



# **42CES Series**

Chilled Water Fan Coil Unit Concealed Type - Low Static Nominal: 400-1,200 CFM















# The Compact and Practical 42CES Fan Coil Units

The Carrier 42CES horizontal furred-in Fan Coils are quiet, compact and flexible. Nominal air quantity range from 400 cfm to 1200 cfm. These units are engineered for industrial and commercial applications.

#### **Features**

- · Ultra-compact design-saves installation space
- · High efficiency heat transfer surface
- · Super quiet operation
- Low installation and maintenance cost-easy wiring, piping connections
- Installed with direct driven forward curved centrifugal fan and 4-speed high efficient motor
- Minimum power requirement for significant money saving to the owners
- · Insulated drain pan
- · Factory leak test
- · Requires no expensive ductwork
- · Ideal for new construction or renovation

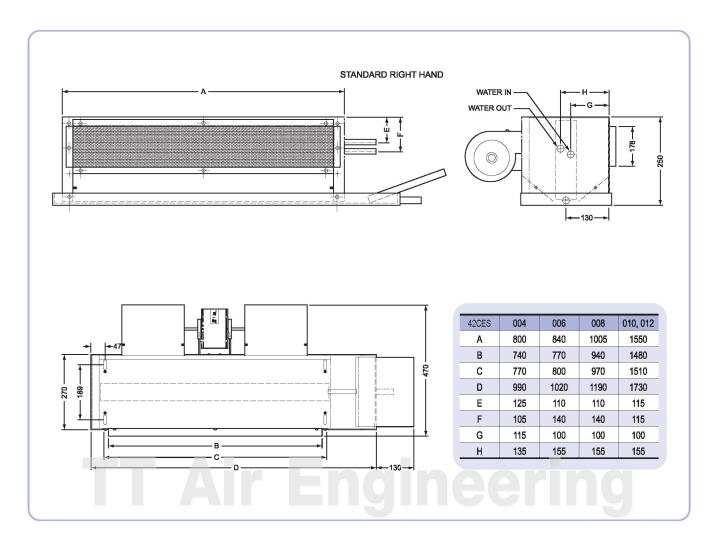
#### **Physical Data**

Specification (รายละเร็	อียดของเครื่อง)				Chille	d Water Coil -	Conceal Ducted	Туре		
Model Name(ชื่อรุ่น)	Indoor		42CE	3004W	42CE	S006W	42CES	3008W	42CE	3012W
	(เครื่องภายใน)		2Rows	3Rows	3Rows	4Rows	3Rows	4Rows	3Rows	4Rows
Cooling Capacity (ควา	มสามารถในการทำความเย็น)	W	3,930	4,610	5,510	6,160	7,040	8,040	10,090	11,550
		Btu/hr.	13,400	15,700	18,800	21,000	24,000	27,400	34,400	39,400
Power Supply (ระบบไท	√พัn)	V/Ph/Hz				220	/1/50			
Operating Current (វាវៈ	ะแสไฟฟ้า)	Amp.	0.	43	0.	65	0.	81	1.	30
Power Consumption (r	ำลังไฟฟ้า)	W	95	.00	108	5.00	170	0.00	210	0.00
Indoor Air Circulation,	Max. (ปริมาณลมหมุนเวียน)	CFM	4	00	6	00	80	00	1,2	200
	Туре				Pe	rmanent Split C	apacitor / 4 Spe	eed		
	Power Supply	V/Ph/Hz				220	/1/50			
Fan Motor	HP		1	/2	1/	15	1.	/8	1/	15
	Q'ty			1		1		1		2
	RLA	Amp.	0.	43	0.	65	0.	81	0.	65
	Туре				(	Centifugal Forw	ard Curve Blad	е		
Blower	Diameter	mm.	1-	44	1-	44	14	14	1-	44
Diowei	Width	mm.	1-	88	1	62	18	38	1	32
	Q'ty		,	2	0	2	ž	2		4
Dimension	Width	mm.	9	90	1,0	020	1,1	190	1,7	730
(ขนาดของเครื่อง)	Depth	mm.	4	70	4	70	4	70	4	70
	Height	mm.	2	50	2	50	25	50	2	50
Gross weight		kg.	22	2.5	2	27	2	9	48	3.5
Connecting Pipe	Water Inlet	inch	5	/8	5	5/8	5	/8	5	/8
(ขนาดท่อที่ใช้)	Water Outlet	inch	5	/8	5	5/8	5.	/8	5	/8
	Drain O.D. (ท่อน้ำทิ้ง)(MPT)	inch	3	/4	3	3/4	3.	/4	3	/4

RLA: Rated Load Amps MPT: Male Pipe Thread

\*Norminal Capacity based on : EAT 80 Fdb/67 Fwb, CHWT 44/54F

### Unit dimensions



### **Performance data**

#### Air Delivery (50 Hz)

Model		CFM AT 0.0 ESP				HIGH CFI	M AT ESP		
MODE	High	Med	Low	0.05	0.10	0.15	0.20	0.25	0.30
42CES <b>004 - 2 rows</b>	630	570	500	560	490	420	345	260	170
42CES <b>006 - 3 rows</b>	870	670	540	800	730	650	570	485	400
42CES <b>008 - 3 rows</b>	1100	790	650	1020	940	850	755	660	550
42CES <b>012 - 3 rows</b>	1500	1050	860	1410	1320	1200	985	840	700
42CES <b>004 - 3 rows</b>	620	560	495	550	480	405	340	250	165
42CES <b>006 - 4 rows</b>	860	660	530	780	710	635	550	470	380
42CES <b>008 - 4 rows</b>	1050	770	640	1000	925	830	740	640	530
42CES <b>012 - 4 rows</b>	1480	970	845	1400	1300	1190	970	830	680

ESP. = External Static Pressure (in. wg)

Notes:

1. Airflow with dry coil conditions.

2. Wet coil cfm is approximately 92% of dy coil cfm.

3. All models without a factory plenum or casing should be operated with a filter and a minimum 0.05 ESP system.

# Performance data \_

### 2 rows cooling coil for size 004, 3 rows cooling coil for size 006, 008, 012

42°F Er	nter Wa	iter Ten	nperatur	е										
	Ente							Temper						
Unit	Tem		(		- 1			0		2		4		6
	WB	DB	TH	SH	TH	SH								
004			11.6	9.0	10.5	8.4	9.3	7.9	8.3	7.3	7.3	6.8	6.2	6.2
006	61	72	16.3	12.6	14.7	11.8	13.1	11.0	11.7	10.2	10.3	9.5	8.8	8.7
008	٥.		20.7	15.8	18.7	14.9	16.8	14.0	15.1	13.1	13.5	12.2	11.8	11.4
012			29.7	22.9	26.8	21.5	23.9	20.2	21.5	18.8	19.1	17.4	16.7	16.1
004			11.6	9.7	10.6	9.2	9.7	8.7	8.8	8.2	7.9	7.6	7.0	7.0
006 008	61	74	16.2 20.5	13.6	14.9 18.8	12.8 16.2	13.5 17.1	12.1 15.3	12.3 15.7	11.4	11.1	10.6 13.6	9.9	9.8
012	- A.V.		29.9	17.0 24.9	27.3	23.5	24.8	22.2	22.6	20.9	20.5	19.5	18.4	18.1
004			13.7	9.6	12.3	9.0	10.9	8.5	9.7	7.9	8.6	7.3	7.4	6.8
004			19.1	12.5	17.2	12.2	15.4	11.8	13.7	11.1	12.1	10.3	10.5	9.5
008	63	74	24.1	16.9	21.9	16.0	19.7	15.0	17.8	14.1	15.9	13.2	14.1	12.3
012			35.0	24.6	31.7	23.2	28.4	21.7	25.5	20.3	22.6	19.0	19.8	17.6
004			13.6	10.4	12.3	9.8	11.1	9.3	10.1	8.7	9.0	8.2	7.9	7.7
004			19.0	14.5	17.3	13.7	15.6	12.9	14.2	12.2	12.7	11.5	11.3	10.7
000	63	76	24.0	18.2	21.9	17.3	19.9	16.3	18.2	15.5	16.6	14.7	15.0	13.8
012			34.6	26.5	31.5	25.1	28.5	23.6	26.0	22.4	23.6	21.1	21.1	19.8
004			15.7	10.3	14.3	9.7	12.9	9.1	11.6	8.5	10.3	7.9	9.0	7.3
006			21.9	14.3	20.0	13.5	18.2	12.8	16.3	11.9	14.4	11.1	12.5	10.3
008	65	76	27.6	18.0	25.4	17.1	23.2	16.2	21.1	15.2	19.0	14.3	16.9	13.4
012			40.0	26.2	36.5	24.7	33.0	23.3	29.9	21.4	26.7	19.4	23.5	17.5
004			15.7	11.0	14.3	10.4	12.8	9.8	11.7	9.3	10.5	8.7	9.4	8.2
006	0.5	70	21.8	15.4	19.9	14.6	18.1	13.8	16.4	13.0	14.8	12.2	13.2	11.5
008	65	78	27.5	19.3	25.3	18.4	23.1	17.4	21.2	16.5	19.3	15.7	17.5	14.8
012			39.9	28.1	36.6	26.6	33.3	25.2	30.4	23.9	27.6	22.5	24.8	21.2
004			17.7	11.6	16.4	11.1	15.0	10.5	13.6	9.9	12.3	9.3	10.9	8.8
006	67	80	24.7	16.2	22.9	15.4	21.1	14.7	19.2	13.8	17.4	12.8	15.6	11.9
008	07	00	31.0	20.3	28.9	19.4	26.8	18.5	24.6	17.6	22.5	16.7	20.3	15.7
012			45.1	29.6	41.6	28.2	38.0	26.8	34.9	25.4	31.7	24.0	28.5	22.6
004			17.7	12.4	16.3	11.8	14.9	11.2	13.8	10.7	12.6	10.2	11.4	9.6
006	67	82	24.5	17.2	22.7	16.4	20.9	15.7	19.2	14.9	17.6	14.2	16.0	13.4
008	0,	02	30.8	24.2	28.8	23.3	26.8	22.4	25.3	21.6	23.8	20.8	22.4	20.0
012			45.0	31.5	41.6	30.1	38.2	28.6	35.3	27.3	32.4	26.0	29.5	24.6
004			19.9	12.2	18.5	11.7	17.2	11.1	15.7	10.5	14.2	9.9	12.7	9.3
006 008	69	82	27.6	17.0	25.9 32.6	16.3 20.5	24.1 30.6	15.5 19.6	22.1 28.2	14.7 18.7	20.1 25.8	13.9 17.7	18.1 23.5	13.1
012			-	-	47.3	29.8	44.0	28.4	40.6	27.0	37.1	25.6	33.7	24.2
004			19.8	13.0	18.5	12.4	17.2	11.9	15.8	11.3	14.4	10.7	13.0	10.2
004			27.6	18.1	25.8	17.3	24.0	16.6	22.1	15.8	20.3	15.0	18.4	14.2
008	69	84	-	-	32.6	21.8	30.5	20.9	28.2	20.0	25.9	19.0	23.7	18.1
012				-	47.1	31.7	43.9	30.3	40.5	28.9	37.1	27.5	33.8	26.1
004			-	-	20.8	12.3	19.4	11.7	17.9	11.1	16.5	10.6	15.0	10.0
004			÷	-	28.9	17.1	27.2	16.4	25.1	15.6	23.1	14.8	21.1	14.0
008	71	84	-	-	36.4	21.5	34.4	20.7	32.0	19.7	29.7	18.8	27.3	17.9
012			-	-	52.9	31.3	49.6	29.9	45.9	28.5	42.2	27.0	38.4	25.6
004			-	-	20.7	13.0	19.4	12.5	17.9	11.9	16.4	11.3	14.9	10.7
006				-	28.9	18.1	27.1	17.4	25.1	16.6	23.1	15.8	21.1	15.0
008	71	86	-	-	36.4	22.8	34.3	21.9	31.9	21.0	29.6	20.1	27.2	19.1
012			-	-	52.7	33.2	49.5	31.8	46.0	30.4	42.5	29.0	39.0	27.5

43°F E			peratur	е										
		ering							rature R					
Unit	Tem		-			3		0		2		4		6
	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			10.9	8.7	9.8	8.1	8.8	7.6	7.8	7.0	6.8	6.4	5.8	5.8
006	61	72	15.3	12.1	13.8	11.3	12.3	10.6	10.9	9.8	9.6	9.0	8.3	8.2
008	01	1.2	19.4	15.2	17.6	14.3	15.7	13.4	14.2	12.5	12.6	11.6	11.1	10.7
012			27.9	22.1	25.2	20.7	22.5	19.4	20.1	18.0	17.8	16.5	15.5	15.1
004			11.0	9.4	10.0	8.9	9.1	8.4	8.3	7.8	7.5	7.2	6.7	6.7
006	61	74	15.4	13.1	14.1	12.4	12.7	11.7	11.6	10.9	10.5	10.1	9.3	9.3
800	01	/	19.4	16.5	17.8	15.6	16.2	14.8	14.9	13.9	13.6	13.0	12.3	12.1
012			28.2	24.0	25.8	22.7	23.4	21.4	21.4	20.0	19.4	18.6	17.3	17.2
004			12.9	9.3	11.6	8.7	10.2	8.2	9.1	7.6	8.0	7.0	6.9	6.5
006	63	74	18.0	12.5	16.2	12.0	14.4	11.4	12.9	10.6	11.3	9.8	9.8	9.1
008	03	74	22.8	16.3	20.6	15.4	18.5	14.5	16.7	13.6	14.9	12.7	13.2	11.8
012			33.0	23.7	29.8	22.3	26.6	20.9	23.9	19.5	21.2	18.1	18.4	16.7
004			12.8	10.0	11.7	9.5	10.5	9.0	9.5	8.4	8.5	7.9	7.5	7.3
006	63	76	17.9	14.0	16.4	13.3	14.8	12.5	13.4	11.8	12.1	11.0	10.7	10.3
800	03	70	22.7	17.6	20.7	16.7	18.8	15.8	17.3	15.0	15.7	14.1	14.2	13.3
012			32.8	25.6	29.9	24.2	27.0	22.9	24.6	21.6	22.3	20.2	19.9	18.9
004			14.9	9.9	13.5	9.4	12.2	8.8	10.9	8.2	9.6	7.6	8.4	7.0
006	0.5	70	20.8	13.9	18.9	13.1	17.1	12.3	15.3	11.5	13.5	10.7	11.7	9.9
008	65	76	26.2	17.4	24.0	16.5	21.9	15.6	19.8	14.7	17.8	13.7	15.8	12.8
012			38.0	25.3	34.6	23.9	31.2	22.5	28.1	20.8	25.0	19.1	22.0	17.5
004			14.9	10.7	13.5	10.1	12.2	9.5	11.1	9.0	10.0	8.4	8.8	7.9
006	0.5	70	20.7	14.9	18.9	14.1	17.1	13.3	15.6	12.6	14.0	11.8	12.4	11.0
008	65	78	26.1	18.7	24.0	17.8	21.8	16.9	20.1	16.0	18.3	15.1	16.5	14.3
012			37.9	27.2	34.7	25.8	31.5	24.4	28.8	23.1	26.0	21.7	23.3	20.4
004			16.9	11.3	15.6	10.7	14.2	10.2	12.9	9.6	11.6	9.0	10.3	8.5
006			23.6	15.7	21.8	15.0	19.9	14.2	18.2	13.4	16.4	12.5	14.6	11.7
008	67	80	29.7	19.8	27.6	18.9	25.4	18.0	23.3	17.1	21.2	16.1	19.2	15.2
012			43.1	28.8	39.7	27.4	36.2	26.0	33.1	24.6	30.1	23.2	27.0	21.8
004			16.9	12.0	15.5	11.5	14.2	10.9	13.1	10.4	12.0	9.8	10.8	9.3
006			23.5	16.8	21.7	16.0	19.9	15.2	18.3	14.5	16.7	13.8	15.2	13.0
008	67	82	29.6	22.3	27.5	21.4	25.4	20.5	23.8	19.7	22.2	18.9	20.6	18.1
012			43.0	30.7	39.7	29.2	36.4	27.8	33.6	26.5	30.8	25.2	28.0	23.9
004			19.1	11.9	17.7	11.3	16.4	10.8	14.9	10.2	13.5	9.6	12.0	9.0
006			26.6	16.6	24.8	15.8	23.0	15.1	21.0	14.3	19.0	13.5	17.1	12.7
008	69	82	-	-	31.3	19.9	29.2	19.0	26.8	18.1	24.5	17.2	22.2	16.2
012			-	-	45.2	28.9	41.9	27.6	38.5	26.2	35.1	24.8	31.7	23.4
004			19.0	12.6	17.7	12.1	16.4	11.5	15.0	11.0	13.7	10.4	12.4	9.9
006			26.5	17.6	24.7	16.9	22.9	16.1	21.1	15.3	19.3	14.6	17.5	13.8
008	69	84	-	-	31.2	21.2	29.1	20.3	26.9	19.4	24.7	18.5	22.5	17.6
012		4	-	-	45.1	30.8	41.8	29.5	38.6	28.1	35.3	26.7	32.1	25.3
004			-	-	20.0	12.0	18.6	11.4	17.1	10.8	15.6	10.2	14.1	9.7
006			-	-	27.8	16.7	26.0	15.9	24.0	15.1	22.0	14.4	20.0	13.6
008	71	84	-	-	35.1	21.0	33.0	20.1	30.6	19.2	28.2	18.2	25.9	17.3
012			-	-	50.8	30.5	47.6	29.1	43.9	27.7	40.2	26.2	36.5	24.8
004			-	-	19.9	12.7	18.6	12.1	17.1	11.6	15.7	11.0	14.2	10.4
006				-	27.8	17.7	26.0	16.9	24.0	16.2	22.1	15.4	20.1	14.6
008	71	86		7	35.0	22.2	32.9	21.4	30.6	20.4	28.2	19.5	25.9	18.6
012					50.7	32.3	47.4	31.0	44.0	29.6	40.5	28.2	37.1	26.8
012				$\leftarrow$	00.7	02.0	777	01.0	77.0	20.0	40.0	20.2	01.1	20.0

Unit	
WB	
1004   006   006   007   008   008   007   008	
14.0   14.6   12.9   10.9   11.4   10.2   10.2   9.3   8.9   8.5   7.7	SH
100	5.4
18.1	7.6
1006	10.1
Table   Tabl	14.1
18.3   15.9   16.8   15.1   15.3   14.3   14.1   13.4   12.8   12.4   11.6	6.3
18.3   19.5   16.8   15.1   15.3   14.3   14.1   13.4   12.8   12.4   11.5	8.8
121   9.0   10.9   8.4   9.6   7.9   8.5   7.3   7.5   6.7   6.4	11.5
17.0	16.2
008	6.1
012	8.6
004	11.2
008 008         63         76         16.9         3.5         15.4         12.8         13.9         12.1         12.6         11.3         11.4         10.6         10.1           004 006 008         4         76         17.0         19.6         16.2         17.7         15.3         16.3         14.4         14.8         10.6         13.6         13.3           004 008 009 <b< td=""><td>15.9</td></b<>	15.9
008 63 76 21.4 7.70 9.6 16.2 17.7 15.3 16.3 14.4 14.8 13.6 13.3 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.4 13.6 10.2 10.9 10.6 65 76 19.7 13.4 17.9 12.6 16.0 11.8 14.3 11.0 12.6 10.2 10.9 10.1 10.1 13.2 14.6 10.2 10.2 10.9 10.4 13.6 12.4 13.6 12.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 12.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 12.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 10.2 10.9 10.4 13.6 13.2 14.6 10.2 13.2 14.6 13.3 14.3 14.3 14.6 14.1 14.1 13.5 14.2 14.5 14.5 14.2 14.6 14.1 14.1 15.8 13.3 14.3 14.6 14.1 14.1 15.6 13.3 14.3 14.3 14.6 14.1 14.1 15.6 13.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3	7.0
012   30.9   24.8   28.2   23.4   25.5   22.1   23.2   20.8   21.0   19.4   18.8   004   19.7   13.4   17.9   12.6   16.0   11.8   14.3   11.0   12.6   10.2   10.9   012   24.9   16.8   22.7   15.9   20.5   15.0   18.5   14.1   16.6   13.2   14.6   014   24.9   16.8   22.7   15.9   20.5   15.0   18.5   14.1   16.6   13.2   14.6   005   36.1   24.5   32.7   23.1   29.3   21.6   26.4   20.2   23.4   18.8   20.5   006   65   78   19.7   14.4   17.9   13.7   16.1   12.9   14.7   12.1   13.2   11.4   11.7   008   66   78   19.7   14.4   17.9   13.7   16.1   12.9   14.7   12.1   13.2   11.4   11.7   009   101   24.8   18.1   22.7   17.2   20.6   16.3   18.9   15.4   17.2   14.6   15.9   004   16.2   11.0   14.8   10.4   13.4   9.8   12.2   9.3   10.9   8.7   9.7   005   22.5   15.3   20.7   14.5   18.8   31.8   17.1   13.0   15.4   12.2   13.7   006   67   22.5   15.3   20.7   14.5   18.8   31.8   17.1   13.0   15.4   12.2   13.7   007   22.8   4   19.2   26.2   18.3   24.0   17.4   22.0   16.5   20.0   15.6   18.0   008   67   82   22.4   16.3   20.6   15.5   18.9   14.8   17.4   14.1   15.8   13.3   14.3   009   69   84   18.3   18.6   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   000   12   18.3   11.6   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   000   100   18.3   12.3   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   000   100   18.3   12.3   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   000   101   18.3   13.3   16.1   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   000   101   18.3   12.3   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   001   18.3   12.3   16.9   11.0   15.6   10.5   14.2   9.9   12.8   9.3   11.3   001   18.3   12.3   16.9   11.8   15.5   11.2   14.3   10.7   13.0   10.1   11.7   006   107   18.3   12.3   16.9   11.8   15.5   11.2   14.3   10.7   13.0   10.1   11.7   007   18.3   12.3   16.9   11.8   15.5   11.2   14.3   10.7   13.0   10.1   11.7   008   19.4   18.8   18.3   18.8   18.8   18.8   18.8   18.	9.8
14.1   9.6   12.8   9.0   11.4   8.5   10.2   7.9   9.0   7.3   7.7	12.7
006 008 009 1012         65 249         76         9.7         13.4         17.9         12.6         16.0         11.8         14.3         11.0         12.6         10.2         10.9           004 006 008 009 009 009 009 009         4 009 00	18.1
008         65         76         24.9         66.8         22.7         15.9         20.5         15.0         18.5         14.1         16.6         13.2         14.6           004         36.1         24.5         32.7         23.1         29.3         21.6         26.4         20.2         23.4         18.8         20.5           006         65         78         14.1         10.3         12.8         9.8         11.5         9.2         10.4         8.7         9.4         8.1         8.3         3.0           012         78         19.7         14.4         17.9         13.7         16.1         12.9         14.7         12.1         13.2         11.4         11.7           004         36.0         26.4         32.8         25.0         29.7         23.6         27.1         23.3         24.5         20.9         21.9           006         67         80         28.4         19.2         26.2         18.3         24.0         17.4         22.9         33.0         19.8         7.9         9.7           004         22.4         16.1         11.0         14.8         10.4         13.4         9.3         12.9	6.7
O12	9.4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	12.3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	17.4 7.6
008         65         78         24.8         18.1         22.7         17.2         20.6         16.3         18.9         15.4         17.2         14.6         15.5           0104         36.0         26.4         32.8         25.0         29.7         12.3         24.5         20.9         21.9           006         67         80         16.2         11.0         14.8         10.4         13.4         9.8         12.2         9.3         10.9         8.7         9.7           006         67         80         22.5         15.3         20.7         14.5         18.8         13.8         17.1         13.0         15.4         12.2         13.7           0012         22.5         15.3         20.7         14.5         18.8         13.8         17.1         13.0         15.4         12.2         13.7           004         41.2         28.0         73.8         26.5         34.4         25.1         31.4         23.8         28.4         22.2         18.3         14.0         17.4         22.0         16.5         20.0         15.5         18.9         14.8         17.4         14.1         11.3         31.5         10.2	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10.6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	13.7
008 008         67         80         22.5         15.3         20.7         14.5         18.8         13.8         17.1         13.0         15.4         12.2         13.7           012         28.4         19.2         26.2         18.3         24.0         17.4         22.0         16.5         20.0         15.6         18.2         24.1         22.0         16.5         18.0         15.6         18.0         24.2         25.4         25.4         25.1         31.4         23.8         28.4         22.4         25.4         25.5         31.4         23.8         28.4         22.4         25.4         25.5         18.9         14.8         17.4         14.1         13.3         25.5         16.2         19.6         24.4         16.1         11.3         9.5         10.2         10.2         10.2         11.3         14.3         14.1         13.3         14.5         10.2         14.1         13.8         27.0         11.3         9.5         10.2         10.2         14.1         13.8         27.0         11.5         11.3         14.5         14.1         13.3         14.5         10.2         14.2         19.1         14.1         11.3         14.5         10	8.2
008         67         80         28.4         9.2         26.2         18.3         24.0         17.4         22.0         16.5         20.0         15.6         18.0           004         41.2         28.0         37.8         26.5         34.4         25.1         31.4         23.8         22.4         22.4         25.4           006         67         82         16.1         11.7         14.8         11.1         13.5         10.6         12.4         10.1         11.3         9.5         10.2           012         22.4         16.3         20.6         15.5         18.9         14.8         17.4         12.0         11.3         15.8         10.2         17.0         18.7         12.3         17.8         20.5         17.0         18.7           012         41.1         29.8         37.8         28.4         34.6         27.0         31.9         25.7         20.5         17.0         18.7           006         69         82         18.3         11.6         16.9         11.0         15.6         10.5         14.2         9.9         12.8         9.3         11.3         16.0           008         2.5         <	11.5
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14.7
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	21.1
006 008         67 008         82         22.4 28.3 28.3 20.5 20.5 20.2 20.3 20.5 20.2 20.3 20.5 20.2 20.3 20.5 20.2 20.3 20.5 20.3 20.5 20.3 20.5 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3	9.0
008         67         82         28.3         20.5         26.2         19.6         24.0         18.7         22.3         17.8         20.5         17.0         18.7           012         41.1         29.8         37.8         28.4         34.6         27.0         31.9         25.7         29.3         24.4         26.6           006         69         82         25.5         16.1         23.7         15.4         21.8         14.6         19.9         13.8         18.0         13.1         16.1           004         -         -         29.9         19.4         27.7         18.5         25.5         17.5         23.2         16.6         20.9           004         -         41.3         12.3         16.9         13.8         15.5         17.5         23.2         16.6         20.9           004         -         -         43.2         28.1         39.8         26.7         36.5         35.3         33.1         23.9         29.8           006         69         84         17.1         23.6         16.4         21.8         15.6         20.0         14.9         18.3         14.1         16.6	12.6
012         41.1         29.8         37.8         28.4         34.6         27.0         31.9         25.7         29.3         24.4         26.6           006         006         69         82         18.3         11.6         11.0         15.6         10.5         14.2         9.9         12.8         9.3         11.3           008         69         82         2.5         16.1         23.7         15.4         21.8         14.6         19.9         13.8         18.0         13.1         11.3           004         -         -         29.9         19.4         27.7         18.5         25.5         17.5         23.2         16.6         20.9           004         -         -         43.2         28.1         39.8         26.7         36.5         25.3         33.1         23.9         29.8           006         69         84         18.3         12.3         69         11.8         15.5         11.2         14.3         10.7         13.0         10.1         11.7           012         -         -         29.8         20.6         27.7         19.8         25.6         18.9         23.5         18.0	16.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	23.1
006 008 012         69         82         25.5         16.1         23.7         15.4         21.8         14.6         19.9         13.8         18.0         13.1         16.1           012 004 006 008 008 009 012         -         -         29.9         19.4         27.7         18.5         25.5         17.5         23.2         16.6         20.9           004 008 009 012         -         43.2         28.1         39.8         26.7         36.5         25.3         33.1         23.9         29.8           004 012         -         -         29.8         20.6         16.4         21.8         15.6         20.0         14.9         18.3         14.1         16.6           004 012         -         -         29.8         20.6         27.7         19.8         25.6         18.9         23.5         18.0         21.4           004 004         -         -         43.1         30.0         39.7         28.6         36.6         27.3         33.5         25.9         30.4           004 004         -         -         19.2         11.6         17.8         11.1         16.3         10.5         14.8         9.9         13.3 <td>8.7</td>	8.7
008 69 82 - 29.9 19.4 27.7 18.5 25.5 17.5 23.2 16.6 20.9 10.4 27.7 18.5 25.5 17.5 23.2 16.6 20.9 10.4 27.7 18.5 25.5 17.5 23.2 16.6 20.9 10.4 27.7 10.5 27.7	12.3
012 - 43.2 28.1 38.8 26.7 36.5 25.3 33.1 23.9 29.8 006 006 008 69 84 25.4 17.1 23.6 16.4 21.8 15.5 11.2 14.3 10.7 13.0 10.1 11.7 012 - 29.8 20.6 27.7 19.8 26.6 18.9 23.5 18.0 21.4 014 - 43.1 30.0 39.7 28.6 36.6 27.3 33.5 25.9 30.4 004 - 19.2 11.6 17.8 11.1 16.3 10.5 14.8 9.9 13.3	15.7
004 006 008 012         69 004 012         44 25.4         12.3         16.9         11.8         15.5         11.2         14.3         10.7         13.0         10.1         11.7           008 012         69 012         84 012         17.1         23.6         16.4         21.8         15.6         20.0         14.9         18.3         14.1         16.6           012         -         -         29.8         20.6         27.7         19.8         25.6         18.9         23.5         18.0         21.4           004         -         -         43.1         30.0         39.7         28.6         36.6         27.3         33.5         25.9         30.4           004         -         -         19.2         11.6         17.8         11.1         16.3         10.5         14.8         9.9         13.3	22.5
006 008 69 84 25.4 17.1 23.6 16.4 21.8 15.6 20.0 14.9 18.3 14.1 16.6 16.6 17.1 17.1 17.1 17.1 17.1 17	9.6
008 69 84 29.8 20.6 27.7 19.8 25.6 18.9 23.5 18.0 21.4 012 43.1 30.0 39.7 28.6 36.6 27.3 33.5 25.9 30.4 004 19.2 11.6 17.8 11.1 16.3 10.5 14.8 9.9 13.3	13.4
012 - 43.1 30.0 39.7 28.6 36.6 27.3 33.5 25.9 30.4 004 - 19.2 11.6 17.8 11.1 16.3 10.5 14.8 9.9 13.3	17.1
004 19.2 11.6 17.8 11.1 16.3 10.5 14.8 9.9 13.3	24.6
	9.3
006 26.7 16.2 24.9 15.5 22.9 14.7 20.9 13.9 18.8	13.1
008 71 84 33.7 20.4 31.6 19.5 29.2 18.6 26.8 17.7 24.4	16.7
012 - 48.8 29.6 45.5 28.3 41.8 26.9 38.2 25.4 34.6	24.0
004 - 19.1 12.4 17.8 11.8 16.3 11.2 14.9 10.7 13.5	10.1
006 267 172 248 165 229 157 210 150 191	14.2
008 71 86 - 33.6 21.7 31.5 20.8 29.2 19.9 26.9 19.0 24.6	18.0
012 - 48.7 31.5 45.4 30.2 42.0 28.8 38.6 27.4 35.2	26.0

45°FE	nter Wa	ter Ten	nperatur	е										
		ering							rature R					
Unit		p.(°F)	- 6			3		0		2		4		6
	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			9.5	8.0	8.5	7.5	7.6	7.0	6.6	6.4	5.8	5.8	5.1	5.1
006	61	72	13.3	11.2	11.9	10.4	10.6	9.7	9.3	8.9	8.2	8.1	7.1	7.1
800	01	1 12	16.9	14.0	15.2	13.2	13.6	12.4	12.3	11.4	10.9	10.4	9.5	9.4
012			24.4	20.4	22.0	19.1	19.6	17.8	17.4	16.3	15.3	14.7	13.2	13.2
004			9.8	8.8	8.9	8.3	8.1	7.8	7.3	7.2	6.6	6.6	5.9	5.9
006	61	74	13.6	12.2	12.4	11.6	11.3	10.9	10.2	10.1	9.2	9.2	8.2	8.2
800	•		17.2	15.4	15.8	14.6	14.4	13.8	13.2	12.8	12.1	11.8	10.9	10.9
012			24.9	22.4	22.8	21.1	20.8	19.9	18.9	18.3	17.1	16.8	15.3	15.3
004			11.4	8.6	10.1	8.1	9.0	7.6	7.9	7.0	6.9	6.4	5.9	5.8
006	63	74	15.9	12.5	14.1	11.3	12.6	10.5	11.1	9.9	9.7	9.0	8.4	8.2
800	""		20.1	15.2	18.1	14.3	16.1	13.4	14.5	12.5	12.9	11.6	11.3	10.7
012			29.0	22.0	26.0	20.7	23.1	19.3	20.6	17.9	18.2	16.5	15.8	15.1
004			11.4	9.4	10.3	8.9	9.4	8.4	8.4	7.8	7.5	7.3	6.7	6.7
006	63	76	15.9	13.1	14.4	12.4	13.1	11.7	11.8	10.9	10.6	10.2	9.4	9.3
800	"	'*	20.0	16.5	18.4	15.6	16.7	14.8	15.3	13.9	13.9	13.0	12.5	12.1
012			29.0	23.9	26.5	22.6	24.0	21.3	21.8	19.9	19.7	18.6	17.6	17.2
004			13.4	9.3	12.0	8.7	10.6	8.1	9.4	7.6	8.3	7.0	7.1	6.4
006	65	76	18.6	12.9	16.8	12.2	14.9	11.4	13.3	10.6	11.6	9.8	10.1	9.0
008			23.5	16.3	21.3	15.3	19.1	14.4	17.3	13.5	15.4	12.6	13.5	11.7
012			34.1	23.6	30.8	22.2	27.4	20.8	24.6	19.7	21.8	18.5	18.9	17.4
004			13.3	10.0	12.1	9.5	10.8 15.2	8.9	9.8	8.4	8.8	7.8	7.7	7.3
006 008	65	78	18.6 23.5	14.0	16.9	13.2	19.4	12.5 15.7	13.8	11.7	12.4 16.1	11.0	10.9	10.2
012				17.6 25.5	21.4	16.7	27.9	22.8	17.7 25.4	14.9 21.5	22.9	14.1 20.2	14.5 20.4	
			34.0 15.4		30.9	24.2		9.5		9.0	10.2			18.8
004 006			21.5	10.6 14.8	14.0 19.6	10.1	12.6 17.7	13.3	11.4 16.0	12.5	14.4	8.4 11.8	9.1 12.8	7.9 11.2
008	67	80	27.0	18.6	24.8	17.7	22.6	16.8	20.7	15.9	18.8	15.1	16.9	14.2
012			39.2	27.1	35.9	25.7	32.6	24.3	29.7	23.0	26.8	21.6	23.9	20.3
004		$\vdash$	15.3	11.4	14.0	10.8	12.7	10.3	11.7	9.8	10.7	9.3	9.6	8.7
006			21.4	15.9	19.6	15.1	17.9	14.3	16.4	13.6	15.0	13.0	13.5	12.2
008	67	82	27.0	18.6	24.8	17.7	22.6	16.8	20.7	15.0	18.8	15.1	16.9	14.2
012			39.1	29.0	36.0	27.6	32.8	26.2	30.3	25.0	27.7	23.7	25.1	22.4
004		_	17.5	11.2	16.2	10.7	14.7	10.1	13.3	9.6	11.9	9.0	10.6	8.4
006			24.4	15.7	22.5	14.9	20.7	14.2	18.8	13.4	16.9	12.6	15.1	11.8
008	69	82	-	-	28.5	18.8	26.3	17.9	24.1	17.0	21.9	16.1	19.7	15.2
012				190	41.2	27.3	37.7	25.9	34.4	24.5	31.1	23.1	27.8	21.7
004			17.5	12.0	16.1	11.4	14.7	10.9	13.4	10.3	12.2	9.8	11.1	9.3
006			24.4	16.7	22.5	15.9	20.6	15.2	19.0	14.5	17.3	13.7	15.6	13.0
008	69	84	-	-	28.4	20.1	26.3	19.2	24.3	18.3	22.3	17.4	20.3	16.5
012			-	-	41.1	29.1	37.7	27.7	34.7	26.4	31.7	25.1	28.8	23.8
004			-	-	18.4	11.3	17.0	10.7	15.5	10.2	14.0	9.6	12.5	9.0
006			-	-	25.6	15.8	23.8	15.0	21.7	14.2	19.7	13.4	17.7	12.7
008	71	84	-	12	32.3	19.8	30.2	19.0	27.8	18.0	25.3	17.1	22.9	16.2
012			-	-	46.8	28.8	43.4	27.5	39.8	26.0	36.2	24.6	32.7	23.2
004			-	-	18.3	12.0	16.9	11.5	15.5	10.9	14.1	10.4	12.8	9.8
006			-	-	25.6	16.8	23.7	16.0	21.8	15.3	19.9	14.5	18.0	13.8
008	71	86	-	-	32.3	21.1	30.1	20.2	27.8	19.3	25.5	18.4	23.3	17.5
012			-	-	46.7	30.7	43.3	29.3	39.9	28.0	36.6	26.6	33.2	25.2
	_	_												

# Performance data \_

### 3 rows cooling coil for size 004, 4 rows cooling coil for size 006, 008, 012

42°F Er	nter Wa	ter Tem	peratur	е										
	Ente								rature R					
Unit	Tem		(		8			0		2		4		6
	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			13.3	9.7	12.2	9.2	11.1	8.7	10.0	8.2	8.9	7.7	7.8	7.2
006	61	72	17.7	13.0	16.3	12.3	14.8	11.6	13.5	11.0	12.2	10.3	10.9	9.7
800	٠.		23.4	17.3	21.4	16.4	19.3	15.5	17.4	14.5	15.5	13.5	13.6	12.6
012			33.3	24.4	30.5	23.2	27.7	21.9	25.2	20.6	22.7	19.4	20.1	18.1
004			13.1	10.5	12.2	10.0	11.3	9.6	10.3	9.1	9.4	8.6	8.5	8.2
006	61	74	17.6	13.9	16.3	13.3	15.1	12.7	14.0	12.1	12.9	11.5	11.8	10.9
800			23.2	18.6	21.4	17.7	19.6	16.9	18.0	16.0	16.5	15.1	14.9	14.2
012			33.0	26.3	30.6	25.1	28.2	23.9	26.1	22.8	23.9	21.6	21.8	20.5
004			15.4	10.4	14.1	9.9	12.9	9.4	12.5	8.8	12.1	8.3	11.7	7.8
006	63	74	20.5	13.9	19.0	13.2	17.6	12.5	16.1	11.8	14.5	11.2	13.0	10.5
008			27.0	18.5	24.7	17.5	22.5	16.5	20.5	15.5	18.4	14.6	16.4	13.6
012			38.5	26.1	35.5	24.8	32.5	23.5	29.7	22.2	26.9	20.9	24.1	19.6
004			15.3	11.2	14.2	10.7	13.0	10.2	12.0	9.7	11.0	9.2	9.9	8.7
006	63	76	20.4	14.9	19.0	14.2	17.6	13.6	16.3	13.0	14.9	12.3	13.6	11.7
008	- 00		26.9	19.9	24.9	18.9	22.9	18.0	21.0	17.1	19.1	16.2	17.2	15.3
012			38.5	28.1	35.6	26.8	32.8	25.5	30.2	24.3	27.7	23.1	25.1	21.9
004			-	-	16.4	10.6	15.2	10.1	13.9	9.5	12.7	9.0	11.4	8.5
006	65	76	-		21.9	14.1	20.4	13.5	18.7	12.8	17.0	12.0	15.3	11.3
008			30.8	19.7	28.7	18.8	26.5	17.8	24.1	16.8	21.8	15.8	19.4	14.8
012			43.8	27.8	41.0	26.6	38.3	25.4	35.0	24.0	31.7	22.6	28.4	21.2
004			-	-	16.3	11.2	15.1	10.6	14.0	10.2	12.8	9.8	11.7	9.3
006	65	78	-	-	21.7	15.1	20.2	14.4	18.8	13.8	17.3	13.1	15.8	12.5
008	- 00		30.7	21.1	28.5	20.1	26.3	19.2	24.2	18.2	22.1	17.3	20.1	16.3
012			43.6	29.7	40.8	28.4	37.9	27.2	35.1	25.9	32.3	24.6	29.5	23.4
004			-	-	18.5	12.0	17.4	11.5	16.1	11.0	14.9	10.5	13.6	9.9
006	67	80	-	-	24.7	16.0	23.3	15.4	21.7	14.7	20.1	14.0	18.6	13.3
008	٠,	00	-		32.5	21.3	30.4	20.4	28.1	19.4	25.9	18.4	23.6	17.4
012			141	W	46.4	30.1	43.7	29.0	40.6	27.6	37.5	26.3	34.3	25.0
004				-	18.4	12.8	17.3	12.4	16.2	11.9	15.1	11.3	14.0	10.8
006	67	82	-	-	24.6	16.9	23.1	16.3	21.6	15.7	20.2	15.0	18.7	14.4
008				-	32.4	22.7	30.4	21.8	28.2	20.8	26.1	19.9	24.0	18.9
012			-	-	46.0	31.9	43.1	30.7	40.3	29.5	37.6	28.2	34.8	27.0
004				-	-	•	19.7	12.2	18.4	11.7	17.0	11.1	15.7	10.5
006	69	82	-	-	-	-	26.3	16.3	24.7	15.6	23.0	14.9	21.3	14.2
800			-	-	36.5	22.5	34.4	21.6	31.9	20.6	29.5	19.5	27.0	18.5
012			-	-	52.0	31.8	49.4	30.6	46.1	29.3	42.8	27.9	39.6	26.5
004			-	-	-	-	19.7	12.9	18.4	12.4	17.1	11.9	15.8	11.3
006	69	84	-	-	-	-	26.3	17.2	24.7	16.6	23.1	15.9	21.6	15.2
008			-	-	36.4	23.8	34.3	22.9	32.0	21.9	29.8	21.0	27.6	20.0
012			-	-	51.9	33.6	49.3	32.5	46.2	31.2	43.1	29.9	40.0	28.6
004			-	-	-	-	22.1	12.9	20.8	12.3	19.5	11.8	18.1	11.3
006	71	84	-	-		-	29.4	17.1	27.8	16.4	26.2	15.8	24.6	15.1
800	0.00	-	-	-	40.7	23.6	38.7	22.7	36.3	21.8	33.9	20.8	31.6	19.9
012			-	-	57.9	33.4	55.3	32.2	52.1	30.9	48.8	29.6	45.6	28.3
004			-	-	-	-	22.0	13.6	20.7	13.1	19.4	12.5	18.1	12.0
006	71	86	-	-	-	-	812.4	18.1	549.7	17.4	287.1	16.7	24.4	16.1
008			-	-	40.6	25.0	38.6	24.1	36.2	23.1	33.8	22.1	31.4	21.1
012			-	-	57.7	35.2	55.1	34.1	52.0	32.8	48.8	31.5	45.6	30.2

	Ente	ering					Water	Tempe	rature R	ise(°F)				
Unit	Tem		-	ŝ		2		0		2	1	4	1 1	6
Oilit	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			12.5	9.4	11.4	8.9	10.4	8.4	9.4	7.9	8.4	7.4	7.3	6.9
006	10000	00000	16.7	12.5	15.3	11.8	13.9	11.2	12.7	10.5	11.4	9.9	10.2	9.5
800	61	72	22.0	16.7	20.0	15.8	18.1	14.8	16.3	13.9	14.5	12.9	12.7	11.
012			31.3	23.5	28.6	22.3	26.0	21.1	23.6	19.8	21.2	18.5	18.8	17.
004			12.4	10.1	11.5	9.7	10.6	9.2	9.8	8.8	8.9	8.3	8.0	7.8
006	*****		16.6	13.5	15.5	12.9	14.3	12.3	13.2	11.7	12.2	11.1	11.1	10.
800	61	74	21.9	18.0	20.2	17.2	18.5	16.3	17.0	15.4	15.5	14.5	14.1	13.
012			31.2	25.4	29.0	24.3	26.7	23.1	24.6	22.0	22.6	20.8	20.5	19.
004			14.6	10.1	13.4	9.5	12.2	9.0	11.5	8.5	10.9	8.0	10.3	7.5
006			19.4	13.4	18.0	12.7	16.5	12.1	15.1	11.4	13.6	10.7	12.1	10.
800	63	74	25.6	17.9	23.4	16.9	21.2	15.9	19.2	15.0	17.2	14.0	15.3	13.
012			36.5	25.2	33.6	24.0	30.6	22.7	27.9	21.4	25.2	20.1	22.5	18.
004			14.5	10.8	13.4	10.3	12.3	9.8	11.3	9.4	10.3	8.9	9.3	8.4
006			19.4	14.4	18.0	13.8	16.6	13.1	15.4	12.5	14.1	11.9	12.8	11.
008	63	76	25.5	19.2	23.6	18.3	21.6	17.4	19.8	16.5	18.0	15.6	16.2	14.
012			36.4	27.2	33.7	25.9	31.0	24.7	28.6	23.5	26.1	22.3	23.7	21.
004			-	-	15.5	10.2	14.3	9.7	13.1	9.2	11.9	8.7	10.6	8.1
006			-	-	20.7	13.6	19.3	13.0	17.7	12.3	16.0	11.6	14.4	10.
800	65	76	29.4	19.1	27.2	18.1	25.0	17.2	22.7	16.2	20.4	15.2	18.1	14.
012			41.7	26.9	38.9	25.7	36.1	24.5	32.9	23.1	29.8	21.7	26.6	20.
004			-	-	15.5	10.9	14.3	10.4	13.2	9.9	12.1	9.5	11.0	9.0
006			-	-	20.7	14.6	19.2	14.0	17.8	13.3	16.4	12.7	15.0	12.
800	65	78	29.3	20.4	27.1	19.5	25.0	18.5	22.9	17.6	20.9	16.7	18.9	15.
012			41.6	28.8	38.8	27.5	35.9	26.3	33.2	25.1	30.5	23.8	27.8	22.
004			-	-	17.7	11.7	16.5	11.2	15.3	10.6	14.1	10.1	12.8	9.6
006	27		-	-	23.6	15.5	22.2	14.9	20.6	14.2	19.1	13.6	17.5	12.
800	67	80	-	-	31.0	20.7	28.9	19.7	26.7	18.8	24.5	17.8	22.3	16.
012			-	-	44.3	29.2	41.6	28.0	38.5	26.7	35.5	25.4	32.4	24.
004			-	-	17.6	12.4	16.5	12.0	15.4	11.5	14.3	11.0	13.2	10.
006	07	00	-	-	23.5	16.5	22.1	15.9	20.6	15.2	19.2	14.6	17.8	14.
800	67	82	-	-	31.0	22.0	28.9	21.1	26.9	20.2	24.8	19.3	22.8	18.
012			-	-	44.1	31.1	41.2	29.8	38.5	28.6	35.8	27.4	33.1	26.
004			-	-	20.0	12.3	18.9	11.8	17.5	11.3	16.2	10.8	14.8	10.
006	69	82	-	-	26.6	16.4	25.2	15.8	23.5	15.1	21.9	14.4	20.2	13.
800	09	02	-	-	35.0	21.8	32.9	20.9	30.5	19.9	28.1	18.9	25.7	17.
012			-	-	50.0	30.9	47.3	29.7	44.0	28.4	40.8	27.0	37.5	25.
004			-	-	19.9	13.1	18.8	12.6	17.5	12.1	16.3	11.5	15.0	11.
006	69	84	-	-	26.5	17.4	25.2	16.8	23.6	16.1	22.0	15.4	20.5	14.
800	09	04	37.1	24.1	35.0	23.2	32.8	22.3	30.6	21.3	28.4	20.4	26.2	19.
012			-	-	49.8	32.7	47.1	31.6	44.1	30.3	41.1	29.0	38.0	27.
004			-	-	-	-	21.2	12.5	19.9	12.0	18.6	11.4	17.2	10.
006	71	84	-		-	-	28.3	16.7	26.7	16.0	25.0	15.3	23.3	14.
800	[ 71 ]	04	-	-	39.3	23.0	37.1	22.1	34.7	21.1	32.3	20.2	29.9	19.
012			-	-	55.8	32.5	53.2	31.4	49.9	30.0	46.6	28.7	43.4	27.
004			-	-	-	-	21.2	13.2	19.9	12.7	18.5	12.2	17.2	11.
006	71	86	-				550.3	17.6	374.6	16.9	199.0	16.3	23.3	15.
800	11	00	17	<u> </u>	39.1	24.3	37.0	23.4	34.6	22.5	32.3	21.5	29.9	20.
012					55.7	34.3	53.0	33.2	49.8	31.9	46.7	30.6	43.5	29.

44 F CI			peratur	е				_						
	Ente							Tempe						
Unit	Tem		- (		~		1			2		4		6
	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			11.7	9.0	10.7	8.5	9.7	8.1	8.7	7.6	7.8	7.0	6.8	6.5
006	61	72	15.6	12.0	14.3	11.4	13.0	10.8	11.8	10.1	10.6	9.5	9.4	8.8
800			20.6	16.0	18.7	15.1	16.8	14.2	15.2	13.2	13.5	12.2	11.8	11.2
012			29.3	22.6	26.8	21.4	24.3	20.2	22.0	19.0	19.7	17.7	17.5	16.4
004			11.7	9.8	10.9	9.4	10.0	8.9	9.2	8.4	8.4	7.9	7.6	7.4
006	61	74	15.7	13.0	14.6	12.4	13.5	11.9	12.4	11.3	11.4	10.6	10.4	10.0
800	•		20.7	17.4	19.1	16.6	17.5	15.7	16.0	14.8	14.6	13.8	13.2	12.9
012			29.4	24.6	27.3	23.5	25.2	22.4	23.2	21.2	21.3	20.0	19.3	18.8
004			13.8	9.7	12.6	9.2	11.4	8.7	10.6	8.2	9.7	7.7	8.9	7.2
006	63	74	18.3	12.9	16.9	12.3	15.5	11.6	14.1	10.9	12.7	10.3	11.3	9.6
800			24.1	17.2	22.0	16.3	19.9	15.3	18.0	14.4	16.1	13.4	14.1	12.4
012			34.4	24.3	31.6	23.1	28.7	21.8	26.1	20.5	23.5	19.3	20.8	18.0
004			13.7	10.5	12.7	10.0	11.6	9.5	10.7	9.0	9.7	8.6	8.8	8.1
006	63	76	18.3	13.9	17.0	13.3	15.7	12.7	14.4	12.1	13.2	11.5	12.0	10.8
800	•••		24.1	18.6	22.2	17.7	20.3	16.8	18.6	15.9	16.9	15.0	15.2	14.1
012			34.3	26.2	31.8	25.0	29.2	23.9	26.9	22.7	24.6	21.5	22.3	20.3
004			-	-	14.7	9.9	13.5	9.4	12.3	8.8	11.1	8.3	9.9	7.8
006	65	76	-	-	19.6	13.2	18.1	12.5	16.6	11.8	15.0	11.1	13.4	10.4
800	00	10	27.9	18.4	25.7	17.5	23.5	16.5	21.3	15.5	19.1	14.6	16.9	13.6
012			39.7	26.0	36.8	24.8	33.9	23.5	30.9	22.2	27.9	20.9	24.8	19.5
004			-		14.7	10.6	13.5	10.1	12.4	9.6	11.4	9.2	10.3	8.7
006	65	78	-	-	19.6	14.1	18.2	13.5	16.8	12.9	15.4	12.3	14.1	11.6
008	00	,,,	27.8	19.8	25.7	18.9	23.6	17.9	21.7	17.0	19.7	16.1	17.8	15.2
012			-		36.8	26.7	33.9	25.4	31.3	24.2	28.7	23.0	26.1	21.8
004			-	1-1	16.9	11.3	15.7	10.8	14.5	10.3	13.3	9.8	12.1	9.3
006	67	80	-	-	22.5	15.0	21.0	14.4	19.5	13.8	18.0	13.1	16.4	12.4
800	01	00	-	- 1	29.6	20.0	27.4	19.1	25.2	18.2	23.1	17.2	20.9	16.3
012			121	-	42.2	28.3	39.4	27.1	36.4	25.9	33.5	24.6	30.5	23.3
004			-	-	16.8	12.1	15.6	11.6	14.6	11.1	13.5	10.6	12.5	10.1
006	67	82		-	22.4	16.0	21.0	15.4	19.6	14.8	18.2	14.2	16.8	13.5
008	• • •	02	-	-	29.5	21.4	27.4	20.5	25.5	19.6	23.5	18.7	21.5	17.8
012			-	-	42.1	30.2	39.2	29.0	36.6	27.8	34.0	26.6	31.3	25.4
004			-	-	19.1	12.0	18.0	11.5	16.7	11.0	15.4	10.4	14.0	9.9
006	69	82	-	-	25.5	15.9	24.1	15.3	22.4	14.6	20.8	13.9	19.1	13.3
800		52	12	- 12	33.6	21.2	31.4	20.3	29.0	19.3	26.6	18.3	24.3	17.3
012				-	47.9	30.0	45.1	28.8	41.9	27.5	38.7	26.2	35.5	24.9
004			-	-	19.1	12.7	17.9	12.2	16.7	11.7	15.5	11.2	14.3	10.7
006	69	84		-	25.4	16.9	24.0	16.3	22.5	15.6	21.0	15.0	19.4	14.3
800	00	07	•	-	33.5	22.6	31.3	21.6	29.2	20.7	27.0	19.8	24.8	18.8
012			-		47.8	31.9	45.0	30.7	42.0	29.4	39.0	28.2	36.1	26.9
004				-	-	-	20.4	12.2	19.0	11.6	17.7	11.1	16.3	10.5
006	71	84	- 1	-	-		27.2	16.2	25.5	15.5	23.8	14.8	22.1	14.1
800	( )	04	-	-	37.8	22.4	35.6	21.5	33.1	20.5	30.7	19.5	28.3	18.5
012			- 12	127	53.8	31.6	51.0	30.5	47.7	29.2	44.4	27.8	41.1	26.5
004				-		-	20.3	12.9	19.0	12.4	17.7	11.8	16.4	11.3
006	71	86	-	-	-	-	288.1	17.2	199.5	16.5	110.9	15.8	22.2	15.1
	7.1	00	-		37.7	23.7	35.5	22.8	33.1	21.8	30.8	20.9	28.4	19.9
008														

45°F E	nter Wa	ter Ten	peratur	е										
	Ente	ering					Water	Tempe	rature R	ise(°F)				
Unit	Tem			ĵ		3		0		2	1	4	1	6
	WB	DB	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004			10.9	8.7	9.9	8.2	9.0	7.7	8.1	7.2	7.2	6.7	6.3	6.2
006			14.6	11.5	13.3	10.9	12.1	10.3	11.0	9.7	9.9	9.0	8.7	8.4
008	61	72	19.1	15.4	17.4	14.5	15.6	13.6	14.0	12.6	12.5	11.6	10.9	10.6
012			27.3	21.7	25.0	20.6	22.6	19.4	20.4	18.1	18.3	16.9	16.1	15.6
004			11.0	9.5	10.2	9.0	9.3	8.6	8.6	8.1	7.9	7.6	7.1	7.0
006	C4	74	14.7	12.6	13.7	12.0	12.6	11.5	11.7	10.8	10.7	10.2	9.7	9.6
008	61	14	19.4	16.8	17.9	16.0	16.4	15.2	15.1	14.2	13.7	13.2	12.3	12.2
012			27.6	23.7	25.6	22.6	23.6	21.6	21.8	20.4	19.9	19.1	18.1	17.9
004			12.9	9.4	11.8	8.8	10.7	8.3	9.6	7.8	8.6	7.3	7.5	6.8
006	63	74	17.3	12.4	15.8	11.8	14.4	11.2	13.1	10.5	11.7	9.8	10.4	9.2
008	03	14	22.7	16.6	20.6	15.7	18.6	14.7	16.7	13.8	14.9	12.8	13.0	11.8
012			32.4	23.4	29.6	22.2	26.8	21.0	24.3	19.7	21.7	18.5	19.2	17.2
004			12.9	10.1	11.9	9.6	10.9	9.2	10.0	8.7	9.1	8.2	8.2	7.7
006	63	76	17.2	13.4	15.9	12.8	14.7	12.2	13.5	11.6	12.4	11.0	11.3	10.4
800	03	10	22.7	18.0	20.9	17.1	19.1	16.2	17.5	15.3	15.9	14.4	14.2	13.5
012			32.3	25.3	29.8	24.2	27.4	23.0	25.2	21.9	23.1	20.7	20.9	19.5
004			15.1	10.0	13.8	9.5	12.6	9.0	11.4	8.5	10.3	8.0	9.1	7.5
006	65	76	20.0	13.3	18.5	12.7	17.0	12.0	15.5	11.3	14.0	10.7	12.5	10.0
008	00	10	26.4	17.8	24.2	16.8	22.0	15.9	19.9	14.9	17.7	13.9	15.6	13.0
012			37.7	25.1	34.7	23.9	31.7	22.6	28.8	21.3	25.9	20.0	23.1	18.7
004			15.0	10.8	13.9	10.3	12.7	9.9	11.7	9.4	10.7	8.9	9.6	8.4
006	65	78	20.0	14.3	18.6	13.7	17.1	13.1	15.8	12.4	14.5	11.8	13.2	11.2
008	00	10	26.4	19.2	24.3	18.2	22.2	17.3	20.4	16.4	18.5	15.5	16.7	14.6
012			37.6	27.0	34.8	25.8	32.0	24.6	29.5	23.4	27.0	22.2	24.4	21.0
004			-	-	16.0	10.9	14.8	10.4	13.7	9.9	12.5	9.5	11.4	9.0
006	67	80	-	-	21.4	14.6	19.9	13.9	18.4	13.3	16.9	12.6	15.4	12.0
800	07	00	30.3	20.3	28.1	19.4	25.9	18.5	23.8	17.6	21.7	16.6	19.6	15.7
012			-	-	40.1	27.4	37.2	26.2	34.3	25.0	31.5	23.7	28.6	22.5
004			-	-	16.0	11.7	14.8	11.1	13.8	10.7	12.8	10.3	11.7	9.8
006	67	82	-	-	21.4	15.5	19.9	14.9	18.6	14.3	17.3	13.7	15.9	13.1
800	"	01	30.2	21.7	28.1	20.8	26.0	19.9	24.1	19.0	22.2	18.1	20.3	17.2
012			-	-	40.1	29.3	37.3	28.1	34.7	27.0	32.2	25.8	29.6	24.6
004			-	-	18.3	11.6	17.1	11.1	15.8	10.6	14.5	10.1	13.2	9.6
006	69	82	-	-	24.4	15.4	23.0	14.8	21.3	14.2	19.7	13.5	18.0	12.8
800	"	0.2	-	-	32.1	20.6	29.8	19.7	27.5	18.7	25.2	17.7	22.9	16.8
012			-	-	45.8	29.1	43.0	27.9	39.8	26.6	36.6	25.3	33.4	24.0
004			-	-	18.3	12.4	17.1	11.9	15.9	11.4	14.7	10.9	13.5	10.4
006	69	84	-	-	24.3	16.4	22.9	15.8	21.4	15.2	19.9	14.5	18.4	13.9
800			-	-	32.0	21.9	29.9	21.0	27.7	20.1	25.6	19.2	23.5	18.3
012			-	-	45.7	31.0	42.9	29.8	39.9	28.5	37.0	27.3	34.1	26.1
004			-	-	-	-	19.5	11.8	18.1	11.3	16.8	10.7	15.4	10.2
006	71	84	-	-	-	~	26.1	15.7	24.4	15.0	22.6	14.3	20.9	13.6
008	"	٠.	-	-	36.3	21.8	34.1	20.8	31.6	19.9	29.1	18.9	26.6	17.9
012			-	-	51.7	30.7	48.9	29.6	45.6	28.3	42.2	26.9	38.8	25.6
004			-	-	-	-	19.5	12.5	18.2	12.0	16.8	11.5	15.5	11.0
006	71	86	-	-	-	-	26.0	16.7	24.4	16.0	22.7	15.4	21.1	14.7
800	- "	00	-	-	36.2	23.1	34.0	22.2	31.6	21.2	29.3	20.3	26.9	19.3
012			-	-	51.6	32.6	48.8	31.4	45.6	30.2	42.4	28.9	39.2	27.6

## Performance data \_\_\_\_

### Chilled Water Coil Pressure Drop (△p) (FT of Water)

Cv												٧	Vater Flow	Rate (GP	VI)											
Factor	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	13.0	14.0
0.8	0.9	3.6	8.1	14.4	22.5	32.4	-	-	-	=	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-
0.9	0.7	2.8	6.4	11.4	17.8	25.6	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.0	0.5	2.3	5.2	9.2	14.4	20.7	28.2	36.9	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
1.1	0.4	1.9	4.2	7.6	11.9	17.1	23.3	30.5	-	-	-	-	-	-	-	-	-	-	-	-	=	-	-	-	-	-
1.2	-	1.6	3.6	6.4	10.0	14.4	19.6	25.6	32.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3	-	1.3	3.0	5.4	8.5	12.3	16.7	21.8	27.6	34.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4	-	1.1	2.6	4.7	7.3	10.6	14.4	18.8	23.8	29.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5	-	1.0	2.3	4.1	6.4	9.2	12.5	16.4	20.7	25.6	31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6	-	0.9	2.0	3.6	5.6	8.1	11.0	14.4	18.2	22.5	27.2	32.4	-	-	-	-	-	-	-	-	-	-	-	1-	-	-
1.7	-	0.8	1.8	3.2	4.9	7.1	9.7	12.7	16.1	19.9	24.1	28.7	33.7	-	-	-	-	-	-	-	-	-	-	-	-	-
1.8	-	0.7	1.6	2.8	4.4	6.4	8.7	11.4	14.4	17.8	21.5	25.6	30.1	-	-	-	-	-	-	-	-	-	-	-	-	-
1.9	-	0.6	1.4	2.5	4.0	5.7	7.8	10.2	12.9	15.9	19.3	23.0	27.0	31.3	-	-	-	-	-	-	-	-	-	-	-	-
2.0	-	0.5	1.3	2.3	3.6	5.2	7.0	9.2	11.6	14.4	17.4	20.7	24.4	28.2	32.4	-	1-	-	-	-	-	-	-	1-	-	-
2.1	-	0.5	1.1	2.0	3.2	4.7	6.4	8.3	10.6	13.0	15.8	18.8	22.1	25.6	29.4	33.5	-	-	-	-	-	-	-	-	-	-
2.2	-	0.4	1.0	1.9	2.9	4.2	5.8	7.6	9.6	11.9	14.4	17.1	20.1	23.3	26.8	30.5	-	-		-	-	-	-	-	-	-
2.3	-	-	0.9	1.7	2.7	3.9	5.3	6.9	8.8	10.9	13.2	15.7	18.4	21.3	24.5	27.9	31.5				-	-	-	-	-	-
2.4	-	-	0.9	1.6	2.5	3.7	4.9	6.4	8.1	10.0	12.1	14.4	16.9	19.6	22.5	25.6	28.9	32.4	-	75	-	-	-	-	-	-
2.5	-	-	0.8	1.4	2.3	3.3	4.5	5.9	7.4	9.2	11.1	13.3	15.6	18.1	20.7	23.6	26.7	29.9	33.3		-	-	-	-	-	-
2.6	-	-	0.7	1.3	2.1	3.0	4.1	5.4	6.9	8.5	10.3	12.3	14.4	16.7	19.2	21.8	24.6	27.6	30.8	-	-	-	-	-	-	-
2.7	-	-	0.7	1.2	1.9	2.8	3.8	5.0	6.4	7.9	9.5	11.4	13.3	15.5	17.8	20.2	22.8	25.6	28.5	31.6	-	-	-	-	-	-
2.8	-	-	0.6	1.1	1.8	2.6	3.6	4.7	5.9	7.3	8.9	10.6	12.4	14.4	16.5	18.8	21.2	23.8	26.5	29.4	32.4	-	-	-	-	-
2.9	-	-	0.6	1.1	1.7	2.4	3.3	4.3	5.5	6.8	8.3	9.8	11.6	13.4	15.4	17.5	19.8	22.2	24.7	27.4	30.2	-	, <b>-</b>	-	-	-
3.0	-	-	0.5	1.0	1.6	2.3	3.1	4.1	5.2	6.4	7.7	9.2	10.8	12.5	14.4	16.4	18.5	20.7	23.1	25.6	28.2	31.0	-	-	-	-
3.2	-	-	0.5	0.9	1.4	2.0	2.7	3.6	4.5	5.6	6.8	8.1	9.5	11.0	12.6	14.4	16.3	18.2	20.3	22.5	24.8	27.2	29.8	-	-	-
3.4	-	-	-	0.8	1.2	1.8	2.4	3.2	4.0	4.9	6.0	7.1	8.4	9.7	11.2	12.7	14.4	16.1	18.0	19.9	22.0	24.1	26.4	28.7	-	-
3.6	-	-	-	0.7	1.1	1.6	2.1	2.8	3.6	4.4	5.3	6.4	7.5	8.7	10.0	11.4	12.8	14.4	16.0	17.8	19.6	21.5	23.5	25.6	30.1	-
3.8	-	-	-	0.6	1.0	1.4	1.9	2.5	3.2	4.0	4.8	5.7	6.7	7.8	9.0	10.2	11.5	12.9	14.4	15.9	17.6	19.3	21.1	23.0	27.0	31.3
4.0	-	-	-	0.5	0.9	1.3	1.7	2.3	2.9	3.6	4.3	5.2	6.1	7.0	8.1	9.2	10.4	11.6	13.0	14.4	15.9	17.4	19.0	20.7	24.4	28.2

Note: Interpolation is permitted: do not extrapolate. To calculate pressure drop for Cv factors and flow rates not shown in the table, use the following formula

$$\triangle P = \frac{(GPM)^2}{(Cv)^2} \times 2.3$$

Chilled Wat	er Coll CV I	-actors	
Unit Size	2-Row	3-Row	

Unit Size	2-Row	3-Row	4-Row				
42CES004	1.2	0.9	-				
42CES006	-	2.4	2.0				
42CES008	-	2.2	1.9				
42CES012	-	3.2	3.0				

### **Metric conversion chart**

Metric Tech	X	= English Unit	x =	SI Unit
Area				
cm <sup>2</sup>			100	mm <sup>2</sup>
cm <sup>2</sup>	0.1550	in. <sup>2</sup>	645.2	mm <sup>2</sup>
m <sup>2</sup>			1.0	m <sup>2</sup>
m <sup>2</sup>	10.76	ft <sup>2</sup>	0.09290	m <sup>2</sup>
Lenght				
$\mu$ m			1.0	$\mu$ m
$\mu$ m	39.37	micro-inch	0.0254	$\mu$ m
mm			1.0	mm
mm	0.03937	in.	25.4	mm
mm	0.003281	ft	304.8	mm
m			1.0	m
m	3.281	ft	0.3048	m
m	1.094	yd	0.9144	m
Mass				
g			1.0	g
g	0.03527	oz	28.35	g
kg			1.0	kg
kg	2.205	lb	0.4536	kg
tonne, Mg			1.0	tonne, Mg
tonne, Mg	1.102	U.S. ton (2000 lb)	0.9072	tonne, Mg
Power		, ,		
kcal/h			1.163	W
kcal/h	3.968	Btu/h	0.2931	W
Hp metric			0.7355	kW
Hp metric	0.9863	HP (550 ft lb )	0.7457	kW
Mcal/h		3	1.163	kW
Mcal/h	0.3307	Ton refr.	3.517	kW
Pressure				
mm w.g. 4°C			9.806	Pa
mm w.g. 4°C	0.03937	in H <sub>2</sub> O 39,2°F	249.1	Pa
mm Hg 0°C			0.1333	kPa
mm Hg 0°C	0.03937	in Hg 32°F	3.386	kPa
kg <sub>f</sub> /cm <sup>2</sup>		7/1	98.07	kPa
kg <sub>f</sub> /cm <sup>2</sup>	14.22	psi	6.895	kPa
mH <sub>2</sub> O	3.281	ft H <sub>2</sub> O	2.989	kPa

Metric Tech	х :	= English Unit	х	= SI Unit
Temperature				
Interval				
.C			1.0	K
.C	1.8	۴F	0.5556	.C
Velocity				
m/s			1.0	m/s
m/s	3.281	ft/s	0.3048	m/s
m/s	196.9	ft/min	0.00508	m/s
Volume				
mm <sup>3</sup>			1.0 x 10 <sup>-6</sup>	L
mm <sup>3</sup>	6.102 x 10 <sup>-5</sup>	in. <sup>3</sup>	0.01639	L
L			1.0	L
L	0.03531	ft <sup>3</sup>	28.32	L
m <sup>3</sup>			1.0	m <sup>3</sup>
m <sup>3</sup>	1.308	yd <sup>3</sup>	0.7646	m <sup>3</sup>
L	0.2642	U.S. gal	3.785	L
L	2.113	U.S. pint	0.4732	L
mL, cm <sup>3</sup>			1.0	mL
mL, cm <sup>3</sup>	0.03381	U.S. oz	29.57	mL
Volume/Time				
m <sup>3</sup> /h			0.2778	L/s
m <sup>3</sup> /h	0.5886	ft <sup>3</sup> /min	0.4719	L/s
m <sup>3</sup> /h	4.403	U.S. gal/min	0.06309	L/s
L/h		_	2.778 x 10 <sup>-4</sup>	L/s
L/h	4.403 x 10 <sup>-3</sup>	U.S. gal/min	0.06309	L/s
(m <sup>3</sup> /h)/	1.780	cfm/ton	0.1342	L/s kw
(1000 kcal/h)	1.700	Ciri/ton	0.1342	L/S KW

Metric Tech	Conversion Factor	=	English Unit	Conversion =	SI Unit
Temperature	VAV				
.C				°C + 273.15	K
.c	(°C x 1.8) + 32		F -	(°F - 32) ÷ 1.8	.C

refi	xes	Leger	ıd		
М	MEGA - 10 <sup>6</sup>	m	METER	K	KELVIN
k	KILO - 10 <sup>3</sup>	cal	CALORIE	W	WATT
d	DECI - 10 <sup>-1</sup>	kg	KILOGRAM (mass)	Pa	PASCAL
С	CENTI - 10 <sup>-2</sup>	kgf	KILOGRAM - FORCE	J	JOULE
m	MILLI - 10 <sup>-3</sup>	L	LITER	N	NEWTON
μ	MICRO - 10 <sup>-6</sup>	,C	DEGRESS CELSIUS	h	HOUR

Units			
¢Р	CENTIPOISE	mm Hg	MILLIMETERS MERCURY
cSt	CENTISTOKE	tonne	= 1000 kg
HP metric =	(PS, CV, ch) METRIC HORSEPOWER	kcal	= fg FRIGORIE
mm w.g.	MILLIMETERS WATER GAUGE	bar	= 100 kPa

บริษัท แคเรียร์ (ประเทศไทย) จำกัด

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บริษัทฯ ขอสงวนสิทธิ์ที่จะเปลี่ยนแปลงรายละเอียคข้างต้น โดยมิต้องแจ้งให้ทราบล่วงหน้า Carrier reserves the right to make changes in specifications without prior notice.





YOUR CARRIER MAN: