



SFC

CHILLED WATER  
FAN COIL UNITS





## General

- Fabricated with a rigid galvanized steel casing.
- The DIDW centrifugal fans have balanced, galvanized steel, and forward curved blades.
- Single skin galvanized steel casing with 5mm thickness, 27 kg/m<sup>3</sup> high-density non-flammable PE insulation.
- An optional return air plenum is available.



## Fan Motor Assembly

- Standard galvanized steel fan wheel with optional aluminium fan wheel for low noise application.
- The motor comes with hermetic aluminum alloy casing and permanently lubricated ball bearing.
- The motor has grade B class insulation; with built-in thermal cutout.
- The motor lead-out wires are enclosed by flexible metal conduit, providing protection against damage.

# FEATURES

## Coil

- The coil can have 3 or 4 rows, with copper tubes mechanically bonded into corrugated aluminum fin collars.
- Optional Copper fin or hydrophilic blue fin is available.
- Water inlet / outlet connections are 3/4-inch female pipe thread (BT).
- Header assembly is a one-piece casting, which enables to connect steel pipe directly.
- Coil assembly is tested over 20 kg/cm<sup>2</sup>(300psig).
- A manual air vent is fitted with a drain line to the drain pan to avoid any water drips when venting.
- A water drain is located at the bottom of the coil header.

## Drain Pan

- The drain pan is 25mm depth with 0.8mm thickness galvanized steel c/w internal epoxy polyester resin coating.
- The drain pan is sloped towards the drain pipe with a 2 deg. gradient.
- The drain pan has one 1/2-inch male pipe thread (BT) connection.
- The standard insulation material is 5mm thickness, 27kg/m<sup>3</sup> density PE foam.



General Data (Engineering and Component Data)

MODEL		SFC03AW	SFC04AW	SFC06AW	SFC08AW	SFC10AW	SFC12AW
Nominal Cooling Capacity	BTU/HR	9,426	13,183	18,340	24,179	29,131	34,971
	W	2,760	3,860	5,370	7,080	8,530	10,240
Nominal Sensible Cooling Capacity	BTU/HR	7,377	10,177	14,480	19,159	23,360	28,004
	W	2,160	2,980	4,240	5,610	6,840	8,200
Power Supply	V/Ph/Hz	220 ~240 / 1 / 50					
Motor Type		3 Speed Permanent Split Capacitor					
Max Unit Running Amp (0/30Pa)*	A x Qty	0.25	0.37	0.40	0.62	0.25+0.62	0.45+0.45
Max Unit Running Amp (30/60Pa)**	A x Qty	0.36	0.40	0.70	0.75	0.36+0.75	0.70+0.70
Max Unit Running Amp, High Static (70/100Pa)***	A x Qty	0.48	0.70	0.75	1.10	0.4+1.10	0.75+0.75
Output Power (0/30Pa)*	w x Qty	20	40	50	85	20+85	50+50
Output Power (30/60Pa)**	w x Qty	32	50	70	100	32+100	70+70
Output Power, High Static (70/100Pa)***	w x Qty	55	72	100	125	50+125	100+100
Air Flow	L/s (CFM)	142 (300)	189 (400)	282 (600)	378 (800)	472 (1000)	567 (1200)
External Statics Pressure (H) (without plenum box)*	Pa	30	30	30	30	30	30
External Statics Pressure (H) (without plenum box)**	Pa	60	60	60	60	60	60
External Statics Pressure, High Static (H) (without plenum box)***	Pa	100	100	100	100	100	100
External Statics Pressure (H) (with plenum box)*	Pa	0	0	0	0	0	0
External Statics Pressure (H) (with plenum box)**	Pa	30	30	30	30	30	30
External Statics Pressure, High Static (H) (with plenum box)***	Pa	70	70	70	70	70	70
Fan Coil Water Volume / Mass	cm <sup>3</sup>	795	1179	1439	1763	2066	2437
Condensate Drain Size	mm (in)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
Normal Water Flow Rate	USGPM	2.1	2.9	4.1	5.4	6.5	7.8
	LITRES/M	8	11	15	20	24	29
Head Loss	kpa	27	21	19	21	21	23
Max Working Pressure	kpa (psi)	1600 (230)					
Connection (Thread Type)	Inch (mm)	3/4" (NPT) 19.0					
Unit Weight	kg (lb)	17 (37.5)	22 (48.5)	26 (57.3)	30 (66.1)	37 (81.6)	43 (94.8)

Components Data (Engineering and Component Data)

MODEL		SFC03AW	SFC04AW	SFC06AW	SFC08AW	SFC10AW	SFC12AW		
Casing	Outline Dimension	Length	mm	805	1051	1224	1470	1642	1889
		Depth	mm	458 (without plenum) / 488 (with plenum and filter)					
		Height	mm	270					
	Material		GI						
	External Finishing		Bare GI						
	Insulation		PE / 5mm						
Fan	Qty		1	1	2	2	3	4	
	Material		GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	
	Diameter	mm	160	160	160	160	160	160	
	Length	mm	200	200	200	200	200	200	
	Drive		Direct	Direct	Direct	Direct	Direct	Direct	
Fan Motor	Type		3 Speed Permanent Split Capacitor						
	Qty		1	1	1	1	2	2	
	Index of Protection (IP)		IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	
	Insulation Grade		B	B	B	B	B	B	
	Power Source (V/Ph/Hz)		220 ~240 / 1 / 50						
	Poles		4	4	4	4	4	4	
	Capacitor (0/30Pa)	µF	1.5	2.5	3.0	4.0	2.0+4.0	3.0+3.0	
	Capacitor (30/60Pa)	µF	2.5	3.0	3.5	4.0	2.5+4.0	3.5+3.5	
	Capacitor (70/100Pa)	µF	3.0	3.5	4.0	5.0	3.0+5.0	4.0+4.0	
	Rated Running Current (0/30Pa)	A x Qty	0.25	0.37	0.40	0.62	0.25+0.62	0.45+0.45	
	Rated Running Current (30/60Pa)	A x Qty	0.36	0.40	0.70	0.75	0.36+0.75	0.70+0.70	
	Rated Running Current, High Static (70/100Pa)	A x Qty	0.48	0.70	0.75	1.10	0.40+1.1	0.75+0.75	
	Motor Output (0/30Pa)	w x Qty	20	40	50	85	20+85	50+50	
Motor Output (30/60)	w x Qty	32	50	70	100	32+100	70+70		
Motor Output, High Static (70/100)	w x Qty	55	72	100	125	50+125	100+100		
Coil	Tube	Material		Copper (Cu)					
		Diameter	mm	9.52	9.52	9.52	9.52	9.52	9.52
		Thickness	mm	0.3	0.3	0.3	0.3	0.3	0.3
	Fin	Material		Aluminum (Al)					
		Thickness	mm	0.11	0.11	0.11	0.11	0.11	0.11
		Face Area	m <sup>2</sup> (ft <sup>2</sup> )	0.095 (1.020)	0.145 (1.56)	0.18 (1.94)	0.23 (2.48)	0.265 (2.85)	0.315 (3.39)
Row			3	3	3	3	3	3	
	Fin per inch	FPI	12	12	12	12	12	12	
Filtration	Type		Washable Aluminium Frame Filter / G2						
	Quantity	pc	1	2	2	3	3	4	
	Dimension (L x W x t)	mm	488x243x12	734x243x12	906x243x12	1152x243x12	1324x243x12	1570x243x12	

Note:

- All specifications are subjected to change by the manufacturer without prior notice
- Nominal cooling capacity are based on the below conditions:
  - Entering air temperature 27 degC (80.6 degF) DB and 19 degC (66.2 deg F) WB
  - Entering water temperature 7 degC (44.6 degF)
  - Leaving water temperature 12 degC (53.6 degF)
- Sound Pressure Level tested at 1.4m below the unit (free return and discharge air was ducted to adjacent room)

General Data (Engineering and Component Data) -High Delta T

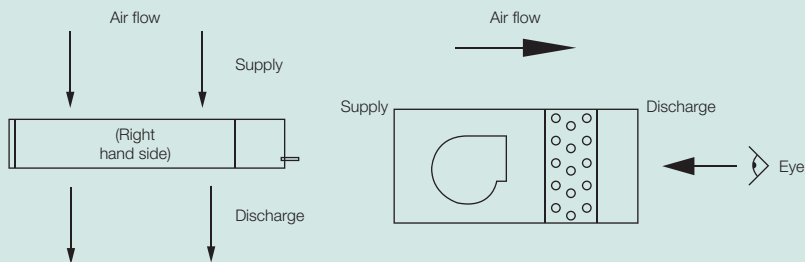
MODEL		SFCH03AW	SFCH04AW	SFCH06AW	SFCH08AW	SFCH10AW	SFCH12AW
Nominal Cooling Capacity	BTU/HR	9289	12944	19057	24897	29849	36781
	W	2720	3790	5580	7290	8740	10770
Nominal Sensible Cooling Capacity	BTU/HR	7548	10382	15300	20150	24487	29815
	W	2210	3040	4480	5900	7170	8730
Power Supply	V/Ph/Hz	220 ~240 / 1 / 50					
Motor Type		3 Speed Permanent Split Capacitor					
Max Unit Running Amp (30/60Pa)	A x Qty	0.48	0.70	0.75	1.10	0.40+1.10	0.75+0.75
Output Power (30/60Pa)	w x Qty	55	72	100	125	50+125	100+100
Output Power, High Static (70/100Pa)	w x Qty	72	85	120	140	72+140	120+120
Air Flow	L/s (CFM)	142 (300)	189 (400)	282 (600)	378 (800)	472 (1000)	567 (1200)
External Statics Pressure (H) (without plenum box)	Pa	60	60	60	60	60	60
External Statics Pressure, High Static (H) (without plenum box)	Pa	100	100	100	100	100	100
External Statics Pressure (H) (with plenum box)	Pa	30	30	30	30	30	30
External Statics Pressure, High Static (H) (with plenum box)	Pa	70	70	70	70	70	70
Fan Coil Water Volume / Mass	cm <sup>3</sup>	832	1235	1508	1852	2168	2558
Condensate Drain Size	mm (in)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
Nominal Water Flow Rate	USGPM	1.3	1.8	2.6	3.5	4.1	5.1
	LITRES/M	5	7	10	13	16	19
Head Loss	kpa	15	11	22	21	18	29
Max Working Pressure	kpa (psi)	1600 (230)					
Connection (Thread Type)	Inch (mm)	3/4" (NPT) 19.0					
Unit Weight	kg	17	22	26	30	37	43

Components Data (Engineering and Component Data) -High Delta T

MODEL		SFCH03AW	SFCH04AW	SFCH06AW	SFCH08AW	SFCH10AW	SFCH12AW		
Casing	Length	mm	805	1051	1224	1470	1642	1889	
	Outline Dimension	Depth	mm	458 (without plenum) / 488 (with plenum and filter)					
		Height	mm	270					
	Material		GI						
	External Finishing		Bare GI						
Insulation		PE / 5mm							
Fan	Qty		1	1	2	2	3	4	
	Material		GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	GALVANIZED STEEL	
	Diameter	mm	160	160	160	160	160	160	
	Length	mm	200	200	200	200	200	200	
	Drive		Direct	Direct	Direct	Direct	Direct	Direct	
Fan Motor	Type		3 Speed Permanent Split Capacitor						
	Qty		1	1	1	1	2	2	
	Index of Protection (IP)		IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	
	Insulation Grade		B	B	B	B	B	B	
	Power Source (V/Ph/Hz)		220 ~240 / 1 / 50						
	Poles		4	4	4	4	4	4	
	Capacitor	µF	3.0	3.5	4.0	5.0	3.0+5.0	4.0+4.0	
	Rated Running Current (30/60Pa)	A x Qty	0.48	0.70	0.75	1.10	0.40+1.10	0.75+0.75	
Motor Output (30/60Pa)	w x Qty	55	72	100	125	50+125	100+100		
Coil	Tube	Material	Copper (Cu)						
		Diameter	mm	9.52	9.52	9.52	9.52	9.52	9.52
		Thickness	mm	0.3	0.3	0.3	0.3	0.3	0.3
	Fin	Material	Aluminum (Al)						
		Thickness	mm	0.11	0.11	0.11	0.11	0.11	0.11
		Face Area	m <sup>2</sup> (ft <sup>2</sup> )	0.095 (1.020)	0.145 (1.56)	0.18 (1.94)	0.23 (2.48)	0.265 (2.85)	0.315 (3.39)
		Row		4	4	4	4	4	4
Fin per inch	FPI	12	12	12	12	12	12		
Filtration	Type		Washable Aluminium Frame Filter / G2						
	Quantity	pc	1	2	2	3	3	4	
	Dimension (L x W x t)	mm	488x243x12	734x243x12	906x243x12	1152x243x12	1324x243x12	1570x243x12	

Note:

- All specifications are subjected to change by the manufacturer without prior notice
- Nominal cooling capacity are based on the below conditions:-
  - Entering air temperature 27 degC (80.6 degF) DB and 19 degC (66.2 deg F) WB
  - Entering water temperature 6.67 degC (44.0 degF)
  - Leaving water temperature 14.4 degC (58.0 degF)
- Sound Pressure Level tested at 1.4m below the unit (free return and discharge air was ducted to adjacent room)



## Nomenclature | SFC 08 AW - X 3 AR (Standard) SFC 08 AW - P 3 AR (Optional)

<b>Brand</b>	S : Saiver
<b>Model Name</b>	FC : Fan Coil FCH: Fan Coil, High Delta T
<b>Capacity</b>	03 : 300cfm 04 : 400cfm 06 : 600 cfm 08 : 800 cfm 10 : 1000 cfm 12 : 1200 cfm
<b>Series</b>	A : A Series
<b>Model Type</b>	W : Chilled Water WH : Chilled Water With Heater
<b>Plenum Box &amp; External Static</b>	P0 : With Plenum Box & Filter, 0pa ESP P3 : With Plenum Box & Filter, 30pa ESP P7 : With Plenum Box & Filter, 70pa ESP X3 : Without Plenum Box & Filter, 30pa ESP X6 : Without Plenum Box & Filter, 60pa ESP X10 : Without Plenum Box & Filter, 100pa ESP
<b>Electrical</b>	A : 50 Hz/1Ph/220~240V B : 60 Hz/1Ph/208~230V C : 60 Hz/1Ph/115V F : 50 Hz/3Ph/380~415V G : 60 Hz/3Ph/380V H : 60 Hz/3Ph/208~230V
<b>Header Orientation (Discharge View)</b>	R : Right Hand Side L : Left Hand Side

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