



Zamil

Air Conditioners



Concealed Chilled Water Fan Coil Units

DWX Series
DWX02 thru DWX20
200 CFM thru 2000 CFM



Higher quality of indoor living

Our Products...



• Window ACs
• Mini Split units



• Cassette units
• Ceiling / Floor units
• Free-Standing units



• Air-Cooled-
Condensing Units



• Packaged Units



• Air Handling Units



• Chillers



• Centrifugal Chillers
• Mobile ACs



Controls:
• Building Automation
• Security • Fire Alarms

Company Business

Zamil Air Conditioners was founded in 1974 as one of the first air conditioning companies to be established in Saudi Arabia and today is a leading international manufacturer of air conditioning systems and is Number One in the Middle East.

Zamil Air conditioners manufactures both consumer and central air conditioners and has sales operations in over 55 countries in the Middle East, Europe, Africa and Asia.

The company's operations are structured into four Strategic Business Units (SBUs) supporting five in-house product and service brands as well as a number of international brands under the OEM sales.

The five in-house brands are Classic, Cooline, CoolCare, Clima Tech and Geoclima.

The four SBUs are:

1. Consumer Business Unit supporting Classic, Cooline, GE and OEM brands for consumers.
2. Unitary & Applied Business Unit supporting Zamil, Cooline, GE and OEM brands for commercial and industrial customers.
3. Zamil CoolCare Business Unit providing industrial, electro mechanical contracting services, HVAC maintenance, retrofit & operation services and parts.
4. Geoclima srl is an independent business supporting other SBUs for their requirements of chillers & double skin AHU's.

The first three SBUs - Consumer Products, Unitary & Applied Products and CoolCare direct their business operations from the corporate headquarters in Dammam, Saudi Arabia.

Geoclima has its engineering & production operations located at Monfalcone, Italy and has a design center in Austria.

All the four SBUs, while operating independently, supplement each other's activities in a way that makes synergy work at its best and achieve the corporate goals of maximizing customer satisfaction.

Factories and Productions

Zamil Air Conditioners has two manufacturing plants in Dammam, Saudi Arabia and has one specialty production facility in Italy operated by Geoclima.

The company can produce up to 550,000 Room Air Conditioners, 300,000 Mini-Split systems and 50,000 Central Air Conditioning systems per year.

Quality & Product Certificates

The Quality systems and policies at Zamil Air Conditioners comply with the required ISO 9001:2008 certification.

Zamil Air Conditioners is the first company in Saudi Arabia to receive the SASO (Saudi Arabia's Standard Organization) Certificate for Room Air Conditioners. ZAC's products are also certified with:

1. CE (Council of European Community)
2. UL (Underwriters Laboratory)
3. ETL (Test Facilities)
4. SASO (Saudi Arabian Standards Organization)
5. ISO 9001:2008 (International Organization for Standardization)
6. ASME (American Quality of Mechanical Engineers)

Other awards include the prestigious Engineering Excellence Award of General Electric and the inaugural Prince Mohammed bin Fahd Al Saud Award for Factory Safety.

Our Products

In addition to the consumer products such as the Room Air Conditioners (RAC) and the Mini Splits, Zamil Air Conditioners manufactures a host of residential, commercial and industrial air conditioners. This broad range extends from the Concealed Units up to 5 TR, the Ducted Splits up to 30 TR, the Packaged Units up to 95 TR, the Single and Double Skin Air Handling Units up to 138,316 CFM and the Water Chillers up to 600 TR cooling capacity. In addition, centrifugal chillers - powered by MHI compressors - are available up to 5,000 TR.

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*CONTINUING RESEARCH RESULTS IN STEADY IMPROVEMENTS.
THEREFORE, THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.*

MODEL DECODING

1, 2 & 3 BASIC (SERIES)	4 & 5 SIZE (x 100 CFM)	6 ELECTRICAL SUPPLY(V-Ph-Hz)	7 COIL	8 HEATER	9 ACCESSORIES	10 UNITS/FIN	11 COIL CONNECTION	12 FILTER	13 OPTION
DWX CHILLED WATER FAN COIL UNIT	02	C : 208/230-1-60	A : 3 ROW CHILLED WATER	N : NO HEATER B : 1 kW D : 2 kW E : 3 kW F : 4 kW G : 5 kW	N : STANDARD	STANDARD UNIT	R : RH SIDE, STANDARD (FACING AIR DISCHARGE) L : LH SIDE, OPTIONAL (FACING AIR DISCHARGE)	N : NONE A : ALUMINUM (1/2" THICK) B : ALUMINUM (1" THICK)	N : STANDARD UNIT WITHOUT THERMOSTAT T : UNIT WITH THERMOSTAT V : VOLT FREE CONTACTS** K : V & T
	03		B : 4 ROW CHILLED WATER	K : 4D VALVE PACKAGE (HEAT & COOL)	A : ALUMINUM FIN				
	04		J : 3 ROW CHILLED WATER		B : COATED ALUMINUM FIN				
	06		WATER + 1 ROW HEAT		C : COPPER FIN				
	08				DISTRICT COOLING UNIT*				
	10		N : NO HEATER D : 2 kW E : 3 kW F : 4 kW G : 5 kW J : 7 kW M : 10 kW	D : ALUMINUM FIN					
	12			B : 4 ROW CHILLED WATER	E : COATED ALUMINUM FIN				
	14			L : 5 ROW CHILLED WATER	F : COPPER FIN				
	16			K : 4 ROW CHILLED WATER + 1 ROW HEAT					
	18								
20									

NOTE:

* District cooling units are available for cool models only (not available for chilled & hot water combination).

** Volt free contact option is available as: A) Unit ON indication, B) Unit OFF indication.

UNIT FEATURES

COMPACT DIMENSIONS

Ideal to fit into tight spaces.

EASY MAINTENANCE / ONE SIDE ACCESS

Filters can be easily removed by lifting/sliding. Piping and controls are on one side for easy access.

QUIET, PULSE FREE AIR DELIVERY

Centrifugal fans that are statically and dynamically balanced, handle up to 0.5" w.g. external static pressure allowing you to keep the unit away from your comfort zone.

STANDARD SPECIFICATIONS

UNIT CONSTRUCTION

These ducted indoor fan coil units consists of a coil, motor/blower assembly and a drain pan securely mounted on heavy gauge galvanized steel housing. Steel sheet panels are zinc coated and galvanized by the hot dip process of lock-forming quality conforming to ASTM A 653 commercial weight G-90.

This unit is designed for those concealed overhead installations which require supply ductwork. A 1.5" duct collar is provided into the front panel for supply air duct connection. Return air is from the rear side.

Access to the blower assembly is provided through the removable bottom panel from where the complete fan/motor deck can be removed for servicing. The panels are insulated with 5/16" thick (density 0.033 g/cm³) polyethylene acoustic and thermal insulation. 1/2" thick permanent washable type aluminum filter is provided. Units are rated in accordance with ARI 440.

BLOWER ASSEMBLY

The direct drive blower motor assembly is easily accessible for complete servicing after removal of fan deck from the unit. The aluminum blower wheels are large in diameter and are of the forward curved design. Constructed of galvanized steel, they are statically and dynamically balanced for quiet and smooth performance.

MOTORS

Motors are permanent split capacitor type with three speed windings. The bearings are of sleeve type.

COILS

Coils are 3/8" OD copper tubing with aluminum fins mechanically bonded to the tubes. Manual air vents are provided on all

chilled water coils (auto air vents are available as an option). The standard coil is 3 rows (for sizes 02 to 12) & 4 rows (for size 14 and above) for standard & district cooling applications. A 4 pipe coil consisting of 3 rows of cooling coil and 1 row of heating coil (for sizes 02 to 12) & 4 rows of cooling coil and 1 row of heating coil (for size 14 and above) is also offered as an optional item. Each coil is pressure tested in the factory at not less than 300 psi (2070 kpa) air pressure.

DISTRICT COOLING APPLICATION

District cooling provides chilled water from a cooling plant through a network of pipes to multiple residential, industrial and commercial buildings for air conditioning purpose.

A typical district cooling system requires the FCU's to operate with a 8°C - 9°C delta temperature. Entering water temperature to the Fan Coil Unit is expected to be between 5.5°C and 6.5°C.

District Cooling Benefits:

- * Better quality of cooling
- * Maximum cost effectiveness
- * Capital cost elimination
- * Space saving
- * Decrease in sound pollution
- * Environmental friendly

DRAIN PAN

The condensate drain pan is fabricated of 18 gauge galvanized steel. The drain pan is powder coat painted. The outer surface is thermally insulated.

DRIP LIP

The purpose of a 'drip-lip' is to capture any condensate from the valve packages and direct it to the drain pan. It is fabricated of a single metal formed to fit on the side of the drain pan. They may be installed in the field and should always be pitched towards the drain pan to assure proper drainage. This will be supplied loose for field installations along with valve packages.

OPTIONS

ELECTRIC HEATERS

The heater element is of the resistance open coil type. Thermal overheat cut-outs and fusible links are provided to shut-off power to heaters in case of airflow failure. The complete heater assembly is sliding type and easy to remove for maintenance.

FILTERS

All models are furnished with 1/2" thick permanent washable type aluminum filters as standard. One inch thick aluminum filters can be provided as an option.

VALVE PACKAGES

A variety of valve packages, as a set are available as an option (3D for two pipe system and 4D for four pipe systems). These valves can be factory installed or shipped loose for field installation.

THERMOSTAT

An attractive wall mount three speed thermostat with all required functions and features for safe and smooth operation which can be used for cooling & heating. This thermostat can be configured in the model decoding.

PHYSICAL DATA

MODEL NUMBER	DWX02	DWX03	DWX04	DWX06	DWX08	DWX10	DWX12	DWX14	DWX16	DWX18	DWX20
POWER SUPPLY, V-Ph-Hz	208/230-1-60										
BLOWER	Type	Forward Curved									
BLOWER MOTOR	Size (mm)	146x196	146x196	146x196	146x240	180x240	180x240	180x240	200x216	200x216	200x216
	Quantity	1	1	1	2	2	2	2	2	2	2
	Quantity	1	1	1	1	1	1	1	1	1	1
	FLA	0.66	0.66	0.66	1.2	2.52	2.52	2.52	3.6	3.6	3.6
	Watts @ 0.0 ESP, high speed	106	143	169	192	249	407	464	626	748	850
COOLING COIL	Type	Corrugated Fin & Tube									
	Tube dia. - Rows - FPI (STD.)	3/8 - 3 - 12	3/8 - 3 - 12	3/8 - 3 - 12	3/8 - 3 - 12	3/8 - 3 - 12	3/8 - 3 - 12	3/8 - 4 - 12	3/8 - 4 - 14	3/8 - 4 - 14	3/8 - 4 - 14
	Tube dia. - Rows - FPI (Option)	3/8 - 4 - 12	3/8 - 4 - 12	3/8 - 4 - 12	3/8 - 4 - 12	3/8 - 4 - 12	3/8 - 4 - 12	3/8 - 5 - 12	3/8 - 5 - 14	3/8 - 5 - 14	3/8 - 5 - 14
	Face area, Sq. ft. (Sq. m.)	1.75(0.16)	1.75(0.16)	1.75(0.16)	2.22(0.2)	2.22(0.2)	3(0.28)	3(0.28)	4.37(0.4)	4.37(0.4)	4.37(0.4)
HOT WATER COIL	Type	Corrugated Fin & Tube									
	Tube dia. - Rows - FPI	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14	3/8 - 1 - 14
	Face area, Sq. ft. (Sq. m.)	1.75(0.16)	1.75(0.16)	1.75(0.16)	2.22(0.2)	2.22(0.2)	3(0.28)	3(0.28)	4.37(0.4)	4.37(0.4)	4.37(0.4)
COIL CONNECTIONS	Chilled water, Inlet - Outlet (inch)	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8
RETURN AIR FILTER	Hot water, Inlet - Outlet (inch)	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8	5/8 - 5/8
	Size (inch)	7.5x14.6	7.5x14.6	7.5x14.6	8x16.5	8x16.5	9.5x18.5	9.5x18.5	11x22.75	11x22.75	11x22.75
SHIPPING WEIGHT	Quantity	2	2	2	2	2	2	2	2	2	2
	kg. (approx.)	34	34	34	40	40	52	52	65	65	65

HOT WATER CAPACITIES

MODEL NUMBER	EWT - 150°F (65°C)		EWT - 180°F (82°C)	
	GPM (LPS)	CAPACITIES MBH (kW)	GPM (LPS)	CAPACITIES MBH (kW)
DWX02	1.10 (0.069)	11.4 (3.33)	1.71 (0.107)	17.1 (5.0)
DWX03	1.21 (0.076)	12.0 (3.51)	1.8 (0.113)	18.05 (5.3)
DWX04	1.3 (0.081)	12.6 (3.7)	2.0 (0.126)	19.23 (5.63)
DWX06	1.6 (0.10)	16.0 (4.7)	2.45 (0.154)	24.4 (7.14)
DWX08	1.7 (0.107)	16.5 (4.83)	2.55 (0.16)	25.43 (7.45)
DWX10	2.3 (0.144)	22.5 (6.6)	3.5 (0.22)	34.72 (10.16)
DWX12	2.41 (0.15)	23.41 (6.85)	3.7 (0.23)	36.54 (10.7)
DWX14	2.51 (0.16)	24.26 (7.1)	3.86 (0.24)	38.25 (11.2)
DWX16	3.41 (0.214)	33.32 (9.75)	5.2 (0.32)	51.7 (15.16)
DWX18	3.61 (0.227)	35.0 (10.25)	5.55 (0.35)	55.0 (16.11)
DWX20	3.7 (0.233)	35.8 (10.5)	5.71 (0.36)	56.5 (16.55)

NOTE: Capacities @ 70°F (21°C) Entering Air Temperature & 20°F (11°C) Water Temperature Drop.

LEGEND:

EWT - Entering Water Temperature

MBH - 1000 BTUH

GPM - Gallons Per Minute

LPS - Liters Per Second

CHILLED WATER COOLING CAPACITIES, STD. UNITS (ENGLISH UNITS)

ENTERING AIR TEMP. = 76°F DB/63°F WB (@ HIGH SPEED)

WTR (°F)	UNIT SIZE	40°F EWT			45°F EWT			50°F EWT		
		TC	SC	GPM	TC	SC	GPM	TC	SC	GPM
8	02	10.60	7.40	2.63	8.10	6.20	2.01	5.94	5.42	1.48
	03	11.70	8.30	2.92	9.10	7.10	2.26	6.67	6.29	1.67
	04	12.79	9.19	3.19	10.00	8.00	2.50	7.37	7.10	1.84
	06	17.06	12.36	4.27	13.43	10.84	3.36	9.89	9.64	2.47
	08	18.43	13.42	4.61	14.49	11.76	3.62	10.64	10.47	2.66
	10	25.50	18.59	6.37	20.02	16.28	5.01	14.69	14.50	3.67
	12	28.36	20.80	7.09	22.20	18.21	5.55	16.24	16.22	4.06
	14	37.28	26.91	9.32	29.24	23.49	7.31	21.45	20.82	5.36
	16	47.04	33.63	11.76	36.61	29.11	9.15	26.99	25.77	6.75
	18	52.52	37.85	13.13	41.22	33.05	10.30	30.28	29.32	7.57
	20	55.35	39.98	13.83	43.40	34.92	10.85	31.84	30.96	7.96
	22	65.35	47.98	16.58	51.40	41.92	12.85	37.84	36.96	9.56
10	02	9.90	6.95	1.98	7.80	6.00	1.56	5.80	5.32	1.16
	03	11.16	7.96	2.23	8.80	6.90	1.76	6.49	6.15	1.30
	04	12.37	8.92	2.47	9.70	7.80	1.95	7.14	6.92	1.43
	06	16.60	12.06	3.32	13.06	10.57	2.61	9.57	9.39	1.92
	08	17.90	13.07	3.58	14.05	11.46	2.81	10.27	10.17	2.06
	10	24.74	18.09	4.95	19.40	15.85	3.88	14.17	14.08	2.84
	12	27.43	19.79	5.49	21.46	17.68	4.29	15.61	15.61	3.12
	14	36.13	26.17	7.22	28.32	22.86	5.66	20.71	20.23	4.14
	16	45.25	32.50	9.05	35.61	28.40	7.12	26.17	25.18	5.23
	18	50.93	36.83	10.18	39.98	32.21	7.99	29.26	28.52	5.85
	20	53.63	38.90	10.72	42.04	33.98	8.41	30.73	30.08	6.15
	22	63.63	46.90	13.45	50.04	40.98	10.41	36.73	36.08	7.75
12	02	9.71	6.82	1.62	7.50	5.90	1.28	5.67	5.23	0.94
	03	10.90	7.81	1.82	8.50	6.80	1.43	6.31	6.02	1.05
	04	12.09	8.74	2.01	9.40	7.60	1.58	6.92	6.75	1.15
	06	16.22	11.81	2.70	12.73	10.33	2.12	9.27	9.14	1.55
	08	17.46	12.79	2.91	13.67	11.19	2.28	9.92	9.90	1.65
	10	24.12	17.69	4.02	18.86	15.48	3.14	13.67	13.67	2.28
	12	26.68	19.47	4.45	20.81	17.22	3.47	15.01	15.01	2.50
	14	35.20	25.57	5.87	27.55	22.31	4.59	20.02	19.68	3.34
	16	44.24	31.85	7.37	34.75	27.83	5.79	25.40	24.58	4.23
	18	49.68	36.04	8.28	38.92	31.47	6.49	28.32	27.76	4.72
	20	52.26	37.99	8.71	40.89	33.15	6.81	29.70	29.25	4.95
	22	62.26	45.99	11.44	48.89	40.13	8.81	35.70	35.25	6.55

ENTERING AIR TEMP. = 80°F DB/67°F WB (@ HIGH SPEED)

WTR (°F)	UNIT SIZE	40°F EWT			45°F EWT			50°F EWT		
		TC	SC	GPM	TC	SC	GPM	TC	SC	GPM
8	02	16.84	10.10	4.21	14.21	8.74	3.55	11.64	7.93	2.91
	03	18.99	11.55	4.75	15.94	10.21	3.98	12.97	9.12	3.24
	04	21.08	12.93	5.27	17.60	11.44	4.40	14.23	10.20	3.56
	06	27.95	17.27	6.99	23.35	15.32	5.84	18.86	13.71	4.71
	08	30.17	18.73	7.54	25.12	16.59	6.28	20.19	14.84	5.05
	10	41.75	25.95	10.44	34.72	22.97	8.68	27.93	20.57	6.98
	12	46.43	29.01	11.61	38.43	25.64	9.61	31.09	23.09	7.77
	14	62.12	38.22	15.53	51.65	33.70	12.91	41.53	30.00	10.38
	16	77.13	47.17	19.28	64.53	41.71	16.13	52.28	37.21	13.07
	18	87.22	53.60	21.80	72.65	47.34	18.16	58.54	42.17	14.63
	20	92.08	56.72	23.02	76.55	50.04	19.13	61.53	44.54	15.38
	22	102.08	64.72	25.75	84.55	56.04	21.86	69.53	50.54	17.08
10	02	16.05	9.67	3.21	13.51	8.54	2.70	11.00	7.58	2.20
	03	17.94	10.97	3.59	15.00	9.69	3.00	12.20	8.67	2.44
	04	19.76	12.19	3.95	16.42	10.77	3.28	13.54	9.80	2.71
	06	26.20	16.29	5.24	21.81	14.43	4.36	18.17	13.28	3.63
	08	28.12	17.57	5.62	23.57	15.70	4.71	19.60	14.47	3.92
	10	38.85	24.31	7.77	32.61	21.76	6.52	27.10	20.04	5.42
	12	42.87	26.99	8.57	36.27	24.35	7.25	30.08	22.47	6.01
	14	57.82	35.80	11.56	47.83	31.53	9.56	39.58	28.82	7.92
	16	72.50	44.59	14.50	60.38	39.38	12.07	49.50	35.57	9.90
	18	81.41	50.37	16.28	67.46	44.40	13.49	55.77	40.53	11.15
	20	85.68	53.11	17.13	70.84	46.78	14.17	58.76	42.86	11.75
	22	95.68	61.11	19.86	78.85	52.78	16.90	66.76	50.86	13.45
12	02	15.38	9.31	2.56	12.88	8.19	2.15	10.60	7.36	1.77
	03	17.04	10.47	2.84	14.33	9.31	2.39	11.95	8.53	1.99
	04	18.62	11.56	3.10	15.90	10.47	2.65	13.23	9.61	2.20
	06	24.97	15.59	4.16	21.33	14.16	3.56	17.76	13.05	2.96
	08	26.97	16.67	4.49	23.01	15.38	3.84	19.13	14.18	3.19
	10	37.30	23.04	6.22	31.81	21.29	5.30	26.43	19.63	4.40
	12	41.46	26.18	6.91	35.30	23.79	5.88	29.27	21.96	4.88
	14	54.52	33.95	9.09	46.46	30.73	7.74	38.58	28.21	6.43
	16	68.50	42.36	11.42	58.13	38.10	9.69	48.41	34.96	8.07
	18	76.77	47.77	12.79	65.48	43.25	10.91	54.42	39.71	9.07
	20	80.94	50.44	13.49	68.97	45.68	11.49	57.27	41.96	9.54
	22	90.94	58.44	16.22	76.97	53.68	14.22	65.27	49.96	12.27

ENTERING AIR TEMP. = 84°F DB/71°F WB (@ HIGH SPEED)

WTR (°F)	UNIT SIZE	40°F EWT			45°F EWT			50°F EWT		
		TC	SC	GPM	TC	SC	GPM	TC	SC	GPM
8	02	23.55	12.66	5.89	20.74	11.35	5.18	18.01	10.24	4.50
	03	26.82	14.51	6.70	23.53	13.05	5.88	20.35	11.82	5.09
	04	30.03	16.34	7.51	26.26	14.69	6.56	22.62	13.32	5.65
	06	39.72	21.72	9.93	34.79	19.61	8.70	29.99	17.85	7.50
	08	43.13	23.65	10.78	37.68	21.35	9.42	32.41	19.43	8.10
	10	59.84	32.84	14.96	52.23	29.63	13.06	44.88	26.95	11.22
	12	67.14	36.96	16.78	58.40	33.29	14.60	49.99	30.25	12.50
	14	89.41	48.69	22.35	77.87	43.67	19.47	66.80	39.48	16.70
	16	109.59	59.50	27.40	95.94	53.51	23.98	82.74	48.48	20.68
	18	125.01	68.07	31.25	109.06	61.12	27.26	93.72	55.34	23.43
20	132.51	72.22	33.13	115.42	64.82	28.85	99.01	58.62	24.75	
10	02	22.45	12.09	4.49	19.78	10.87	3.96	17.17	9.83	3.43
	03	25.37	13.78	5.07	22.27	12.42	4.45	19.24	11.27	3.85
	04	28.20	15.40	5.64	24.67	13.90	4.93	21.23	12.61	4.24
	06	37.40	20.53	7.48	32.73	18.57	6.55	28.16	16.91	5.63
	08	40.40	22.25	8.08	35.28	20.13	7.06	30.27	18.33	6.05
	10	55.95	30.83	11.19	48.81	27.88	9.76	41.83	25.38	8.37
	12	62.32	34.04	12.46	54.18	31.12	10.84	46.26	28.31	9.25
	14	83.28	45.57	16.66	72.60	41.01	14.52	62.24	37.17	12.45
	16	103.16	56.20	20.63	90.35	50.69	18.07	77.85	46.01	15.57
	18	116.84	63.89	23.37	102.00	57.56	20.40	87.57	52.22	17.51
20	123.44	67.60	24.69	107.61	60.87	21.52	92.23	55.18	18.45	
12	02	21.60	11.66	3.60	19.02	10.49	3.17	16.48	9.49	2.75
	03	24.24	13.20	4.04	21.25	11.91	3.54	18.31	10.80	3.05
	04	26.79	14.68	4.46	23.39	13.24	3.90	20.06	12.02	3.34
	06	35.53	19.57	5.92	31.02	17.70	5.17	26.56	16.09	4.43
	08	38.23	20.92	6.37	33.28	19.10	5.55	28.71	17.53	4.78
	10	52.86	29.05	8.81	45.97	26.41	7.66	39.71	24.28	6.62
	12	58.53	32.53	9.75	50.71	29.33	8.45	44.18	27.22	7.36
	14	78.62	43.17	13.10	68.42	38.89	11.40	58.43	35.23	9.74
	16	98.17	53.68	16.36	85.84	48.40	14.31	73.72	43.90	12.29
	18	110.57	60.69	18.43	96.36	54.70	16.06	82.41	49.57	13.73
20	116.52	64.05	19.42	101.39	57.68	16.90	86.56	52.27	14.43	

CHILLED WATER COOLING CAPACITIES, DISTRICT COOLING UNITS (ENGLISH UNITS)

ENTERING AIR TEMP. = 73°F DB/62°F WB (@ HIGH SPEED)

WTR (°F)	UNIT SIZE	42°F EWT			43°F EWT			44°F EWT		
		TC	SC	GPM	TC	SC	GPM	TC	SC	GPM
16	02	7.58	5.35	0.95	7.16	5.17	0.9	6.75	4.98	0.84
	03	8.47	6.1	1.06	7.99	5.88	1	7.51	5.67	0.94
	04	9.32	6.79	1.17	8.78	6.54	1.1	8.24	6.3	1.03
	06	12.44	9.13	1.55	11.71	8.8	1.46	10.99	8.47	1.37
	08	13.33	9.84	1.67	12.54	9.48	1.57	11.76	9.12	1.47
	10	18.4	13.6	2.3	17.3	13.1	2.16	16.21	12.6	2.03
	12	20.26	15.08	2.53	19.03	14.5	2.38	17.8	13.95	2.22
	14	27.08	19.81	3.39	25.48	19.08	3.19	23.89	18.37	2.99
	16	34.7	25.13	4.34	32.68	24.18	4.09	30.67	23.3	3.83
	18	38.91	28.39	4.86	36.6	27.32	4.58	34.3	26.26	4.29
	20	40.92	29.91	5.11	38.47	28.77	4.81	36.03	27.68	4.5
15	02	7.66	5.4	1.02	7.24	5.21	0.96	6.82	5.03	0.91
	03	8.57	6.16	1.14	8.09	5.94	1.08	7.61	5.73	1.02
	04	9.45	6.87	1.26	8.9	6.62	1.19	8.36	6.38	1.12
	06	12.61	9.24	1.68	11.89	8.91	1.59	11.16	8.59	1.49
	08	13.54	9.98	1.81	12.75	9.62	1.7	11.96	9.26	1.59
	10	18.69	13.8	2.49	17.59	13.29	2.35	16.5	12.8	2.2
	12	20.61	15.31	2.75	19.38	14.75	2.58	18.15	14.19	2.42
	14	27.5	20.09	3.67	25.89	19.35	3.45	24.29	18.63	3.24
	16	35.2	25.44	4.69	33.16	24.51	4.42	31.14	23.61	4.15
	18	39.54	28.79	5.27	37.21	27.72	4.96	34.89	26.66	4.65
	20	41.61	30.37	5.55	39.13	29.22	5.22	36.68	28.11	4.89
14	02	7.74	5.45	1.11	7.32	5.26	1.05	6.9	5.07	0.98
	03	8.68	6.23	1.24	8.19	6.01	1.17	7.72	5.8	1.1
	04	9.58	6.96	1.37	9.03	6.71	1.29	8.49	6.47	1.21
	06	12.8	9.36	1.83	12.07	9.03	1.72	11.34	8.71	1.62
	08	13.76	10.12	1.97	12.96	9.76	1.85	12.16	9.41	1.74
	10	18.99	13.99	2.71	17.89	13.5	2.56	16.79	13	2.4
	12	20.98	15.55	3	19.74	14.99	2.82	18.5	14.43	2.64
	14	27.93	20.38	3.99	26.31	19.63	3.76	24.7	18.91	3.53
	16	35.73	25.79	5.1	33.67	24.85	4.81	31.63	23.93	4.52
	18	40.19	29.21	5.74	37.84	28.13	5.41	35.5	27.08	5.07
	20	42.33	30.84	6.05	39.83	29.7	5.69	37.35	28.56	5.34

ENTERING AIR TEMP. = 75°F DB/64°F WB (@ HIGH SPEED)

WTR (°F)	UNIT SIZE	42°F EWT			43°F EWT			44°F EWT		
		TC	SC	GPM	TC	SC	GPM	TC	SC	GPM
16	02	10.16	6.55	1.27	9.73	6.24	1.22	9.31	6.18	1.16
	03	11.43	7.49	1.43	10.94	7.28	1.37	10.45	7.07	1.31
	04	12.65	8.38	1.58	12.09	8.14	1.51	11.54	7.92	1.44
	06	16.9	11.28	2.11	16.16	10.96	2.02	15.42	10.66	1.93
	08	18.2	12.21	2.27	17.39	11.86	2.17	16.59	11.53	2.07
	10	25.15	16.88	3.14	24.03	16.42	3	22.91	15.96	2.86
	12	27.85	18.82	3.48	26.59	18.28	3.32	25.33	17.77	3.17
	14	36.97	24.59	4.62	35.32	23.88	4.41	33.69	23.2	4.21
	16	47.25	31.12	5.91	45.16	30.2	5.64	43.07	29.34	5.38
	18	53.31	35.33	6.66	50.9	34.28	6.36	48.51	33.28	6.06
	20	56.21	37.33	7.03	53.65	36.24	6.71	51.11	35.15	6.39
15	02	10.25	6.6	1.37	9.82	6.41	1.31	9.39	6.23	1.25
	03	11.56	7.43	1.54	11.06	7.35	1.47	10.57	7.14	1.41
	04	12.81	8.48	1.71	12.25	8.23	1.63	11.69	8	1.56
	06	17.11	11.4	2.28	16.36	11.08	2.18	15.62	10.78	2.08
	08	18.44	12.35	2.46	17.62	12.01	2.35	16.81	11.67	2.24
	10	25.49	17.1	3.4	24.36	16.61	3.25	23.23	16.15	3.1
	12	28.27	19.07	3.77	26.99	18.53	3.6	25.72	18.02	3.43
	14	37.48	24.9	5	35.81	24.19	4.77	34.16	23.48	4.55
	16	47.89	31.49	6.38	45.76	30.57	6.1	43.66	29.7	5.82
	18	54.1	35.8	7.21	51.66	34.72	6.89	49.24	33.73	6.56
	20	57.08	37.84	7.61	54.48	36.72	7.26	51.91	35.63	6.92
14	02	10.36	6.66	1.48	9.92	6.47	1.42	9.49	6.29	1.35
	03	11.69	7.47	1.67	11.19	7.43	1.6	10.69	7.22	1.53
	04	12.97	8.57	1.85	12.41	8.33	1.77	11.84	8.1	1.69
	06	17.33	11.53	2.47	16.57	11.21	2.37	15.82	10.9	2.26
	08	18.69	12.5	2.67	17.87	12.16	2.55	17.05	11.83	2.44
	10	25.85	17.32	3.69	24.71	16.83	3.53	23.57	16.36	3.37
	12	28.71	19.33	4.1	27.42	18.8	3.92	26.14	18.27	3.73
	14	38.03	25.22	5.43	36.34	24.49	5.19	34.66	23.79	4.95
	16	48.57	31.9	6.94	46.42	30.96	6.63	44.28	30.06	6.33
	18	54.96	36.3	7.85	52.48	35.22	7.5	50.02	34.19	7.15
	20	58.03	38.42	8.29	55.39	37.25	7.91	52.77	36.17	7.54

NOTE:

- Capacities are with 3 row coil for models DWX02 - DWX12 & 4 row coil for models DWX14 & above.
- For any other conditions, please use selection software for fan coil units.
Apart from capacities, this software provides;
 - Sensible heat ratio
 - Leaving air temperature (DB/WB) - °F
 - Leaving water temperature - °F
 - Leaving water velocities (FPM)
 - Water pressure drop (feet of water)

LEGEND:

- TC - Total Capacity (MBH)
 SC - Sensible Heat Capacity (MBH)
 WTR - Water Temperature Rise (°F)
 EWT - Entering Water Temperature (°F)
 GPM - Water flow (Gallons Per Minute)

CHILLED WATER COOLING CAPACITIES, STD. UNITS (METRIC UNITS)

ENTERING AIR TEMP. = 25°C DB/17°C WB (@ HIGH SPEED)

WTR (°C)	UNIT SIZE	4°C EWT			7°C EWT			10°C EWT		
		TC	SC	LPS	TC	SC	LPS	TC	SC	LPS
5	02	2.90	2.13	0.14	2.30	1.90	0.11	1.58	1.58	0.08
	03	3.25	2.44	0.16	2.50	2.11	0.12	1.76	1.76	0.09
	04	3.61	2.74	0.17	2.80	2.40	0.13	1.94	1.94	0.10
	06	4.84	3.70	0.23	3.70	3.21	0.18	2.60	2.60	0.12
	08	5.22	4.02	0.25	4.00	3.50	0.19	2.79	2.79	0.13
	10	7.22	5.57	0.34	5.52	4.83	0.26	3.86	3.86	0.18
	12	8.01	6.22	0.38	6.11	5.38	0.29	4.25	4.25	0.20
	14	10.55	8.04	0.50	8.05	6.96	0.38	5.63	5.63	0.27
	16	13.19	9.98	0.63	10.11	8.63	0.48	7.11	7.11	0.34
	18	14.86	11.32	0.71	11.40	9.80	0.54	7.96	7.96	0.38
	20	15.66	11.95	0.75	11.95	10.34	0.57	8.36	8.36	0.40
	22	16.46	12.58	0.79	12.58	10.97	0.60	8.76	8.76	0.42
6	02	2.80	2.05	0.11	2.20	1.82	0.09	1.54	1.54	0.07
	03	3.15	2.39	0.13	2.40	2.00	0.10	1.72	1.72	0.08
	04	3.50	2.65	0.14	2.70	2.30	0.11	1.88	1.88	0.09
	06	4.73	3.63	0.19	3.60	3.14	0.14	2.52	2.52	0.10
	08	5.10	3.93	0.20	3.90	3.41	0.15	2.70	2.70	0.11
	10	7.04	5.44	0.28	5.37	4.72	0.21	3.72	3.72	0.15
	12	7.80	6.07	0.31	5.93	5.25	0.24	4.09	4.09	0.16
	14	10.28	7.87	0.41	7.80	6.76	0.31	5.45	5.45	0.22
	16	12.90	9.79	0.51	9.88	8.46	0.39	6.91	6.91	0.28
	18	14.50	11.07	0.58	11.00	9.55	0.44	7.71	7.71	0.31
	20	15.26	11.69	0.61	11.60	10.10	0.46	8.09	8.09	0.32
	22	16.02	12.31	0.64	12.31	10.72	0.49	8.49	8.49	0.34
7	02	2.70	2.00	0.09	2.10	1.72	0.07	1.53	1.53	0.06
	03	3.05	2.34	0.11	2.32	1.98	0.08	1.67	1.67	0.07
	04	3.40	2.60	0.12	2.60	2.23	0.09	1.83	1.83	0.08
	06	4.64	3.56	0.16	3.50	3.05	0.12	2.51	2.51	0.09
	08	4.99	3.86	0.17	3.70	3.30	0.13	2.61	2.61	0.10
	10	6.89	5.34	0.24	5.23	4.61	0.18	3.59	3.59	0.12
	12	7.61	5.93	0.26	5.76	5.12	0.20	3.93	3.93	0.13
	14	10.05	7.71	0.34	7.65	6.65	0.26	5.27	5.27	0.18
	16	12.65	9.62	0.43	9.66	8.31	0.33	6.71	6.71	0.23
	18	14.19	10.87	0.48	10.75	9.34	0.37	7.47	7.47	0.25
	20	14.92	11.46	0.51	11.30	9.85	0.39	7.82	7.82	0.27
	22	15.65	12.05	0.54	12.05	10.44	0.42	8.22	8.22	0.29

ENTERING AIR TEMP. = 27°C DB/19.5°C WB (@ HIGH SPEED)

WTR (°C)	UNIT SIZE	4°C EWT			7°C EWT			10°C EWT		
		TC	SC	LPS	TC	SC	LPS	TC	SC	LPS
5	02	4.98	3.01	0.24	4.16	2.64	0.20	3.36	2.33	0.16
	03	5.60	3.43	0.27	4.65	3.01	0.22	3.72	2.67	0.18
	04	6.20	3.83	0.30	5.12	3.36	0.24	4.07	2.98	0.19
	06	8.22	5.12	0.39	6.79	4.50	0.32	5.46	4.04	0.26
	08	8.85	5.54	0.42	7.28	4.87	0.35	5.89	4.41	0.28
	10	12.24	7.67	0.58	10.06	6.73	0.48	8.15	6.11	0.39
	12	13.57	8.55	0.65	11.09	7.49	0.53	9.06	6.85	0.43
	14	18.21	11.29	0.87	14.97	9.88	0.72	11.92	8.78	0.57
	16	22.70	13.99	1.08	18.78	12.28	0.90	14.96	10.86	0.71
	18	25.59	15.86	1.22	21.08	13.89	1.01	16.78	12.34	0.80
	20	26.99	16.76	1.29	22.18	14.67	1.06	17.69	13.06	0.85
	22	27.99	17.66	1.35	23.18	15.46	1.11	18.60	13.85	0.90
6	02	4.79	2.90	0.19	3.99	2.54	0.16	3.20	2.24	0.13
	03	5.34	3.29	0.21	4.41	2.88	0.18	3.59	2.59	0.14
	04	5.87	3.65	0.23	4.83	3.20	0.19	3.98	2.92	0.16
	06	7.78	4.87	0.31	6.48	4.33	0.26	5.34	3.97	0.21
	08	8.34	5.25	0.33	7.00	4.70	0.28	5.75	4.32	0.23
	10	11.51	7.25	0.46	9.68	6.51	0.39	7.95	5.98	0.32
	12	12.75	8.08	0.51	10.76	7.29	0.43	8.82	6.70	0.35
	14	17.14	10.69	0.68	14.15	9.41	0.56	11.61	8.60	0.46
	16	21.55	13.34	0.86	17.73	11.68	0.71	14.54	10.62	0.58
	18	24.15	15.05	0.96	19.93	13.24	0.79	16.37	12.09	0.65
	20	25.40	15.86	1.01	21.01	13.99	0.84	17.24	12.78	0.69
	22	26.65	16.66	1.06	22.11	14.78	0.89	18.13	13.57	0.74
7	02	4.61	2.81	0.16	3.82	2.45	0.13	3.13	2.20	0.11
	03	5.11	3.16	0.17	4.27	2.80	0.15	3.52	2.55	0.12
	04	5.60	3.49	0.19	4.74	3.15	0.16	3.90	2.88	0.13
	06	7.51	4.71	0.26	6.36	4.26	0.22	5.23	3.91	0.18
	08	8.11	5.11	0.28	6.86	4.62	0.23	5.64	4.24	0.19
	10	11.21	7.08	0.38	9.48	6.40	0.32	7.78	5.87	0.27
	12	12.46	7.91	0.43	10.52	7.14	0.36	8.62	6.57	0.29
	14	16.39	10.26	0.56	13.85	9.24	0.47	11.36	8.44	0.39
	16	20.51	12.76	0.70	17.33	11.46	0.59	14.27	10.46	0.49
	18	23.08	14.44	0.79	19.52	13.00	0.67	16.03	11.88	0.55
	20	24.33	15.25	0.83	20.56	13.73	0.70	16.87	12.56	0.58
	22	25.58	16.05	0.87	21.59	14.46	0.74	17.71	13.25	0.62

ENTERING AIR TEMP. = 29°C DB/21.5°C WB (@ HIGH SPEED)

WTR (°C)	UNIT SIZE	4°C EWT			7°C EWT			10°C EWT		
		TC	SC	LPS	TC	SC	LPS	TC	SC	LPS
5	02	6.71	3.67	0.32	5.85	3.27	0.28	5.01	2.93	0.24
	03	7.61	4.20	0.36	6.60	3.75	0.32	5.63	3.38	0.27
	04	8.48	4.71	0.41	7.34	4.21	0.35	6.23	3.80	0.30
	06	11.24	6.27	0.54	9.73	5.63	0.46	8.26	5.09	0.39
	08	12.17	6.81	0.58	10.51	6.11	0.50	8.90	5.53	0.43
	10	16.87	9.45	0.81	14.55	8.47	0.70	12.31	7.66	0.59
	12	18.85	10.60	0.90	16.20	9.49	0.77	13.65	8.57	0.65
	14	25.15	13.98	1.20	21.66	12.46	1.03	18.30	11.20	0.87
	16	31.00	17.18	1.48	26.84	15.34	1.28	22.81	13.83	1.09
	18	35.23	19.58	1.68	30.39	17.47	1.45	25.73	15.73	1.23
	20	37.27	20.74	1.78	32.11	18.49	1.53	27.13	16.64	1.30
	22	38.50	21.90	1.87	33.63	19.51	1.61	28.55	17.75	1.37
6	02	6.45	3.54	0.26	5.60	3.15	0.22	4.81	2.84	0.19
	03	7.27	4.03	0.29	6.31	3.60	0.25	5.37	3.25	0.21
	04	8.06	4.49	0.32	6.97	4.02	0.28	5.90	3.63	0.23
	06	10.70	5.99	0.43	9.24	5.37	0.37	7.82	4.86	0.31
	08	11.54	6.48	0.46	9.94	5.81	0.40	8.38	5.26	0.33
	10	15.96	8.98	0.64	13.75	8.05	0.55	11.57	7.27	0.46
	12	17.74	10.01	0.71	15.22	8.96	0.61	12.81	8.12	0.51
	14	23.75	13.25	0.95	20.45	11.84	0.81	17.23	10.65	0.69
	16	29.52	16.41	1.18	25.54	14.67	1.02	21.66	13.23	0.86
	18	33.36	18.60	1.33	28.76	16.63	1.15	24.28	14.98	0.97
	20	35.20	19.66	1.40	30.30	17.57	1.21	25.54	15.81	1.02
	22	36.43	20.81	1.47	31.73	18.50	1.27	26.77	16.64	1.07
7	02	6.25	3.43	0.21	5.43	3.06	0.19	4.64	2.75	0.16
	03	7.00	3.88	0.24	6.06	3.47	0.21	5.13	3.12	0.18
	04	7.71	4.31	0.26	6.65	3.86	0.23	5.62	3.48	0.19
	06	10.23	5.74	0.35	8.81	5.15	0.30	7.54	4.71	0.26
	08	11.00	6.20	0.38	9.44	5.55	0.32	8.14	5.13	0.28
	10	15.19	8.57	0.52	13.03	7.67	0.44	11.26	7.11	0.38
	12	16.79	9.52	0.57	14.51	8.59	0.49	12.52	7.96	0.43
	14	22.61	12.66	0.77	19.41	11.30	0.66	16.46	10.25	0.56
	16	28.29	15.77	0.97	24.42	14.10	0.83	20.62	12.69	0.70
	18	31.81	17.80	1.09	27.36	15.90	0.93	23.18	14.41	0.79
	20	33.50	18.77	1.14	28.76	16.77	0.98	24.44	15.23	0.83
	22	34.73	19.62	1.19	29.99	17.62	1.03	25.67	16.06	0.87

NOTE:

- Cap

CHILLED WATER COOLING CAPACITIES, DISTRICT COOLING UNITS (METRIC UNITS)

ENTERING AIR TEMP. = 23°C DB/17°C WB (@ HIGH SPEED)

WTR (°C)	UNIT SIZE	5.5°C EWT			6°C EWT			6.5°C EWT		
		TC	SC	LPS	TC	SC	LPS	TC	SC	LPS
9	02	2.45	1.67	0.07	2.34	1.62	0.06	2.23	1.57	0.06
	03	2.75	1.9	0.07	2.62	1.84	0.07	2.49	1.79	0.07
	04	3.03	2.12	0.08	2.88	2.05	0.08	2.74	1.99	0.07
	06	4.04	2.85	0.11	3.85	2.76	0.1	3.66	2.68	0.1
	08	4.34	3.08	0.12	4.13	2.98	0.11	3.92	2.89	0.1
	10	5.99	4.25	0.16	5.7	4.13	0.15	5.41	4	0.14
	12	6.61	4.72	0.18	6.29	4.58	0.17	5.96	4.43	0.16
	14	8.82	6.2	0.23	8.39	6.01	0.22	7.97	5.82	0.21
	16	11.29	7.85	0.3	10.75	7.61	0.29	10.21	7.37	0.27
	18	12.68	8.88	0.34	12.06	8.6	0.32	11.45	8.33	0.3
	20	13.34	9.37	0.35	12.69	9.07	0.34	12.04	8.79	0.32
8.5	02	2.48	1.68	0.07	2.36	1.62	0.07	2.25	1.58	0.06
	03	2.78	1.92	0.08	2.65	1.86	0.07	2.52	1.81	0.07
	04	3.06	2.14	0.09	2.92	2.08	0.08	2.78	2.01	0.08
	06	4.09	2.88	0.12	3.9	2.79	0.11	3.71	2.71	0.1
	08	4.4	3.11	0.12	4.19	3.02	0.12	3.98	2.93	0.11
	10	6.07	4.3	0.17	5.78	4.18	0.16	5.49	4.05	0.15
	12	6.71	4.78	0.19	6.38	4.64	0.18	6.05	4.49	0.17
	14	8.93	6.27	0.25	8.5	6.08	0.24	8.08	5.89	0.23
	16	11.42	7.94	0.32	10.88	7.69	0.31	10.34	7.46	0.29
	18	12.85	8.99	0.36	12.23	8.7	0.34	11.61	8.43	0.33
	20	13.53	9.49	0.38	12.88	9.19	0.36	12.22	8.9	0.34
8	02	2.5	1.69	0.07	2.39	1.6	0.07	2.27	1.59	0.07
	03	2.81	1.94	0.08	2.68	1.88	0.08	2.55	1.82	0.08
	04	3.1	2.16	0.09	2.96	2.1	0.09	2.81	2.04	0.08
	06	4.14	2.91	0.12	3.95	2.83	0.12	3.75	2.74	0.11
	08	4.46	3.15	0.13	4.24	3.06	0.13	4.03	2.96	0.12
	10	6.16	4.36	0.18	5.86	4.23	0.18	5.57	4.1	0.17
	12	6.81	4.84	0.2	6.48	4.7	0.19	6.15	4.56	0.18
	14	9.05	6.34	0.27	8.62	6.15	0.26	8.19	5.96	0.24
	16	11.57	8.03	0.35	11.02	7.78	0.33	10.48	7.54	0.31
	18	13.04	9.1	0.39	12.41	8.82	0.37	11.79	8.54	0.35
	20	13.74	9.61	0.41	13.07	9.31	0.39	12.41	9.02	0.37

ENTERING AIR TEMP. = 24°C DB/18°C WB (@ HIGH SPEED)

WTR (°C)	UNIT SIZE	5.5°C EWT			6°C EWT			6.5°C EWT		
		TC	SC	LPS	TC	SC	LPS	TC	SC	LPS
9	02	3.14	1.97	0.08	3.02	1.92	0.08	2.91	1.88	0.08
	03	3.53	2.19	0.09	3.4	2.2	0.09	3.27	2.15	0.09
	04	3.91	2.53	0.1	3.77	2.46	0.1	3.62	2.4	0.1
	06	5.23	3.4	0.14	5.03	3.31	0.13	4.83	3.23	0.13
	08	5.63	3.68	0.15	5.42	3.59	0.14	5.2	3.5	0.14
	10	7.78	5.09	0.21	7.49	4.97	0.2	7.19	4.85	0.19
	12	8.63	5.68	0.23	8.29	5.54	0.22	7.96	5.4	0.21
	14	11.44	7.41	0.3	11.01	7.23	0.29	10.57	7.05	0.28
	16	14.62	9.39	0.39	14.07	9.14	0.37	13.51	8.91	0.36
	18	16.51	10.66	0.44	15.87	10.38	0.42	15.23	10.11	0.4
	20	17.41	11.27	0.46	16.73	10.97	0.44	16.06	10.69	0.43
8.5	02	3.16	1.99	0.09	3.05	1.94	0.09	2.94	1.89	0.08
	03	3.57	2.25	0.1	3.44	2.22	0.1	3.3	2.16	0.09
	04	3.96	2.55	0.11	3.81	2.49	0.11	3.66	2.43	0.1
	06	5.28	3.43	0.15	5.09	3.35	0.14	4.89	3.27	0.14
	08	5.7	3.72	0.16	5.48	3.63	0.15	5.27	3.54	0.15
	10	7.88	5.15	0.22	7.58	5.02	0.21	7.28	4.9	0.2
	12	8.74	5.74	0.25	8.4	5.6	0.24	8.07	5.46	0.23
	14	11.58	7.49	0.33	11.14	7.3	0.31	10.7	7.12	0.3
	16	14.8	9.49	0.42	14.23	9.24	0.4	13.67	9.01	0.38
	18	16.73	10.78	0.47	16.08	10.5	0.45	15.44	10.24	0.43
	20	17.65	11.41	0.5	16.96	11.1	0.48	16.28	10.82	0.46
8	02	3.19	2	0.1	3.08	1.95	0.09	2.96	1.9	0.09
	03	3.6	2.3	0.11	3.47	2.24	0.1	3.34	2.18	0.1
	04	4	2.58	0.12	3.85	2.51	0.11	3.7	2.45	0.11
	06	5.34	3.47	0.16	5.14	3.38	0.15	4.94	3.3	0.15
	08	5.77	3.76	0.17	5.55	3.67	0.17	5.33	3.58	0.16
	10	7.97	5.2	0.24	7.67	5.08	0.23	7.37	4.95	0.22
	12	8.86	5.81	0.26	8.52	5.67	0.25	8.18	5.53	0.24
	14	11.73	7.58	0.35	11.28	7.39	0.34	10.84	7.2	0.32
	16	14.98	9.59	0.45	14.41	9.35	0.43	13.85	9.11	0.41
	18	16.96	10.92	0.51	16.3	10.63	0.49	15.65	10.36	0.47
	20	17.91	11.55	0.53	17.21	11.25	0.51	16.52	10.96	0.49

NOTE:

- Capacities are with 3 row coil for models DWX02 - DWX12 & 4 row coil for models DWX14 & above.
- For any other conditions, please use selection software for fan coil units.
Apart from capacities, this software provides;
 - Sensible heat ratio
 - Leaving air temperature (DB/WB) - °C
 - Leaving water temperature - °C
 - Leaving water velocities (m/s)
 - Water pressure drop (kPa)

LEGEND:

- TC - Total Capacity (kW)
 SC - Sensible Heat Capacity (kW)
 WTR - Water Temperature Rise (°C)
 EWT - Entering Water Temperature (°C)
 LPS - Water flow (Liters Per Second)

FAN PERFORMANCE DATA (ENGLISH UNITS)

MODEL NUMBER	BLOWER MOTOR SPEED	CFM @ EXTERNAL STATIC PRESSURE (Inches of water)								
		0.0	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
DWX02	HIGH	289	255	221	206	183	160	137	110	85
	MEDIUM	215	176	136	103	70	60	-	-	-
	LOW	-	-	-	-	-	-	-	-	-
DWX03	HIGH	378	357	336	303	269	258	247	193	130
	MEDIUM	289	255	221	206	183	160	137	110	85
	LOW	215	176	136	103	70	60	-	-	-
DWX04	HIGH	462	431	401	390	380	353	326	254	183
	MEDIUM	418	399	381	361	341	318	295	231	168
	LOW	378	357	336	303	269	258	247	193	130
DWX06	HIGH	660	642	591	566	542	508	475	406	334
	MEDIUM	552	528	514	478	452	421	390	333	255
	LOW	470	445	420	395	375	345	315	265	175
DWX08	HIGH	750	729	698	670	643	613	584	510	427
	MEDIUM	660	642	591	566	542	508	475	406	334
	LOW	552	528	504	478	452	421	390	333	255
DWX10	HIGH	1050	987	960	934	908	886	864	804	741
	MEDIUM	852	827	802	775	748	727	706	650	594
	LOW	637	614	592	575	559	533	507	462	408
DWX12	HIGH	1234	1209	1184	1153	1122	1083	1044	966	894
	MEDIUM	1050	987	960	934	908	886	864	804	741
	LOW	852	827	802	775	748	727	706	650	594
DWX14	HIGH	1400	1362	1324	1291	1258	1218	1178	1102	1009
	MEDIUM	1225	1192	1160	1130	1100	1064	1028	958	877
	LOW	995	975	955	928	902	876	851	798	737
DWX16	HIGH	1631	1601	1571	1538	1505	1466	1426	1331	1245
	MEDIUM	1366	1338	1310	1277	1244	1199	1153	1070	970
	LOW	1100	1065	1030	992	954	912	869	792	726
DWX18	HIGH	1950	1900	1840	1780	1728	1690	1651	1558	1463
	MEDIUM	1631	1601	1571	1538	1505	1466	1426	1331	1245
	LOW	1366	1338	1310	1277	1244	1199	1153	1070	970
DWX20	HIGH	2100	2070	2050	2010	1970	1930	1900	1800	1650
	MEDIUM	1970	1930	1900	1860	1820	1785	1750	1700	1550
	LOW	1700	1680	1660	1640	1620	1600	1570	1475	1400

NOTE: 1. Values include losses for dry coil (3 row for DWX02 - DWX12 & 4 row for DWX14 - DWX20) and filters.
2. For additional hot water row, add 0.1" WG to the ESP.

FAN PERFORMANCE DATA (METRIC UNITS)

MODEL NUMBER	BLOWER MOTOR SPEED	LITERS PER SECOND @ EXTERNAL STATIC PRESSURE (Pascal)								
		0.0	12.5	25	37.5	50	62.5	75	100	125
DWX02	HIGH	136	120	104	92	86	76	65	52	41
	MEDIUM	101	83	64	49	33	28	-	-	-
	LOW	-	-	-	-	-	-	-	-	-
DWX03	HIGH	178	168	159	143	127	122	117	91	61
	MEDIUM	136	120	104	92	86	76	65	52	41
	LOW	101	83	64	49	33	28	-	-	-
DWX04	HIGH	218	203	189	184	179	167	154	120	86
	MEDIUM	197	188	180	170	161	150	139	109	79
	LOW	178	168	159	143	127	122	117	91	61
DWX06	HIGH	311	303	279	267	256	240	224	192	158
	MEDIUM	260	249	243	226	213	199	184	157	120
	LOW	222	210	198	186	177	163	149	125	83
DWX08	HIGH	354	344	329	316	303	289	276	241	202
	MEDIUM	311	303	279	267	256	240	224	192	158
	LOW	260	249	238	226	213	199	184	157	120
DWX10	HIGH	495	466	453	441	428	418	408	379	350
	MEDIUM	402	390	378	366	353	343	333	307	280
	LOW	301	290	279	271	264	252	239	218	193
DWX12	HIGH	582	571	559	544	529	511	493	456	422
	MEDIUM	495	466	453	441	428	418	408	379	350
	LOW	402	390	378	366	353	343	333	307	280
DWX14	HIGH	661	643	625	609	594	575	556	520	476
	MEDIUM	578	563	547	533	519	502	485	452	414
	LOW	470	460	451	438	426	413	402	377	348
DWX16	HIGH	770	756	741	726	710	692	673	628	588
	MEDIUM	645	631	618	603	587	566	544	505	458
	LOW	519	503	486	468	450	430	410	374	343
DWX18	HIGH	920	897	868	840	815	798	779	735	690
	MEDIUM	770	756	741	726	710	692	673	628	588
	LOW	645	631	618	603	587	566	544	505	458
DWX20	HIGH	991	977	967	949	930	911	897	849	779
	MEDIUM	930	911	897	878	859	842	826	802	731
	LOW	802	793	783	774	764	755	741	696	661

NOTE: 1. Values include losses for dry coil (3 row for DWX02 - DWX12 & 4 row for DWX14 - DWX20) and filters.
2. For additional hot water row, add 25 pascal to the ESP.

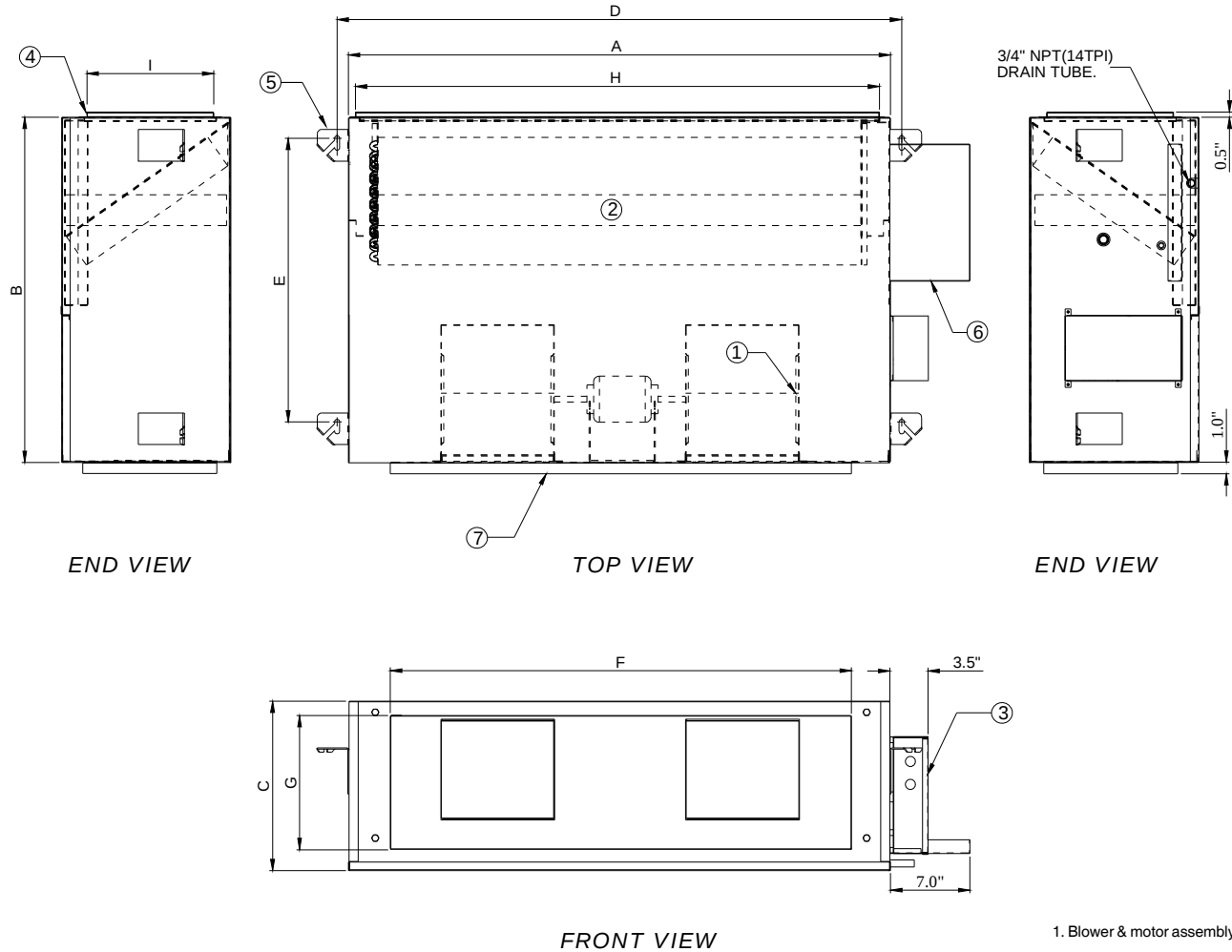
SOUND POWER LEVEL (dB re 10⁻¹² Watts)

AT 0.15 ESP

MODEL NUMBER	BLOWER MOTOR SPEED	OCTAVE BAND CENTER FREQUENCY - Hz						
		125	250	500	1000	2000	4000	8000
DWX02	HIGH	55	47	40	38	36	30	25
	MEDIUM	53	45	38	36	33	28	22
	LOW	50	46	36	34	32	27	21
DWX03	HIGH	58	54	47	48	50	41	35
	MEDIUM	55	47	40	38	36	30	25
	LOW	52	47	38	37	36	30	25
DWX04	HIGH	62	59	55	55	53	47	42
	MEDIUM	61	57	52	51	49	44	39
	LOW	57	53	47	48	48	41	35
DWX06	HIGH	64	59	58	53	52	49	46
	MEDIUM	62	57	56	51	49	46	43
	LOW	62	57	55	50	47	42	37
DWX08	HIGH	69	67	64	59	58	55	54
	MEDIUM	64	59	58	53	52	49	46
	LOW	62	57	56	51	49	46	43
DWX10	HIGH	72	67	66	69	64	63	62
	MEDIUM	69	64	62	66	60	58	56
	LOW	65	60	62	60	55	53	49
DWX12	HIGH	72	67	66	69	64	63	62
	MEDIUM	69	64	62	66	60	58	56
	LOW	65	60	62	60	55	53	49
DWX14	HIGH	74	70	68	70	67	65	65
	MEDIUM	72	67	66	69	64	63	62
	LOW	69	64	62	66	60	58	56
DWX16	HIGH	74	69	64	66	64	61	60
	MEDIUM	71	64	62	63	61	56	54
	LOW	68	61	60	59	57	51	46
DWX18	HIGH	76	73	68	69	68	66	65
	MEDIUM	74	69	64	66	64	61	60
	LOW	71	64	62	63	61	56	54
DWX20	HIGH	79	74	68	70	69	68	66
	MEDIUM	77	71	65	68	67	65	63
	LOW	74	67	63	65	63	60	57

DIMENSIONS

MODELS: DWX02 - DWX20



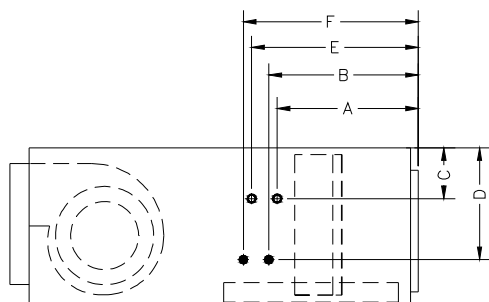
- 1. Blower & motor assembly
- 2. Cooling coil
- 3. Control box
- 4. Filter rack
- 5. Unit mounting brackets
- 6. Drip lip
- 7. Duct connector

NOTE: All dimensions are in mm (dimensions in brackets are in inches).

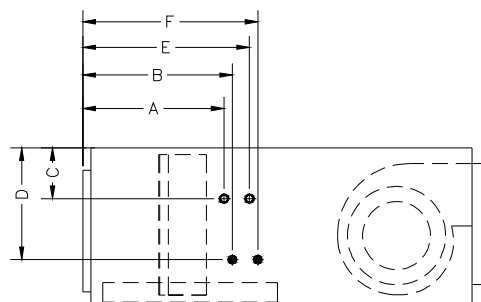
MODEL	DIMENSIONS									NO. OF MOTORS	NO. OF BLOWERS
	A	B	C	D	E	F	G	H	I		
DWX02	805 (31.7)	520 (20.5)	246 (9.7)	863 (34)	444 (17.5)	696 (27.4)	183 (7.2)	736 (29)	208 (8.2)	1	1
DWX03	805 (31.7)	520 (20.5)	246 (9.7)	863 (34)	444 (17.5)	696 (27.4)	183 (7.2)	736 (29)	208 (8.2)	1	1
DWX04	805 (31.7)	520 (20.5)	246 (9.7)	863 (34)	444 (17.5)	696 (27.4)	183 (7.2)	736 (29)	208 (8.2)	1	1
DWX06	904 (35.6)	610 (24)	244 (9.6)	960 (37.8)	521 (20.5)	769 (30.3)	183 (7.2)	841 (33.1)	206 (8.1)	1	2
DWX08	904 (35.6)	610 (24)	244 (9.6)	960 (37.8)	521 (20.5)	769 (30.3)	183 (7.2)	841 (33.1)	206 (8.1)	1	2
DWX10	1011 (39.8)	762 (30)	318 (12.5)	1067 (42)	640 (25.2)	858 (33.8)	241 (9.5)	945 (37.2)	259 (10.2)	1	2
DWX12	1011 (39.8)	762 (30)	318 (12.5)	1067 (42)	640 (25.2)	858 (33.8)	241 (9.5)	945 (37.2)	259 (10.2)	1	2
DWX14	1011 (39.8)	762 (30)	318 (12.5)	1067 (42)	640 (25.2)	858 (33.8)	241 (9.5)	945 (37.2)	259 (10.2)	1	2
DWX16	1194 (47)	762 (30)	368 (14.5)	1245 (49)	625 (24.6)	894 (35.2)	266 (10.5)	1155 (45.5)	292 (11.5)	1	2
DWX18	1194 (47)	762 (30)	368 (14.5)	1245 (49)	625 (24.6)	894 (35.2)	266 (10.5)	1155 (45.5)	292 (11.5)	1	2
DWX20	1194 (47)	762 (30)	368 (14.5)	1245 (49)	625 (24.6)	894 (35.2)	266 (10.5)	1155 (45.5)	292 (11.5)	1	2

DIMENSIONAL DATA - COIL CONNECTIONS

MODELS: DWX02, 03 & 04 (VERTICAL COIL)



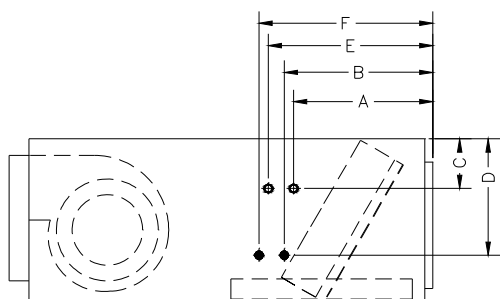
RH SIDE



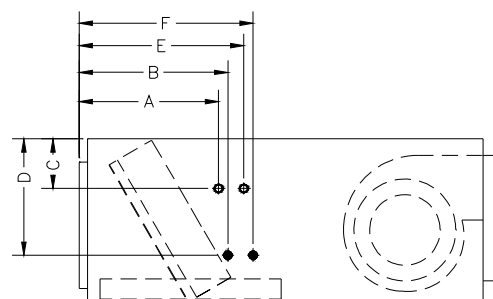
LH SIDE

● INLET
○ OUTLET

MODELS: DWX06 - DWX20 (INCLINED COIL)



RH SIDE



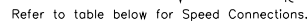
LH SIDE

● INLET
○ OUTLET

MODEL	CHILLED WATER COIL					HOT WATER COIL		
	A	B	C	D	No. OF ROWS	E	F	No. OF ROWS
DWX02	225 (8.9)	237 (9.3)	32 (1.3)	176 (6.9)	3	264 (10.4)	275 (10.8)	1
DWX03	225 (8.9)	237 (9.3)	32 (1.3)	176 (6.9)	3	264 (10.4)	275 (10.8)	1
DWX04	225 (8.9)	237 (9.3)	32 (1.3)	176 (6.9)	3	264 (10.4)	275 (10.8)	1
DWX06	313 (12.3)	324 (12.8)	32 (1.3)	178 (7)	3	351 (13.8)	362 (14.3)	1
DWX08	313 (12.3)	324 (12.8)	32 (1.3)	178 (7)	3	351 (13.8)	362 (14.3)	1
DWX10	313 (12.3)	324 (12.8)	83 (3.3)	227 (8.9)	3	351 (13.8)	362 (14.3)	1
DWX12	313 (12.3)	324 (12.8)	83 (3.3)	227 (8.9)	3	351 (13.8)	362 (14.3)	1
DWX14	319 (12.6)	330 (13)	83 (3.3)	227 (8.9)	4	357 (14)	368 (14.5)	1
DWX16	376 (14.8)	389 (15.3)	129 (5)	273 (10.8)	4	414 (16.3)	427 (16.8)	1
DWX18	376 (14.8)	389 (15.3)	129 (5)	273 (10.8)	4	414 (16.3)	427 (16.8)	1
DWX20	376 (14.8)	389 (15.3)	129 (5)	273 (10.8)	4	414 (16.3)	427 (16.8)	1

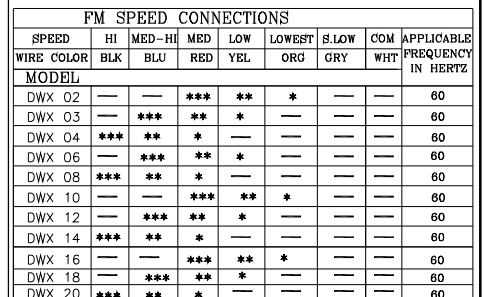
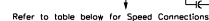
NOTE: All dimensions are in mm (dimensions in brackets are in inches).

MODELS: DWX02 - DWX14



1. POWER SUPPLY, REFER TO UNIT NAMEPLATE.
2. MOTORS THERMALLY PROTECTED.
3. ▲ HVTB IS NOT REQUIRED FOR HEATER MODELS.
4. USE HEATER AS PER OPTION REQUIRED. IF EV & HEATERS ARE FACTORY INSTALLED, PLEASE READ DASHED LINE AS CONTINUOUS LINE.
5. USE THERMOSTAT WITH CONTACT RATING 3AMPS (MINIMUM) FOR FM CONNECTION (FOR DWX02 - DWX14 ONLY).
6. USE COPPER CONDUCTOR WIRES ONLY.

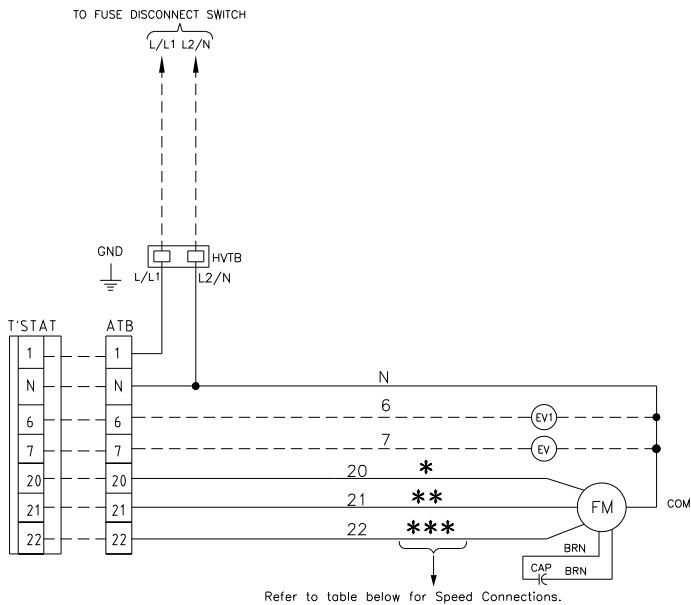
MODELS: DWX16 - DWX20



TYPICAL SCHEMATIC WIRING DIAGRAM

HEAT/COOL MODELS - HOT WATER

MODELS: DWX02 - DWX14



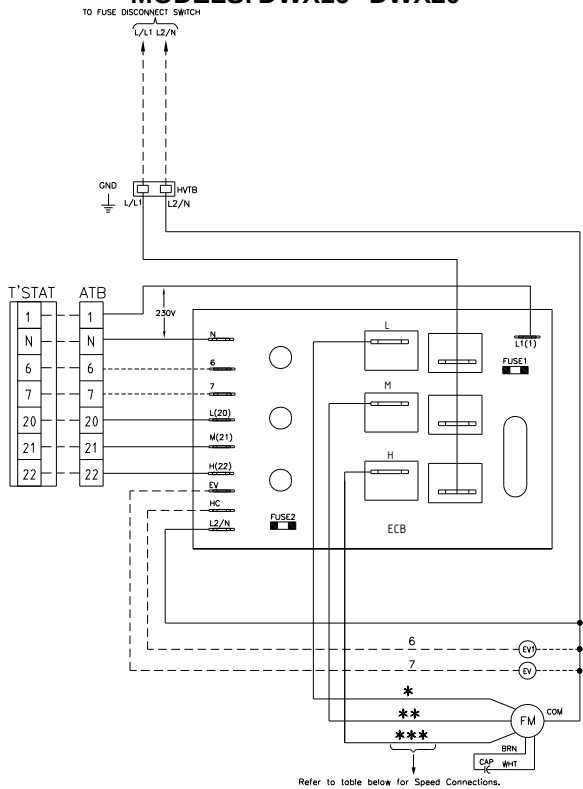
LEGEND

AFS	AIR FLOW SWITCH
ATB	AUXILIARY TERMINAL BLOCK
CAP	CAPACITOR
EV	ELECTRIC VALVE (COOLING)
EV1	ELECTRIC VALVE (HEATING)
FM	FAN MOTOR
GND	LUG GROUND
HVTB	HIGH VOLTAGE TERMINAL BLOCK
LL1	LINE OR LINE 1
L2/N	LINE 2 OR NEUTRAL
---	FIELD WIRING
---	FACTORY WIRING

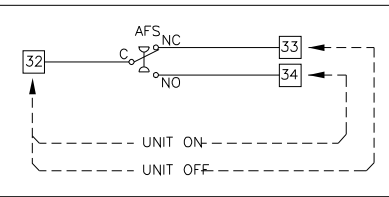
NOTES

1. POWER SUPPLY, REFER TO UNIT NAMEPLATE.
2. MOTORS THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR WIRES ONLY.
3. IF EV & EV1 ARE FACTORY INSTALLED, PLEASE READ DASHED LINE AS CONTINUOUS LINE.
4. USE THERMOSTAT WITH CONTACT RATING 3AMPS (MINIMUM) FOR FM CONNECTION (FOR DWX02 - DWX14 ONLY).
5. USE COPPER CONDUCTOR WIRES ONLY.

MODELS: DWX16 - DWX20



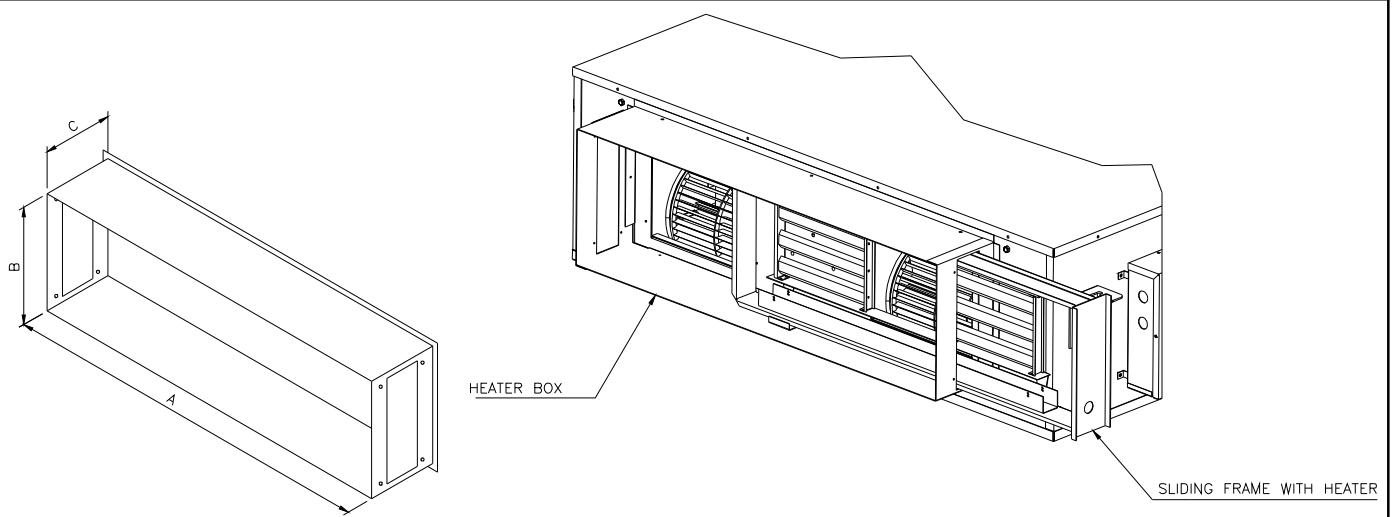
OPTIONAL VFC CONNECTION (UNIT ON/OFF INDICATION)



FM SPEED CONNECTIONS

SPEED	HI	MED-HI	MED	LOW	LOWEST	S.LOW	COM	APPLICABLE
WIRE COLOR	BLK	BLU	RED	YEL	ORG	GRY	WHT	FREQUENCY IN HERTZ
MODEL								
DWX 02	---	---	***	**	*	---	---	60
DWX 03	---	***	**	*	---	---	---	60
DWX 04	***	**	*	---	---	---	---	60
DWX 06	---	***	**	*	---	---	---	60
DWX 08	***	**	*	---	---	---	---	60
DWX 10	---	---	***	**	*	---	---	60
DWX 12	---	***	**	*	---	---	---	60
DWX 14	***	**	*	---	---	---	---	60
DWX 16	---	---	***	**	*	---	---	60
DWX 18	---	***	**	*	---	---	---	60
DWX 20	***	**	*	---	---	---	---	60

HEATER ARRANGEMENTS



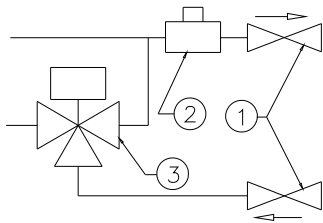
DIMENSIONS - HEATER BOX

MODEL	DIMENSIONS		
	A	B	C
DWX 02/03/04	696 (27.4)	228 (9)	216 (8.5)
DWX 06/08	769 (30.3)	228 (9)	216 (8.5)
DWX 10/12/14	858 (33.8)	241 (9.5)	147 (5.8)
DWX 16/18/20	894 (35.2)	266 (10.5)	147 (5.8)

NOTE: All dimensions are in mm (dimensions in brackets are in inches).

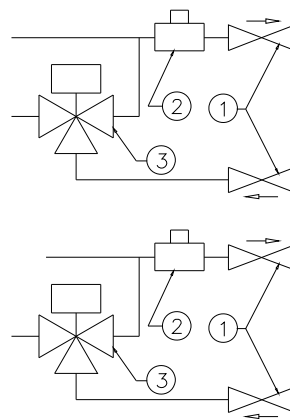
VALVE PACKAGES

VALVE PACKAGE 3-D (for 2-pipe)



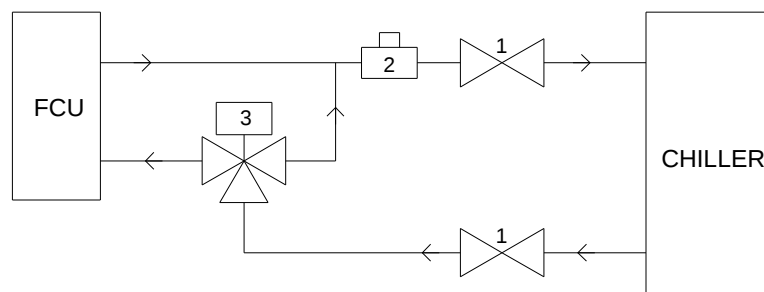
- ① Two gate shut off valves
- ② One balancing valve
- ③ One 3-way motor valve

VALVE PACKAGE 4-D (for 4-pipe)



- ① Four gate shut off valves
- ② Two balancing valves
- ③ Two 3-way motor valves

- ① Two gate valves
- ② One balancing valve
- ③ One 3-way motor valve



INSTALLATION

The complete shipment should be inspected for damage. Any damage, visible or concealed, should be reported immediately to the delivery man or driver and noted on the shipping invoice.

Place unit in position and make sure that unit is level. This is important to assure proper drainage and operation. Slots provided in the mounting brackets should be used for installing the units.

ELECTRICAL

Please ensure regular power supply (V-Ph-Hz) to the unit is as per unit nameplate requirements.

Caution: Operation of the unit on improper power supply like generators will result in damage to the unit.

Warning: Before installation or servicing, always TURN OFF all power to the unit. There may be more than one disconnect switch. Ensure all of them are turned off.

GROUND & POWER WIRES

Connect power wires as per wiring diagram. Connect ground wire to the ground lug inside the control box.

WIRING

1. All wiring must comply with the "National Electric Code" and local electrical standards.
2. The power supply, voltage, frequency and phase must coincide with the unit nameplate.
3. Power wiring to the equipment must be adequately sized for maximum ampacity as shown on unit name plate; but not less than 14 gauge (2.5 mm²) for lower amps.
4. For control wiring, use approved thermostat wire [minimum 18 gauge (0.75 mm²)], color coded wires. Never use telephone wire for this purpose.
5. Power supply should be checked to be certain that supply voltage agrees with equipment nameplate. Serious damage to motors can occur, if improper voltage is applied.

MAINTENANCE

COIL

Coil may be cleaned by removing and brushing between fins with a stiff wire brush. Brushing should be followed by cleaning with vacuum cleaner. The coil may also be cleaned by using a high pressure air, if compressed air source is available. It should be pointed out that if air filters are used and periodically cleaned, the coils will not be clogged up prematurely.

DRAIN PIPE

Drain pipe should be checked before summer operation of unit. If it is clogged, steps should be taken to clear the debris so that condensate will flow out easily. A standard pipe cleaner for 1/2" ID pipe may be used. Periodic checks of the drain pipe should be taken during summer operation, as there is a possibility of it becoming clogged with dirt.

FILTER CLEANING

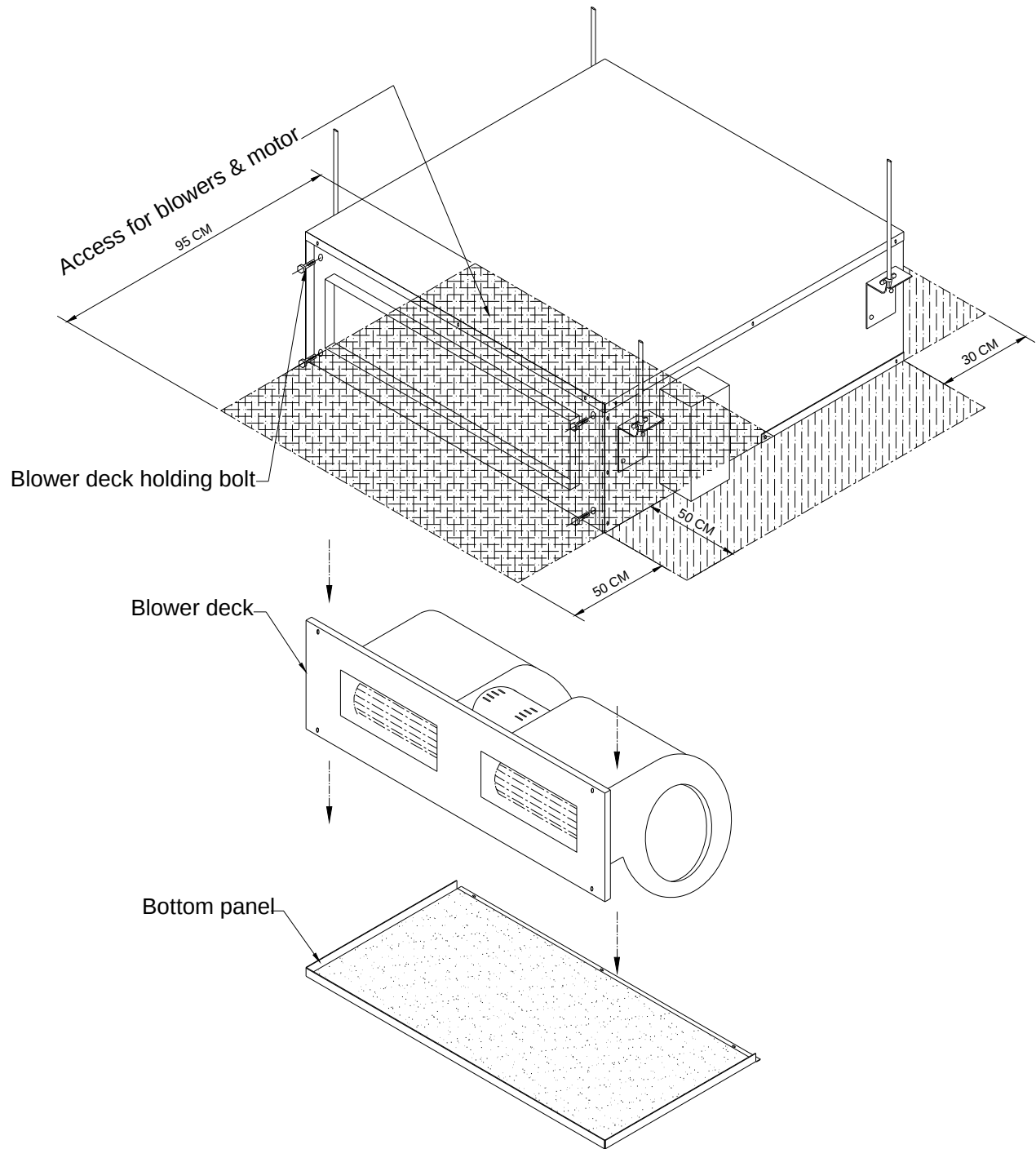
Remove access panel, slide filter out of filter rack, and clean as follows:

Tap filter on solid surface to dislodge heavy particles. Wash under stream of hot water. If filter has been put to exceptional service, a mild solution of Sal-Soda, Tri-Sodium Phosphate or any other commercial solvent can be used. Set filter on end with slots in frame down, which allows it to drain. Filters should dry thoroughly before reuse.

REPLACEMENT PARTS

When writing for replacement parts, refer to model number and serial number on the nameplate of the unit.

SERVICING INSTRUCTIONS



NOTES:

1. Required indoor unit access clearances are shown as hatched area.
2. Free service access should be available from the bottom of the unit for removing & servicing the blower/motor deck.
3. Servicing instructions:
 - a. Remove the bottom panel.
 - b. Support the blower deck while unscrewing the 4 blower deck holding bolts and bring down the blower deck.

PARTS LIST

DESCRIPTION	MODEL NUMBER				
	DWX02/03/04	DWX06/08	DWX10/12/14	DWX16/18	DWX20
BLOWER MOTOR	800-827-17	800-547-65	800-547-66	800-547-67	800-547-67
BLOWER WHEEL	800-711-50	800-711-51	800-711-52	800-711-53	800-711-53
VALVE PACKAGE (3D)	700-364-81	700-364-81	700-364-81	700-364-81	700-364-81
RETURN AIR FILTERS	800-249-43	800-249-39	800-249-38	800-249-36	800-249-36
THERMOSTAT	800-652-93	800-652-93	800-652-93	800-652-93	800-652-93

NOTE: For 4D type valve package, order 2 x 3D valve packages.



Zamil Air Conditioners (ZAC), a sector business of Zamil Industrial, is the largest supplier of air conditioners in the Middle East. It manufactures and markets a whole range of air conditioners from Room Air Conditioners to Packaged units to large capacity Chillers for residential, commercial and industrial applications.

Zamil Air Conditioners was founded in 1974 as one of the first air conditioning companies to be established in Saudi Arabia and today is a leading international manufacturer of air conditioning systems and is Number One in the Middle East.

With its head office and prime manufacturing plants in Dammam, Saudi Arabia and a production facility in Italy, Zamil Air Conditioners produces over 900,000 air conditioners per annum. It supplies air conditioning products to over 55 countries across the world - the major markets being GCC, Middle East, North Africa, Europe and Asia.

Zamil Air Conditioners is an ISO 9001:2008 certified company. It is the first Middle-Eastern company to have received the prestigious ARI (Air-Conditioning and Refrigeration Institute, USA) and Eurovent certifications for many of its products. With its state-of-the-art testing facility - Ikhtabar, a third party air conditioners testing facility built by Intertek Testing Services (ITS), certified by Electrical Testing Laboratories (ETL) and accredited by the Saudi Accreditation Committee (SASO) for compliances with the international testing standards, Zamil Air Conditioners is the only manufacturer in the region capable of guaranteeing product performance in compliance with local, regional and international specifications and standards for operating performance, cooling capacity, energy efficiency, airflow, noise level and durability.

Over the past few years, Zamil Air Conditioners has embarked upon an ambitious growth path. Besides expanding its product lines through the two acquisitions made by Zamil Industrial in Europe - Clima Tech and Geoclima, Zamil Air Conditioners has been vigorously moving into newer markets, seeking strategic alliances and investing heavily in Research & Development.

For more information, please visit our website www.zamilac.com



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