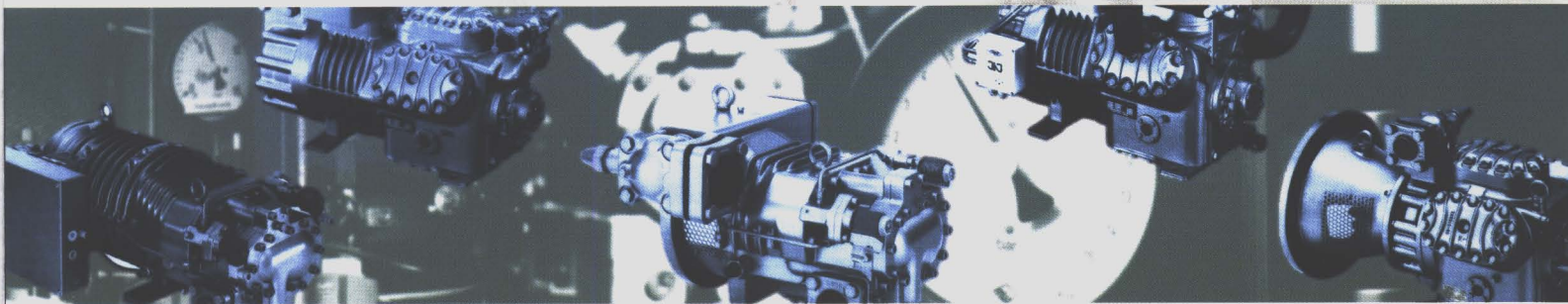


Air-Cooled Condensing Units

2 through 50 hp.



*C*hillmatch condensing units are designed and built for long lasting operation using our unrivalled experience in refrigeration system. Every aspect is engineered to ensure maximum reliability and economy of operation together with ease of service and simple installation. Chillmatch multi temperature units are ideal for freezing room, Cold storage room, Hypermarkets, Supermarket, Convenience store, Industrial cooling, air conditioning system or where any reliable, Economical and efficient systems. Appropriate for rooms with temperatures from -30°C to +25°C. Refrigeration capacities from 4 Kw. To 112 Kw. Or 2 Hp. To 50 Hp.

*B*enefits

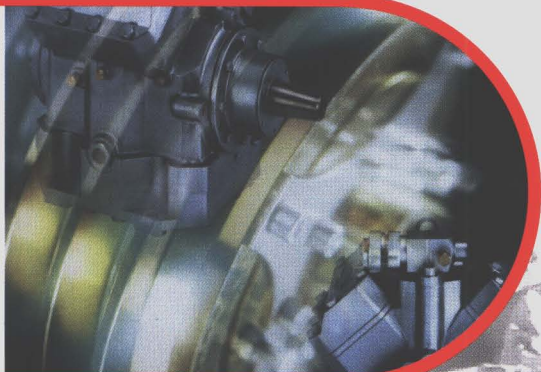
- Robust construction
- Compact design to save on installation space
- Factory assembly reduces installation times
- Indicator sight glass for ease of system analysis
- Solid mounted with no internal suspension
- Corrosion resistant for long lasting operation
- Quality control of all engineering and manufacturing processes
- Comprehensive spare parts, Technical back-up and service
- Suitable for R-22 and other refrigerants

*S*tandard Features

- Adjustable high-low pressure control
- Receiver
- Discharge temperature sensor
- Rota lock suction service valve
- Crankcase heater
- Oil pressure switch
- Receiver Rota lock service valve

*O*ptional Features (Factory mounted)

- Suction Accumulator, Oil Separator and stop valve oil return
- Knockdown outdoor cabinet
- CIC for low temperature application
- Capacity control, Start unloading
- System pressure gauges
- Check valve
- Solenoid By-Pass
- Liquid line filter drier and sight glass



PERFORMANCE DATA

MEDIUM AND HIGH TEMPERATURE

MODEL SERIES		ACM-01			ACM-02		ACM-03		
COMPRESSOR :		2HC-2.2	2GC-2.2	2FC-3.2	2EC-3.2	2DC-3.2	2CC-4.2	4FC-5.2	
PROCESSING ROOM (16-18 °C)									
Cooling Capacity (R-22)	:kW	4.46	5.25	6.36	7.59	9.09	11.15	12.92	
	:kcal/hr.	3,838	4,518	5,473	6,532	7,823	9,596	11,119	
CHILLED ROOM (0-2 °C)									
Cooling Capacity (R-22)	:kW	3.37	3.99	4.82	5.67	6.78	8.35	9.64	
	:kcal/hr.	2,900	3,434	4,148	4,880	5,835	7,186	8,296	
COMPRESSOR : Type		Semi Hermetic Reciprocating, Bitzer							
Capacity Control *(Option)		0%, 100%						0%50%100%	
Number of Cylinders		2						4	
Power Supply :V/Ph/Hz		220..240 D /1/50 Hz - 380..420 Y/3/50Hz							
Starting Method		Δ/Y							
Max Working Current	:Amp	7,4/4,3	8,1/4,7	10,0/5,8	12,0/6,9	13,5/7,8	16,4/9,4	18,7/10,8	
Starting Current (Locked Rotor)	:Amp	39/22,5	39/22,5	44,2/25,5	60,6/37	64/37	76,6/44,2	107,7/62,2	
Max Power Consumption	:kW	2.4	2.7	3.4	4	4.5	5.6	6.2	
	:HP	3.2	3.6	4.6	5.4	6.0	7.5	8.3	
Disp. Volume 1450 rpm	:m ³ /h	6,51	7,58	9,54	11,4	13,4	16,2	18,1	
Oil Charge	:Litre	1	1	1	1,5	1 5	1,5	2	
AIR COOLED CONDENSER:									
Heat Reject	:kW	11			13		19		
Area Surface	:m ²	23.3			29.9		59.9		
Number of Fan	:Unit	1			1		2		
Fan Blade size	:mm	450			500		450		
Electrical Supply :V/ph/Hz		220V/1/50Hz							
Motor Power	:W	95			150		95		
Motor Current	:Amp	0.6			0.9		1.2		
Speed	:RPM	900			900		900		
Volume Air Flow	:m ³ /h	3,850			4,450		8,000		
PIPE CONNECTION:(Suct/Liq.)		16/10			22/13				22/16
	:inch	5/8" / 3/8"			7/8" / 1/2"				7/8" / 5/8"
RECEIVER		3		5.6	7.8		13		
APPROXIMATE WEIGHT		:kg.	80	80	85	127	127	127	155

Remark :The Refrigeration Capacity given is based on outdoor ambient temperature 35 °C

Evaporating Temperature 2 °C for Processing Room

Evaporating Temperature -5 °C for Chilled Room

MEDIUM AND HIGH TEMPERATURE

MODEL SERIES		ACM-04		ACM-05		ACM-06	
COMPRESSOR :		4EC-6.2	4DC-7.2	4CC-9.2	4VC-10.2	4TC -12.2	4PC -15.2
PROCESSING ROOM (16-18 °C)							
Cooling Capacity (R-22)	:kW	15.85	19.31	23.3	25.3	40.5	48
	:kcal/hr.	13,641	16,618	20,052	21,773	34,855	41,309
CHILLED ROOM (0-2 °C)							
Cooling Capacity (R-22)	:kW	11.85	14.48	17.5	19.2	23.2	27.7
	:kcal/hr.	10,198	12,462	15,061	16,524	19,966	23,839
COMPRESSOR :	Type	Semi Hermetic Reciprocating, Bitzer					
Capacity Control *(Option)		0%, 50%, 100%					
Number of Cylinders		4					
Power Supply	:V/Ph/Hz	220..240 D /1/50 Hz - 380..420 Y/3/50Hz			380..420YY/3/50 Hz		
Starting Method		Δ/Y			PW		
Max Working Current	:Amp	22.9/13.2	27.5/15.9	34.5/20.0	21	24	31
Starting Current (Locked Rotor)	:Amp	107.7/62.2	142.8/82.4	142.8/82.4	59/99	69/113	81/132
Max Power Consumption	:kW	7.9	9	11.6	11.3	13.8	166.3
	:HP	10.6	12.1	15.5	15.1		222.9
Disp. Volume 1450 rpm	:m ³ /h	22.7	26.8	32.5	34.7	41.3	48.5
Oil Charge	:Litre	2	2	2	2.6	2.6	2.6
AIR COOLED CONDENSER:							
Heat Reject	:kW	28		39		58	
Area Surface	:m ²	67.7		67.7		173.6	
Number of Fan	:Unit	2		2		2	
Fan Blade size	:mm	500			500		650
Electrical Supply	:V/ph/Hz	220V/1/50Hz		380V/3/50Hz			
Motor Power	:W	150		370		370	
Motor Current	:Amp	1.8		1.2		1.4	
Speed	:RPM	900		900		900	
Volume Air Flow	:m ³ /h	8,900		15,000		16,200	
PIPE CONNECTION:(Suct/Liq.)	:mm	28 / 16	28 / 22			35 / 22	42 / 22
	:inch	1.1/8" / 5/8"	1.1/8" / 7/8			1.3/8" / 7/8"	1.5/8" / 7/8"
RECEIVER	:Litre	13	15				30
APPROXIMATE WEIGHT	:kg.	155	160	165	250	250	270

Remark :The Refrigeration Capacity given is based on outdoor ambient temperature 35 °C

Evaporating Temperature 2 °C for Processing Room

Evaporating Temperature -5 °C for Chilled Room

PERFORMANCE DATA

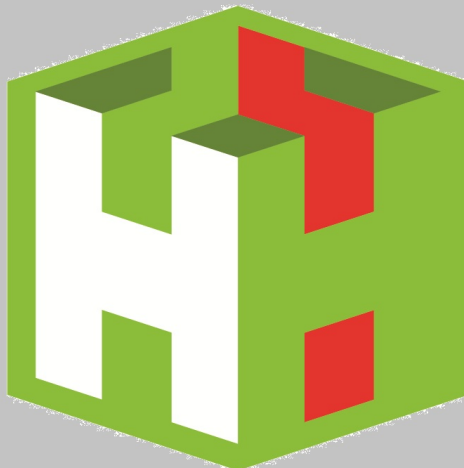
MEDIUM AND HIGH TEMPERATURE

MODEL SERIES		ACM-07		ACM-08		ACM-09		ACM-10	
COMPRESSOR :		4NC-20.2	4J-22.2	4H-25.2	4G-30.2	6J-33.2	6H-35.2	6G-40.2	6F-50.2
PROCESSING ROOM (16-18 °C)									
Cooling Capacity (R-22)	:kW	42.4	47.7	55.2	63.3	71.5	82.9	94.9	112.2
	:kcal/hr.	36,490	41,051	47,506	54,477	61,534	71,345	81,672	96,561
CHILLED ROOM (0-2 °C)									
Cooling Capacity (R-22)	:kW	32.1	36.2	41.9	48.1	54.3	63	72.2	85.7
	:kcal/hr.	27,626	31,154	36,060	41,395	46,731	54,218	62,136	73,754
COMPRESSOR : Type		Semi Hermetic Reciprocating, Bitzer							
Capacity Control *(Option)		0%, 50%, 100%				0%, 33%, 66%, 100%			
Number of Cylinders		4				6			
Power Supply :V/Ph/Hz		380..420YY/3/50 Hz							
Starting Method		PW							
Max Working Current	:Amp	37	39	45	53	60	61	78	92
Starting Current (Locked Rotor)	:Amp	97/158	97/158	116/193	135/220	147/262	147/262	180/323	226/404
Max Power Consumption	:kW	19.5	21.5	24.9	30.1	32.2	37.4	38.6	53.2
	:HP	26.1	28.8	33.4	40.3	43.2	50.1	51.7	71.3
Disp. Volume 1450 rpm	:m ³ /h	56.2	63.5	73.7	84.6	95.3	110.5	126.8	151.6
Oil Charge	:Litre	2.6	4	4.5	4.5	4.75	4.75	4.75	4.75
AIR COOLED CONDENSER:									
Heat Reject	:kW	81		106		153		170	
Area Surface	:m ²	112		189		272		327	
Number of Fan	:Unit	2		2		3		3	
Fan Blade size	:mm	750							
Electrical Supply	:V/ph/Hz	380V/3/50Hz							
Motor Power	:W	746		746		746		746	
Motor Current	:Amp	4.2		4.2		6.3		6.3	
Speed	:RPM	900		900		900		900	
Volume Air Flow	:m ³ /h	37,000		36,000		56,000		55,000	
PIPE CONNECTION:(Suct/Liq.)		42 / 22		54 / 22		54 / 28			
	:inch	1.5/8"/7/8"		2.1/8"/7/8"		2.1/8"/1.1/8"			
RECEIVER	:Litre	30			50				
APPROXIMATE WEIGHT	:kg.	275	342	365	370	415	420	430	435

Remark :The Refrigeration Capacity given is based on outdoor ambient temperature 35 °C

Evaporating Temperature 2 °C for Processing Room

Evaporating Temperature -5 °C for Chilled Room



HARN

Engineering Solutions

LOW TEMPERATURE

MODEL SERIES
COMPRESSOR :
COLD STORAGE (-20
Cooling Capacity
FREEZING ROOM (-3
Cooling Capacity
COMPRESSOR :
Capacity Control

Number of Cylinders		4						
Power Supply	:V/Ph/Hz	20..240D/1/50 Hz - 380..420Y/3/50H			380..420YY/3/50Hz			
Starting Method		Δ/Y			PW			
Max Working Current	:Amp	15.9/9.2	18.5	23.4/13.5	27.5/15.9	14	17	21
Starting Current (Locked Rotor)	:Amp	76.6/44.2	92.7/53.3	107.7/62.2	107.7/62.2	39/68	49/81	59/99
Max Power Consumption	:kW	5.4	6.4	8	9	8.1	9.4	11.7
	:HP	7.2	8.6	10.7	12.1	10.9	12.6	15.7
Disp. Volume 1450 rpm	:m ³ /h	18.1	22.7	26.8	32.48	34.7	41.3	48.5
Oil Charge	:Litre	2.0			2	2.6		
AIR COOLED CONDENSER:								
Heat Reject	:kW	11		13	19		27	
Area Surface	:m ²	23.3		29.9	59.9		67.7	
Number of Fan	:Unit	1		1	2		2	
Fan Blade size	:mm	450		500	450		500	
Electrical Supply	:V/ph/Hz	220V/1/50 Hz						
Motor Power	:W	95		150	95		150	
Motor Current	:Amp	0.6		0.9	1.2		1.8	
Speed	:RPM	900		900	900		900	
Volume Air Flow	:m ³ /h	3,850		4,450	8,000		8,900	
PIPE CONNECTION:(Suct/Liq.)	:mm	22/13	28/16	28/16			35/16	35/22
	:inch	7.8"/1/2	1.1/8"/5/8"	1.1/8"/5/8"			1.3/8"/5/8"	1.3/8"/7/8"
RECEIVER	:Litre	7.8		13		15		
APPROXIMATE WEIGHT	:kg.	130	135	140	145	210	220	230

Remark :The Refrigeration Capacity given is based on outdoor ambient temperature 35 °C

Evaporating Temperature -27 °C for Cold Storage

Evaporating Temperature -35 °C for Freezing Room

LOW TEMPERATURE

MODEL SERIES		ACM-05		ACM-06	ACM-07			ACM-08	
COMPRESSOR :		4NC-12.2	4J-13.2	4H-15.2	4G20.2	6J-22.2	6H-25.2	6G-30.2	6F-40.2
P COLD STORAGE (-20 ° C)									
Cooling Capacity (R-22)	:kW	10.89	12.06	13.98	16.25	18.09	21	24.4	29.6
	:kcal/hr.	9,372	10,379	12,031	13,985	15,568	18,073	20,999	25,474
FREEZING ROOM (-30 ° C)									
Cooling Capacity (R-22)	:kW	6.02	6.83	7.91	9.23	10.24	11.87	13.84	17.07
	:kcal/hr.	5,181	5,878	6,807	7,943	8,813	10,215	11,911	14,691
COMPRESSOR :	Type								
Capacity Control *(Option)		0%, 50%, 100%				0%, 33%, 60%, 100%			
Number of Cylinders		4				6			
Power Supply	:V/Ph/Hz	380..420YY/3/50Hz							
Starting Method		PW							
Max Working Current	:Amp	24	27	31	37	39	45	53	78
Starting Current (Locked Rotor)	:Amp	69/113	81/132	81/132	97/158	116/193	116/193	135/220	180/323
Max Power Consumption	:kW	14.1	15.7	18.1	21.5	23.5	27.2	31.9	38.6
	:HP	18.9	21.0	24.3	28.8	31.5	36.5	42.8	51.7
Disp. Volume 1450 rpm	:m ³ /h	56,2	63,5	73,7	84,6	95,3	110,5	126,8	151,6
Oil Charge	:Litre	2.6	4.0		4.5	4.75			
AIR COOLED CONDENSER:									
Heat Reject	:kW	39		58		81		106	
Area Surface	:m ²	67.7		173.6		112		189	
Number of Fan	:Unit	2		2		2		2	
Fan Blade size	:mm	500		600		750			
Electrical Supply	:V/ph/Hz	380V/3/50 Hz							
Motor Power	:W	373		373		746		746	
Motor Current	:Amp	1.2		1.4		4.2		4.2	
Speed	:RPM	900		900		900		900	
Volume Air Flow	:m ³ /h	15,000		16,200		37,000		36,000	
PIPE CONNECTION:(Suct/Liq.)	:mm	35/22	42/22		54/22	54/28			
	:inch	1.3/8"/7/8"	1.5/8"/7/8"		2.1/8"/7/8"	2.1/8"/1.1/8"			
RECEIVER	:Litre	30						50	
APPROXIMATE WEIGHT	:kg.	240	270	290	300	340	350	360	370

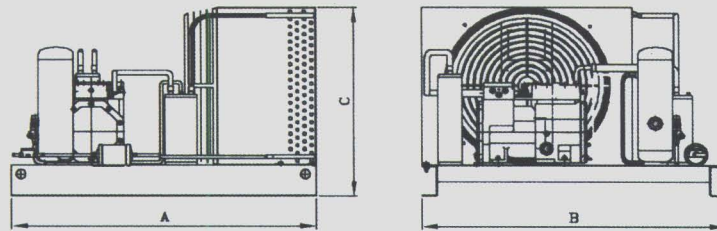
Remark :The Refrigeration Capacity given is based on outdoor ambient temperature 35 °C

Evaporating Temperature -27 °C for Cold Storage

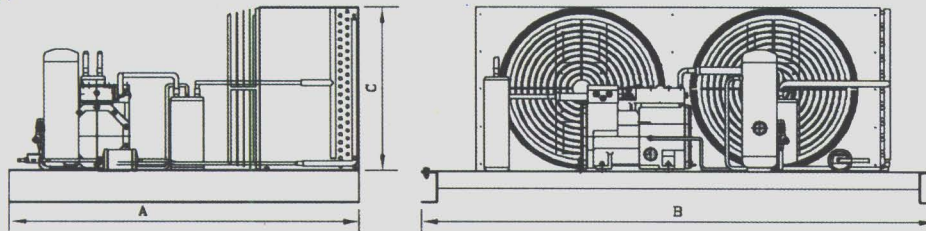
Evaporating Temperature -35 °C for Freezing Room

DRAWINGS AND DIMENSIONS

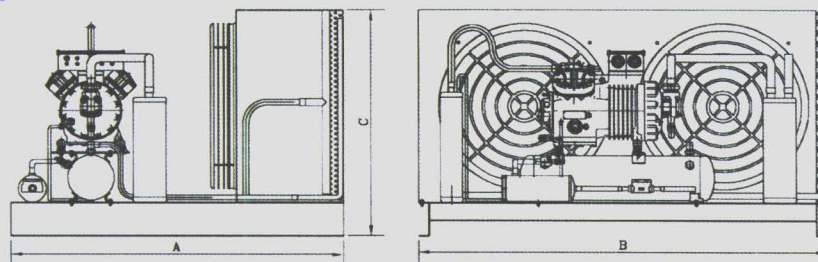
ACM01-02



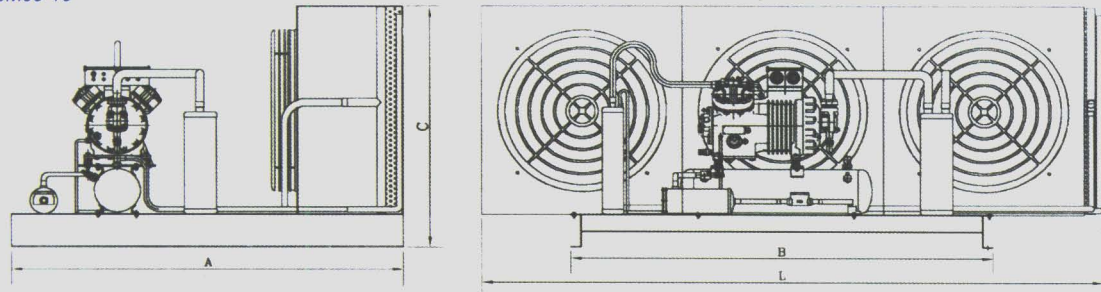
ACM03-04



ACM05-08



ACM09-10



Model :	ACM01	ACM02	ACM03	ACM04	ACM05	ACM06	ACM07	ACM08	ACM09	ACM10
A (Depth) : mm	950	950	1,350	1,350	1,350	1,550	1,550	1,550	1,850	1,850
B (Width) : mm	950	950	1,600	1,600	1,600	1,900	1,900	1,900	2,000	2,000
C (High) : mm	630	680	650	700	700	1,010	1,060	1,060	1,160	1,160
L (Length) : mm									2,950	2,950

Manufacturer reserves the right to change any specifications or designs without notice.