F.L.A (A.M.P)	R.C.S mm²	C.B.(AMP)
08	309	1	1.49	0.75	5
10	389	1	1.98	0.75	5
12	465	1	2.22	1	10
14	660	1	3.35	1	10
16	729	1	3.35	1	10
18	791	1	3.74	1	10
20	945	1	4.50	1	10

Power Supply 220 Volt / 1 Phase / 60 Hz

Model	Maximum Absorbed Power (WATT)	No. of Motors	F.L.A (A.M.P)	R.C.S mm²	C.B.(AMP)
08	355	1	1.73	0.75	5
10	432	1	2.11	0.75	5
12	552	1	2.64	0.75	5
14	793	1	3.85	1	10
16	638	1	3.34	1	10
18	666	1	3.43	1	10
20	715	1	3.82	1	10

FLA Full Load Ampere
C.B. Circuit Breaker
R.C.S. Recommended Cable Size

* Nameplate Amps may vary



Guide Specifications

General

Furnish and install Fan Coil Units as indicated and scheduled in the plans. Units shall be factory assembled with coils that are pressure tested individually to 400 psi (2.8 MPa). The fans must be factory run and manufacturer must have a facility to test the capacity of cooling coils at specified entering air conditions and specified chilled water temperature, to assure correct capacity.

In addition the test facility shall be suitable to test air capacity at specified external pressure drop at indicated speed setting.

Basic Unit

The basic unit shall be fabricated out of 0.8 to 1.2mm as applicable galvanized steel to Q/ ASB385-2014. The coil top panel and return plenum shall be insulated with PE foam. The fan motor shall be easily removable for serviceability. A terminal box with terminal strip shall be provided for terminating the wiring. The filter shall be easily removable from either side or the back. Units with powder coating finish shall be available as an option.

Coils

Coils shall be made out of 3/8 inch or 9.52mm OD copper tubes. Aluminum fins shall be 0.1mm thick and the coil shall have maximum spacing of 2.3mm between the fins. The coil shall be pressure tested under water to 2.8 Pa (For a working pressure of 1600 kpa) and dehydrated before assembly. Coil shall be provided with a drain plug in the bottom and a manual air vent on the top. The coil assembly shall be protected on the side on which piping is to be fitted with a cover made of GI sheet. The metal sheet below the coil shall be powder coated to avoid corrosion. Gold Epoxy and Blue Hydrophilic coated fins shall be available as options. There shall also be the availability of copper fins for higher hazardous and/or humid environments.

Motors

Motors shall be 3 speed, permanent split capacitor type with Thermal overload protection. Motors shall have permanently lubricated ball bearings.

The motors shall have a class F insulation. Standard motor shall be IP20, IP54shall be available on as an option. Total enclosed motors shall be available on request (option). Motors shall be protected by an internal overload that is UL Certified component.

Fans

Fans shall be centrifugal direct-drive, double inlet double width, forward curved type. Fan wheels shall be statically and dynamically balanced.

Terminal Box

All units shall be provided with factory installed terminal box with the fan motor wired to the box.

Drain Pan

Drain Pan shall be die-formed steel, sloped to the piping connection, which will be threaded for easy connection. Internal surface shall be painted with anti-corrosive paint. The drain pan shall be insulated from below the closed cell formed insulation that complies with B5476 part 6 to class 1 requirements.

Testing

Manufacturer shall have a test facility to verify the air flow rate at specified external static pressure on all three speeds. It shall also be possible to verify the cooling capacity with water flow rates and temperature shown in the product guide. Verification of Airflow and Capacities shall be an option available at a declared cost. The manufacturing process should have a certified ISO 9000 quality plan.

Filter

As an option, 25mm aluminum media filters shall be available.

Certifications – ISO9001:2008



DET NORSKE VERITAS
MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 2110-2005-AQ-RGC-RvA

This is to certify that

York Guangzhou Air Conditioning and Refrigeration Equipment Co., Ltd.

Xuetian, Longshan Town, Fogang County, Qingyuan City, Guangdong, P.R. China

has been found to conform to the Management System Standard:

ISO 9001:2008

This Certificate is valid for the following product or service ranges:

Design and Manufacture of Room Air Conditioner, Air Cooled Ducted Split Air Conditioner, Air Cooled (Heat Pump) Water Chiller, Air Cooled Split (Heat Pumper) Water Chiller, Air Cooling Heat Pump Water Heater, Digital Scroll Multi-connected Air Conditioner, YORK VRF(Variable Refrigerant Flow), Water Cooled Floor Mounted Package Air Conditioner, Air Handling Unit, Fan Coil, Variable Air Volume Terminals and Spare Parts

Initial Certification date:
January 26th, 2005

Place and date:
Shanghai, January 10th, 2011

This Certificate is valid until:
January 26th, 2014

The audit has been performed under the supervision of
Peng Liu
Lead Auditor

for the Accredited Unit:
DNV CERTIFICATION B.V.,
THE NETHERLANDS

Chen Yi
Management Representative

 MGMT. SYS.
RvA C024

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

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Certifications – ISO14001:2004



DET NORSKE VERITAS
MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 2111-2005-AE-RGC-RvA

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York Guangzhou Air Conditioning and Refrigeration Equipment Co., Ltd.

Xuetian, Longshan Town, Fogang County, Qingyuan City, Guangdong, P.R. China

has been found to conform to the Management System Standard:

ISO 14001:2004

This Certificate is valid for the following product or service ranges:

Design and Manufacture of Room Air Conditioner, Air Cooled Ducted Split Air Conditioner, Air Cooled (Heat Pump) Water Chiller, Air Cooled Split (Heat Pumper) Water Chiller, Air Cooling Heat Pump Water Heater, Digital Scroll Multi-connected Air Conditioner, YORK VRF(Variable Refrigerant Flow), Water Cooled Floor Mounted Package Air Conditioner, Air Handling Unit, Fan Coil, Variable Air Volume Terminals and Spare Parts

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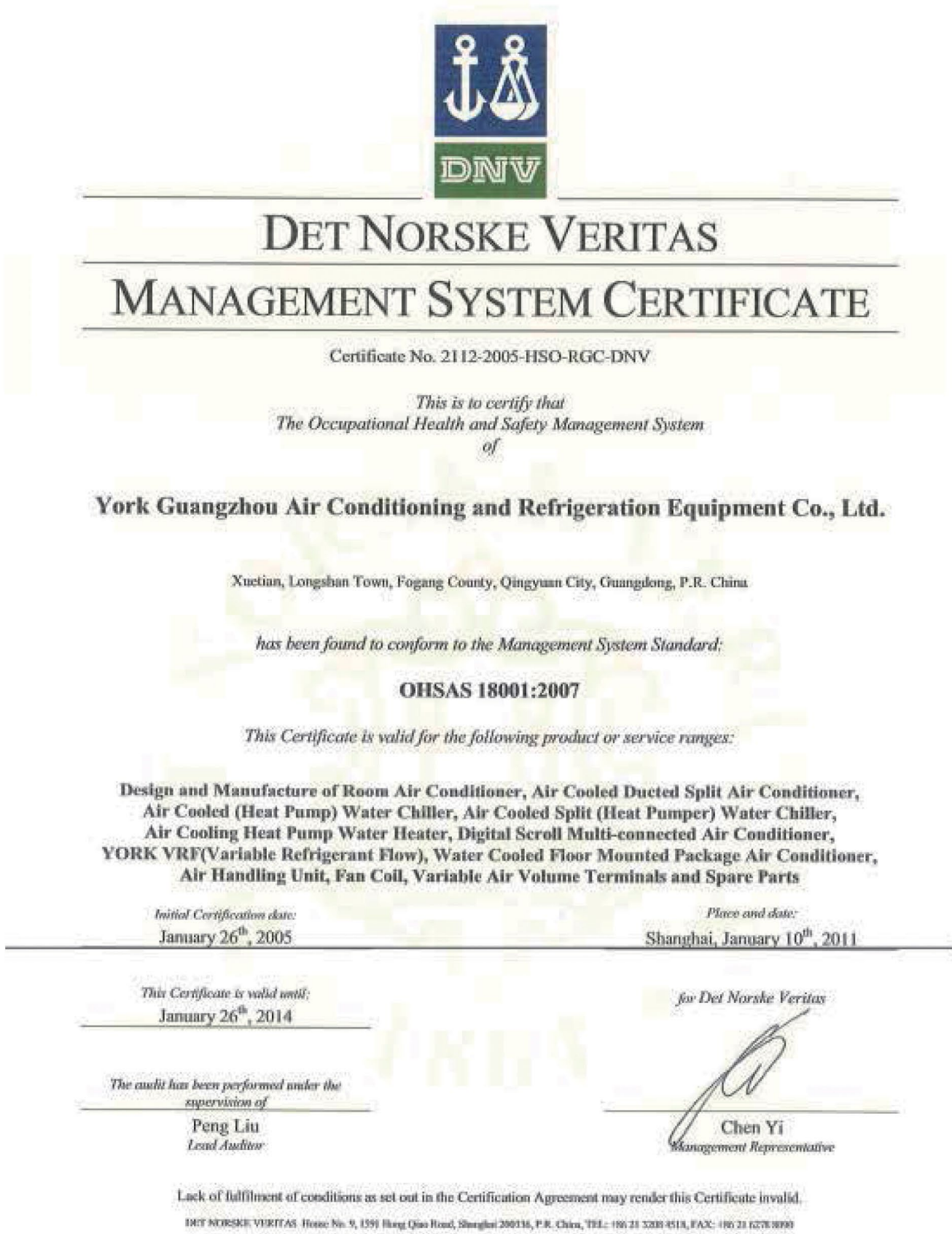
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Certifications – OHSAS18001:2007



About Johnson Controls Building Technologies and Solutions

Johnson Controls Building Technologies & Solutions is making the world safer, smarter and more sustainable – one building at a time. Our technology portfolio integrates every aspect of a building – whether security systems, energy management, fire suppression or HVACR – to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, *Metasys*®, Ruskin®, Frick®, PENN®, Sabroe®, Simplex® and Grinnell®.

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