



Merits of *CHIEF* High-Efficiency Heat-Pump Type Roof-Top Air-Conditioning Module

Model No. CHRF-15-D

1. Assembly-free of cooling tower \ water pump \ chiller pump and related pipes and valves.

-----Electricity-Saving \ Time-Saving.

2. Fan coil and air handling unit are not needed, only ducts to CHIEF air conditioner.

-----Easy Maintenance.

3. All outdoor air-cooling style is out of trouble of water source shortage or water poor quality.

4. No additional expansion valve \ level control valve and refrigerant pump are needed. Completed oil return and temperature control are achieved due to the special design by *CHIEF* patent.

5. Easy control and operation \ lower noise and the best quality control.

6. No water-pipe leaking problem inside the cooling-heating room system, which is suitable for computer room \ generator room \ control room \ fine instruments room \ superior laboratory \ R& D room \ conference hall \ high-class leisure hall \ ocean liner---etc.

7. This heating system (heat pump method) is carefully designed---very easy control and operation and electricity-saving.





SPECIFICATIONS (冷氣系統)

MODEL NO ·		CHRF-05	CHRF-08	CHRF-10
COOLING PERFORMANCE 製冷能力	TOTAL KCAL / H	14,000	22,500	28,600
	EER 值 Kcal / w-h	3.01	3.02	3.02
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機馬力	5	7.5	10
	CAPACITY STEPS (%) (UNIT) 容量控制	0 / 100	0 / 100	0 / 100
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	5.9	9.6	11.7
	ROWS 排數	3	3	4
	REFRIGERANT CONTROL 冷媒控制	Thermo-Expansion Valve 冷媒外部均壓膨脹閥		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	2000	2800	3500
	MOTOR HP 風扇馬達	1.0	1.5	2.0
	AVAILABLE SP (Aq.) (STD CFM) 標準風量下靜壓	8 m / m	12 m / m	20 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	10.3	16.5	20.3
	ROWS 排數	3	3	4
CONDENSER FAN & MOTOR 冷凝風扇與馬達	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 1	1.0 / 1	0.5 / 2
	TOTAL HP 馬力	0.5	1.0	1.0
	AIR FLOW CFM 風量 CFM	4500	6600	8000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1"		
	FILTER TYPE 過濾網	2" PRE-FILTER SUS-304		
REFRIGERANT 冷媒	R-22	4.3	6.5	9.0
NET WEIGHT 淨重	(Kg)	310	385	420
SHIPPING WEIGHT 運輸總重	(Kg)	345	425	472
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	154×107×89	154×107×106	167×107×127

※ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available, decided by customer.



SPECIFICATIONS (冷氣系統)

MODEL NO ·		CHRF-15	CHRF-20	CHRF-30
COOLING PERFORMANCE 製冷能力	TOTAL KCAL / H	42,800	56,300	84,600
	EER 值 Kcal / w-h	3.03	3.08	3.08
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機馬力	15	20	30
	CAPACITY STEPS (%) (UNIT) 容量控制	0 / 100	0 / 50 / 100	0 / 50 / 100
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	17.0	22.6	33.2
	ROWS 排數	4	4	4
	REFRIGERANT CONTROL 冷媒控制	Thermo-Expansion Valve 冷媒外部均壓膨脹閥		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	4200	5600	8500
	MOTOR HP 風扇馬達	3.0	5.0	7.5
	AVAILABLE SP (Aq.) (STD CFM) 標準風量下靜壓	45 m / m	50 m / m	65 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	29.5	40.0	58.8
	ROWS 排數	4	4	4
CONDENSER FAN & MOTOR 冷凝風扇與馬達	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 2	0.5 / 3	0.5 / 3
	TOTAL HP 馬力	1.0	1.5	2.0
	AIR FLOW CFM 風量 CFM	8000	12000	13000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1"		
	FILTER TYPE 過濾網	2" PRE-FILTER SUS-304		
REFRIGERANT 冷媒	R-22	14.0	17.0	26.0
NET WEIGHT 淨重	(Kg)	520	760	980
SHIPPING WEIGHT 運輸總重	(Kg)	710	930	1250
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	191×152×155	191×152×155	210×175×192

❖ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available, decided by customer.



SPECIFICATIONS (冷氣系統)

MODEL NO .		CHRF-40	CHRF-60	CHRF-80
COOLING PERFORMANCE 製冷能力	TOTAL KCAL / H	116,000	168,000	226,000
	EER 值 Kcal / w - h	3.04	3.06	3.08
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機馬力	40	60	80
	CAPCITY STEPS (%) (UNIT) 容量控制	0 / 50 / 100		
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT ²	48.2	69.0	92.6
	ROWS 排數	4	4	4
	REFRIGERANT CONTROL 冷媒控制	Thermo-Expansion Valve 冷媒外部均壓膨脹閥		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	12000	17000	20000
	MOTOR HP 風扇風量	10	15	20
	AVAILABLE SP (Aq.) (STD CFM) 標準風量下靜壓	50 m / m	50 m / m	65 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT ²	78.6	118.0	160.2
	ROWS 排數	4	4	4
CONDENSER FAN & MOTOR 冷凝風扇與馬達	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 4	0.5 / 6	0.5 / 8
	TOTAL HP 馬力	2.0	3.0	4.0
	AIR FLOW CFM 風量 CFM	23000	31000	40000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1 1/2"		
	FILTER TYPE 過濾網	2" PRE-FILTER SUS-304		
REFRIGERANT 冷媒	R-22	42	65	80
NET WEIGHT 淨重	(Kg)	1450	1660	1950
SHIPPING WEIGHT 運輸總重	(Kg)	1820	2180	2650
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	210×210×192	280×210×192	280×235×192

❖ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available , decided by customer .



SPECIFICATIONS (冷暖兩用型)

MODEL NO .		CHRFH-05	CHRFH-08	CHRFH-10
COOLING CAPACITY	TOTAL KCAL / H	14,000	22,500	28,600
HEATING CAPACITY	TOTAL KCAL / H	16,800	27,000	34,300
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機 HP	5	7.5	10
	CAPCITY STEPS (%) (UNIT) 容量控制	0 / 100	0 / 100	0 / 100
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	5.9	9.6	11.7
	ROWS 排數	3	3	3
	REFRIGERANT CONTROL 冷媒控制	JET PUMP & LIQUID RECIRCULATION 噴射 & 液体再循環		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	2000	3000	4000
	MOTOR HP 風扇馬達	1.0	1.5	2.0
	AVAILABLE SP (Aq.) (STD CFM) 標準風量下靜壓	8 m / m	10 m / m	20 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	11.8	18.9	23.3
	ROWS 排數	3	3	3
CONDENSER FAN & MOTOR 冷凝風扇與馬達	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 1	1.0 / 1	0.5 / 2
	TOTAL HP 馬力	0.5	1.0	1.0
	AIR FLOW CFM 風量 CFM	4500	6600	8000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1"		
	FILTER TYPE 過濾網	2" PRE-FILTER SUS-304		
HEATING PROCESS 加熱	HEAT PUMP METHOD , CONTROLLED BY 4-WAYS SOLENOID VALVE			
DEFROSTING PROCESS 除霜	ON-OFF CONTROLLED BY THERMOSTAT			
REFRIGERANT 冷媒	R-22	4.8	7.5	10.6
NET WEIGHT 淨重	(Kg)	360	452	480
SHIPPING WEIGHT 運輸總重	(Kg)	415	516	535
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	154×107×89	154×107×106	167×107×127

❖ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available , decided by customer .



SPECIFICATIONS (冷暖兩用型)

MODEL NO .		CHRFH-15	CHRFH-20	CHRFH-30
COOLING CAPACITY	TOTAL KCAL / H	42,800	56,300	86,600
HEATING CAPACITY	TOTAL KCAL / H	51,360	67,500	101,500
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機 HP	15	20	30
	CAPACITY STEPS (%) (UNIT) 容量控制	0 / 100	0 /50 /100	0 /50 /100
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	17.0	22.6	33.2
	ROWS 排數	3	3	3
	REFRIGERANT CONTROL 冷媒控制	JET PUMP & LIQUID RECIRCULATION 噴射 & 液体再循環		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	4200	5600	8500
	MOTOR HP 風扇馬達	3.0	5.0	7.5
	AVAILABLE SP (Aq.) (STD CFM) 標準風量	45 m / m	50 m / m	65 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	33.9	46.0	67.6
	ROWS 排數	3	3	3
CONDENSER FAN & MOTOR 冷凝器資料	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 2	0.5 / 2	0.5 / 3
	TOTAL HP 馬力	1.0	1.0	1.5
	AIR FLOW CFM 風量	8000	12000	13000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1"		
	FILTER TYPE 風量 CFM	2" PRE-FILTER SUS-304		
HEATING PROCESS 加熱	HEAT PUMP METHOD , CONTROLLED BY 4-WAYS SOLENOID VALVE			
DEFROSTING PROCESS 除霜	ON-OFF CONTROLLED BY THERMOSTAT			
REFRIGERANT 冷媒	R-22	16.0	19.0	30.0
NET WEIGHT 淨重	(Kg)	680	880	1160
SHIPPING WEIGHT 運輸總重	(Kg)	780	1010	1320
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	191×152×155	191×152×155	210×175×192

❖ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available , decided by customer .



SPECIFICATIONS (冷暖兩用型)

MODEL NO .		CHRFH-40	CHRFH-60	CHRFH-80
COOLING CAPACITY	TOTAL KCAL / H	116,000	168,000	226,000
HEATING CAPACITY	TOTAL KCAL / H	139,000	201,000	271,000
COMPRESSOR 壓縮機馬力	COMPRESSOR HP 壓縮機 HP	40	60	80
	CAPCITY STEPS (%) (UNIT) 容量控制	0 / 50 / 100		
EVAPORATOR COIL 蒸發盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	48.2	69.0	92.6
	ROWS 排數	6	6	6
	REFRIGERANT CONTROL 冷媒控制	JET PUMP & LIQUID RECIRCULATION 噴射 & 液体再循環		
EVAPORATOR BLOWER CENTRIFUGAL FORWARD CURVED 蒸發風車特性	STANDARD CFM 標準風量	12000	17000	20000
	MOTOR HP 風扇馬達	10	15	20
	AVAILABLE SP (Aq.) (STD CFM) 標準風量下靜壓	50 m / m	50 m / m	65 m / m
CONDENSER COIL 冷凝盤管	TYPE 型式	ALUMINUM FIN ON COPPER TUBE		
	FACE AREA (SQUARE FEET) 傳熱面積 FT2	90.3	135.5	185.2
	ROWS 排數	4	4	4
CONDENSER FAN & MOTOR 冷凝風扇與馬達	TYPE 型式	DIRECT DRIVE		
	MOTOR HP / QUANTITY 馬力/數量	0.5 / 4	0.5 / 6	0.5 / 8
	TOTAL HP 馬力	2.0	3.0	4.0
	AIR FLOW CFM 風量 CFM	23000	31000	40000
CONDENSER PHYSICAL DATA 冷凝器資料	CONDENSATE DRAIN (FPT) 排水頭口徑	1 1 / 2"		
	FILTER TYPE 風量 CFM	2" PRE-FILTER SUS-304		
HEATING PROCESS 加熱	HEAT PUMP METHOD , CONTROLLED BY 4-WAYS SOLENOID VALVE			
DEFROSTING PROCESS 除霜	ON-OFF CONTROLLED BY THERMOSTAT			
REFRIGERANT 冷媒	R-22	48	72	88
NET WEIGHT 淨重	(Kg)	1670	1960	2350
SHIPPING WEIGHT 運輸總重	(Kg)	1980	2290	2700
CABINET DIMENSIONS 外型尺寸	L×W×H (CM)	210×210×192	280×210×192	280×235×192

❖ POWER SOURCE : 3Φ 220V、380V、440V、460V、are available , decided by customer .