



ENGINEERING DATA

Package Air Conditioner
Rooftop
Cooling Only [50Hz]

UATQ-C Series



R410A

ED5RT2-ME21V1
Supersede : TM-5RT-C-MEA1

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Introduction

Model Name and Power Supply

Model	Power Supply
UATQ60CGXY1	3Phase, 380-415V, 50Hz
UATQ90CGXY1	
UATQ120CGXY1	
UATQ150CGXY1*	
UATQ180CGXY1	
UATQ210CGXY1	
UATQ240CGXY1	
UATQ300CGXY1	

Remark:

*UATQ150CGXY1 is targeted for non UAE countries only.

Nomenclature

Definition	Description
Unit Category	UAT : Rooftop
Refrigerant & Mode	Q : R410A , Cooling Only
Capacity Indication*	60 : 60,000 Btu/hr
Major Design Category	C : C Series
Specification	G : Gold Fin (Outdoor Coil)
Factory Origin	X : Malaysia
Power Supply	Y1 : 3Phase / 380-415V / 50Hz
Revision	“blank” : First Revision

Remark:

*Capacity value under Nomenclature is an indication.

Please refer to Specifications Data for exact capacity value.

Functions

Category	Functions	UATQ-C
Basic Function	Operating limit for cooling (°CDB)	19~52
	Operating limit for cooling (°FDB)	66.2~125.6
Compressor	Rotary compressor	-
	Scroll compressor	●
Lifestyle Convenience	Indoor unit ON/OFF button	-
	R/C with back light (wired remote controller)	●
	Temperature display (wired remote controller)	●
Health & Clean	Saranet Filter	●
	2" return air filter slot	●
	Ionizer	-
Timer	Weekly Timer (applicable with wired remote controller)	●
Worry Free (Reliability & Durability)	Auto-restart (after power failure)	●
	Self-diagnosis (R/C, LED)	●
	Separate service panel for control box	●
	Separate partition	●
	Wiring error check function	-
	High and low pressure switch	●
	Anti-corrosion treatment of outdoor heat exchanger	Gold Fin
Flexibility	ESP Selection	●
	°F/°C changeover R/C temperature display (Factory setting: °C)	●
Remote Control	NIM Adaptor	●*
	Sequential NIM Adaptor	●*
Remote Controller	Wireless	-
	Wired	BRC51D65

Note: ● : Available
 - : Not Available
 ●* : Optional (Refer to DAMA Spare Part team for more details on optional items.)

Features

Key Features

High Energy Efficiency

In line with the market trend of moving towards high energy efficiency products, the UATQ-C series is designed with high efficiency scroll compressors, optimized heat exchangers and high-performing fans with the target of high EER.

Model	UATQ60C	UATQ90C
Nominal EER @ 35°C (Btu/hr/W)	13.01	11.80
Nominal EER @ 46°C (Btu/hr/W)	8.80	8.55

Model	UATQ120C	UATQ150C
Nominal EER @ 35°C (Btu/hr/W)	12.20	12.00
Nominal EER @ 46°C (Btu/hr/W)	8.60	8.55

Model	UATQ180C	UATQ210C
Nominal EER @ 35°C (Btu/hr/W)	11.70	12.00
Nominal EER @ 46°C (Btu/hr/W)	8.55	8.95

Model	UATQ240C	UATQ300C
Nominal EER @ 35°C (Btu/hr/W)	11.90	11.90
Nominal EER @ 46°C (Btu/hr/W)	8.70	8.45

Note:

Efficiency at 35°C is in compliance with the ESTIDAMA minimum requirement of 11.60 Btu/hr/W.

Efficiency at 46°C is in compliance with the ESMA minimum requirement of 8.10 Btu/hr/W, 7.90 Btu/hr/W and 7.50 Btu/hr/W (according to rated capacity).

Wide Operating Range

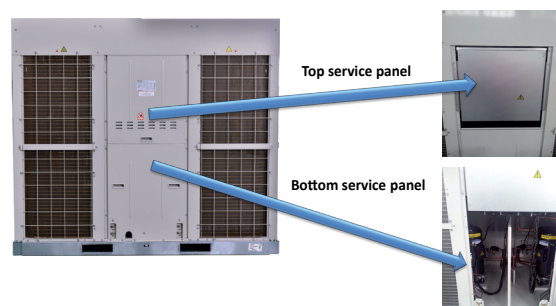
The UATQ-C series rooftops are specifically designed to deliver top performance in both standard and high ambient temperature conditions. Each unit is capable of operating continuously at an outdoor ambient of up to **52°C**.

Lightweight and compact

The lightweight and compact design of UATQ-C series allows for ease of transportation and installation.

Separate Service Panels

The unit is designed with two separate service panels for easy electrical box servicing.



Independent Refrigerant Circuit

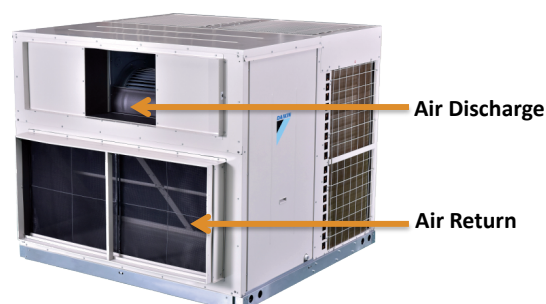
Each unit is designed with two independent refrigerant circuits, each controlled separately for maximum part load efficiency and durability.

This also allows the unit to run at part load when lower cooling capacity is required.

** Applicable for UATQ120C and above.*

Air Discharge and Air Return

The UATQ-C series is available in Horizontal Air Discharge only, designed with Air discharge on the top and return air on the bottom for easy duct design.



Component Features

Compressor

High efficiency, low noise, and hermetically sealed SCROLL compressors are used in the UATQ-C series to give a better performance.

All compressors are equipped with an internal overload protection. Crankcase heaters are installed as standard in each compressor.

Evaporator Coil

Evaporator coils are manufactured from seamless inner grooved copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer.

All coils are tested against leaks by Nitrogen holding at 609psig and highly precise Helium leak test at 235psig.

Hydrophilic Gold Fin coating evaporator coil is offered as standard, which could give good effects to efficient drainage of condensate water as well as heat transfer performance, and gives superior corrosion protection even in the harshest environment especially in coastal area. (960 hours Salt Spray tested)

Evaporator Fan

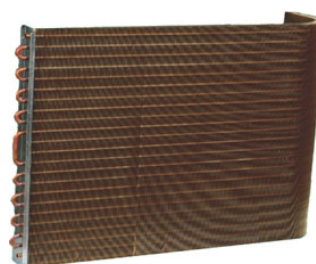
The unit is designed with belt driven evaporator motor, allows for change of pulley on site to accommodate different static pressure and air flow requirement. This flexibility allows for wider application and offers the possibility to reach the best working conditions considering the unit's characteristics. The fan motor is **IP55 rated protection index with class B insulation class**.

Condenser Coil

Condenser coils are manufactured from seamless inner grooved copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All coils are tested against leaks by Nitrogen holding at 609psig and highly precise Helium leak test at 235psig.

ALL standard coils are up to 3 rows / 14-16 FPI, 3/8" (9.52mm) O.D. tubes.

Hydrophilic Gold Fin coating condenser coil is offered as standard, which gives superior corrosion protection even in the harshest environment especially in coastal area. (960 hours Salt Spray tested)



Condenser Fan/Motor

Fans are of propeller type, direct driven by weatherproof electrical induction motors. Condenser fan motors are **rated IP55 protection index with class F insulation class** and is designed with **dust proof bearing** to ensure the reliability of the motor and smooth operation all year round.

Casing/Structure

The unit casing used in UATQ-C series is made of zinc coated galvanized steel sheets. It is further coated with an electrostatic powder coat, oven-baked for a tough and lasting weather resistant finish. Zinc plated screws are used to further reduce the possibility of unit rusting.

Coil Guard

The condenser coil is protected by coil guard to prevent accidental damage during transportation, handling and installation.



Refrigerant Circuit

The UATQ-C series is designed with the ability to operate at partial load depending on the requirement of the application.

** Applicable for UATQ120C and above.*

Each refrigerant circuit has an independent **Thermal Expansion Valve (TXV)**, **Filter Drier** and **High / Low Pressure Switch**.

Additional valves are provided for site installation of Pressure Gauge and Low Ambient Kit.



Filter

Saranet pre-filter is available as standard in the unit to prevent foreign particles entry into the unit.

A 2" filter rail is installed in the unit to accommodate additional site installed filter.

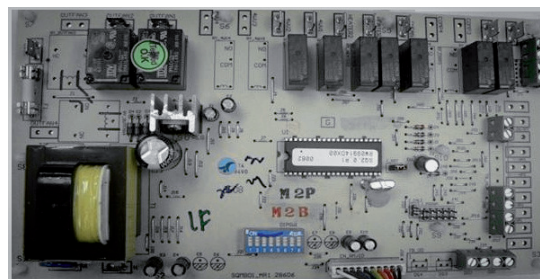
Phase Sequential Protection

The Phase Sequential Protector is a three phase line monitor module that protects the unit components against phase loss, phase reversal and phase unbalance. It is designed to protect compressors from reverse rotation. The onboard LED indicators indicates the ON and FAULT status.

Microprocessor Based Control

The control system consists of a microprocessor controller and a user interface remote controller. The controller offers the following features:

- Built in anti recycle timer to prevent compressor short cycling
- Sequential control of compressor, condenser motor and evaporator motor
- Intelligent control to ensure balance usage of compressor in the system
- Auto random restart and memory backup of last setting in case of interrupted power supply
- Energy saving function
- Sensor fault indication



Wired Control Panel

The control panel is protected by a panel cover to prevent nuisance changes by unauthorized personnel.

With the remote wired controller connected, the following features can be performed:

- Temperature setting
- 7 days programmable timer
- Error indication on the remote controller for easy troubleshooting



Specifications

MODEL				UATQ60C	UATQ90C	UATQ120C	UATQ150C		
Capacity Rated [1]		Btu/h		62,500	93,400	124,500	154,400		
		kW		18.32	27.37	36.49	45.25		
Capacity Rated [2]		Btu/h		61,000	90,000	121,500	150,000		
		kW		17.88	26.38	35.61	43.96		
Capacity Rated [3]		Btu/h		51,780	77,000	103,300	129,000		
		kW		15.18	22.57	30.28	37.81		
Power Consumption Rated [2]		kW		4.69	7.63	9.96	12.50		
Running Current Rated [2]		A		8.20	13.50	17.00	24.10		
EER [2]		W/W		3.81	3.46	3.58	3.52		
Refrigerant	Type			R410A					
Charge		kg		9.5	11.5	5.2 + 5.2	8.5 + 8.5		
Refrigerant Control (Expansion Device)				THERMAL EXPANSION VALVE (TXV)					
Casing		Colour		IVORY WHITE					
EVAPORATOR									
Control	Air Discharge			DUCTED					
	Operation			WIRED CONTROL					
Air Flow		CFM		2000	2800	4400	5000		
External Static Pressure (Factory Setting)		Pa / in.wg.		50-500 / 0.2-2.0 (100 / 0.4)	50-500 / 0.2-2.0 (65 / 0.26)	50-500 / 0.2-2.0 (85 / 0.34)	50-500 / 0.2-2.0 (95 / 0.38)		
Condensate Drain Size		mm / in		25.40 / 1					
Fan	Type			CENTRIFUGAL FORWARD CURVE					
	Drive			BELT DRIVE					
Fan Motor	Type			INDUCTION					
	Index of protection (IP)			IP55					
	Insulation Grade			B					
	Power Consumption		kW	0.50	1.07	0.93	1.64		
	Running Current Rated		A	1.30	2.30	2.30	3.70		
	Motor Output		kW	0.75	1.10	1.50	2.20		
	Poles			4					
Coil	Tube	Material		COPPER					
		Diameter		mm		9.52			
	Fin	Material		ALUMINIUM					
		Face Area		m²		0.71	0.81	0.65 + 0.65	0.65 + 0.65
		Row				4	4	3	4
Air Quality	Filter	Type		WASHABLE SARANET					
		Size (L x W x t)		mm	1100 x 500 x 4	1100 x 660 x 4	895 x 685 x 4	895 x 685 x 4	
		Quantity		pc	1		2		
CONDENSER									
Sound Pressure Level		dBA		61	62	65	67		
Sound Power Level		dBA		81	83	83	85		
Dimensions (H x W x D)		mm		1150 x 1280 x 1520	1350 x 1280 x 1520	1390 x 1965 x 1630	1390 x 1965 x 1630		
Packaged Dimensions (H x W x D)		mm		1270 x 1320 x 1710	1410 x 1320 x 1710	1440 x 2020 x 1840	1440 x 2020 x 1840		
Weight		kg		350	380	590	650		
Gross Weight		kg		370	400	620	680		
Fan	Type			PROPELLER					
	Drive			DIRECT DRIVE					
Fan Motor	Type			INDUCTION					
	Index of protection (IP)			IP55					
	Insulation Grade			F					
	Power Consumption		kW	0.45	0.82	0.52 + 0.52	0.80 + 0.80		
	Running Current Rated		A	2.00	3.50	2.30 + 2.30	3.50 + 3.50		
	Motor Output		kW	0.36	0.68	0.36 + 0.36	0.58 + 0.58		
	Quantity		pc	1		2			
Poles			6		6 + 6				
Compressor	Type			SCROLL					
	Oil type			POE OIL					
	Oil amount		cm³	1656	1774	1656 + 1656	1656 + 1656		
	Power Consumption [2]		kW	3.57	5.31	3.74 + 3.74	4.38 + 4.38		
	Running Current Rated [2]		A	6.40	10.10	6.70 + 6.70	9.00 + 9.00		
	Locked Rotor Amp.		A	64.0	101.0	64.0 + 64.0	100.0 + 100.0		
Quantity		pc	1		2				
Coil	Tube	Material		COPPER					
		Diameter		mm		9.52			
	Fin	Material		ALUMINIUM					
		Face Area		m²		1.72	2.10	1.44 + 1.44	1.44 + 1.44
		Row				3	3	2	3

1) GROSS COOLING CAPACITY BASED ON 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

2) NOMINAL COOLING CAPACITY BASED ON 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

3) NOMINAL COOLING CAPACITY BASED ON 29°C DB / 19°C WB INDOOR AND 46°C DB OUTDOOR

4) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

5) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE

MODEL				UATQ180C	UATQ210C	UATQ240C	UATQ300C
Capacity Rated [1]		Btu/h		189,000	220,000	248,600	312,200
		kW		55.39	64.48	72.86	91.50
Capacity Rated [2]		Btu/h		181,000	213,000	241,000	304,000
		kW		53.05	62.43	70.63	89.10
Capacity Rated [3]		Btu/h		156,000	184,000	208,000	258,000
		kW		45.72	53.90	60.96	75.62
Power Consumption Rated [2]		kW		15.47	17.75	20.26	25.54
Running Current Rated [2]		A		27.20	33.90	38.70	46.00
EER [2]		W/W		3.43	3.52	3.49	3.49
Refrigerant	Type	R410A					
	Charge	kg	8.5 + 8.5	12.0 + 12.0	10.8 + 10.8	14.0 + 14.0	
Refrigerant Control (Expansion Device)			THERMAL EXPANSION VALVE (TXV)				
Casing		Colour	IVORY WHITE				
EVAPORATOR							
Control	Air Discharge		DUCTED				
	Operation		WIRED CONTROL				
Air Flow		CFM	3304 / 7000	3587 / 7600	3776 / 8000	4248 / 9000	
External Static Pressure (Factory Setting)		Pa / in.wg.	50-500 / 0.2-2.0 (120 / 0.48)	50-500 / 0.2-2.0 (165 / 0.66)	50-500 / 0.2-2.0 (175 / 0.70)	50-500 / 0.2-2.0 (140 / 0.56)	
Condensate Drain Size		mm / in	25.40 / 1				
Fan	Type		CENTRIFUGAL FORWARD CURVE				
	Drive		BELT DRIVE				
Fan Motor	Type		INDUCTION				
	Index of protection (IP)		IP55				
	Insulation Grade		B				
	Power Consumption	kW	2.39	2.40	2.60	3.48	
	Running Current Rated	A	4.70	4.60	5.50	7.20	
	Motor Output	kW	3.00	3.00	3.70	3.70	
	Poles		4				
Coil	Tube	Material	COPPER				
		Diameter	mm	9.52			
	Fin	Material	ALUMINIUM				
		Face Area	m²	0.89 + 0.89	1.14 + 1.14	1.14 + 1.14	1.45 + 1.45
		Row	4				
Air Quality	Filter	Type	WASHABLE SARANET				
		Size (L x W x t)	mm	834 x 760 x 4	1040 x 750 x 4	1040 x 750 x 4	1040 x 1050 x 4
		Quantity	pc	2			
CONDENSER							
Sound Pressure Level		dBA	68	69	70	72	
Sound Power Level		dBA	87	89	89	92	
Dimensions (H x W x D)		mm	1690 x 1965 x 1905	1650 x 2410 x 2030	1650 x 2410 x 2030	1950 x 2410 x 2030	
Packaged Dimensions (H x W x D)		mm	1730 x 2120 x 2020	1740 x 2570 x 2290	1740 x 2570 x 2290	2040 x 2570 x 2290	
Weight		kg	840	930	940	1090	
Gross Weight		kg	870	970	980	1130	
Fan	Type		PROPELLER				
	Drive		DIRECT DRIVE				
Fan Motor	Type		INDUCTION				
	Index of protection (IP)		IP55				
	Insulation Grade		F				
	Power Consumption	kW	0.87 + 0.87	1.50 + 1.50	1.50 + 1.50	1.50 + 1.50	
	Running Current Rated	A	3.80 + 3.80	2.70 + 2.70	2.70 + 2.70	2.70 + 2.70	
	Motor Output	kW	0.68 + 0.68	1.20 + 1.20	1.20 + 1.20	1.20 + 1.20	
	Quantity	pc	2				
Compressor	Poles		6 + 6				
	Type		SCROLL				
	Oil type		POE OIL				
	Oil amount	cm³	1774 + 1774	2514 + 2514	2514 + 2514	3253 + 3253	
	Power Consumption [2]	kW	5.30 + 5.30	5.75 + 5.75	6.84 + 6.84	9.02 + 9.02	
	Running Current Rated [2]	A	10.10 + 10.10	11.90 + 11.90	14.10 + 14.10	18.60 + 18.60	
	Locked Rotor Amp.	A	101.0 + 101.0	139.0 + 139.0	139.0 + 139.0	140.0 + 140.0	
Coil	Tube	Material	COPPER				
		Diameter	mm	9.52			
	Fin	Material	ALUMINIUM				
		Face Area	m²	1.64 + 1.64	2.13 + 2.13	2.13 + 2.13	2.59 + 2.59
		Row	3				

1) GROSS COOLING CAPACITY BASED ON 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

2) NOMINAL COOLING CAPACITY BASED ON 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR

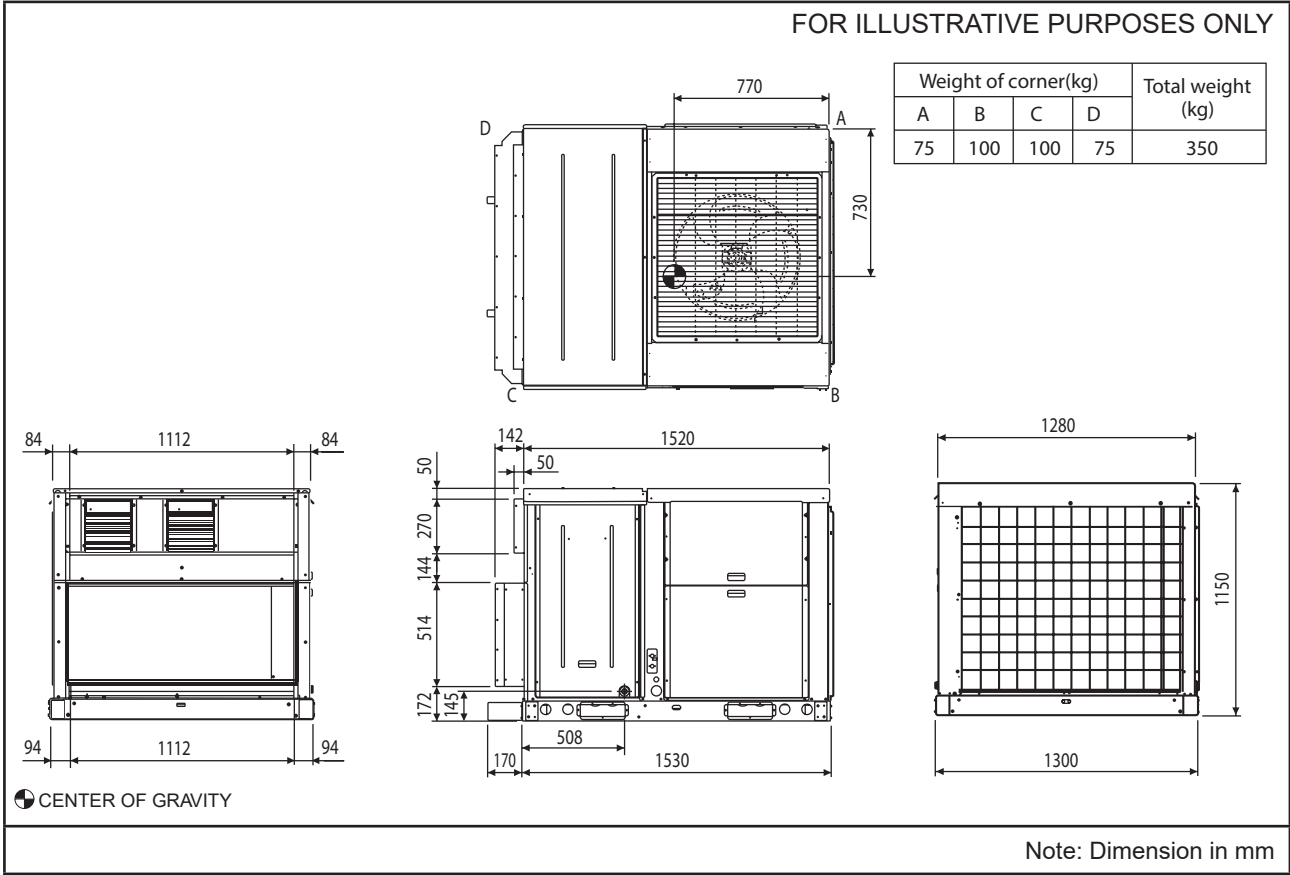
3) NOMINAL COOLING CAPACITY BASED ON 29°C DB / 19°C WB INDOOR AND 46°C DB OUTDOOR

4) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

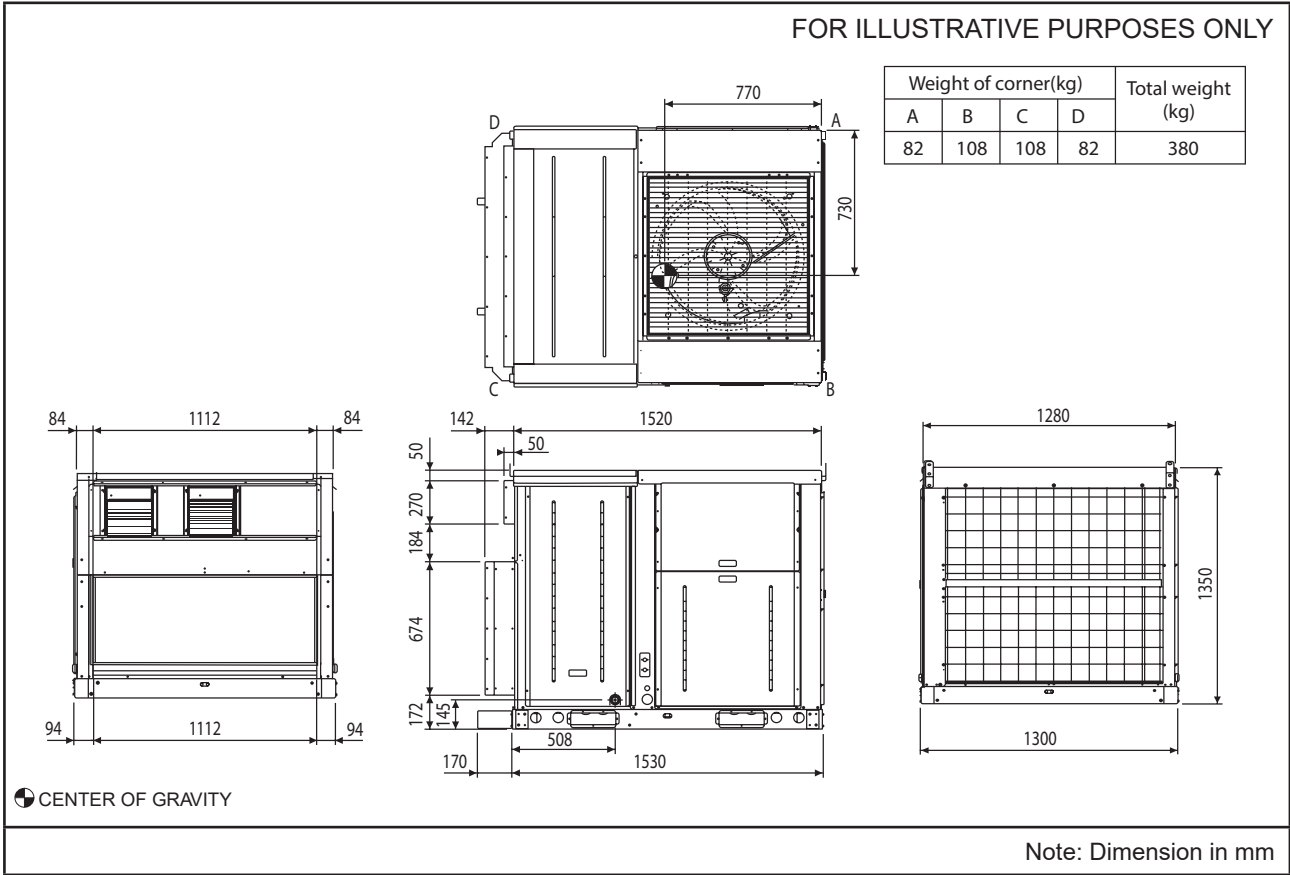
5) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE

Dimensions

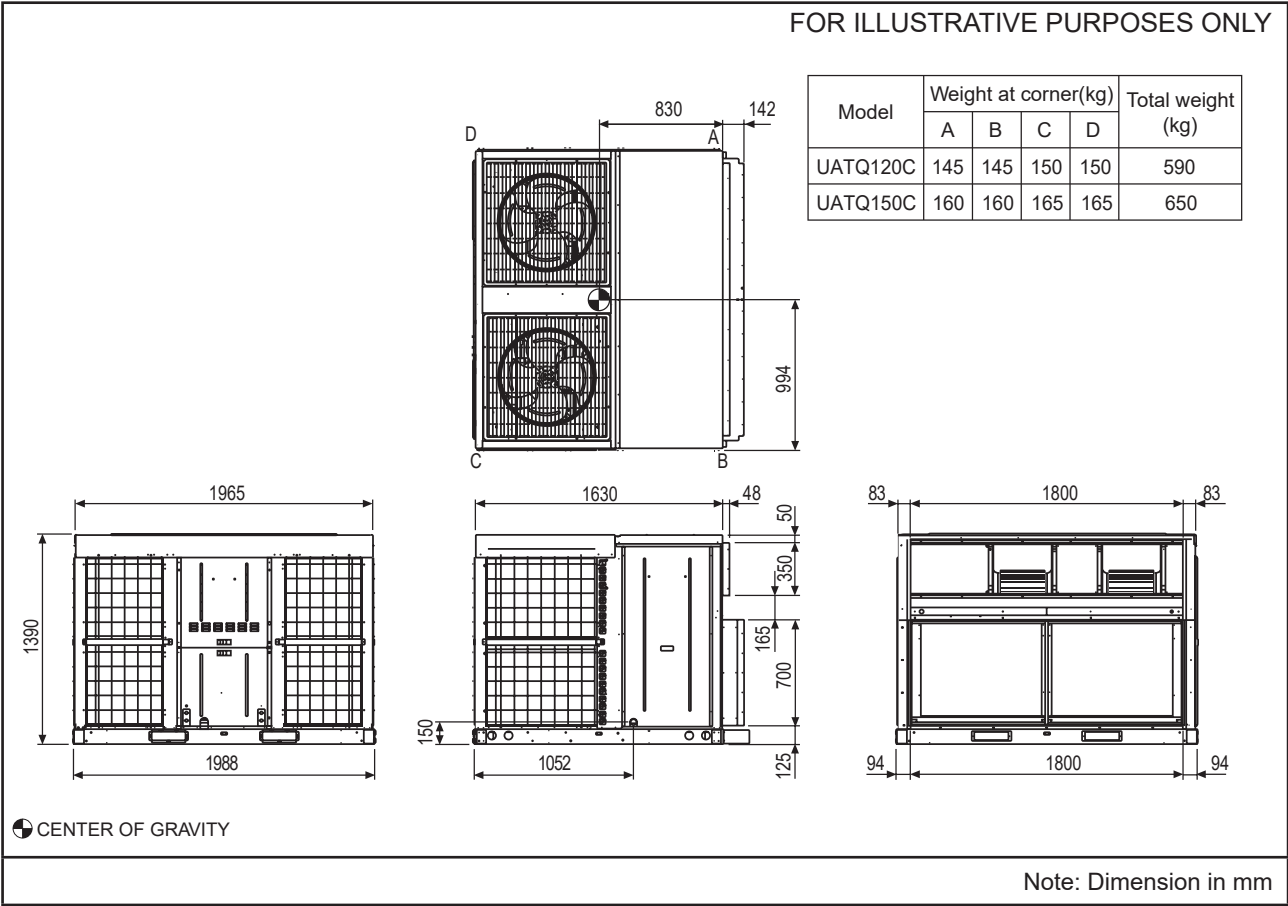
Model : UATQ60C



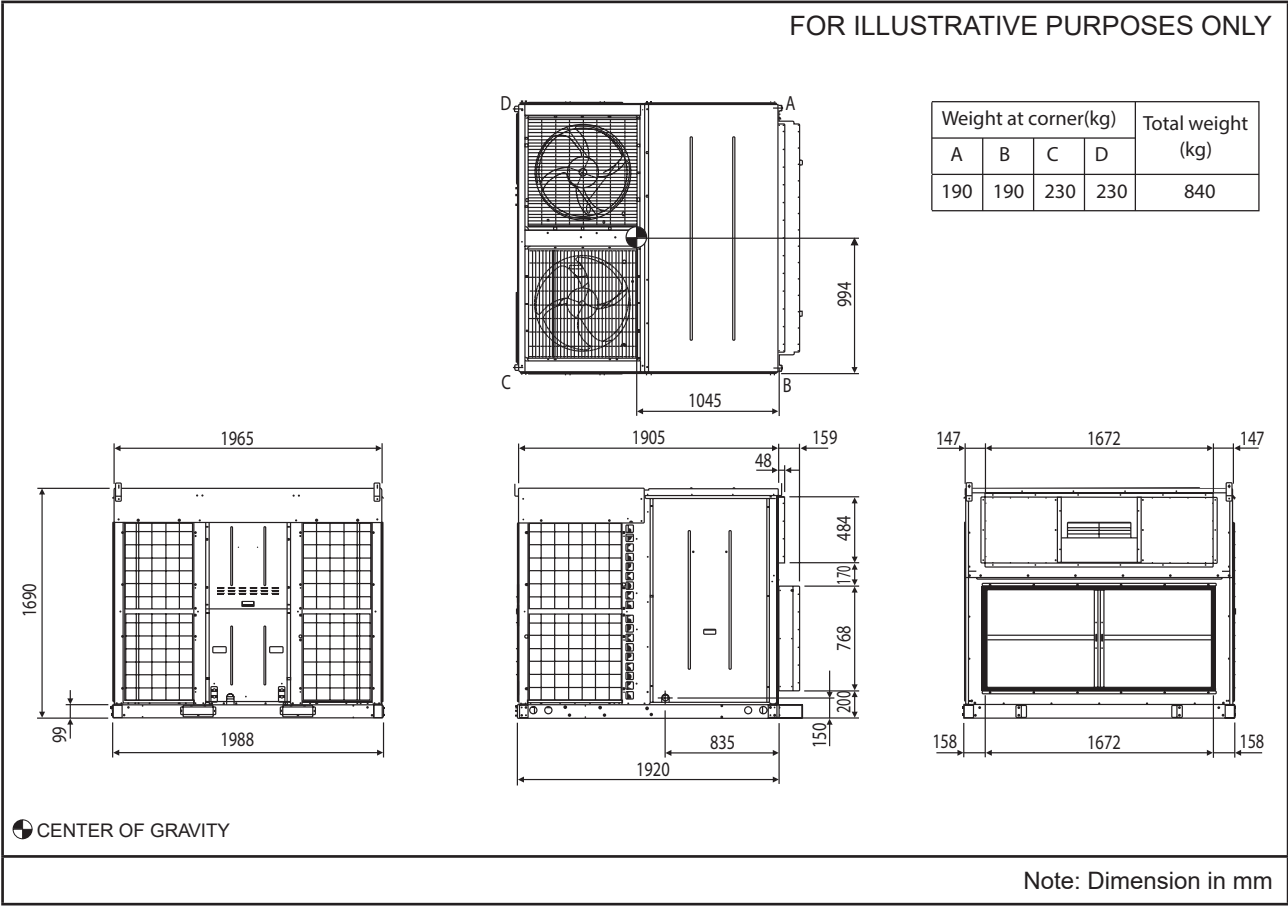
Model : UATQ90C



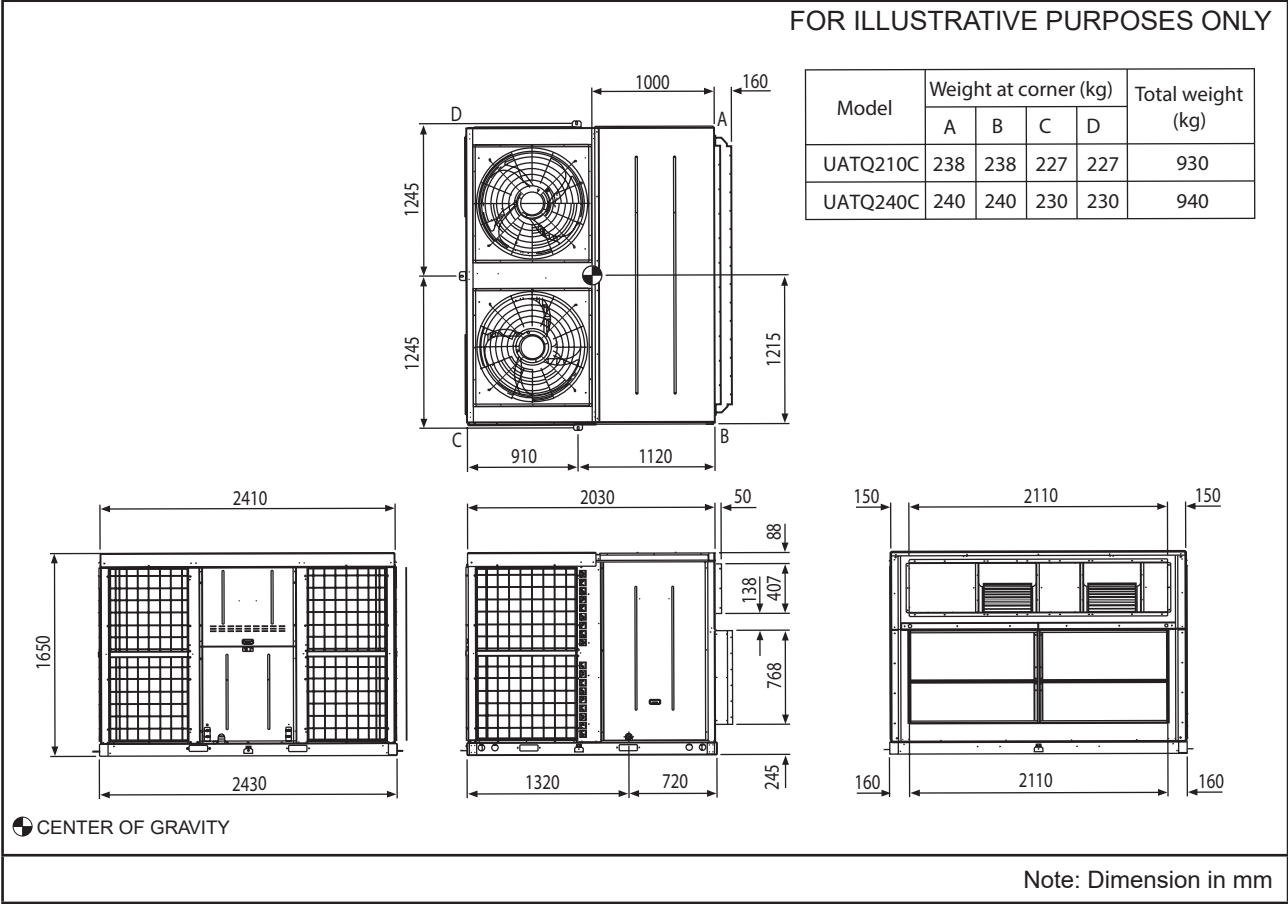
Model : UATQ120/150C



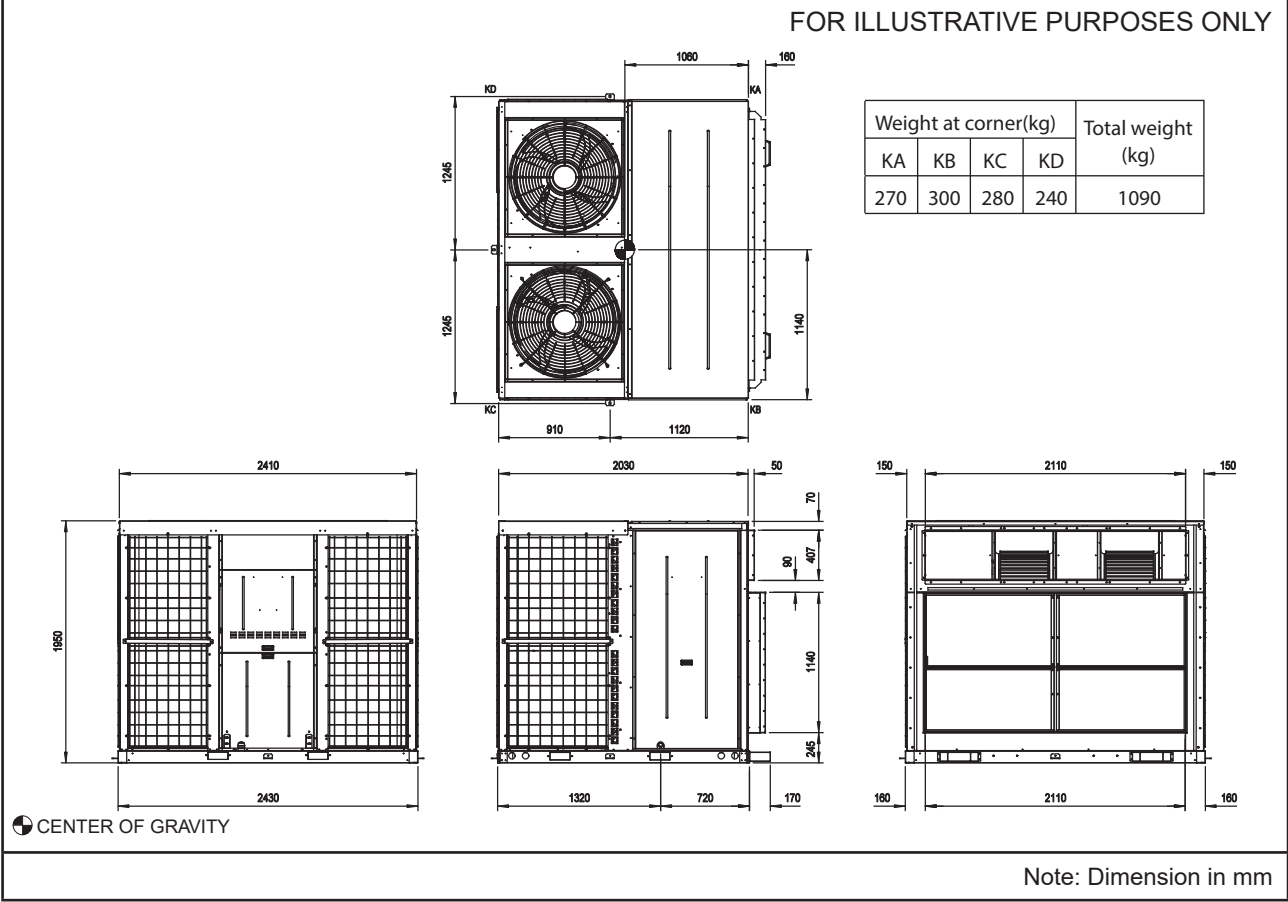
Model : UATQ180C



Model : UATQ210/240C



Model : UATQ300C



Selection Process

Drive Package

The following are the design requirements for UATQ60C unit:																											
Model:		UATQ60C																									
Supply Air Quantity		=	2000 CFM																								
External Static Pressure		=	280 Pa																								
Step 1:	From the fan curve (at 2000 CFM for standard operating system), Internal Static Pressure = 135 Pa																										
Step 2:	Therefore at 2000 CFM and 250 Pa external static pressure, Total Static Pressure = 135 + 280 Pa = 415 Pa																										
Step 3:	From the blower curve, the design requirement calls for fan speed at about 1380 RPM. The new operating point is beyond the capability of original 0.75kW motor so it has to be replaced by 1.1kW motor. From the table: <table><tr><td>Motor pulley</td><td>=</td><td>100</td><td>mm</td></tr><tr><td>Blower pulley</td><td>=</td><td>140</td><td>mm</td></tr><tr><td>Motor RPM</td><td>=</td><td>1445</td><td>(Take 1.1kW motor data)</td></tr></table> In order to obtain 1380 RPM, we calculate the new blower pulley as: (while maintaining the motor pulley) <table><tr><td>New blower pulley</td><td>=</td><td>100 x (1445 / 1380)</td></tr><tr><td></td><td>=</td><td>104.7 mm</td></tr></table> Let us take close approximation of 106 mm diameter pulley size Recheck, with Db = 106 mm <table><tr><td>Blower pulley</td><td>=</td><td>1445 x (100/106)</td></tr><tr><td></td><td>=</td><td>1363 RPM</td></tr></table> We thus need to change the blower pulley from 140 mm to 106 mm in order to obtain the higher operating static pressure.			Motor pulley	=	100	mm	Blower pulley	=	140	mm	Motor RPM	=	1445	(Take 1.1kW motor data)	New blower pulley	=	100 x (1445 / 1380)		=	104.7 mm	Blower pulley	=	1445 x (100/106)		=	1363 RPM
Motor pulley	=	100	mm																								
Blower pulley	=	140	mm																								
Motor RPM	=	1445	(Take 1.1kW motor data)																								
New blower pulley	=	100 x (1445 / 1380)																									
	=	104.7 mm																									
Blower pulley	=	1445 x (100/106)																									
	=	1363 RPM																									
Step 4:	When the pulley is changed, the V-belt length must be rechecked. We have for horizontal air throw configuration: <table><tr><td>V-belt length, L</td><td>=</td><td>2C + 1.57 (Db + Dm)</td></tr><tr><td></td><td>=</td><td>(2x165) + 1.57(105+100)</td></tr><tr><td></td><td>=</td><td>651.9 mm</td></tr></table> We thus can use a belt with a length of 650 mm where, <table><tr><td>C</td><td>=</td><td>distance between the centres of the two pulleys</td></tr><tr><td>Db</td><td>=</td><td>diameter of blower pulley</td></tr><tr><td>Dm</td><td>=</td><td>diameter of motor pulley</td></tr></table>			V-belt length, L	=	2C + 1.57 (Db + Dm)		=	(2x165) + 1.57(105+100)		=	651.9 mm	C	=	distance between the centres of the two pulleys	Db	=	diameter of blower pulley	Dm	=	diameter of motor pulley						
V-belt length, L	=	2C + 1.57 (Db + Dm)																									
	=	(2x165) + 1.57(105+100)																									
	=	651.9 mm																									
C	=	distance between the centres of the two pulleys																									
Db	=	diameter of blower pulley																									
Dm	=	diameter of motor pulley																									
Step 5:	From the blower curve, we can also notice that the motor power input has maintained within the current operating range of the standard unit's motor. Summary: <table><tr><td>i) Fan motor power</td><td>=</td><td>1.1</td><td>kW</td></tr><tr><td>ii) Blower pulley diameter</td><td>=</td><td>106</td><td>mm</td></tr><tr><td>iii) V-belt length</td><td>=</td><td>650</td><td>mm</td></tr></table>			i) Fan motor power	=	1.1	kW	ii) Blower pulley diameter	=	106	mm	iii) V-belt length	=	650	mm												
i) Fan motor power	=	1.1	kW																								
ii) Blower pulley diameter	=	106	mm																								
iii) V-belt length	=	650	mm																								

Note: Factory supplied rooftop is only with standard drive package.

All other changes are only given as example and need to be field supply.

Fan Performance Table

Model : UATQ60C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		100		150		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
1500	811	0.22	928	0.29	1041	0.36	1151	0.43	1257	0.51
2000	948	0.38	1039	0.47	1129	0.56	1216	0.65	1302	0.75
2400	1067	0.56	1143	0.66	1219	0.77	1294	0.88	1368	0.99
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
1500	1360	0.59	1458	0.68	1553	0.77	1644	0.86	1732	0.95
2000	1387	0.85	1470	0.95	1551	1.05	-	-	-	-
2400	1441	1.10	-	-	-	-	-	-	-	-

Note (For UATQ60C):

- Figures are for reference only.
- indicates factory set point.
- indicates 0.75kW evaporator fan motor.
- indicates 1.1kW evaporator fan motor.

Model : UATQ90C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		65		150		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
2100	998	0.52	1039	0.56	1180	0.71	1269	0.80	1356	0.90
2800	1164	0.92	1195	1.00	1304	1.13	1374	1.24	1442	1.35
3300	1287	1.36	1314	1.42	-	-	-	-	-	-
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
2100	1441	1.00	1525	1.10	1607	1.21	1687	1.31	1766	1.42
2800	-	-	-	-	-	-	-	-	-	-
3300	-	-	-	-	-	-	-	-	-	-

Note (For UATQ90C):

- Figures are for reference only.
- indicates factory set point.
- indicates 1.1kW evaporator fan motor.
- indicates 1.5kW evaporator fan motor.

Model : UATQ120C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		85		150		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
3300	579	0.46	667	0.59	797	0.79	894	0.97	984	1.17
4400	657	0.85	728	1.00	834	1.25	918	1.46	998	1.68
5300	729	1.29	789	1.47	880	1.76	954	2.00	1025	2.25
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
3300	1067	1.37	1141	1.59	1208	1.82	1267	2.06	1319	2.31
4400	1075	1.91	1149	2.15	1220	2.40	1287	2.66	1352	2.93
5300	1094	2.51	1162	2.77	-	-	-	-	-	-

Note (For UATQ120C):

- Figures are for reference only.
- indicates factory set point.
- indicates 1.5kW evaporator fan motor.
- indicates 2.2kW evaporator fan motor.
- indicates 3.0kW evaporator fan motor.

Model : UATQ150C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		95		150		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
3800	698	0.70	791	0.86	887	1.05	975	1.24	1057	1.43
5000	767	1.19	843	1.39	923	1.61	998	1.83	1070	2.06
6000	828	1.74	894	1.96	963	2.22	1028	2.47	1092	2.72
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
3800	1134	1.64	1206	1.85	1274	2.08	1336	2.31	1393	2.56
5000	1140	2.29	1208	2.53	1274	2.78	-	-	-	-
6000	1155	2.98	-	-	-	-	-	-	-	-

Note (For UATQ150C):

- Figures are for reference only.
- indicates factory set point.
- indicates 2.2kW evaporator fan motor.
- indicates 3.0kW evaporator fan motor.

Model : UATQ180C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		100		120		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
5400	471	1.06	523	1.25	546	1.34	624	1.67	673	1.89
7000	552	1.94	593	2.19	611	2.30	674	2.70	713	2.97
8400	626	3.05	661	3.35	676	3.48	-	-	-	-
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
5400	720	2.11	767	2.34	812	2.57	856	2.81	899	3.06
7000	753	3.24	791	3.51	-	-	-	-	-	-
8400	-	-	-	-	-	-	-	-	-	-

Note (For UATQ180C):

- Figures are for reference only.
- indicates factory set point.
- indicates 3.0kW evaporator fan motor.
- indicates 3.7kW evaporator fan motor.

Model : UATQ210C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		100		165		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
5800	546	0.97	623	1.21	720	1.54	767	1.72	835	1.99
7600	618	1.71	679	2.00	758	2.41	798	2.62	855	2.94
9000	678	2.48	731	2.83	799	3.29	834	3.53	884	3.90
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
5800	899	2.27	961	2.56	1019	2.86	1074	3.18	1126	3.50
7600	911	3.27	965	3.61	1019	3.96	1070	4.31	1121	4.67
9000	934	4.27	982	4.65	1030	5.03	1077	5.42	-	-

Note (For UATQ210C):

- Figures are for reference only.
- indicates factory set point.
- indicates 3.0kW evaporator fan motor.
- indicates 3.7kW evaporator fan motor.
- indicates 5.5kW evaporator fan motor.

Model : UATQ240C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		100		150		175		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
6000	505	0.95	582	1.20	655	1.17	693	1.28	794	2.03
8000	593	1.80	653	2.13	711	2.46	741	2.64	824	3.15
9600	669	2.79	719	3.17	769	3.56	795	3.77	866	4.36
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
6000	860	2.32	922	2.63	982	2.95	1039	3.28	1093	3.62
8000	879	3.50	933	3.87	985	4.24	1036	4.62	1086	5.01
9600	914	4.77	961	5.18	-	-	-	-	-	-

Note (For UATQ240C):

- Figures are for reference only.
- indicates factory set point.
- indicates 3.7kW evaporator fan motor.
- indicates 5.5kW evaporator fan motor.

Model : UATQ300C

Air Flow (CFM)	External Static Pressure (Pascal)									
	50		100		140		200		250	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
6750	562	1.24	631	1.51	684	1.47	762	2.07	824	2.37
9000	642	2.26	695	2.59	737	2.44	799	3.29	850	3.65
10800	746	3.46	788	3.82	821	4.12	871	4.56	911	4.94
Air Flow (CFM)	300		350		400		450		500	
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)	RPM	PO (kW)
6750	885	2.67	943	2.98	1000	3.30	1055	3.63	1108	3.97
9000	900	4.02	950	4.39	998	4.77	1046	5.16	1092	5.55
10800	952	5.32	-	-	-	-	-	-	-	-

Note (For UATQ300C):

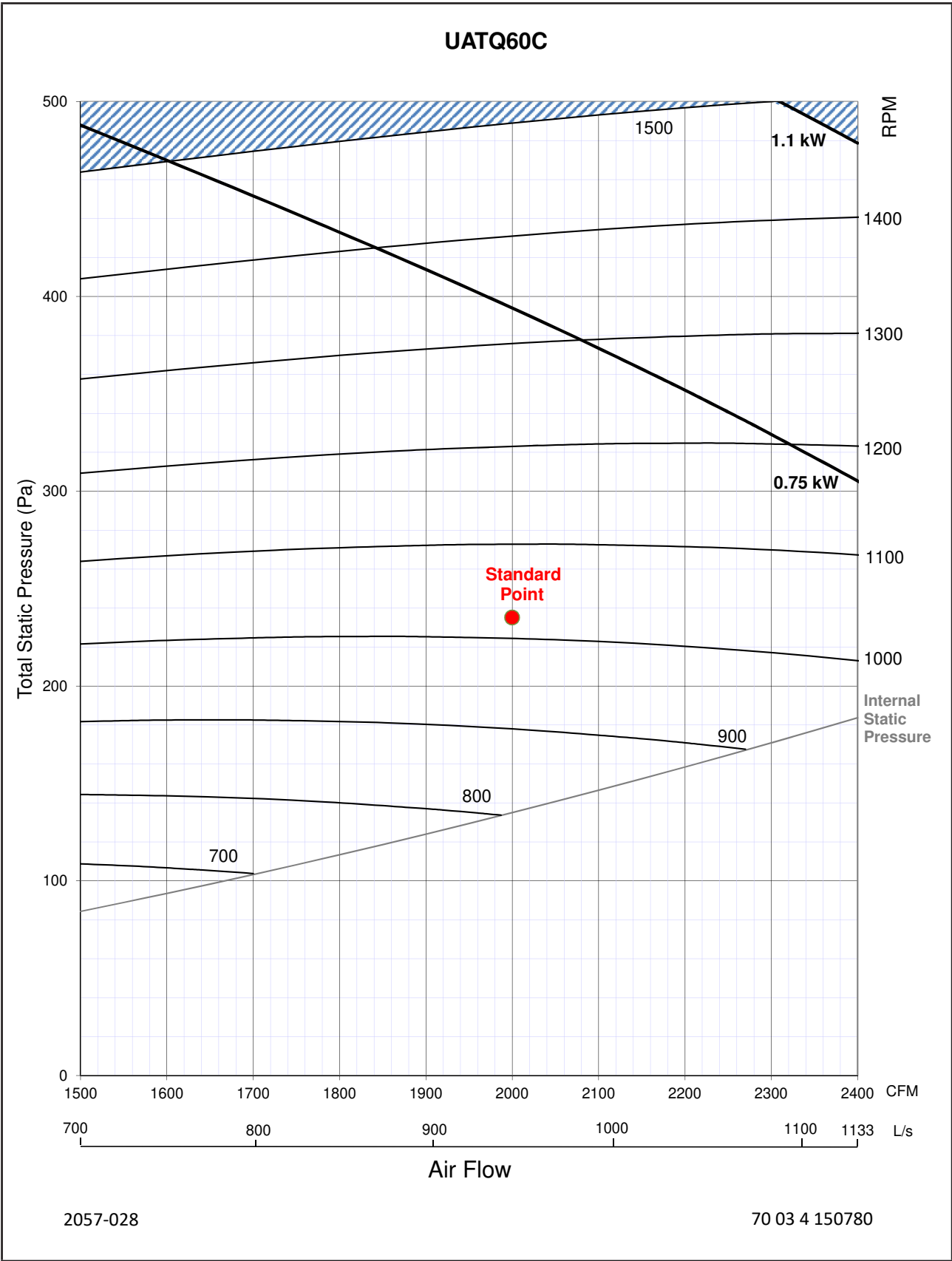
- Figures are for reference only.
- indicates factory set point.
- indicates 3.7kW evaporator fan motor.
- indicates 5.5kW evaporator fan motor.

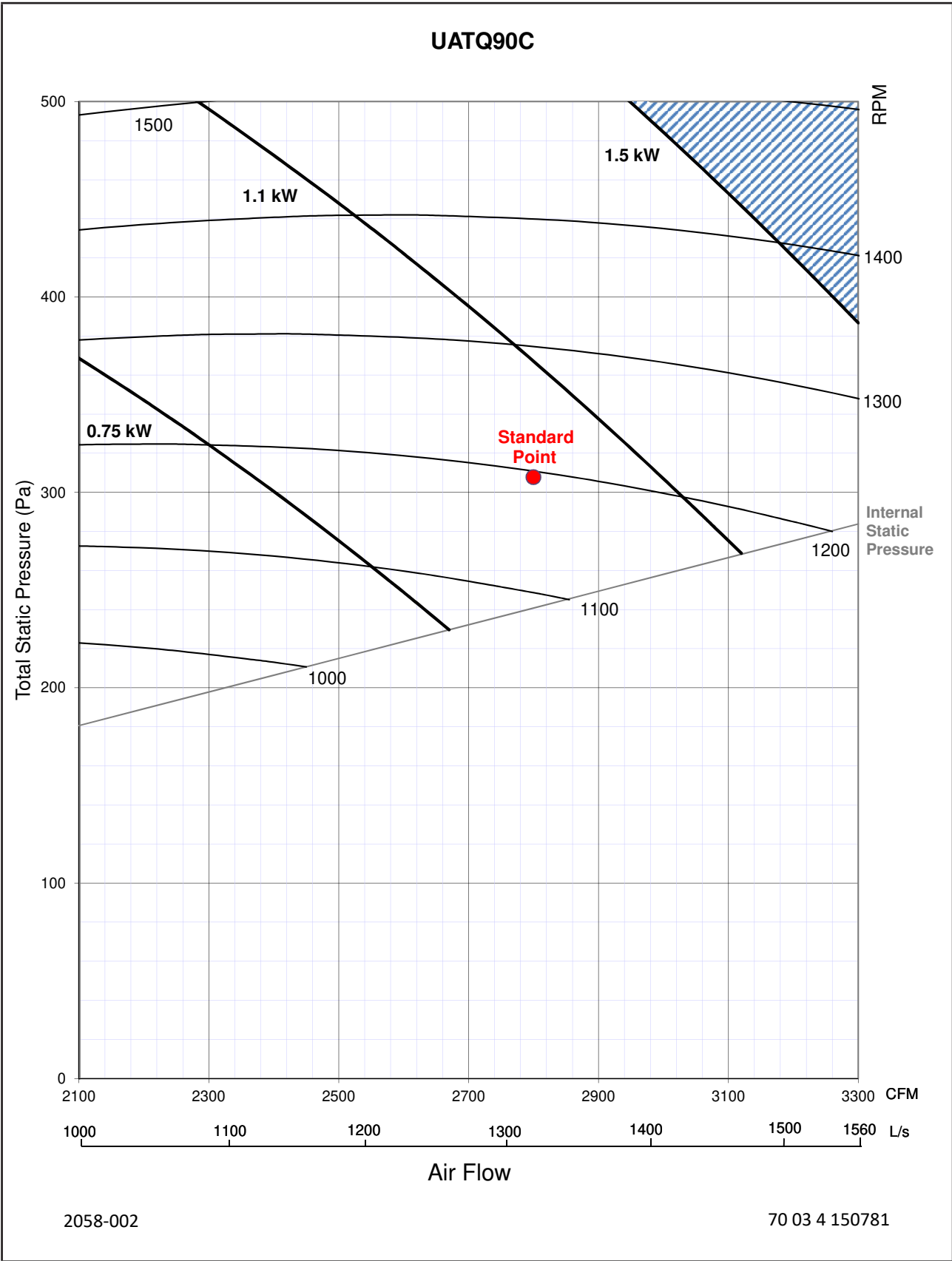
Dimensional Data

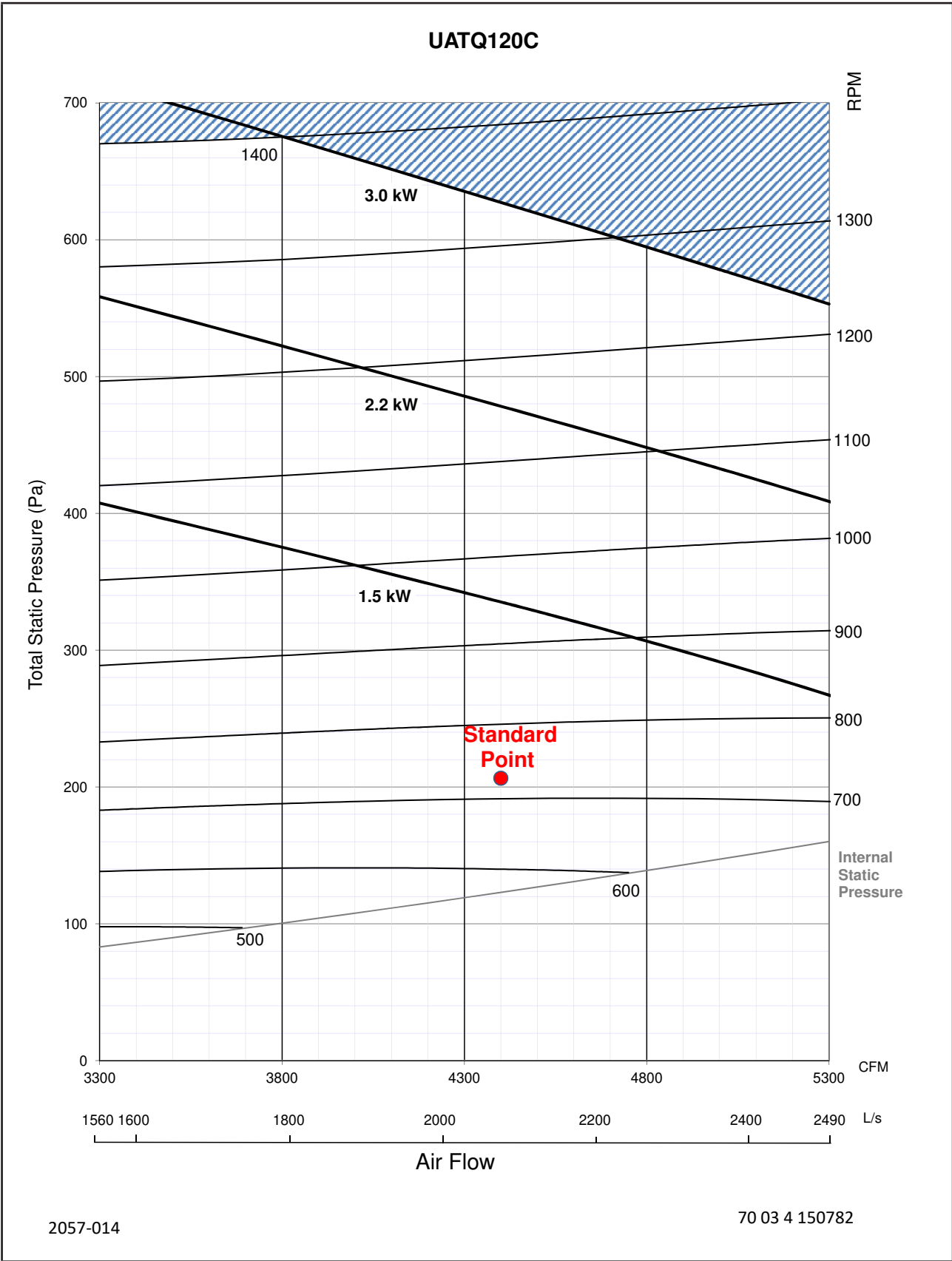
Model	Blower Pulley, Dm (mm)		Motor Pulley, Dm (mm)		V belt		
	Type	Diameter (mm)	Type	Diameter (mm)	Type	Length (mm)	Quantity (pcs)
UATQ60C	SPZ 1	140/1610	SPZ 1	100/1210	SPZ	710	1
UATQ90C	SPZ 1	90/1210	SPZ 1	75/1108	SPZ	630	1
UATQ120C	SPZ 2	160/2012	SPZ 2	80/1210	SPZ	772	2
UATQ150C	SPZ 2	140/1610	SPZ 2	80/1210	SPZ	710	2
UATQ180C	SPZ 2	180/2012	SPZ 2	75/1210	SPZ	800	2
UATQ210C	SPZ 2	180/2012	SPZ 2	95/1610	SPZ	1000	2
UATQ240C	SPZ 2	250/2012	SPZ 2	132/1610	SPZ	1162	2
UATQ300C	SPZ 2	250/2012	SPZ 2	125/2012	SPZ	1337	2

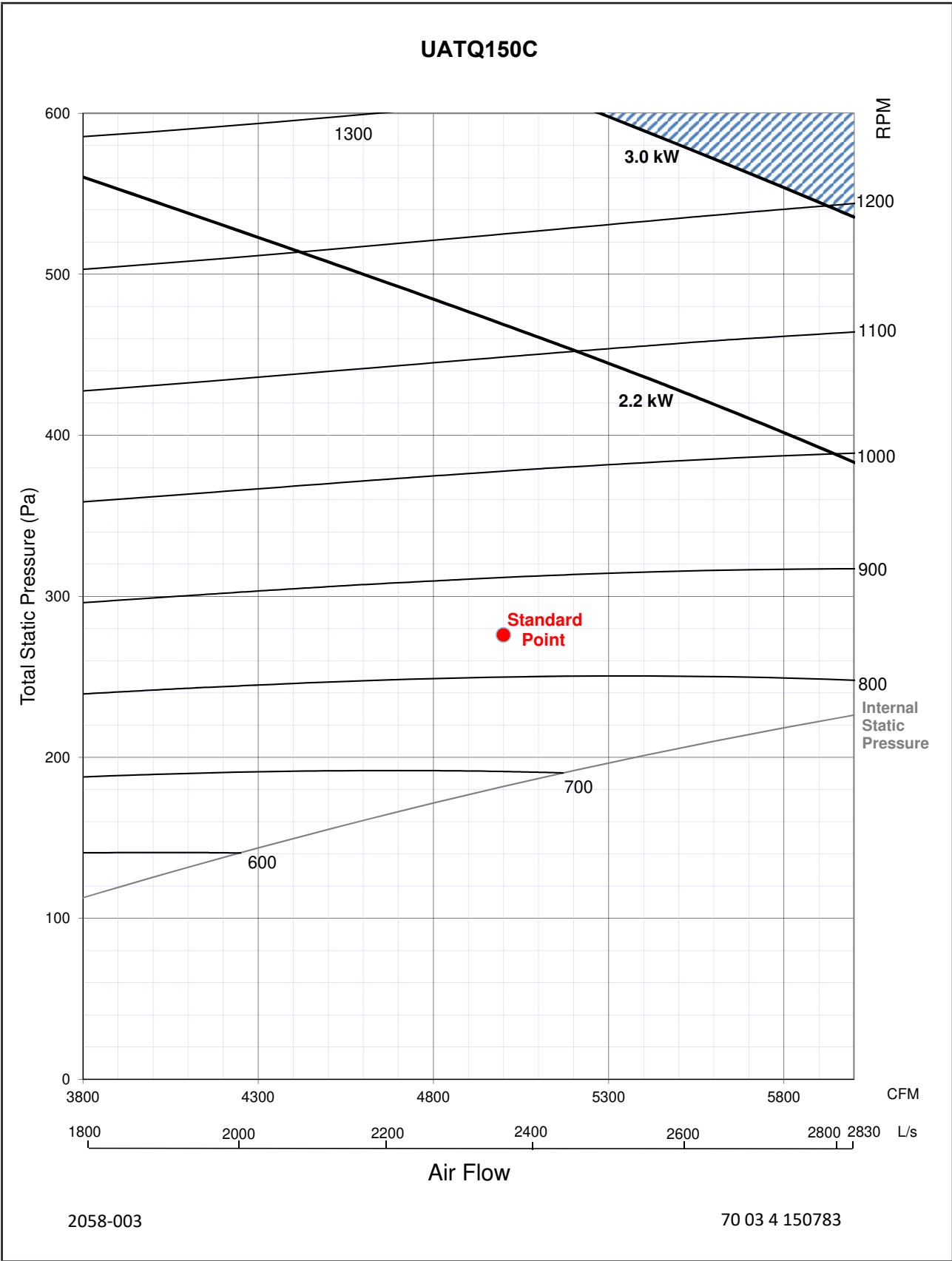
Model	Pulley Center Distance, C (mm)			Motor		Blower
	Factory setting	Min	Max	Output Power (kW)	RPM	RPM
UATQ60C	165	155	175	0.75	1430	1021
UATQ90C	185	175	195	1.10	1445	1204
UATQ120C	193	183	203	1.50	1430	715
UATQ150C	180	170	190	2.20	1450	829
UATQ180C	193	183	203	3.00	1445	602
UATQ210C	281	271	291	3.00	1445	763
UATQ240C	275	265	285	3.70	1440	760
UATQ300C	369	359	379	3.70	1440	720

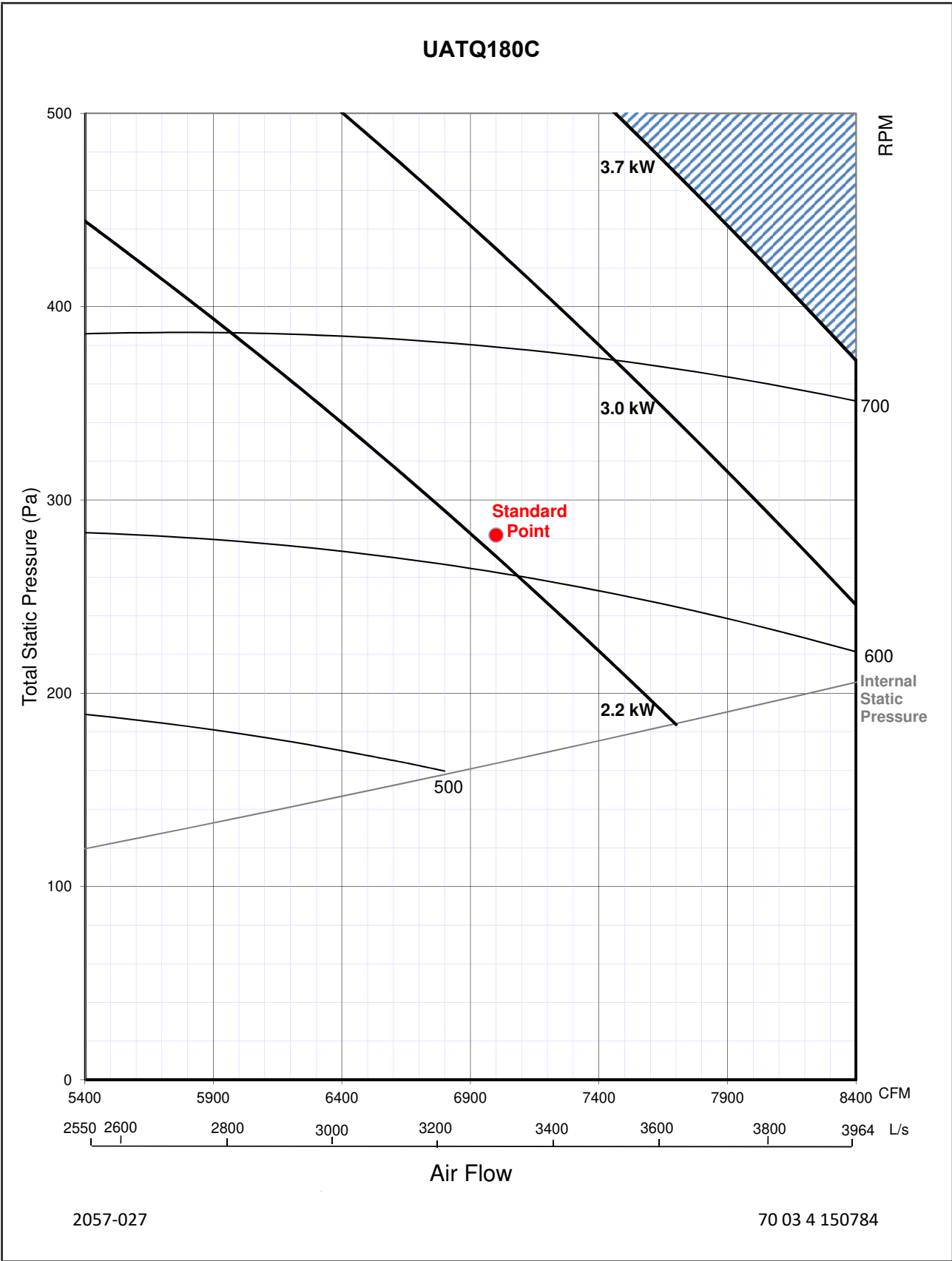
Fan Performance Curve

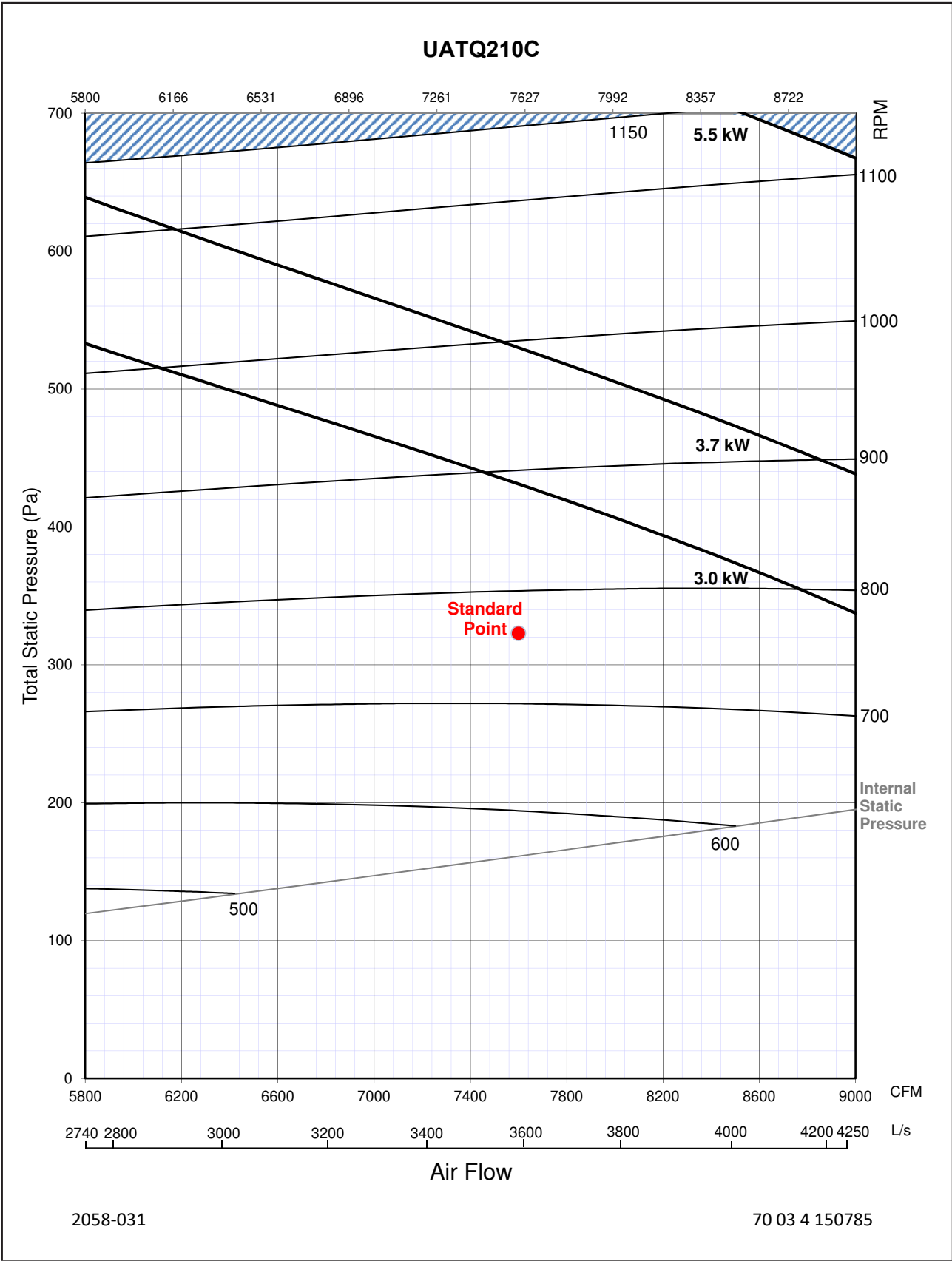


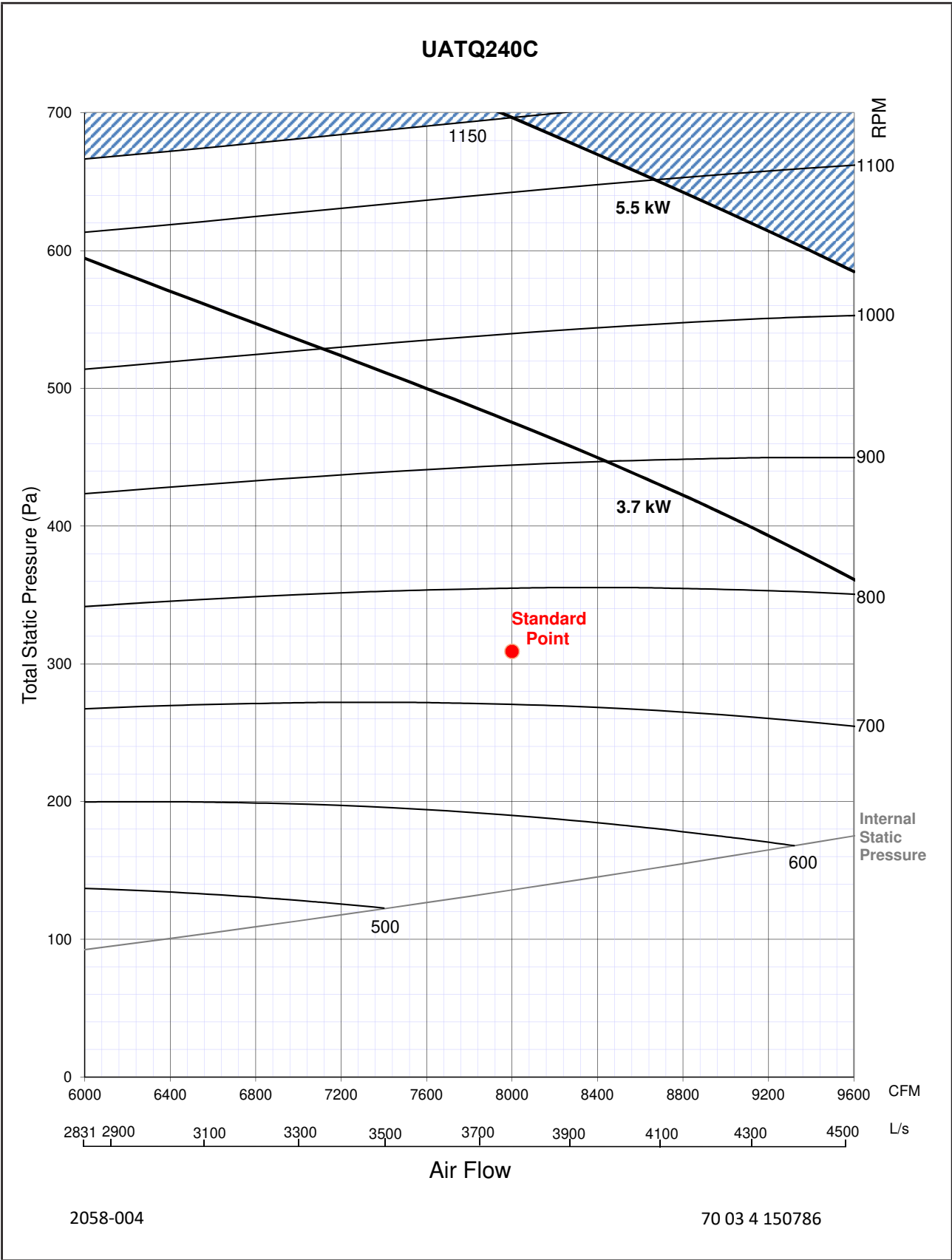


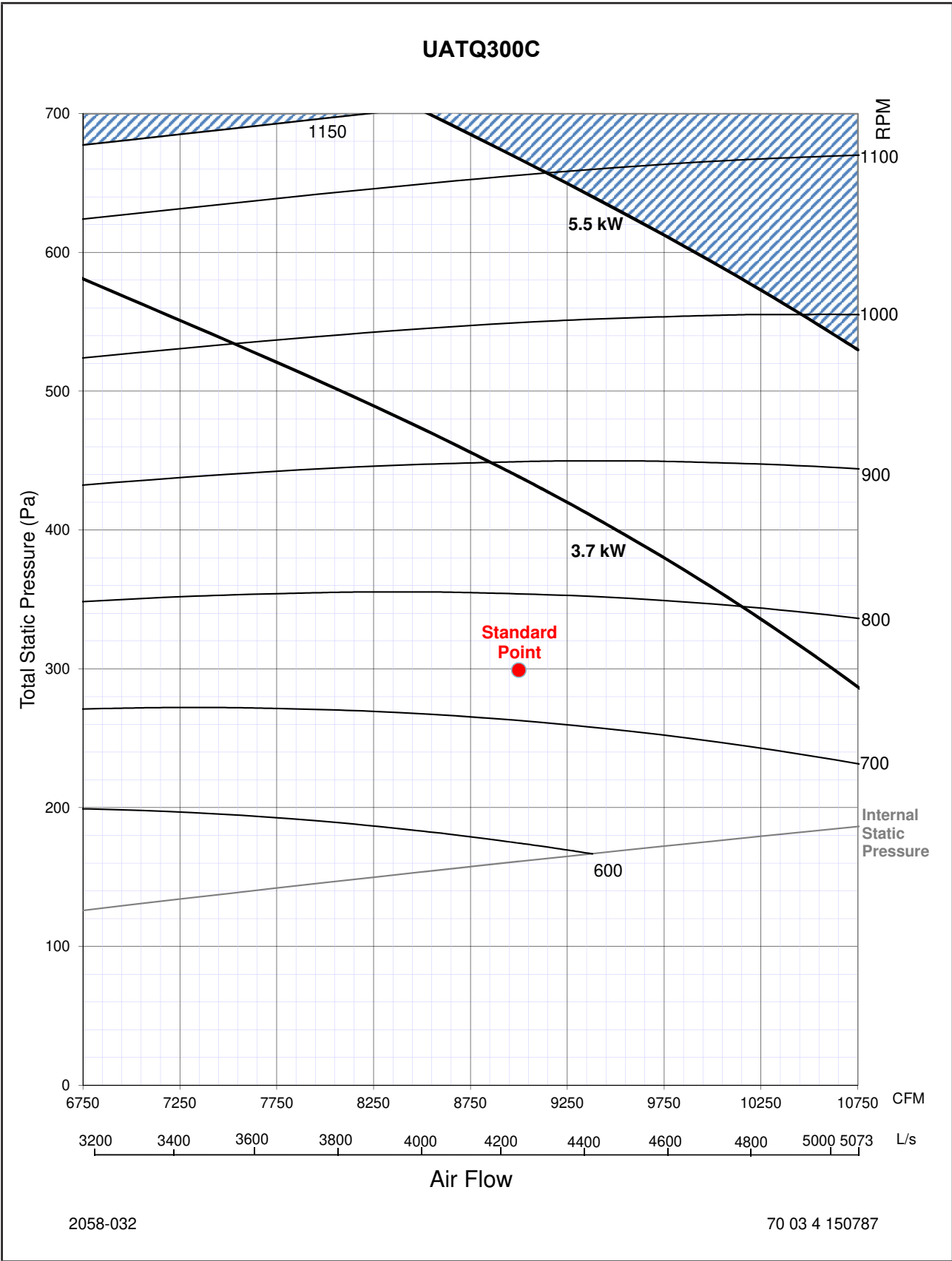












Capacity Tables

Cooling Only

Model : UATQ60C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
1800	16°C	21°C	17.67	13.13	3.68	17.11	12.84	3.93	16.51	12.53	4.23	15.88	12.21	4.56	14.29	11.14	4.93	13.27	10.54	5.43	13.22	10.16	5.68	12.35	9.49	6.08
		24°C	17.74	15.64	3.68	17.18	15.31	3.94	16.58	14.97	4.23	15.95	14.60	4.56	14.36	13.37	4.94	13.34	12.70	5.44	13.28	12.16	5.68	12.41	11.36	6.09
		27°C	17.80	17.80	3.69	17.26	17.26	3.94	16.68	16.68	4.24	16.09	16.09	4.57	14.56	14.56	4.95	13.67	13.67	5.46	13.40	13.40	5.69	12.51	12.51	6.10
		30°C	18.51	18.51	3.72	18.04	18.04	3.98	17.54	17.54	4.29	17.00	17.00	4.63	15.45	15.45	5.02	14.52	14.52	5.53	14.16	14.16	5.77	13.23	13.23	6.18
	19°C	24°C	19.41	12.40	3.77	18.81	12.13	4.03	18.16	11.85	4.33	17.48	11.54	4.66	15.74	10.55	5.04	14.64	10.01	5.54	14.55	9.61	5.81	13.59	8.98	6.22
		27°C	19.46	14.49	3.77	18.86	14.19	4.03	18.21	13.88	4.33	17.53	13.55	4.67	15.80	12.41	5.04	14.70	11.80	5.55	14.60	11.28	5.81	13.64	10.54	6.22
		30°C	19.54	17.68	3.78	18.92	17.36	4.04	18.27	17.02	4.33	17.58	16.67	4.67	15.85	15.32	5.05	14.76	14.65	5.55	14.64	13.88	5.82	13.68	12.97	6.23
		33°C	19.65	19.65	3.78	19.09	19.09	4.05	18.53	18.53	4.35	17.98	17.98	4.70	16.35	16.35	5.09	15.40	15.40	5.61	14.97	14.97	5.85	13.98	13.98	6.26
	22°C	27°C	21.30	11.65	3.87	20.63	11.39	4.14	19.93	11.13	4.44	19.19	10.85	4.78	17.31	9.93	5.16	16.11	9.43	5.66	15.98	9.04	5.95	14.93	8.44	6.37
		30°C	21.33	14.40	3.88	20.66	14.12	4.14	19.96	13.82	4.44	19.22	13.50	4.78	17.34	12.38	5.16	16.16	11.79	5.67	16.01	11.24	5.95	14.95	10.50	6.38
		33°C	21.39	16.78	3.88	20.72	16.48	4.14	20.02	16.17	4.44	19.28	15.84	4.79	17.40	14.57	5.17	16.21	13.94	5.67	16.06	13.19	5.96	15.00	12.32	6.38
		36°C	21.45	19.11	3.88	20.78	18.81	4.15	20.07	18.49	4.45	19.34	18.16	4.79	17.47	16.73	5.17	16.35	15.95	5.69	16.11	15.13	5.96	15.04	14.13	6.39
2000	16°C	21°C	18.04	13.66	3.70	17.46	13.36	3.95	16.84	13.05	4.25	16.18	12.69	4.58	14.56	11.57	4.95	13.52	10.94	5.45	13.48	10.57	5.70	12.59	9.87	6.11
		24°C	18.13	16.28	3.70	17.56	15.95	3.96	16.94	15.60	4.25	16.28	15.22	4.59	14.65	13.94	4.96	13.59	13.26	5.46	13.56	12.68	5.71	12.66	11.84	6.12
		27°C	18.26	18.26	3.71	17.72	17.72	3.97	17.16	17.16	4.27	16.61	16.61	4.61	15.06	15.06	4.99	14.13	14.13	5.50	13.83	13.83	5.74	12.92	12.92	6.14
		30°C	19.21	19.21	3.76	18.71	18.71	4.02	18.18	18.18	4.33	17.62	17.62	4.67	15.99	15.99	5.06	15.03	15.03	5.57	14.67	14.67	5.82	13.70	13.70	6.23
	19°C	24°C	19.81	12.89	3.79	18.18	12.62	4.05	18.51	12.33	4.35	17.80	12.03	4.68	16.03	11.00	5.06	14.90	10.45	5.56	14.82	10.01	5.83	13.84	9.35	6.25
		27°C	19.88	15.09	3.80	19.26	14.78	4.05	18.59	14.46	4.35	17.88	14.13	4.69	16.11	12.94	5.07	14.98	12.33	5.57	14.89	11.91	5.84	13.91	12.13	6.25
		30°C	19.97	18.51	3.80	19.34	18.18	4.06	18.66	17.84	4.36	17.96	17.48	4.70	16.19	16.07	5.07	15.10	15.10	5.58	14.96	14.56	5.85	13.97	13.60	6.26
		33°C	20.29	20.29	3.82	19.77	19.77	4.09	19.22	19.22	4.39	18.64	18.64	4.74	16.94	16.94	5.13	15.95	15.95	5.65	15.52	15.52	5.90	14.50	14.50	6.32
	22°C	27°C	21.71	12.10	3.90	21.01	11.84	4.16	20.29	11.58	4.46	19.52	11.30	4.80	17.60	10.35	5.18	16.38	9.85	5.69	16.26	9.41	5.98	15.19	8.79	6.40
		30°C	21.76	15.03	3.90	21.07	14.73	4.16	20.35	14.42	4.47	19.58	14.09	4.81	17.66	12.92	5.19	16.45	12.32	5.69	16.31	11.73	5.98	15.23	10.96	6.41
		33°C	21.85	17.58	3.90	21.15	17.27	4.17	20.42	16.95	4.47	19.66	16.62	4.81	17.73	15.29	5.19	16.51	14.65	5.70	16.37	13.84	5.99	15.29	12.93	6.42
		36°C	21.92	20.10	3.91	21.23	19.79	4.17	20.51	19.43	4.48	19.80	19.02	4.82	17.95	17.58	5.21	16.88	16.76	5.73	16.49	15.84	6.00	15.40	14.80	6.43
2200	16°C	21°C	18.36	14.03	3.72	17.76	13.70	3.97	17.12	13.36	4.26	16.45	12.99	4.60	14.80	11.84	4.97	13.73	11.19	5.47	13.70	10.82	5.72	12.80	10.10	6.13
		24°C	18.48	16.72	3.72	17.88	16.38	3.98	17.24	16.03	4.27	16.56	15.65	4.60	14.89	14.34	4.98	13.82	13.65	5.48	13.79	13.03	5.73	12.88	12.17	6.14
		27°C	18.74	18.74	3.73	18.22	18.22	3.99	17.68	17.68	4.30	17.11	17.11	4.64	15.50	15.50	5.02	14.54	14.54	5.53	14.24	14.24	5.78	13.31	13.31	6.19
		30°C	19.82	19.82	3.79	19.30	19.30	4.06	18.75	18.75	4.36	18.15	18.15	4.71	16.47	16.47	5.10	15.47	15.47	5.61	15.12	15.12	5.86	14.12	14.12	6.28
	19°C	24°C	20.14	13.49	3.81	19.49	13.21	4.07	18.80	12.92	4.37	18.07	12.60	4.70	16.27	11.52	5.08	15.11	10.91	5.58	15.05	10.50	5.86	14.05	9.80	6.27
		27°C	20.24	15.79	3.82	19.59	15.48	4.07	18.90	15.15	4.37	18.17	14.80	4.71	16.36	13.57	5.09	15.20	12.93	5.59	15.13	12.32	5.86	14.14	11.51	6.28
		30°C	20.35	19.46	3.82	19.68	19.12	4.08	19.01	18.76	4.38	18.30	18.30	4.72	16.53	16.53	5.10	15.48	15.48	5.61	15.24	15.24	5.88	14.23	14.23	6.29
		33°C	20.94	20.94	3.85	20.40	20.40	4.12	19.83	19.83	4.43	19.22	19.22	4.78	17.46	17.46	5.17	16.43	16.43	5.69	16.01	16.01	5.95	14.95	14.95	6.38
	22°C	27°C	22.05	12.66	3.92	21.34	12.40	4.18	20.59	12.13	4.48	19.81	11.85	4.82	17.85	10.87	5.20	16.61	10.34	5.71	16.50	9.87	6.00	15.41	9.22	6.43
		30°C	22.13	15.74	3.92	21.42	15.43	4.18	20.67	15.11	4.49	19.89	14.77	4.83	17.93	13.56	5.21	16.69	12.93	5.71	16.57	12.30	6.01	15.47	11.49	6.44
		33°C	22.23	18.49	3.93	21.52	18.17	4.19	20.77	17.85	4.49	19.98	17.50	4.83	18.01	16.12	5.21	16.76	15.45	5.72	16.64	14.58	6.02	15.54	13.61	6.45
		36°C	22.34	21.17	3.93	21.67	20.78	4.20	20.99	20.32	4.51	20.31	19.80	4.86	18.47	18.20	5.25	17.40	17.28	5.77	16.92	16.48	6.05	15.80	15.40	6.48

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

- shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
- Direct interpolation is permissible. Do not extrapolate.
- Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ90C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
2520	16°C	21°C	26.07	19.37	5.99	25.24	18.94	6.40	24.36	18.49	6.87	23.42	18.01	7.42	21.08	16.44	8.03	19.58	15.55	8.84	19.52	15.00	9.06	18.29	14.06	9.56
		24°C	26.17	23.07	5.99	25.34	22.59	6.40	24.47	22.08	6.88	23.53	21.54	7.43	21.19	19.72	8.03	19.68	18.74	8.85	19.61	17.95	9.07	18.37	16.82	9.57
		27°C	26.27	26.27	6.00	25.47	25.47	6.41	24.61	24.61	6.89	23.74	23.74	7.44	21.49	21.49	8.06	20.16	20.16	8.89	19.78	19.78	9.09	18.53	18.53	9.58
		30°C	27.31	27.31	6.06	26.62	26.62	6.48	25.88	25.88	6.98	25.09	25.09	7.54	22.79	22.79	8.16	21.43	21.43	9.00	20.90	20.90	9.21	19.58	19.58	9.71
	19°C	24°C	28.64	18.30	6.14	27.75	17.90	6.55	26.80	17.48	7.04	25.79	17.03	7.59	23.23	15.57	8.20	21.60	14.77	9.02	21.48	14.19	9.27	20.13	13.30	9.77
		27°C	28.71	21.37	6.14	27.82	20.94	6.56	26.87	20.47	7.04	25.86	19.99	7.59	23.31	18.30	8.21	21.69	17.41	9.02	21.55	16.65	9.27	20.19	15.60	9.78
		30°C	28.83	26.08	6.15	27.92	25.61	6.57	26.96	25.11	7.05	25.94	24.59	7.60	23.39	22.61	8.21	21.78	21.62	9.03	21.62	20.49	9.28	20.25	19.20	9.79
		33°C	28.99	28.99	6.16	28.17	28.17	6.58	27.34	27.34	7.08	26.52	26.52	7.64	24.12	24.12	8.27	22.72	22.72	9.12	22.10	22.10	9.33	20.71	20.71	9.84
	22°C	27°C	31.43	17.19	6.30	30.43	16.81	6.73	29.40	16.42	7.22	28.31	16.01	7.77	25.53	14.65	8.39	23.77	13.91	9.22	23.59	13.34	9.50	22.10	12.50	10.02
		30°C	31.47	21.25	6.31	30.48	20.83	6.73	29.45	20.39	7.22	28.36	19.92	7.78	25.59	18.26	8.40	23.84	17.39	9.22	23.63	16.60	9.50	22.14	15.55	10.02
		33°C	31.56	24.76	6.31	30.57	24.32	6.74	29.54	23.86	7.23	28.45	23.38	7.79	25.67	21.50	8.41	23.92	20.57	9.23	23.70	19.48	9.51	22.21	18.25	10.03
		36°C	31.65	28.20	6.32	30.66	27.75	6.75	29.62	27.28	7.24	28.53	26.80	7.79	25.77	24.69	8.41	24.13	23.53	9.25	23.77	22.33	9.52	22.28	20.92	10.04
2800	16°C	21°C	26.62	20.15	6.02	25.76	19.72	6.43	24.85	19.25	6.91	23.88	18.72	7.45	21.49	17.08	8.06	19.94	16.14	8.87	19.89	15.60	9.10	18.64	14.62	9.60
		24°C	26.76	24.02	6.03	25.90	23.53	6.44	24.99	23.01	6.92	24.02	22.46	7.46	21.62	20.57	8.07	20.06	19.56	8.88	20.01	18.71	9.11	18.75	17.53	9.61
		27°C	26.94	26.94	6.04	26.14	26.14	6.45	25.32	25.32	6.94	24.51	24.51	7.49	22.23	22.23	8.12	20.85	20.85	8.95	20.42	20.42	9.16	19.13	19.13	9.66
		30°C	28.34	28.34	6.12	27.61	27.61	6.55	26.83	26.83	7.04	25.99	25.99	7.60	23.60	23.60	8.23	22.17	22.17	9.07	21.66	21.66	9.29	20.29	20.29	9.79
	19°C	24°C	29.22	19.02	6.17	28.30	18.62	6.59	27.31	18.19	7.07	26.26	17.74	7.62	23.64	16.23	8.23	21.99	15.42	9.05	21.88	14.78	9.31	20.50	13.85	9.82
		27°C	29.34	22.26	6.18	28.41	21.81	6.60	27.42	21.34	7.08	26.38	20.84	7.63	23.76	19.10	8.24	22.10	18.18	9.06	21.98	18.02	9.32	20.59	18.41	9.83
		30°C	29.47	27.30	6.19	28.53	26.82	6.61	27.53	26.32	7.09	26.50	25.79	7.64	23.89	23.70	8.25	22.28	22.28	9.08	22.08	21.49	9.33	20.69	20.13	9.84
		33°C	29.93	29.93	6.21	29.17	29.17	6.65	28.36	28.36	7.15	27.50	27.50	7.71	25.00	25.00	8.35	23.53	23.53	9.19	22.91	22.91	9.42	21.47	21.47	9.94
	22°C	27°C	32.03	17.85	6.34	31.00	17.47	6.77	29.93	17.08	7.26	28.80	16.67	7.81	25.97	15.27	8.43	24.17	14.53	9.25	24.00	13.89	9.54	22.49	13.01	10.06
		30°C	32.11	22.17	6.34	31.08	21.73	6.77	30.02	21.27	7.26	28.89	20.79	7.82	26.05	19.07	8.44	24.26	18.18	9.26	24.07	17.32	9.55	22.55	16.23	10.07
		33°C	32.23	25.93	6.35	31.21	25.48	6.78	30.13	25.01	7.27	29.00	24.52	7.83	26.16	22.56	8.45	24.36	21.61	9.27	24.17	20.43	9.56	22.64	19.14	10.09
		36°C	32.34	29.65	6.36	31.32	29.19	6.79	30.26	28.67	7.28	29.21	28.06	7.84	26.48	25.94	8.47	24.90	24.73	9.32	24.34	23.38	9.58	22.81	21.91	10.10
3080	16°C	21°C	27.09	20.70	6.04	26.20	20.22	6.46	25.26	19.71	6.94	24.28	19.16	7.48	21.83	17.47	8.09	20.25	16.52	8.90	20.23	15.97	9.13	18.95	14.96	9.63
		24°C	27.26	24.66	6.06	26.38	24.17	6.47	25.44	23.64	6.95	24.44	23.09	7.49	21.98	21.15	8.10	20.39	20.13	8.91	20.36	19.24	9.15	19.08	18.02	9.65
		27°C	27.64	27.64	6.08	26.88	26.88	6.50	26.08	26.08	6.99	25.24	25.24	7.55	22.88	22.88	8.17	21.45	21.45	9.00	21.03	21.03	9.22	19.70	19.70	9.72
		30°C	29.25	29.25	6.17	28.48	28.48	6.60	27.66	27.66	7.10	26.78	26.78	7.66	24.31	24.31	8.29	22.83	22.83	9.13	22.32	22.32	9.36	20.91	20.91	9.87
	19°C	24°C	29.71	19.90	6.20	28.75	19.50	6.62	27.73	19.06	7.10	26.66	18.60	7.65	24.00	16.99	8.26	22.30	16.10	9.08	22.21	15.50	9.35	20.81	14.52	9.86
		27°C	29.86	23.30	6.21	28.91	22.84	6.63	27.88	22.35	7.11	26.81	21.83	7.66	24.14	20.02	8.28	22.43	19.07	9.09	22.34	18.19	9.36	20.93	17.05	9.87
		30°C	30.02	28.71	6.22	29.04	28.21	6.64	28.04	27.68	7.13	26.99	26.99	7.68	24.39	24.39	8.30	22.83	22.83	9.13	22.49	22.49	9.38	21.07	21.07	9.89
		33°C	30.90	30.90	6.27	30.10	30.10	6.71	29.26	29.26	7.21	28.36	28.36	7.78	25.77	25.77	8.41	24.24	24.24	9.26	23.63	23.63	9.50	22.14	22.14	10.02
	22°C	27°C	32.54	18.68	6.37	31.49	18.29	6.80	30.38	17.89	7.29	29.22	17.49	7.84	26.34	16.04	8.46	24.50	15.26	9.28	24.35	14.57	9.58	22.82	13.65	10.10
		30°C	32.65	23.23	6.38	31.60	22.77	6.81	30.50	22.29	7.30	29.35	21.80	7.85	26.45	20.00	8.47	24.62	19.08	9.29	24.45	18.16	9.59	22.91	17.02	10.12
		33°C	32.80	27.28	6.39	31.74	26.81	6.82	30.64	26.33	7.31	29.48	25.82	7.87	26.57	23.78	8.48	24.73	22.79	9.31	24.56	21.52	9.61	23.01	20.16	10.13
		36°C	32.97	31.24	6.40	31.98	30.66	6.83	30.97	29.99	7.33	29.97	29.21	7.90	27.25	26.85	8.54	25.67	25.50	9.40	24.97	24.33	9.65	23.40	22.80	10.18

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

- shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
- Direct interpolation is permissible. Do not extrapolate.
- Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Capacity Tables

Model : UATQ120C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
3960	16°C	21°C	35.19	28.13	7.81	34.08	27.51	8.35	32.89	26.85	8.97	31.62	26.15	9.68	28.45	23.88	10.48	26.43	22.59	11.54	25.92	21.44	12.25	24.20	20.02	12.93
		24°C	35.33	33.51	7.82	34.21	32.81	8.36	33.03	32.07	8.98	31.77	31.29	9.69	28.60	28.60	10.49	26.56	26.56	11.55	26.04	25.65	12.26	24.31	23.95	12.95
		27°C	35.46	35.46	7.83	34.37	34.37	8.37	33.22	33.22	8.99	32.04	32.04	9.71	29.00	29.00	10.52	27.22	27.22	11.60	26.26	26.26	12.29	24.52	24.52	12.97
		30°C	36.86	36.86	7.91	35.93	35.93	8.46	34.93	34.93	9.11	33.86	33.86	9.84	30.76	30.76	10.66	28.93	28.93	11.75	27.76	27.76	12.45	25.92	25.92	13.14
	19°C	24°C	38.66	26.57	8.01	37.46	26.00	8.56	36.17	25.38	9.19	34.81	24.74	9.90	31.36	22.61	10.70	29.15	21.46	11.77	28.53	20.28	12.53	26.64	18.93	13.23
		27°C	38.76	31.04	8.01	37.55	30.41	8.56	36.27	29.74	9.19	34.91	29.03	9.91	31.47	26.58	10.71	29.28	25.29	11.78	28.62	23.79	12.54	26.72	22.21	13.24
		30°C	38.91	37.88	8.02	37.68	37.20	8.57	36.39	36.39	9.20	35.02	35.02	9.92	31.58	31.58	10.72	29.40	29.40	11.79	28.71	28.71	12.55	26.80	26.80	13.25
		33°C	39.14	39.14	8.04	38.02	38.02	8.59	36.91	36.91	9.24	35.80	35.80	9.98	32.56	32.56	10.80	30.66	30.66	11.90	29.35	29.35	12.62	27.40	27.40	13.32
	22°C	27°C	42.42	24.97	8.23	41.08	24.42	8.78	39.68	23.85	9.43	38.21	23.25	10.15	34.47	21.28	10.96	32.09	20.21	12.03	31.32	19.06	12.84	29.24	17.80	13.55
		30°C	42.48	30.86	8.23	41.14	30.25	8.79	39.76	29.61	9.43	38.29	28.93	10.15	34.54	26.52	10.96	32.17	25.26	12.04	31.39	23.71	12.84	29.30	22.14	13.56
		33°C	42.60	35.96	8.24	41.27	35.32	8.80	39.87	34.65	9.44	38.40	33.95	10.16	34.65	31.23	10.97	32.29	29.88	12.05	31.48	27.83	12.86	29.39	25.98	13.57
		36°C	42.72	40.95	8.25	41.39	40.30	8.81	39.98	39.62	9.45	38.52	38.52	10.17	34.79	34.79	10.98	32.57	32.57	12.07	31.57	31.57	12.87	29.48	29.48	13.59
4400	16°C	21°C	35.93	29.26	7.85	34.78	28.64	8.39	33.54	27.95	9.02	32.23	27.19	9.73	29.00	24.80	10.52	26.92	23.44	11.58	26.42	22.29	12.30	24.66	20.81	12.99
		24°C	36.12	34.88	7.87	34.97	34.17	8.40	33.74	33.42	9.03	32.43	32.43	9.74	29.18	29.18	10.53	27.08	27.08	11.59	26.58	26.58	12.32	24.82	24.82	13.01
		27°C	36.37	36.37	7.88	35.29	35.29	8.42	34.19	34.19	9.06	33.08	33.08	9.78	30.00	30.00	10.60	28.14	28.14	11.68	27.12	27.12	12.38	25.32	25.32	13.07
		30°C	38.25	38.25	7.99	37.27	37.27	8.54	36.21	36.21	9.19	35.08	35.08	9.92	31.85	31.85	10.74	29.93	29.93	11.84	28.76	28.76	12.55	26.85	26.85	13.25
	19°C	24°C	39.45	27.62	8.05	38.20	27.04	8.60	36.86	26.42	9.23	35.44	25.77	9.95	31.92	23.58	10.75	29.68	22.39	11.81	29.05	21.12	12.59	27.13	19.72	13.29
		27°C	39.60	32.33	8.06	38.35	31.68	8.61	37.02	30.99	9.24	35.61	30.27	9.96	32.08	27.74	10.76	29.83	26.41	11.83	29.19	24.81	12.60	27.25	24.60	13.30
		30°C	39.78	39.66	8.07	38.51	38.51	8.62	37.16	37.16	9.26	35.77	35.77	9.97	32.24	32.24	10.78	30.07	30.07	11.85	29.32	29.32	12.62	27.37	27.37	13.32
		33°C	40.40	40.40	8.11	39.37	39.37	8.68	38.28	38.28	9.33	37.12	37.12	10.07	33.74	33.74	10.90	31.76	31.76	12.00	30.43	30.43	12.74	28.41	28.41	13.45
	22°C	27°C	43.24	25.93	8.28	41.85	25.38	8.83	40.41	24.81	9.47	38.88	24.21	10.20	35.05	22.18	11.00	32.63	21.10	12.08	31.87	19.85	12.90	29.75	18.53	13.62
		30°C	43.34	32.21	8.28	41.96	31.56	8.84	40.52	30.90	9.48	39.00	30.20	10.21	35.17	27.69	11.01	32.75	26.40	12.09	31.97	24.75	12.91	29.85	23.11	13.63
		33°C	43.51	37.66	8.29	42.13	37.01	8.85	40.68	36.32	9.49	39.15	35.61	10.22	35.31	32.77	11.03	32.89	31.39	12.10	32.09	29.19	12.93	29.96	27.25	13.65
		36°C	43.66	43.06	8.30	42.27	42.27	8.86	40.85	40.85	9.51	39.43	39.43	10.24	35.74	35.74	11.06	33.61	33.61	12.17	32.32	32.32	12.95	30.18	30.18	13.68
4840	16°C	21°C	36.57	30.06	7.89	35.37	29.36	8.43	34.10	28.62	9.05	32.77	27.84	9.76	29.47	25.38	10.55	27.34	23.99	11.61	26.86	22.82	12.35	25.08	21.30	13.04
		24°C	36.80	35.82	7.90	35.61	35.10	8.44	34.34	34.34	9.07	32.99	32.99	9.78	29.66	29.66	10.57	27.53	27.53	11.63	27.04	27.04	12.37	25.25	25.25	13.06
		27°C	37.32	37.32	7.93	36.28	36.28	8.48	35.21	35.21	9.12	34.07	34.07	9.85	30.88	30.88	10.67	28.95	28.95	11.75	27.92	27.92	12.46	26.07	26.07	13.16
		30°C	39.48	39.48	8.06	38.44	38.44	8.62	37.33	37.33	9.27	36.16	36.16	10.00	32.81	32.81	10.82	30.82	30.82	11.92	29.64	29.64	12.65	27.67	27.67	13.36
	19°C	24°C	40.11	28.91	8.09	38.82	28.32	8.64	37.44	27.69	9.27	35.98	27.01	9.99	32.40	24.68	10.79	30.10	23.39	11.85	29.50	22.14	12.64	27.54	20.67	13.34
		27°C	40.31	33.84	8.10	39.02	33.17	8.65	37.64	32.45	9.29	36.19	31.71	10.00	32.58	29.08	10.80	30.28	27.70	11.87	29.67	25.99	12.65	27.70	24.27	13.36
		30°C	40.52	40.52	8.12	39.20	39.20	8.67	37.85	37.85	9.30	36.44	36.44	10.02	32.93	32.93	10.83	30.82	30.82	11.92	29.87	29.87	12.68	27.89	27.89	13.38
		33°C	41.71	41.71	8.19	40.63	40.63	8.76	39.49	39.49	9.41	38.28	38.28	10.15	34.78	34.78	10.98	32.72	32.72	12.09	31.38	31.38	12.85	29.30	29.30	13.56
	22°C	27°C	43.92	27.13	8.32	42.50	26.57	8.88	41.01	25.99	9.52	39.45	25.40	10.24	35.55	23.29	11.04	33.08	22.16	12.12	32.34	20.82	12.95	30.19	19.44	13.67
		30°C	44.07	33.74	8.33	42.65	33.07	8.89	41.18	32.38	9.53	39.62	31.66	10.25	35.71	29.05	11.06	33.24	27.71	12.13	32.48	25.95	12.97	30.32	24.23	13.69
		33°C	44.28	39.62	8.34	42.85	38.94	8.90	41.36	38.24	9.54	39.79	37.51	10.27	35.86	34.54	11.07	33.39	33.10	12.15	32.62	30.74	12.99	30.45	28.70	13.71
		36°C	44.50	44.50	8.35	43.17	43.17	8.92	41.81	41.81	9.57	40.46	40.46	10.32	36.78	36.78	11.15	34.65	34.65	12.26	33.16	33.16	13.05	30.96	30.96	13.78

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

1. ■ shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
2. Direct interpolation is permissible. Do not extrapolate.
3. Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ150C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
4500	16°C	21°C	43.44	31.46	9.81	42.07	30.76	10.48	40.60	30.03	11.26	39.03	29.25	12.15	35.12	26.70	13.15	32.63	25.26	14.48	32.14	24.09	15.20	30.15	22.59	16.07
		24°C	43.61	37.47	9.82	42.23	36.69	10.49	40.77	35.87	11.27	39.22	34.99	12.17	35.31	32.03	13.16	32.79	30.43	14.49	32.29	28.82	15.22	30.29	27.03	16.09
		27°C	43.77	43.13	9.83	42.44	42.33	10.50	41.01	41.01	11.29	39.55	39.55	12.19	35.81	35.81	13.20	33.60	33.60	14.56	32.57	32.57	15.25	30.56	30.56	16.12
		30°C	45.51	45.51	9.92	44.36	44.36	10.62	43.12	43.12	11.43	41.80	41.80	12.35	37.98	37.98	13.38	35.71	35.71	14.75	34.43	34.43	15.45	32.29	32.29	16.33
	19°C	24°C	47.73	29.72	10.05	46.25	29.07	10.74	44.66	28.39	11.53	42.97	27.66	12.43	38.71	25.29	13.43	35.99	24.00	14.77	35.38	22.78	15.55	33.20	21.37	16.44
		27°C	47.85	34.72	10.06	46.36	34.01	10.75	44.78	33.26	11.54	43.10	32.46	12.44	38.85	29.73	13.44	36.14	28.28	14.78	35.49	26.73	15.56	33.30	25.08	16.45
		30°C	48.03	42.37	10.07	46.52	41.60	10.76	44.92	40.79	11.55	43.23	39.94	12.45	38.98	36.72	13.46	36.29	35.11	14.80	35.60	32.89	15.58	33.40	30.86	16.47
		33°C	48.31	48.31	10.08	46.94	46.94	10.78	45.57	45.57	11.59	44.20	44.20	12.52	40.19	40.19	13.56	37.85	37.85	14.94	36.40	36.40	15.66	34.14	34.14	16.56
	22°C	27°C	52.37	27.92	10.33	50.71	27.30	11.02	48.99	26.67	11.83	47.17	26.01	12.74	42.55	23.79	13.75	39.61	22.60	15.10	38.85	21.41	15.94	36.44	20.09	16.85
		30°C	52.44	34.51	10.33	50.79	33.83	11.03	49.08	33.12	11.83	47.27	32.35	12.74	42.64	29.66	13.76	39.72	28.25	15.11	38.92	26.64	15.94	36.51	24.99	16.86
		33°C	52.59	40.22	10.34	50.94	39.50	11.04	49.22	38.75	11.85	47.41	37.97	12.76	42.77	34.92	13.77	39.86	33.41	15.12	39.04	31.27	15.96	36.62	29.33	16.87
		36°C	52.74	45.80	10.35	51.09	45.07	11.05	49.35	44.31	11.86	47.55	43.52	12.77	42.94	40.09	13.78	40.21	38.21	15.15	39.16	35.84	15.97	36.73	33.62	16.89
5000	16°C	21°C	44.36	32.72	9.86	42.93	32.03	10.53	41.40	31.26	11.31	39.79	30.41	12.21	35.81	27.74	13.20	33.23	26.21	14.53	32.76	25.04	15.27	30.74	23.49	16.15
		24°C	44.59	39.01	9.87	43.17	38.22	10.55	41.65	37.37	11.33	40.03	36.48	12.22	36.03	33.41	13.22	33.42	31.76	14.55	32.96	30.04	15.29	30.92	28.18	16.17
		27°C	44.90	44.90	9.89	43.56	43.56	10.57	42.20	42.20	11.37	40.84	40.84	12.28	37.04	37.04	13.30	34.74	34.74	14.66	33.63	33.63	15.36	31.55	31.55	16.24
		30°C	47.22	47.22	10.02	46.01	46.01	10.72	44.70	44.70	11.53	43.31	43.31	12.45	39.32	39.32	13.48	36.95	36.95	14.86	35.67	35.67	15.58	33.46	33.46	16.47
	19°C	24°C	48.70	30.89	10.11	47.16	30.24	10.79	45.50	29.55	11.59	43.76	28.82	12.49	39.40	26.37	13.49	36.64	25.04	14.83	36.03	23.73	15.62	33.80	22.26	16.52
		27°C	48.89	36.16	10.12	47.34	35.43	10.81	45.70	34.66	11.60	43.96	33.85	12.50	39.60	31.02	13.51	36.82	29.54	14.84	36.20	28.96	15.64	33.96	29.43	16.53
		30°C	49.11	44.35	10.13	47.54	43.57	10.82	45.88	42.74	11.62	44.15	41.89	12.52	39.80	38.50	13.52	37.12	36.62	14.87	36.36	34.49	15.66	34.11	32.36	16.56
		33°C	49.88	49.88	10.18	48.60	48.60	10.89	47.26	47.26	11.71	45.83	45.83	12.64	41.65	41.65	13.68	39.20	39.20	15.06	37.74	37.74	15.81	35.40	35.40	16.72
	22°C	27°C	53.38	29.00	10.39	51.67	28.38	11.09	49.88	27.75	11.89	48.00	27.08	12.80	43.27	24.80	13.81	40.28	23.60	15.16	39.52	22.30	16.01	37.08	20.92	16.93
		30°C	53.50	36.02	10.39	51.80	35.30	11.10	50.02	34.55	11.90	48.14	33.77	12.81	43.41	30.97	13.82	40.43	29.52	15.17	39.65	27.81	16.03	37.19	26.09	16.94
		33°C	53.71	42.12	10.41	52.01	41.39	11.11	50.22	40.62	11.92	48.33	39.82	12.83	43.59	36.65	13.84	40.60	35.10	15.19	39.80	32.79	16.05	37.34	30.76	16.97
		36°C	53.90	48.16	10.42	52.19	47.41	11.12	50.42	46.57	11.93	48.68	45.58	12.85	44.13	42.13	13.88	41.49	40.17	15.27	40.09	37.53	16.08	37.61	35.21	17.00
5500	16°C	21°C	45.14	33.62	9.90	43.66	32.84	10.58	42.10	32.01	11.36	40.45	31.13	12.25	36.38	28.38	13.25	33.75	26.83	14.58	33.31	25.63	15.33	31.25	24.05	16.21
		24°C	45.43	40.06	9.92	43.95	39.25	10.60	42.39	38.40	11.38	40.73	37.50	12.27	36.62	34.35	13.27	33.98	32.70	14.60	33.54	30.88	15.35	31.46	28.97	16.23
		27°C	46.07	46.07	9.95	44.79	44.79	10.65	43.47	43.47	11.45	42.05	42.05	12.36	38.12	38.12	13.39	35.74	35.74	14.75	34.63	34.63	15.47	32.49	32.49	16.36
		30°C	48.74	48.74	10.11	47.45	47.45	10.82	46.09	46.09	11.63	44.63	44.63	12.55	40.50	40.50	13.58	38.04	38.04	14.96	36.75	36.75	15.70	34.48	34.48	16.60
	19°C	24°C	49.51	32.33	10.16	47.92	31.66	10.84	46.22	30.96	11.64	44.42	30.21	12.54	39.99	27.60	13.54	37.16	26.15	14.87	36.58	24.87	15.68	34.32	23.33	16.58
		27°C	49.76	37.84	10.17	48.17	37.09	10.86	46.46	36.29	11.65	44.68	35.46	12.55	40.23	32.51	13.56	37.38	30.98	14.90	36.79	29.20	15.71	34.51	27.40	16.60
		30°C	50.03	46.63	10.19	48.39	45.82	10.88	46.73	44.96	11.67	44.98	43.99	12.58	40.65	40.22	13.59	38.05	37.98	14.96	37.04	36.22	15.73	34.75	33.98	16.63
		33°C	51.49	51.49	10.27	50.16	50.16	10.99	48.76	48.76	11.81	47.26	47.26	12.74	42.94	42.94	13.78	40.39	40.39	15.17	38.92	38.92	15.95	36.51	36.51	16.86
	22°C	27°C	54.22	30.33	10.44	52.47	29.71	11.14	50.62	29.07	11.94	48.70	28.40	12.85	43.89	26.05	13.86	40.83	24.79	15.21	40.10	23.39	16.08	37.62	21.94	17.00
		30°C	54.40	37.73	10.45	52.66	36.98	11.15	50.83	36.21	11.96	48.91	35.40	12.87	44.08	32.49	13.88	41.03	30.99	15.23	40.28	29.15	16.10	37.78	27.35	17.02
		33°C	54.66	44.31	10.47	52.96	43.98	11.17	51.06	42.76	11.98	49.12	41.94	12.89	44.27	38.62	13.90	41.21	37.02	15.25	40.45	34.54	16.12	37.95	32.40	17.04
		36°C	54.94	50.74	10.48	53.29	49.80	11.19	51.61	48.71	12.01	49.94	47.44	12.95	45.40	43.62	13.99	42.77	41.42	15.39	41.13	39.06	16.20	38.58	36.65	17.13

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

1. ■ shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
2. Direct interpolation is permissible. Do not extrapolate.
3. Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ180C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
6300	16°C	21°C	52.42	44.37	12.14	50.76	43.39	12.97	49.00	42.36	13.94	47.10	41.26	15.04	42.39	37.66	16.27	39.37	35.63	17.92	38.25	33.50	18.08	35.88	31.43	19.00
		24°C	52.63	52.63	12.15	50.97	50.97	12.98	49.20	49.20	13.95	47.32	47.32	15.06	42.61	42.61	16.29	39.57	39.57	17.94	38.43	38.43	18.10	36.05	36.05	19.03
		27°C	52.82	52.82	12.16	51.21	51.21	13.00	49.49	49.49	13.97	47.73	47.73	15.09	43.21	43.21	16.34	40.55	40.55	18.02	38.76	38.76	18.14	36.36	36.36	19.06
		30°C	54.92	54.92	12.28	53.53	53.53	13.14	52.04	52.04	14.14	50.45	50.45	15.28	45.83	45.83	16.55	43.09	43.09	18.25	40.97	40.97	18.37	38.43	38.43	19.31
	19°C	24°C	57.60	41.92	12.44	55.81	41.01	13.29	53.89	40.04	14.27	51.86	39.02	15.38	46.71	35.67	16.62	43.43	33.85	18.28	42.11	31.69	18.49	39.50	29.73	19.44
		27°C	57.75	48.97	12.45	55.95	47.97	13.30	54.04	46.91	14.28	52.01	45.79	15.39	46.88	41.93	16.64	43.62	39.89	18.30	42.24	37.18	18.51	39.63	34.88	19.45
		30°C	57.97	57.97	12.46	56.14	56.14	13.31	54.21	54.21	14.30	52.17	52.17	15.41	47.04	47.04	16.66	43.79	43.79	18.31	42.36	42.36	18.53	39.74	39.74	19.47
		33°C	58.30	58.30	12.48	56.64	56.64	13.34	54.99	54.99	14.35	53.34	53.34	15.49	48.50	48.50	16.78	45.68	45.68	18.49	43.31	43.31	18.63	40.63	40.63	19.58
	22°C	27°C	63.20	39.38	12.78	61.20	38.51	13.64	59.12	37.62	14.64	56.93	36.68	15.76	51.35	33.56	17.02	47.80	31.88	18.69	46.23	29.79	18.95	43.37	27.94	19.92
		30°C	63.28	48.68	12.78	61.29	47.72	13.65	59.23	46.71	14.65	57.04	45.63	15.77	51.45	41.83	17.02	47.93	39.85	18.69	46.32	37.06	18.96	43.45	34.76	19.93
		33°C	63.46	56.73	12.80	61.48	55.71	13.66	59.40	54.66	14.66	57.21	53.56	15.79	51.62	49.26	17.04	48.10	47.13	18.71	46.46	43.49	18.98	43.59	40.80	19.95
		36°C	63.64	63.64	12.81	61.66	61.66	13.68	59.56	59.56	14.67	57.38	57.38	15.80	51.82	51.82	17.06	48.52	48.52	18.75	46.60	46.60	19.00	43.71	43.71	19.97
7000	16°C	21°C	53.53	46.16	12.20	51.81	45.17	13.03	49.96	44.09	14.00	48.01	42.90	15.11	43.21	39.12	16.34	40.10	36.98	17.98	38.99	34.83	18.16	36.58	32.68	19.09
		24°C	53.81	53.81	12.22	52.09	52.09	13.05	50.26	50.26	14.02	48.31	48.31	15.13	43.47	43.47	16.36	40.34	40.34	18.00	39.23	39.23	18.19	36.80	36.80	19.11
		27°C	54.18	54.18	12.24	52.57	52.57	13.08	50.93	50.93	14.07	49.28	49.28	15.20	44.69	44.69	16.46	41.93	41.93	18.15	40.02	40.02	18.27	37.55	37.55	19.20
		30°C	56.99	56.99	12.40	55.52	55.52	13.27	53.95	53.95	14.27	52.27	52.27	15.41	47.45	47.45	16.69	44.59	44.59	18.39	42.44	42.44	18.53	39.82	39.82	19.48
	19°C	24°C	58.77	43.57	12.51	56.91	42.65	13.36	54.91	41.67	14.34	52.80	40.65	15.45	47.55	37.19	16.70	44.21	35.32	18.35	42.88	33.01	18.58	40.23	30.97	19.53
		27°C	58.99	51.00	12.52	57.13	49.97	13.37	55.15	48.89	14.36	53.05	47.75	15.47	47.79	43.75	16.71	44.44	41.66	18.37	43.08	39.63	18.60	40.41	38.73	19.55
		30°C	59.26	59.26	12.54	57.37	57.37	13.39	55.37	55.37	14.38	53.28	53.28	15.49	48.03	48.03	16.74	44.80	44.80	18.41	43.27	43.27	18.62	40.59	40.59	19.57
		33°C	60.19	60.19	12.59	58.65	58.65	13.48	57.03	57.03	14.49	55.30	55.30	15.64	50.27	50.27	16.93	47.31	47.31	18.64	44.91	44.91	18.80	42.13	42.13	19.76
	22°C	27°C	64.41	40.90	12.85	62.35	40.04	13.72	60.20	39.14	14.72	57.92	38.19	15.84	52.22	34.98	17.09	48.61	33.28	18.76	47.04	31.01	19.04	44.13	29.09	20.02
		30°C	64.57	50.80	12.86	62.51	49.79	13.73	60.37	48.74	14.73	58.10	47.63	15.85	52.39	43.68	17.11	48.79	41.64	18.77	47.18	38.68	19.06	44.26	36.29	20.03
		33°C	64.82	59.41	12.88	62.76	58.38	13.75	60.60	57.30	14.75	58.32	56.17	15.87	52.60	51.70	17.13	48.99	48.99	18.80	47.36	45.61	19.08	44.43	42.79	20.06
		36°C	65.04	65.04	12.89	62.98	62.98	13.77	60.85	60.85	14.77	58.74	58.74	15.90	53.25	53.25	17.18	50.07	50.07	18.90	47.70	47.70	19.12	44.75	44.75	20.10
7700	16°C	21°C	54.48	47.42	12.26	52.69	46.32	13.09	50.81	45.15	14.06	48.82	43.91	15.16	43.91	40.03	16.39	40.73	37.84	18.04	39.64	35.66	18.23	37.19	33.45	19.16
		24°C	54.83	54.83	12.28	53.04	53.04	13.11	51.16	51.16	14.08	49.15	49.15	15.19	44.19	44.19	16.42	41.01	41.01	18.06	39.91	39.91	18.26	37.44	37.44	19.19
		27°C	55.59	55.59	12.32	54.05	54.05	13.18	52.46	52.46	14.17	50.75	50.75	15.30	46.00	46.00	16.57	43.13	43.13	18.25	41.21	41.21	18.40	38.66	38.66	19.34
		30°C	58.82	58.82	12.51	57.26	57.26	13.39	55.62	55.62	14.39	53.86	53.86	15.53	48.88	48.88	16.81	45.91	45.91	18.51	43.74	43.74	18.67	41.03	41.03	19.63
	19°C	24°C	59.75	45.60	12.57	57.83	44.66	13.42	55.77	43.67	14.40	53.61	42.61	15.51	48.26	38.93	16.75	44.84	36.89	18.41	43.53	34.60	18.65	40.84	32.46	19.60
		27°C	60.05	53.37	12.59	58.13	52.32	13.44	56.07	51.19	14.42	53.92	50.02	15.54	48.54	45.86	16.78	45.11	43.70	18.43	43.78	40.62	18.68	41.07	38.11	19.63
		30°C	60.37	60.37	12.61	58.40	58.40	13.46	56.39	56.39	14.45	54.29	54.29	15.56	49.05	49.05	16.82	45.92	45.92	18.51	44.08	44.08	18.71	41.36	41.36	19.67
		33°C	62.14	62.14	12.72	60.53	60.53	13.60	58.84	58.84	14.62	57.03	57.03	15.77	51.81	51.81	17.06	48.74	48.74	18.77	46.31	46.31	18.96	43.45	43.45	19.93
	22°C	27°C	65.44	42.79	12.92	63.32	41.91	13.79	61.09	41.00	14.78	58.77	40.06	15.90	52.96	36.74	17.15	49.27	34.96	18.82	47.73	32.54	19.12	44.77	30.52	20.10
		30°C	65.65	53.21	12.93	63.54	52.17	13.80	61.34	51.08	14.80	59.02	49.94	15.92	53.20	45.82	17.18	49.52	43.71	18.84	47.93	40.55	19.15	44.96	38.04	20.12
		33°C	65.97	62.49	12.95	63.84	61.43	13.82	61.62	60.32	14.82	59.28	59.16	15.95	53.43	53.43	17.20	49.74	49.74	18.87	48.14	48.04	19.17	45.16	45.07	20.15
		36°C	66.30	66.30	12.97	64.31	64.31	13.85	62.29	62.29	14.87	60.27	60.27	16.02	54.79	54.79	17.32	51.62	51.62	19.05	48.94	48.94	19.27	45.92	45.92	20.25

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

- shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
- Direct interpolation is permissible. Do not extrapolate.
- Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ210C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
6840	16°C	21°C	61.69	47.58	13.92	59.74	46.53	14.88	57.66	45.42	15.99	55.43	44.23	17.26	49.88	40.38	18.67	46.34	38.20	20.56	45.54	36.34	20.75	42.79	34.14	21.80
		24°C	61.93	56.67	13.94	59.98	55.49	14.90	57.90	54.24	16.01	55.69	52.92	17.27	50.15	48.44	18.69	46.57	46.03	20.58	45.75	43.48	20.77	42.99	40.85	21.83
		27°C	62.16	62.16	13.95	60.26	60.26	14.91	58.24	58.24	16.03	56.17	56.17	17.31	50.85	50.85	18.75	47.72	47.72	20.68	46.15	46.15	20.81	43.36	43.36	21.87
		30°C	64.63	64.63	14.09	63.00	63.00	15.08	61.24	61.24	16.23	59.37	59.37	17.53	53.93	53.93	18.99	50.71	50.71	20.94	48.78	48.78	21.08	45.83	45.83	22.15
	19°C	24°C	67.78	44.95	14.27	65.68	43.97	15.25	63.42	42.93	16.37	61.02	41.84	17.65	54.97	38.24	19.07	51.11	36.29	20.98	50.13	34.37	21.22	47.10	32.29	22.30
		27°C	67.96	52.50	14.28	65.84	51.43	15.26	63.59	50.29	16.38	61.21	49.09	17.66	55.17	44.96	19.09	51.33	42.77	20.99	50.29	40.33	21.23	47.25	37.89	22.32
		30°C	68.22	64.07	14.30	66.07	62.91	15.28	63.80	61.69	16.40	61.39	60.41	17.68	55.36	55.36	19.11	51.53	51.53	21.01	50.44	49.63	21.26	47.39	46.63	22.34
		33°C	68.61	68.61	14.32	66.66	66.66	15.31	64.71	64.71	16.46	62.77	62.77	17.78	57.08	57.08	19.25	53.76	53.76	21.21	51.57	51.57	21.37	48.45	48.45	22.46
	22°C	27°C	74.37	42.23	14.66	72.02	41.29	15.66	69.57	40.33	16.80	67.00	39.33	18.09	60.43	35.98	19.52	56.26	34.18	21.44	55.04	32.31	21.74	51.71	30.36	22.85
		30°C	74.47	52.20	14.67	72.13	51.16	15.66	69.70	50.08	16.80	67.12	48.93	18.10	60.55	44.85	19.53	56.41	42.73	21.45	55.15	40.20	21.75	51.81	37.76	22.86
		33°C	74.68	60.82	14.68	72.35	59.74	15.68	69.91	58.61	16.82	67.33	57.42	18.11	60.75	52.81	19.55	56.60	50.53	21.47	55.31	47.18	21.78	51.97	44.32	22.89
		36°C	74.89	69.26	14.70	72.56	68.17	15.69	70.09	67.01	16.84	67.53	65.83	18.13	60.98	60.64	19.57	57.10	57.10	21.52	55.48	54.08	21.80	52.12	50.81	22.91
7600	16°C	21°C	62.99	49.49	14.00	60.97	48.44	14.96	58.80	47.28	16.07	56.50	45.99	17.33	50.85	41.95	18.75	47.19	39.65	20.63	46.42	37.79	20.84	43.61	35.50	21.90
		24°C	63.32	59.00	14.02	61.30	57.80	14.98	59.15	56.52	16.09	56.85	55.17	17.36	51.16	50.52	18.77	47.47	47.47	20.66	46.70	45.32	20.87	43.88	42.58	21.93
		27°C	63.76	63.76	14.04	61.87	61.87	15.01	59.93	59.93	16.14	58.00	58.00	17.44	52.60	52.60	18.89	49.34	49.34	20.82	47.65	47.65	20.96	44.77	44.77	22.03
		30°C	67.06	67.06	14.23	65.34	65.34	15.23	63.48	63.48	16.38	61.51	61.51	17.69	55.84	55.84	19.15	52.48	52.48	21.10	50.53	50.53	21.26	47.48	47.48	22.35
	19°C	24°C	69.16	46.72	14.35	66.97	45.73	15.33	64.62	44.68	16.45	62.14	43.58	17.73	55.96	39.88	19.16	52.03	37.87	21.05	51.05	35.81	21.31	47.96	33.64	22.40
		27°C	69.42	54.68	14.37	67.23	53.58	15.35	64.90	52.42	16.47	62.43	51.19	17.75	56.24	46.91	19.18	52.30	44.67	21.08	51.29	43.60	21.34	48.19	44.39	22.43
		30°C	69.74	67.07	14.39	67.51	65.89	15.37	65.16	64.64	16.50	62.70	62.70	17.77	56.53	56.53	19.20	52.72	52.72	21.12	51.52	51.52	21.37	48.40	48.40	22.46
		33°C	70.83	70.83	14.45	69.02	69.02	15.46	67.11	67.11	16.63	65.08	65.08	17.95	59.15	59.15	19.42	55.68	55.68	21.39	53.47	53.47	21.57	50.23	50.23	22.67
	22°C	27°C	75.80	43.86	14.75	73.37	42.93	15.74	70.84	41.96	16.89	68.16	40.95	18.17	61.45	37.51	19.61	57.20	35.69	21.52	56.00	33.64	21.85	52.61	31.61	22.96
		30°C	75.98	54.47	14.76	73.56	53.38	15.76	71.04	52.25	16.90	68.37	51.07	18.19	61.66	46.84	19.63	57.42	44.65	21.54	56.17	41.96	21.87	52.77	39.42	22.98
		33°C	76.28	63.70	14.78	73.86	62.59	15.78	71.31	61.43	16.92	68.64	60.22	18.21	61.90	55.43	19.65	57.65	53.08	21.57	56.39	49.48	21.90	52.98	46.48	23.01
		36°C	76.54	72.83	14.80	74.11	71.71	15.79	71.61	70.43	16.94	69.13	68.93	18.25	62.66	62.66	19.71	58.92	58.92	21.69	56.80	56.63	21.94	53.36	53.21	23.06
8360	16°C	21°C	64.11	50.84	14.06	62.01	49.66	15.02	59.79	48.41	16.13	57.45	47.08	17.40	51.67	42.92	18.81	47.93	40.57	20.70	47.20	38.68	20.92	44.34	36.34	21.98
		24°C	64.52	60.59	14.09	62.42	59.36	15.05	60.20	58.08	16.16	57.84	56.72	17.43	52.01	51.96	18.84	48.26	48.26	20.73	47.52	46.59	20.95	44.64	43.78	22.02
		27°C	65.42	65.42	14.13	63.60	63.60	15.12	61.73	61.73	16.26	59.72	59.72	17.56	54.14	54.14	19.01	50.76	50.76	20.94	49.07	49.07	21.11	46.10	46.10	22.18
		30°C	69.22	69.22	14.36	67.39	67.39	15.36	65.45	65.45	16.51	63.39	63.39	17.82	57.52	57.52	19.29	54.03	54.03	21.24	52.08	52.08	21.43	48.93	48.93	22.52
	19°C	24°C	70.32	48.89	14.42	68.05	47.89	15.40	65.64	46.82	16.52	63.09	45.68	17.80	56.80	41.74	19.22	52.77	39.55	21.12	51.83	37.53	21.40	48.69	35.26	22.49
		27°C	70.67	57.23	14.44	68.41	56.10	15.42	65.99	54.89	16.55	63.45	53.63	17.83	57.13	49.17	19.25	53.09	46.85	21.15	52.13	44.06	21.43	48.98	41.40	22.52
		30°C	71.04	70.52	14.47	68.72	68.72	15.45	66.36	66.36	16.58	63.88	63.88	17.86	57.72	57.72	19.30	54.04	54.04	21.24	52.48	52.48	21.47	49.31	49.31	22.56
		33°C	73.13	73.13	14.59	71.23	71.23	15.60	69.24	69.24	16.77	67.12	67.12	18.10	60.97	60.97	19.57	57.36	57.36	21.54	55.14	55.14	21.76	51.80	51.80	22.87
	22°C	27°C	77.01	45.88	14.82	74.51	44.94	15.82	71.90	43.96	16.96	69.16	42.96	18.25	62.33	39.39	19.68	57.99	37.49	21.59	56.82	35.29	21.94	53.38	33.16	23.06
		30°C	77.26	57.06	14.84	74.78	55.93	15.84	72.19	54.77	16.98	69.46	53.54	18.27	62.61	49.13	19.71	58.28	46.87	21.62	57.06	43.99	21.97	53.61	41.33	23.08
		33°C	77.63	67.01	14.86	75.13	65.86	15.86	72.51	64.68	17.01	69.76	63.43	18.30	62.87	58.41	19.74	58.53	55.98	21.65	57.31	52.11	22.00	53.85	48.96	23.12
		36°C	78.02	76.74	14.88	75.68	75.32	15.89	73.30	73.30	17.06	70.93	70.93	18.39	64.48	64.48	19.87	60.75	60.75	21.86	58.27	58.27	22.10	54.75	54.75	23.23

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

1. ■ shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
2. Direct interpolation is permissible. Do not extrapolate.
3. Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ240C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
7200	16°C	21°C	69.80	52.51	15.89	67.59	51.35	16.98	65.23	50.13	18.25	62.71	48.82	19.70	56.43	44.57	21.31	52.42	42.16	23.46	51.00	39.71	23.96	47.88	37.28	25.21
		24°C	70.07	62.55	15.91	67.86	61.25	17.00	65.51	59.87	18.27	63.01	58.41	19.72	56.73	53.47	21.33	52.69	50.80	23.49	51.24	47.51	23.99	48.10	44.60	25.24
		27°C	70.33	70.33	15.93	68.18	68.18	17.02	65.89	65.89	18.30	63.55	63.55	19.76	57.53	57.53	21.40	53.99	53.99	23.60	51.68	51.68	24.04	48.52	48.52	25.28
		30°C	73.12	73.12	16.08	71.27	71.27	17.21	69.29	69.29	18.52	67.17	67.17	20.01	61.02	61.02	21.68	57.37	57.37	23.90	54.62	54.62	24.35	51.28	51.28	25.61
	19°C	24°C	76.69	49.61	16.29	74.30	48.53	17.40	71.75	47.38	18.69	69.04	46.18	20.14	62.19	42.21	21.77	57.82	40.06	23.94	56.15	37.55	24.51	52.71	35.26	25.78
		27°C	76.88	57.95	16.30	74.49	56.77	17.42	71.95	55.51	18.70	69.25	54.19	20.16	62.42	49.63	21.79	58.07	47.21	23.96	56.32	44.07	24.53	52.87	41.37	25.80
		30°C	77.18	70.72	16.32	74.74	69.44	17.44	72.18	68.09	18.72	69.46	66.68	20.18	62.63	61.30	21.81	58.30	58.30	23.98	56.49	54.22	24.56	53.03	50.90	25.83
		33°C	77.63	77.63	16.35	75.41	75.41	17.47	73.21	73.21	18.79	71.01	71.01	20.29	64.58	64.58	21.97	60.82	60.82	24.21	57.75	57.75	24.69	54.22	54.22	25.97
	22°C	27°C	84.14	46.61	16.74	81.48	45.58	17.87	78.71	44.52	19.17	75.80	43.41	20.64	68.36	39.72	22.29	63.65	37.73	24.47	61.64	35.30	25.12	57.87	33.14	26.42
		30°C	84.25	57.61	16.74	81.60	56.47	17.88	78.85	55.28	19.18	75.94	54.00	20.65	68.50	49.51	22.30	63.82	47.16	24.48	61.76	43.92	25.13	57.98	41.23	26.43
		33°C	84.49	67.14	16.76	81.85	65.94	17.89	79.09	64.69	19.20	76.17	63.38	20.67	68.72	58.29	22.32	64.04	55.77	24.51	61.95	51.54	25.15	58.16	48.39	26.46
		36°C	84.73	76.45	16.77	82.09	75.24	17.91	79.29	73.96	19.22	76.40	72.65	20.69	68.99	66.93	22.34	64.60	63.79	24.56	62.13	59.09	25.18	58.33	55.47	26.48
8000	16°C	21°C	71.27	54.63	15.98	68.98	53.46	17.07	66.52	52.18	18.34	63.92	50.77	19.78	57.53	46.30	21.40	53.39	43.76	23.55	51.99	41.29	24.07	48.80	38.76	25.32
		24°C	71.64	65.12	16.00	69.35	63.79	17.10	66.92	62.39	18.36	64.32	60.89	19.81	57.88	55.77	21.43	53.70	53.02	23.58	52.30	49.52	24.10	49.10	46.49	25.35
		27°C	72.13	72.13	16.03	69.99	69.99	17.13	67.81	67.81	18.42	65.62	65.62	19.90	59.51	59.51	21.56	55.82	55.82	23.76	53.36	53.36	24.21	50.10	50.10	25.47
		30°C	75.87	75.87	16.24	73.92	73.92	17.38	71.82	71.82	18.69	69.59	69.59	20.19	63.18	63.18	21.86	59.37	59.37	24.08	56.59	56.59	24.56	53.13	53.13	25.84
	19°C	24°C	78.25	51.56	16.38	75.77	50.48	17.50	73.11	49.32	18.78	70.30	48.10	20.24	63.31	44.01	21.86	58.86	41.80	24.03	57.17	39.12	24.62	53.67	36.73	25.90
		27°C	78.54	60.36	16.40	76.06	59.14	17.52	73.42	57.86	18.80	70.63	56.50	20.26	63.62	51.78	21.89	59.17	49.30	24.06	57.44	45.95	24.65	53.92	47.35	25.93
		30°C	78.90	74.03	16.42	76.38	72.73	17.54	73.71	71.35	18.83	70.94	69.93	20.29	63.95	63.95	21.92	59.64	59.64	24.11	57.69	56.87	24.68	54.16	53.39	25.96
		33°C	80.13	80.13	16.49	78.09	78.09	17.65	75.93	75.93	18.98	73.63	73.63	20.48	66.92	66.92	22.17	62.99	62.99	24.41	59.88	59.88	24.92	56.21	56.21	26.22
	22°C	27°C	85.76	48.41	16.83	83.01	47.38	17.97	80.15	46.32	19.27	77.12	45.20	20.74	69.52	41.40	22.38	64.71	39.39	24.57	62.72	36.76	25.24	58.88	34.51	26.55
		30°C	85.96	60.12	16.85	83.22	58.92	17.98	80.37	57.68	19.29	77.35	56.37	20.76	69.75	51.70	22.40	64.96	49.28	24.59	62.91	45.84	25.26	59.06	43.04	26.57
		33°C	86.29	70.31	16.87	83.56	69.09	18.01	80.68	67.81	19.31	77.65	66.47	20.79	70.03	61.18	22.43	65.23	58.59	24.62	63.15	54.06	25.29	59.29	50.75	26.61
		36°C	86.59	80.39	16.89	83.85	79.15	18.03	81.02	77.73	19.34	78.21	76.09	20.83	70.90	70.33	22.50	66.66	66.66	24.75	63.61	61.88	25.34	59.71	58.09	26.66
8800	16°C	21°C	72.53	56.11	16.05	70.15	54.81	17.15	67.64	53.43	18.41	65.00	51.96	19.86	58.46	47.38	21.47	54.22	44.78	23.63	52.86	42.26	24.16	49.62	39.67	25.41
		24°C	73.00	66.87	16.08	70.62	65.52	17.17	68.11	64.11	18.44	65.43	62.60	19.89	58.84	57.35	21.50	54.60	54.59	23.66	53.21	50.91	24.20	49.96	47.79	25.46
		27°C	74.02	74.02	16.13	71.96	71.96	17.26	69.84	69.84	18.56	67.57	67.57	20.04	61.25	61.25	21.70	57.42	57.42	23.91	54.95	54.95	24.38	51.59	51.59	25.65
		30°C	78.31	78.31	16.39	76.24	76.24	17.53	74.05	74.05	18.85	71.71	71.71	20.34	65.08	65.08	22.01	61.12	61.12	24.24	58.32	58.32	24.75	54.75	54.75	26.03
	19°C	24°C	79.55	53.96	16.46	76.99	52.86	17.57	74.26	51.68	18.86	71.37	50.42	20.32	64.26	46.08	21.94	59.70	43.66	24.11	58.04	41.01	24.72	54.49	38.50	26.00
		27°C	79.96	63.17	16.49	77.40	61.92	17.60	74.65	60.58	18.89	71.78	59.20	20.35	64.63	54.28	21.97	60.06	51.72	24.14	58.38	48.14	24.76	54.80	45.20	26.04
		30°C	80.37	77.84	16.51	77.75	76.48	17.63	75.08	75.04	18.92	72.27	72.27	20.38	65.31	65.31	22.03	61.14	61.14	24.24	58.78	58.78	24.80	55.18	55.18	26.09
		33°C	82.73	82.73	16.65	80.59	80.59	17.81	78.33	78.33	19.15	75.93	75.93	20.66	68.98	68.98	22.34	64.89	64.89	24.59	61.75	61.75	25.13	57.97	57.97	26.44
	22°C	27°C	87.12	50.64	16.92	84.30	49.60	18.05	81.34	48.52	19.36	78.25	47.42	20.83	70.52	43.48	22.47	65.60	41.37	24.65	63.63	38.56	25.34	59.74	36.20	26.66
		30°C	87.41	62.98	16.94	84.60	61.74	18.08	81.67	60.45	19.38	78.58	59.10	20.85	70.83	54.23	22.49	65.93	51.73	24.68	63.91	48.06	25.37	59.99	45.12	26.69
		33°C	87.83	73.96	16.96	84.99	72.70	18.10	82.03	71.39	19.41	78.92	70.01	20.89	71.13	64.47	22.53	66.22	61.79	24.71	64.18	56.94	25.41	60.26	53.45	26.73
		36°C	88.27	84.70	16.99	85.62	83.13	18.14	82.93	81.30	19.47	80.24	79.19	20.99	72.95	72.81	22.68	68.73	68.73	24.95	65.26	64.40	25.53	61.26	60.46	26.86

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

1. ■ shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
2. Direct interpolation is permissible. Do not extrapolate.
3. Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Model : UATQ300C

AFR (CFM)	EWB	EDB	Outdoor temperature																							
			19°C			25°C			30°C			35°C			40°C			46°C			48°C			52°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
8100	16°C	21°C	88.05	62.93	20.03	85.26	61.54	21.41	82.29	60.08	23.01	79.11	58.51	24.83	71.19	53.42	26.86	66.13	50.53	29.58	63.76	47.16	30.23	59.41	43.94	31.87
		24°C	88.39	74.96	20.05	85.60	73.40	21.43	82.64	71.75	23.03	79.48	70.01	24.86	71.57	64.07	26.89	66.47	60.89	29.61	64.06	56.42	30.27	59.69	52.57	31.91
		27°C	88.72	86.28	20.08	86.01	84.68	21.46	83.12	82.93	23.06	80.17	80.17	24.90	72.57	72.57	26.97	68.11	68.11	29.75	64.61	64.61	30.33	60.20	60.20	31.97
		30°C	92.24	92.24	20.28	89.91	89.91	21.70	87.41	87.41	23.35	84.73	84.73	25.23	76.97	76.97	27.33	72.37	72.37	30.13	68.29	68.29	30.72	63.63	63.63	32.38
	19°C	24°C	96.74	59.45	20.54	93.73	58.16	21.94	90.51	56.79	23.56	87.09	55.34	25.39	78.46	50.59	27.44	72.95	48.00	30.18	70.19	44.60	30.92	65.40	41.56	32.59
		27°C	96.99	69.45	20.55	93.97	68.03	21.95	90.76	66.53	23.58	87.36	64.94	25.41	78.74	59.48	27.47	73.26	56.58	30.20	70.41	52.34	30.95	65.60	48.77	32.62
		30°C	97.36	84.76	20.57	94.29	83.22	21.98	91.05	81.60	23.60	87.62	79.91	25.44	79.01	73.46	27.50	73.55	70.24	30.24	70.62	64.40	30.98	65.80	60.00	32.66
		33°C	97.93	97.93	20.61	95.13	95.13	22.03	92.36	92.36	23.69	89.58	89.58	25.58	81.47	81.47	27.70	76.72	76.72	30.52	72.20	72.20	31.15	67.27	67.27	32.83
	22°C	27°C	106.14	55.86	21.10	102.78	54.62	22.53	99.29	53.35	24.17	95.62	52.02	26.02	86.24	47.60	28.09	80.29	45.21	30.85	77.06	41.93	31.69	71.80	39.07	33.40
		30°C	106.29	69.04	21.11	102.94	67.68	22.54	99.47	66.25	24.18	95.80	64.72	26.04	86.42	59.33	28.11	80.51	56.52	30.86	77.21	52.16	31.70	71.94	48.60	33.42
		33°C	106.58	80.46	21.13	103.25	79.02	22.56	99.77	77.52	24.20	96.09	75.96	26.06	86.70	69.86	28.13	80.78	66.84	30.89	77.45	61.22	31.74	72.16	57.04	33.45
		36°C	106.89	91.61	21.14	103.56	90.17	22.58	100.03	88.64	24.23	96.37	87.07	26.09	87.04	80.21	28.16	81.49	76.44	30.96	77.67	70.18	31.76	72.37	65.39	33.48
9000	16°C	21°C	89.90	65.47	20.14	87.02	64.07	21.52	83.92	62.54	23.12	80.64	60.84	24.94	72.57	55.49	26.97	67.35	52.44	29.69	64.99	49.03	30.37	60.56	45.69	32.01
		24°C	90.37	78.04	20.17	87.49	76.45	21.55	84.42	74.77	23.15	81.13	72.98	24.97	73.02	66.83	27.01	67.75	63.55	29.72	65.39	58.81	30.41	60.93	54.80	32.06
		27°C	91.00	90.47	20.20	88.30	88.30	21.60	85.54	85.54	23.23	82.78	82.78	25.09	75.07	75.07	27.17	70.42	70.42	29.96	66.71	66.71	30.55	62.16	62.16	32.20
		30°C	95.71	95.71	20.48	93.25	93.25	21.91	90.60	90.60	23.57	87.79	87.79	25.45	79.70	79.70	27.55	74.90	74.90	30.36	70.75	70.75	30.99	65.92	65.92	32.66
	19°C	24°C	98.71	61.80	20.65	95.59	60.49	22.06	92.23	59.11	23.68	88.69	57.65	25.51	79.86	52.75	27.56	74.26	50.10	30.29	71.48	46.46	31.06	66.60	43.29	32.75
		27°C	99.08	72.33	20.68	95.95	70.88	22.08	92.62	69.34	23.70	89.10	67.72	25.54	80.26	62.05	27.59	74.64	59.09	30.33	71.81	51.70	31.10	66.91	52.93	32.78
		30°C	99.53	88.72	20.70	96.35	87.16	22.11	92.99	85.51	23.74	89.49	83.80	25.57	80.68	77.02	27.63	75.24	73.26	30.39	72.13	67.54	31.14	67.20	62.93	32.83
		33°C	101.09	101.09	20.79	98.51	98.51	22.25	95.78	95.78	23.92	92.88	92.88	25.82	84.42	84.42	27.94	79.46	79.46	30.77	74.86	74.86	31.44	69.75	69.75	33.14
	22°C	27°C	108.18	58.01	21.22	104.72	56.78	22.65	101.11	55.51	24.30	97.28	54.17	26.15	87.70	49.61	28.22	81.64	47.21	30.97	78.41	43.65	31.84	73.05	40.67	33.57
		30°C	108.44	72.05	21.24	104.99	70.61	22.67	101.39	69.12	24.31	97.58	67.55	26.17	87.99	61.96	28.24	81.95	59.06	31.00	78.64	54.44	31.87	73.28	50.73	33.60
		33°C	108.86	84.26	21.26	105.41	82.80	22.70	101.78	81.26	24.35	97.96	79.66	26.21	88.35	73.32	28.28	82.28	70.22	31.03	78.95	64.20	31.91	73.56	59.82	33.64
		36°C	109.24	96.34	21.29	105.77	94.85	22.73	102.20	93.16	24.38	98.66	91.18	26.26	89.43	84.29	28.37	84.09	80.37	31.20	79.52	73.49	31.97	74.09	68.47	33.70
9900	16°C	21°C	91.49	67.25	20.23	88.50	65.69	21.61	85.33	64.03	23.21	81.99	62.27	25.03	73.74	56.78	27.06	68.40	53.67	29.78	66.08	50.19	30.48	61.57	46.76	32.13
		24°C	92.09	80.14	20.27	89.09	78.53	21.65	85.92	76.83	23.25	82.54	75.02	25.07	74.22	68.73	27.11	68.87	65.42	29.82	66.53	60.46	30.53	61.99	56.34	32.18
		27°C	93.37	93.37	20.34	90.77	90.77	21.76	88.10	88.10	23.40	85.24	85.24	25.26	77.26	77.26	27.35	72.44	72.44	30.14	68.70	68.70	30.76	64.01	64.01	32.43
		30°C	98.79	98.79	20.66	96.18	96.18	22.10	93.41	93.41	23.76	90.46	90.46	25.64	82.10	82.10	27.75	77.11	77.11	30.56	72.91	72.91	31.23	67.93	67.93	32.92
	19°C	24°C	100.36	64.67	20.75	97.12	63.35	22.16	93.68	61.94	23.78	90.04	60.43	25.61	81.06	55.22	27.66	75.32	52.32	30.39	72.56	48.70	31.19	67.61	45.38	32.88
		27°C	100.87	75.70	20.78	97.64	74.20	22.19	94.18	72.61	23.81	90.55	70.94	25.65	81.53	65.05	27.70	75.76	61.98	30.43	72.98	57.18	31.23	68.00	53.27	32.92
		30°C	101.39	93.28	20.82	98.08	91.66	22.23	94.71	89.93	23.85	91.17	88.00	25.69	82.38	80.46	27.77	77.13	75.97	30.56	73.48	70.92	31.29	68.47	66.08	32.98
		33°C	104.37	104.37	20.99	101.67	101.67	22.45	98.82	98.82	24.14	95.79	95.79	26.04	87.02	87.02	28.16	81.86	81.86	30.99	77.20	77.20	31.71	71.93	71.93	33.42
	22°C	27°C	109.90	60.68	21.33	106.35	59.44	22.76	102.61	58.15	24.40	98.71	56.82	26.26	88.96	52.11	28.32	82.76	49.58	31.07	79.55	45.80	31.97	74.12	42.67	33.70
		30°C	110.27	75.47	21.35	106.73	73.99	22.79	103.03	72.44	24.43	99.13	70.82	26.29	89.35	64.99	28.36	83.17	62.00	31.11	79.89	57.08	32.01	74.44	53.18	33.74
		33°C	110.80	88.63	21.38	107.22	87.12	22.82	103.49	85.55	24.47	99.56	83.91	26.33	89.73	77.27	28.40	83.53	74.05	31.15	80.24	67.63	32.06	74.76	63.01	33.80
		36°C	111.35	101.51	21.42	108.01	99.63	22.87	104.61	97.44	24.55	101.23	94.90	26.45	92.02	87.26	28.59	86.70	82.86	31.45	81.58	76.48	32.21	76.02	71.26	33.96

Remark:

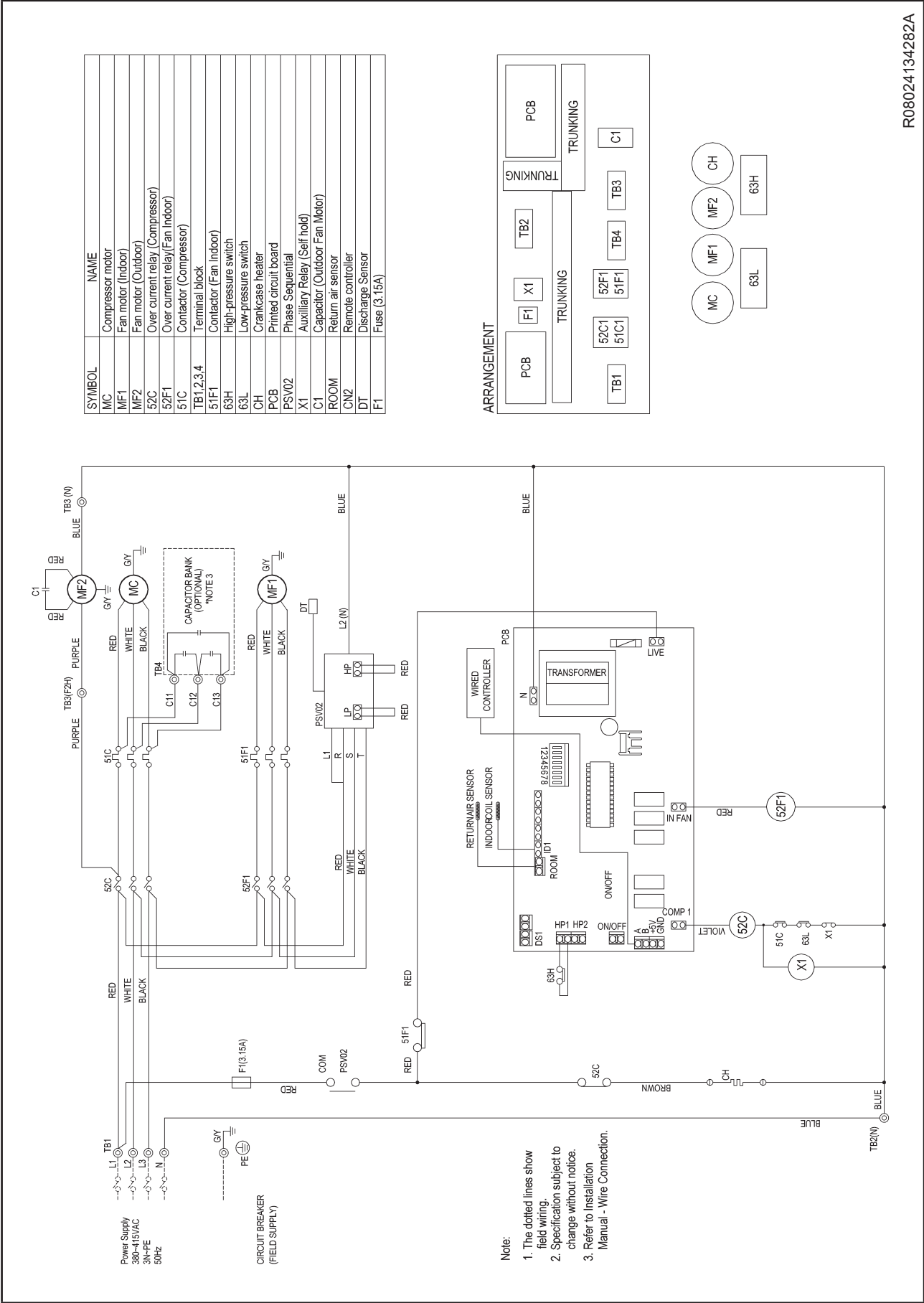
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input

Notes:

1. ■ shows nominal capacities based on Indoor 27°C DB, 19°CWB, Outdoor 35°CDB.
2. Direct interpolation is permissible. Do not extrapolate.
3. Unit is able to operate at ambient from 19°C to 52°C without pressure trip.

Wiring Diagram

Model : UATQ60/90C

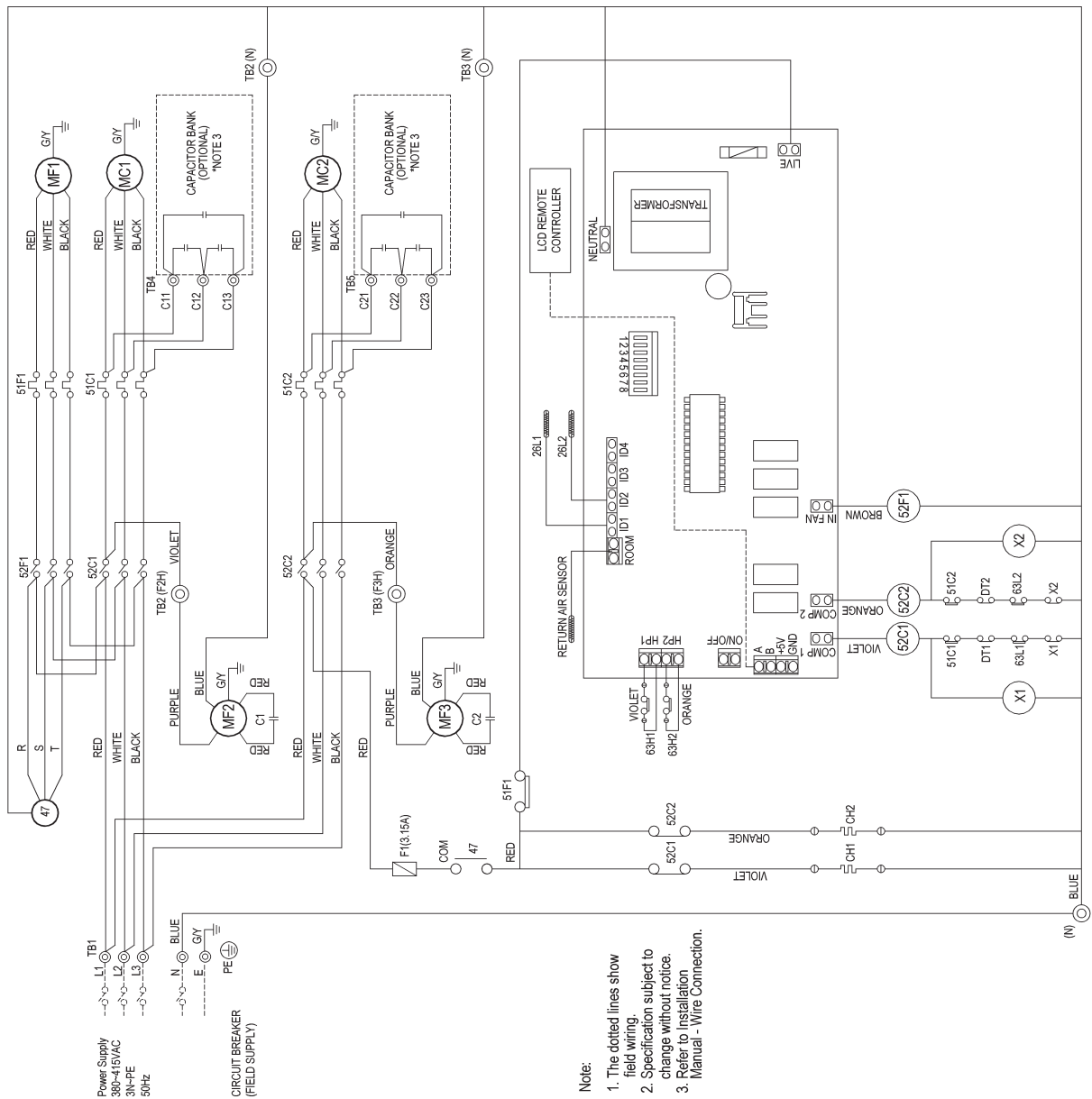
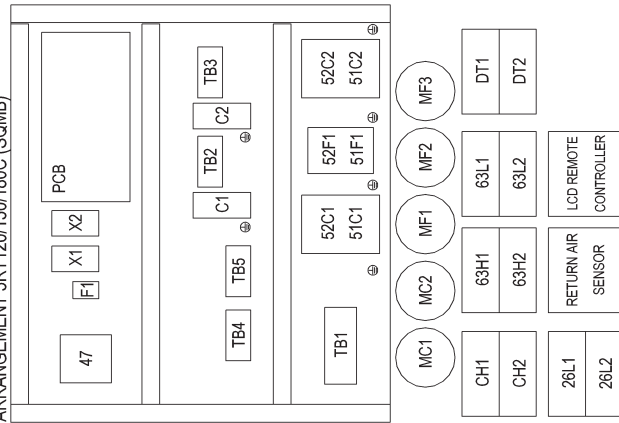


R08024134282A

Model : UATQ120/150/180C

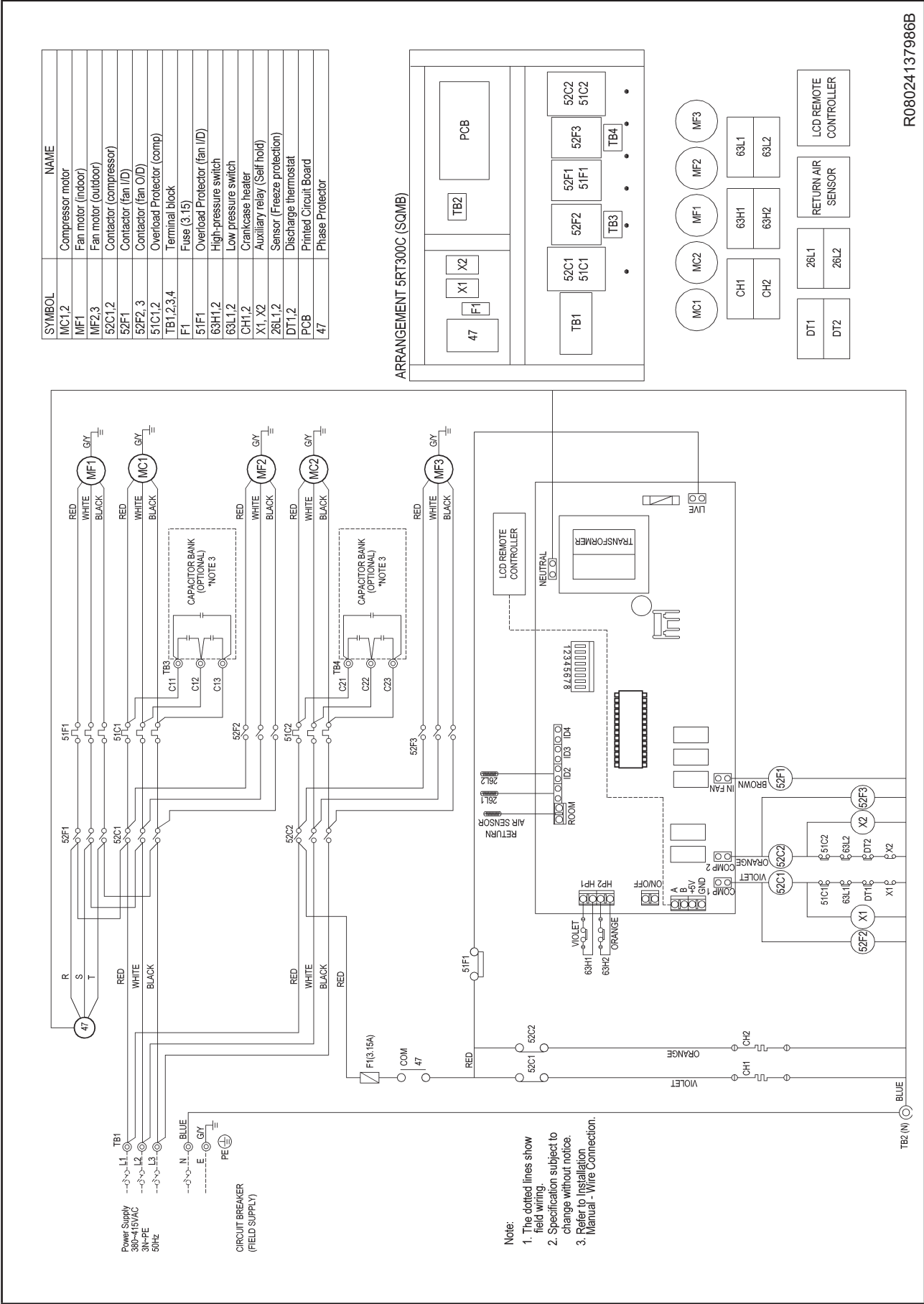
SYMBOL	NAME
MC1, 2	Compressor motor
MF1	Fan motor (indoor)
MF2, 3	Fan motor (outdoor)
52C1, 2	Contact (compressor)
52F1	Contact (fan I/D)
51C1,2	Overload Protector (comp)
TB1, 2, 3, 4 & 5	Terminal block
F1	Fuse (3.15A)
51F1	Overload Protector (fan I/D)
63H1, 2	High-pressure switch
63L1, 2	Low pressure switch
CH1, 2	Crankcase heater
X1, X2	Auxiliary relay (self hold)
26L1,2	Sensor (freeze protector)
DT1,2	Discharge thermostat
PCB	Printed circuit board
47	Phase Protector
C1,C2	Capacitor O/D Fan

ARRANGEMENT 5RT120/150/180C (SQMB)



R08024135502B

Model : UATQ210/240/300C

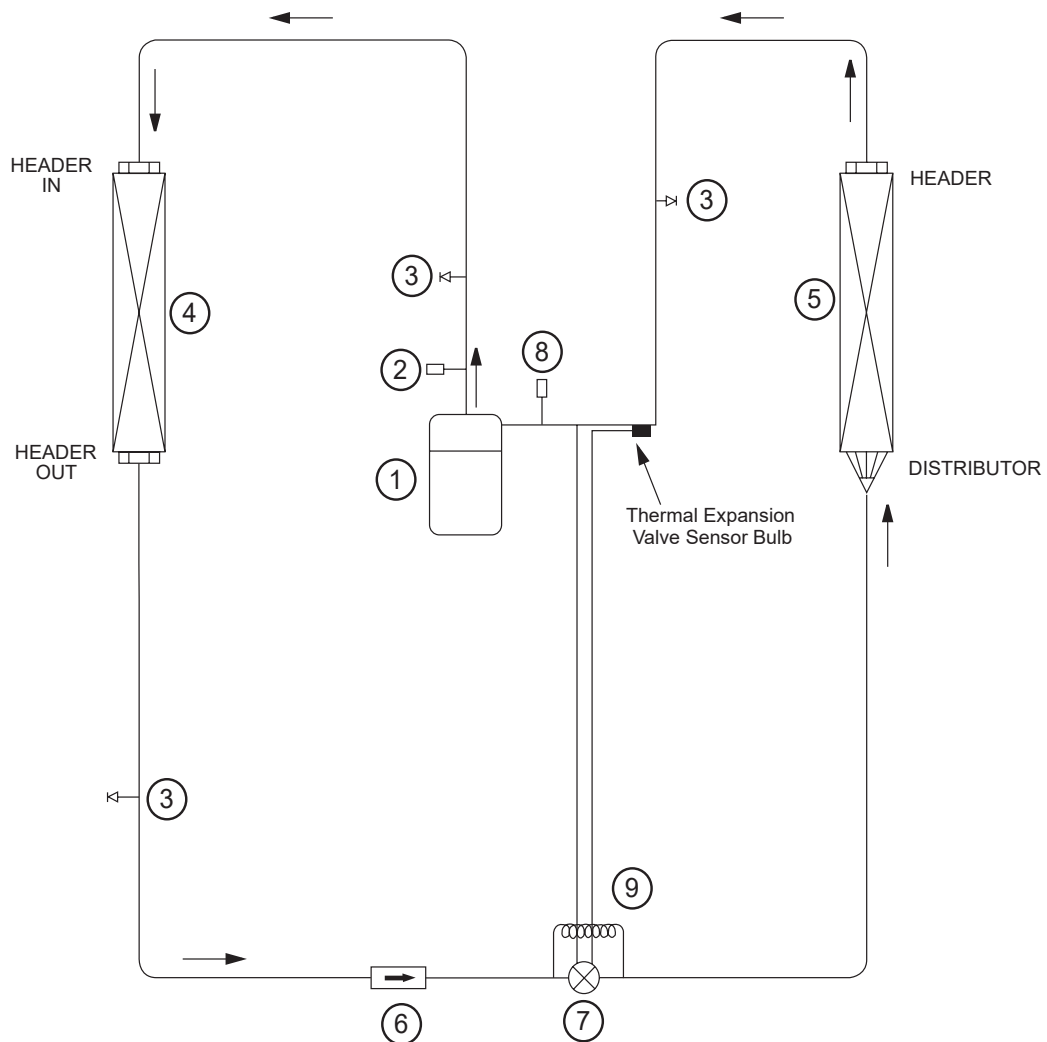


R08024137986B

Piping Diagram

Model : UATQ60/90/120/150/180/210/240/300C

No	Item Description
1	Compressor
2	High Pressure Switch
3	Access Valve
4	Outdoor Heat Exchanger
5	Indoor Heat Exchanger
6	Filter Dryer
7	Thermal Expansion Valve (TXV)
8	Low Pressure Switch
9	Capillary Tube

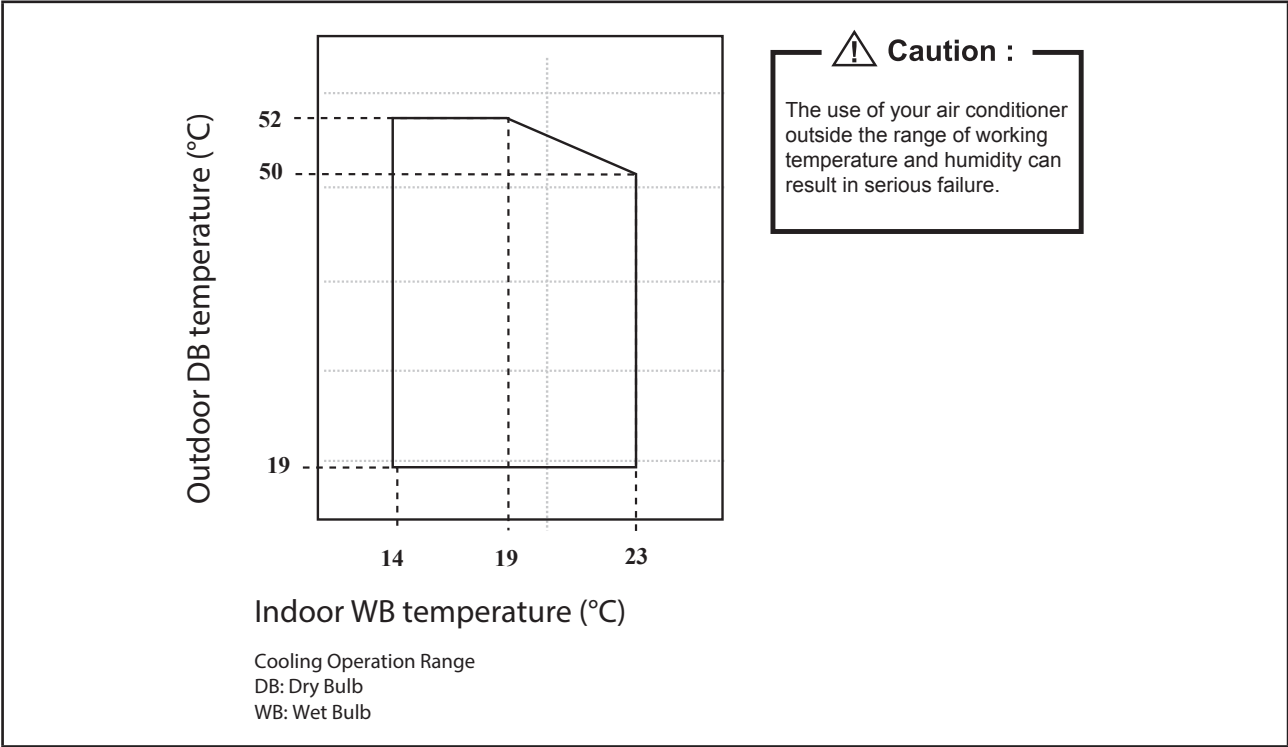


Note: (a) UATQ120/150/180/210/240/300C consists of 2 circuits in the system.
 (b) Item no. 9 is applicable for UATQ180/210C only.

Note: Dimension in mm

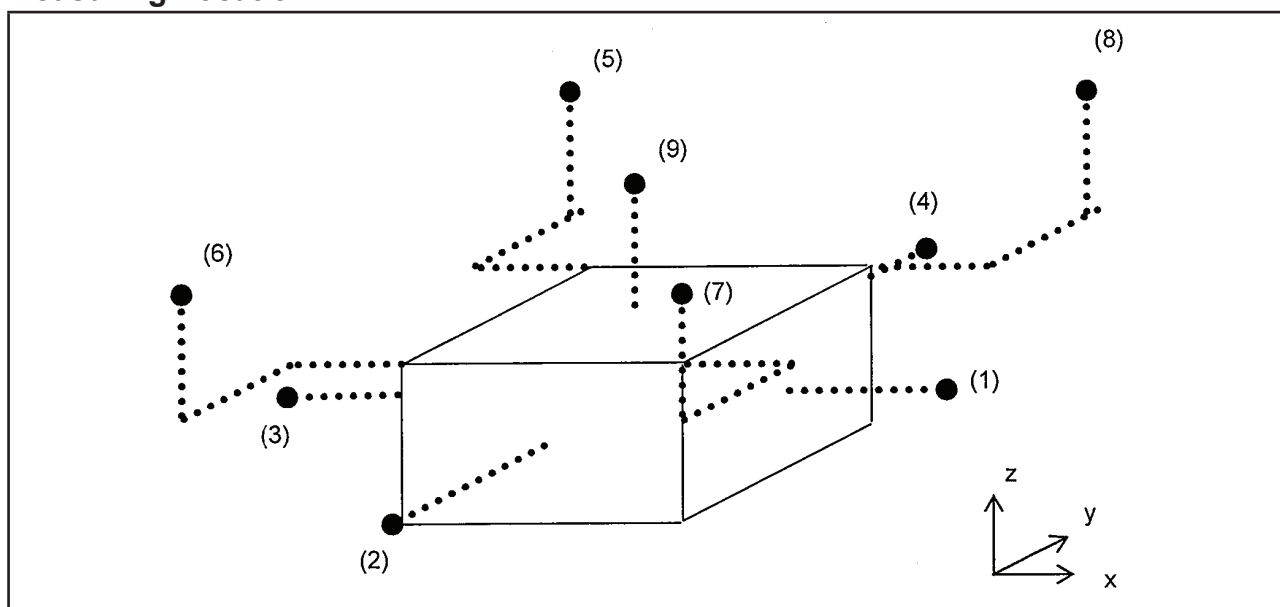
Operation Limit

Model : UATQ-C



Sound Level

Measuring Location



Notes:

Microphone position:

(1) Measurement at open field (Inlet + radiated).

(2) For microphone at position 1 until 4 and 9, the distance will be 1 meter from the centre of the unit's surface.

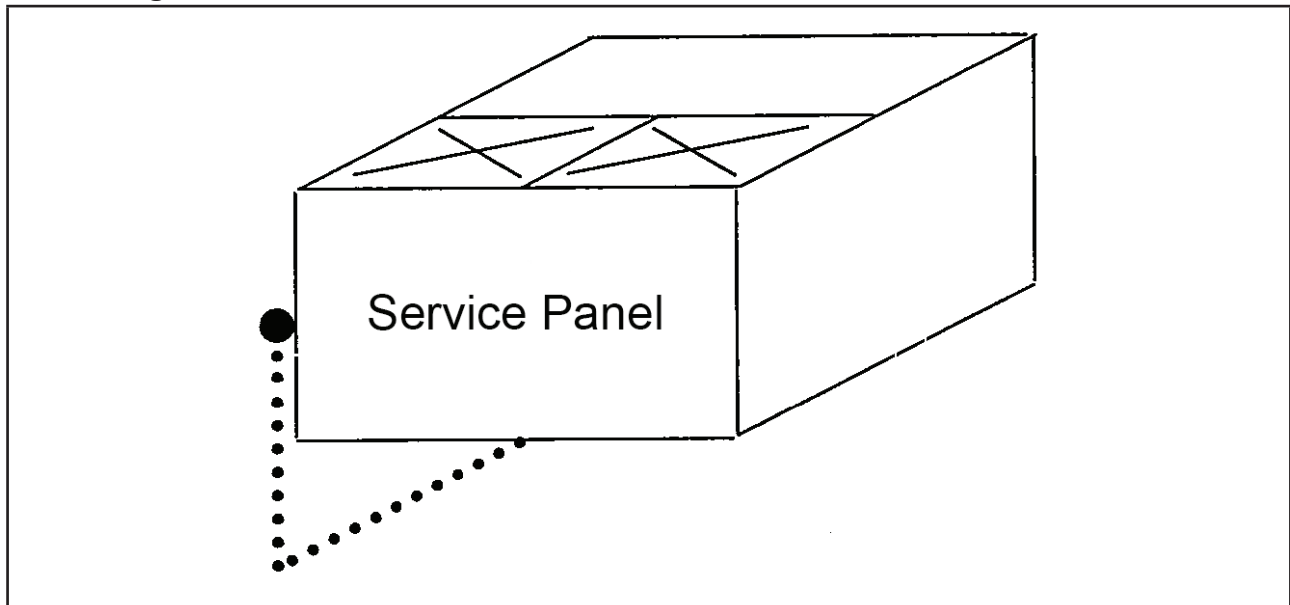
(3) For microphone at position 5 until 8, the distance will be 1 meter 1 meter at each x, y & z axis.

(4) The operation noise measuring method is in accordance with **Standard: EN 12102**

Sound Power Level

Model	1/1 Octave Sound Power Level (dB) ref 1pW							Overall (dBA)
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
UATQ60C	86	81	77	78	70	69	66	81
UATQ90C	87	80	77	80	73	74	69	83
UATQ120C	87	84	78	79	73	72	68	83
UATQ150C	91	83	80	82	74	72	69	85
UATQ180C	94	86	82	84	76	76	71	87
UATQ210C	89	87	84	86	79	75	69	89
UATQ240C	89	87	85	86	80	76	70	89
UATQ300C	89	88	86	87	86	83	77	92

Measuring Location



Notes:

Microphone position:

- (1) Measurement at open field.
- (2) For all microphone position, the distance will be from the unit center in 1m horizontal follow by 1m vertical
- (4) The operation noise measuring method is in accordance with **Standard: JIS B 8616-1999**

Sound Pressure Level

Model	1/1 Octave Sound Pressure (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
UATQ60C	64	64	58	56	50	47	35	61	57
UATQ90C	69	63	56	58	51	50	43	62	58
UATQ120C	70	67	62	60	54	53	50	65	60
UATQ150C	75	66	61	64	55	52	50	67	65
UATQ180C	78	69	63	63	58	57	52	68	69
UATQ210C	73	68	65	65	60	56	52	69	64
UATQ240C	72	69	67	66	60	58	53	70	65
UATQ300C	70	68	68	66	66	63	57	72	67

NC Curve

