Carrier s.a.

Carrier

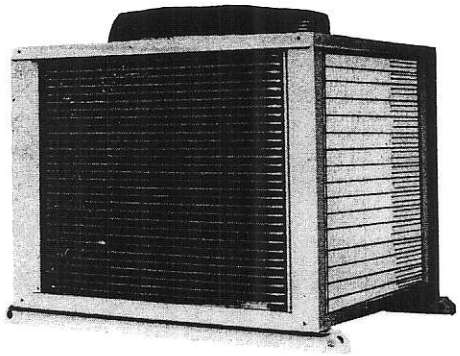
Subsidiary of Carrier Corporation

38 AG 009-035

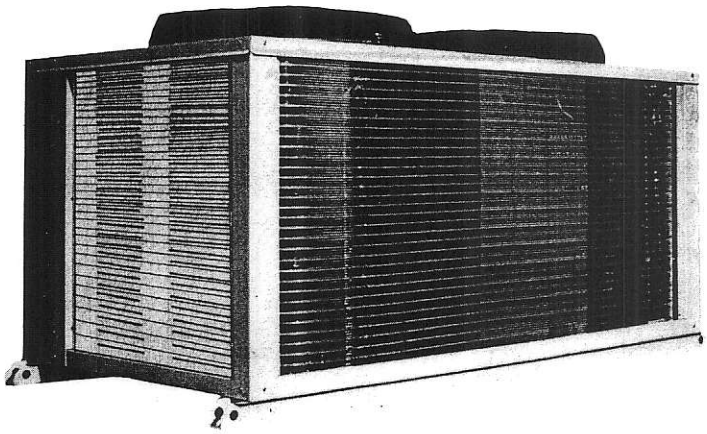
Air cooled condensing units

Nominal capacity :
26.7 to 111.5 kW
50 Hz

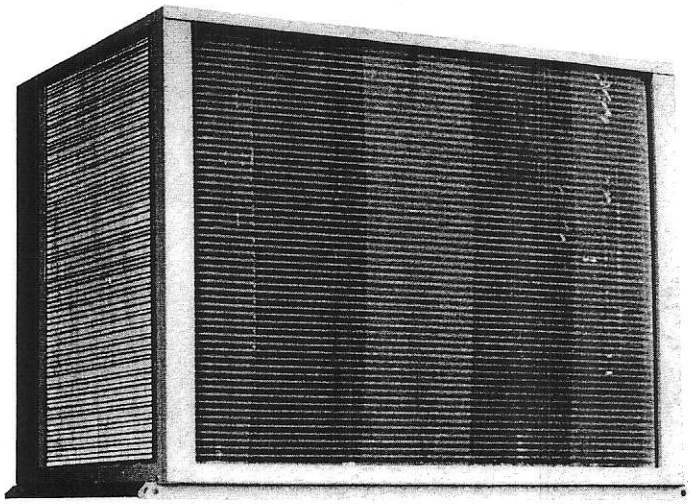
38 AG 009



38 AG 015



38 AG 030



QUALITY ASSURANCE

CERTIFICAT N° 1989/029 AFAQ

ASSOCIATION FRANÇAISE POUR L'ASSURANCE DE

ISO 9001 Lloyd's Quality Assured Firm

NATIONAL ACCREDITATION OF CERTIFICATION BODIES

APPROVALS
BS 5750 Part 1
NFX 50131
ISO 9001

38AG condensing units are usually connected to 39, 40 series air handling units (see page 7) or, to cold room of evaporating units. The advantages of this system, called "direct expansion" because the refrigerant is employed in the exchanger to cool the surrounding air, are as follows :

- high efficiency of the cooling circuit (no secondary cooling medium),
- low installation cost (no chilled water circuit).

FEATURES

Compressors

- Hermetic compressors on sizes 009-013. A suction accumulator is fitted as standard equipment on the suction line to avoid problems caused by migration of liquid refrigerant.
- 4 or 6 cylinder semi-hermetic compressors on sizes 015 to 035.
  Upwards of a certain coolling capacity, the choice of a multiple cylinder bank compressor ensures capacity which is better matched to load fluctuations system. Thus, increasing the comfort level of the installation and lowering operating costs.
  This is done by varying the number of cylinders in operation.

38AG 020 to 035 units are fitted with 06E compressors. To increase unit service life, compressors are shut down through a single pump-down system.
Motor protection includes overtemperature and overcurrent detection which protects against electrical overload.

Units	Type of motor protection
38AG 009-013	Internal overtemperature protection
38AG 015	Internal overtemperature protection
38AG 020 to 035	Discharge gas thermostat

Crankcase heaters – protect compressors from failure caused by dilution or migration of compressor oil.

Time Guard circuit – prevents compressor short cycling by requiring a delay of several minutes before compressor can restart after stopping.

Low-pressure switch – protects against loss of charge and evaporator freeze-up.

High-pressure switch – protects compressor from excessive condensing pressures.

Differential oil pressure (020 to 035) with manual reset, protects compressor from insufficient lubrication.

Direct-drive condenser fans – ensure quiet, dependable operation ; better sound level control because of advanced fan and venturi design.

Head pressure control (013-035 only) – achieved through fan cycling.

Liquid line solenoid valve control relays – are an integral part of the controls on 38AG 020-035 units. They allow single pumpout control to evacuate the low side of the system when the compressor cycles off. As a safety measure, the solenoid closes when the compressor trips off.

Fully protected unit casing – Carrier units are designed for the harshest weather conditions : all sheet metal parts are galvanized and treated in our fully automated paint line where they are phosphatized, passivated, rinsed, painted by robot with a 50 μ coat of polyester resin which is stove baked at 190°C.

Aluminium finned coils, copper tubes – designed for maximum heat transfer, they include a liquid subcooling circuit and are generously dimensioned to cover a wide range of operating conditions.

Winter start control – on 38AG 020 to 035 units only.

Control box – 38AG condensing units are fully wired. To make these units operational, only power line connections are required.

ACCESSORIES

Cylinder bank unloaders : There are several different possibilities : see table below.

38AG Unit	Pressostatic unloader as standard equipment	Possibility A** conversion of the pressostatic unloader to an electric unloader	Possibility B** 2 pressostatic unloaders	Possibility B** 2 electric unloaders
015	YES	YES	YES	YES
020	YES	YES	NO	NO
025	YES	YES	YES	YES
030	YES	YES	YES	YES
035	YES	YES	YES	YES

** Control of unit with thermostat (see List Price catalogue)
A 2 step thermostat
B3 step electronic thermostat

- **Coil grilles –** attractive grilles protect the coil's aluminium fins from damage.
- **Anti-freeze thermostat** for the evaporator should be used in conjunction with the winter start control.
- **Winter start control** for 38AG 009 to 015.
- **32LT Motormaster –** Air flow varies according to fan speed in order to maintain condensing temperature at around 32°C, even with outdoor ambient as low as –20°C.
- **Hot gas bypass package (38AG 015-035)**
- **Remote control transformer relay package** for 38AG 009-015.
- **Gauge panel –** Each field installed panel carries suction and discharge pressure gauges.
- **Thermostat (24 volts)**
  One step AG 009-013
  Two step AG 015-020
  Three step AG 015-025-035

For thermostatic control of unit from conditioned space. Allows selection of heating or cooling and continuous or cycling operation of indoor fan.

- **Part winding (38AG 020-035).**
- **Oil pressure safety** for 38AG 015.
- **Unit mounting legs (+ 250 mm)**

Note : all of these accessories are shown in the List Price pages.

OPTIONS

Most installations are made along the same general lines. However, some require special features. Carrier's list of options is there to help you to meet your specific needs requirements.

Here are a few examples :

- Anti-corrosion finishes for highly aggressive atmospheres :
  – for coils : Cu/Cu, chromate, heresite, tinned copper fins.
  – for bodywork :Epoxy paint polyurethane ; 80 to 120 μ coating.
- Special control box and fan motor dust/water-proofing : to standard IP 55.
- Tropicalization of electrical components.
- Application with refrigerants R502, R12, R500.
- Special voltages : 500 V/50 or 60 Hz... etc.

PHYSICAL DATA

Unit size 38AG		009	013	015	020	025	030	035
Cooling capacity (nominal)*	kW	26.7	38.4	48.4	63.6	75.4	88.3	111.5
Operating weight	kg	188	278	380	519	539	680	760
Refrigerant		R-22	R-22	R-22	R-22	R-22	R-22	R-22
Compressor		DQ 12AG	DQ 12AF	06Q 1515 or 06D 537	06E 4250	06E 8265	06E 8275	06E 8299
Number		1	1	1	1	1	1	1
Oil charge	l	3.65	3.65	4.4	6.7	9	9	9
Capacity control steps		1	1	2	2	2	2	2
Condenser outdoor coil		Copper tubes with aluminium fins						
Rows		2	2	3	3	3	2	3
Face area	m²	1.87	2.68	2.68	3.47	3.47	5.08	5.08
Outdoor fans	number	1	2	2	2	22	2	2
Diameter	mm	610	610	610	762	762	762	762
Air flow	l/s	2218	4436	4436	6500	6500	8028	8028
Nominal power input	kW	0.6	0.6 (each)	0.6 (each)	1 and 1.4	1 and 1.4	1 and 0.8	1 and 0.8
Volume in litres of accumulator	l	6.4	6.4	–	–	–	–	–
Nominal power supply	V-Ph-Hz	400 V - 3 Ph - 50 Hz four-wire				400-3-50 or 230-3-50		
Refrigerant connections								
Liquid ODM	in	5/8	5/8	5/8	7/8	7/8	7/8	7/8
Suction ODM	in	1" 3/8	1" 3/8	1" 3/8	1" 5/8	1" 5/8	1" 5/8	2" 1/8

* Based on saturated suction temperature (SST) of 7.2°C and outdoor air temperature (OAT) of 35°C (ARI STD 210-81).

ELECTRICAL DATA

Unit					Compressor				Fan motor				
	Volts												
38AG	Nameplate V-Ph-Hz	Supplied Min.	Supplied Max.	WSA	ICF	kW	FLA	LRA	MTA	Nbr.	kW each	ph	Volts	FLA each
009	400-3-50	342	462	28.5	95.2	9.9	20.2	92	29	1	0.6	1	230	3.2
013	400-3-50	342	462	49.1	134.4	15	34.1	128	49	2	0.6	1	230	3.2
015	400-3-50	342	457	44.4	122.4	18	30.4	116	43	2	0.6	1	230	3.2
020	400-3-50	342	457	52.2	177.2	21	36.0	170	51	1	1.0	1	230	4.6
										1	1.4	3	400	2.6
025	230-3-50	198	264	112.0	372.5	28	83.5	365	10.6	1	0.6	1	230	4.5
										1	0.6	3	230	3.0
	400-3-50	342	457	66.3	217.3		48	211	62.5	1	0.6	1	230	4.5
										1	0.6	3	400	1.73
030	230-3-50	198	264	125.0	431.1	32	93.5	423	69	1	1.0	1	230	4.6
										1	0.8	3	230	3.5
	400-3-50	342	457	74.1	253.6		54	247	75	1	1.0	1	230	4.6
										1	0.8	3	400	2
035	230-3-50	198	264	176.9	585.1	45	135	577	110	1	1.0	1	230	4.6
										1	0.8	3	230	3.5
	400-3-50	342	457	102.9	343.6		77	337	110	1	1.0	1	230	4.6
										1	0.8	3	400	2

FLA – Full load amps
ICF – Maximum instantaneous current flow during starting (the point in the starting sequence where the sum of the LRA for the compressor plus the total FLA for all running fan motors is at maximum).
kW – Condenser fan motor power input.
LRA – Locked rotor amps.
MTA – Must trip amps (circuit breaker).
WSA – Wire sizing amps ; one terminal block per unit. To size wires it is necessary to take 125% of the FLA of the largest motor plus 100% of this for the other motors in the unit.
Ph – Phase

MINIMUM SUCTION TEMPERATURES – R-22*

Unit 38AG	cylinders	Condensing temperature °C					
		29.5	35	40.5	49	54.5	60
015	6	–25	–25	–25	–25	–20	–15
	4	–25	–25	–25	–20.6	–18	–15
	2	–18	–15	–12.2	–5	–2	0
020	4	–	–	–	–16	–11	–6
	2	–	–	–	–13	–8	–5
025-030 035	2	–34	–29	–25	–17	–13	–9
	4	–	–34	–30	–22	–17	–13
	6	–	–	–	–26	–21	–15

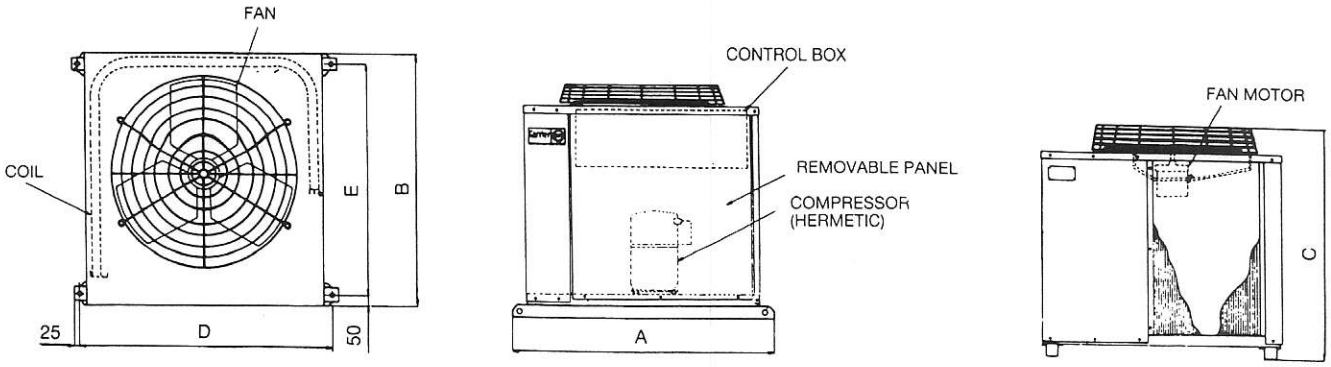
* Minimum suction temperatures which ensure adequate motor cooling at various stages of unloading are based on nominal voltage conditions. Increase the limits by 1.8°C for each percent voltage increase at the motor terminals.
Operating limits : The operating limits with refrigerant R-22 are –25°C to 12°C SST for sizes 009, 013 and 015 and –16°C to 12°C for others. The minimum outdoor operating temperature based on a saturated suction temperature (SST) of 0° is 15° for sizes 009 and 7°C for sizes 013 to 035. The minimum outdoor operating temperature for units equipped with Motormaster control is –20°C.
Note : Contact the factory for applications outside of standard rating limits.

MAXIMUM ALLOWABLE REFRIGERANT LINE LIFT**

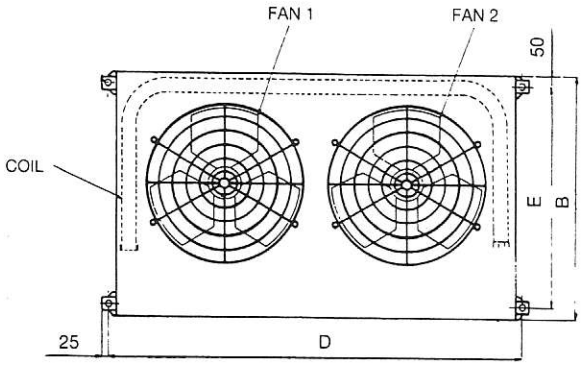
38AG	009	013	015	020	025/030	035
m	13.7	20.4	25.0	25.6	19.5	14.0

Note :
** Based on a 1°C liquid line temperature loss and 48 kPa pressure loss.

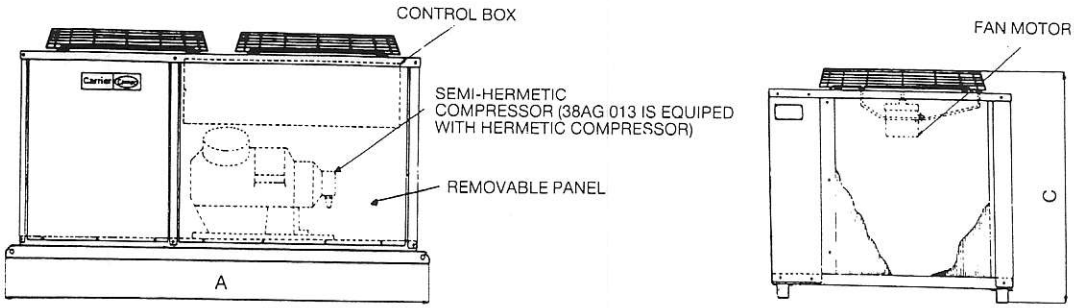
DIMENSIONS 38AG 009



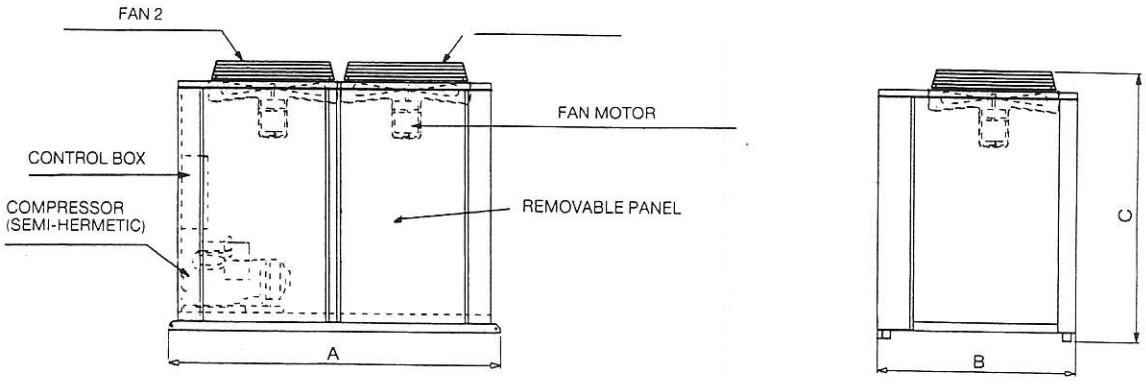
DIMENSIONS 38AG 013, 015, 020,025

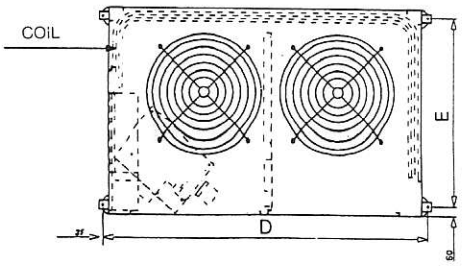


38AG	Dimensions (mm)				
	A	B	C	D	E
009	1200	1090	1030	1150	990
013	1950	1085	1280	1925	986
015	1950	1085	1280	1925	986
020-025	2100	1185	1280	2050	1085
030-035	2249	1343	1747	2199	1223



DIMENSIONS 38AG 030, 035





Notes (all units) :

1. Service and air flow clearances required :
   Front – 1200 mm - Control box panel.
   End and sides – 1000 mm
   Top – 1800 mm
2. All dimensions are in mm.

Caution : Never use these sketches to prepare final drawings for project, always refered to dimensional drawing 99DI.

SELECTION PROCEDURE

For the proposed applications, determine the following :

1. Total capacity required.
2. Saturated suction temperature.
3. Temperature of air entering condenser.

Enter the appropriate condensing unit capacity table at temperature of air entering condenser. Look for total capacity required at or near the saturated suction temperature. (intermediate temperatures must be determined by interpolation). Select the unit that will meet all the required conditions.

Exemple (SI Metric Units)

Cooling load	39.0 kW
Saturated suction temperature (SST) at compressor	8°C
Temperature of air entering condenser	35°C

Entering SI Metric capacity tables at 35°C to determine which unit meets the required cooling capacity. A 38AG 013 has a cooling capacity of 39.6 kW at 8°C SST. The compressor motor power input is 13.1 kW, and the saturated condensing temperature is 52.0°C.

UNIT RATINGS (SI)

38AG 009

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			50		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
-20	–	–	–	9.3	31	4.3	8.2	36	4.3	7.1	40	4.2	–	–	–	–	–	–	–	–	–
-16	–	–	–	11.7	32	4.8	10.4	37	4.9	9.2	41	4.9	8.0	46	4.8	–	–	–	–	–	–
-12	–	–	–	14.3	34	5.3	12.9	38	5.4	11.6	43	5.5	10.3	47	5.5	9.05	51	5.5	–	–	–
-8	18.6	31	5.6	17.2	35	5.8	15.7	40	6.0	14.3	44	6.1	12.9	48	6.2	11.5	53	6.3	10.1	57	6.2
-4	21.9	32	6.1	20.3	37	6.3	18.8	41	6.6	17.2	46	6.8	15.7	50	6.9	14.1	54	7.1	12.6	59	7.1
0	25.5	34	6.6	23.8	38	6.9	22.1	43	7.2	20.4	47	7.4	18.7	52	7.7	17.7	56	7.9	15.4	60	8.0
4	29.4	36	7.1	27.6	40	7.5	25.8	45	7.8	23.9	49	8.1	22.1	53	8.4	20.4	58	8.7	18.4	62	8.8
8	33.7	38	7.7	31.7	42	8.1	29.7	47	8.5	27.7	51	8.8	25.7	55	9.2	23.9	59	9.5	–	–	–
10	35.9	39	8.1	33.8	43	8.4	31.7	48	8.8	29.7	52	9.2	27.6	56	9.5	25.8	60	9.9	–	–	–
12	38.2	40	8.4	36.0	45	8.8	33.9	49	9.2	31.7	53	9.6	29.5	57	9.9	–	–	–	–	–	–

38AG 013

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			50		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
-20	15.5	27	6.3	14.1	32	6.5	12.6	36	6.5	11.2	41	6.5	9.7	45	6.4	–	–	–	–	–	–
-16	18.9	28	7.0	17.4	33	7.2	15.8	38	7.3	14.2	42	7.4	12.6	47	7.4	–	–	–	–	–	–
-12	22.6	30	7.6	21.0	34	7.9	19.3	39	8.1	17.6	43	8.3	15.8	48	8.4	14.8	52	8.4	12.4	57	8.3
-8	26.7	31	8.3	25.0	36	8.7	23.1	40	9.0	21.2	45	9.2	19.4	49	9.4	18.3	54	9.5	15.6	58	9.5
-4	31.2	33	9.0	29.3	37	9.4	27.3	42	9.8	25.3	46	10.1	23.3	51	10.4	21.3	55	10.6	19.2	60	10.7
0	36.1	35	9.8	34.0	39	10.2	31.9	44	10.7	29.7	48	11.1	27.5	53	11.4	25.5	57	11.7	23.1	61	11.9
4	41.5	37	10.6	39.1	41	11.1	36.8	46	11.6	34.4	50	12.0	32.1	54	12.5	30	59	12.9	–	–	–
8	47.2	39	11.4	44.7	43	12.0	42.1	48	12.5	39.6	52	13.1	37.0	56	13.6	34.8	60	14.1	–	–	–
10	50.2	40	11.9	47.6	44	12.5	44.9	49	13.1	42.3	53	13.6	39.6	57	14.1	37.3	61	14.7	–	–	–
12	53.3	41	12.4	50.6	45	13.0	47.8	50	13.6	45.0	54	14.2	42.2	58	14.7	–	–	–	–	–	–

38AG 015

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			50		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
-20	20.1	27	7.1	18.8	32	7.4	17.5	36	7.6	16.2	41	7.8	14.9	46	7.9	13.8	50	8.0	12.4	55	8.1
-16	24.0	28	7.7	22.5	33	8.0	21.0	37	8.4	19.6	42	8.6	18.1	47	8.8	16.8	51	9.0	15.3	56	9.1
-12	28.5	29	8.2	26.8	34	8.7	25.1	39	9.1	23.4	43	9.5	21.7	48	9.8	20.3	53	10.0	18.5	57	10.2
-8	33.4	31	8.8	31.5	35	9.4	29.5	40	9.9	27.7	45	10.3	25.8	49	10.7	24.2	54	11.1	22.2	58	11.3
-4	38.8	32	9.3	36.7	37	10.0	34.5	41	10.6	32.4	46	11.1	30.3	50	11.6	28.6	55	12.1	26.2	60	12.4
0	44.8	34	9.8	42.4	38	10.6	40.0	43	11.3	37.7	47	12.0	35.3	52	12.6	33.4	56	13.2	30.7	61	13.6
4	51.4	35	10.3	48.7	40	11.2	46.0	44	12.0	43.4	49	12.8	40.8	53	13.5	38.7	58	14.3	35.6	63	14.7
8	58.5	37	10.7	55.5	42	11.8	52.6	46	12.7	49.6	51	13.6	46.7	55	14.5	44.4	60	15.4	40.9	64	15.9
10	62.3	38	11.0	59.2	43	12.1	56.0	47	13.1	52.9	52	14.0	49.9	56	14.9	47.5	60	15.9	–	–	–
12	66.3	39	11.2	62.9	44	12.3	59.6	48	13.4	56.4	53	14.5	53.1	57	15.4	50.7	61	16.4	–	–	–

SST – Compressor saturated suction temperature (°C).
CAP – Capacity (kW).
SCT – Saturated temperature entering the condenser (°C).
kW – Compressor power input (kW).

38AG 020

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			50		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
−16	31.3	27	9.8	29.3	31	10.3	27.4	36	10.8	25.6	41	11.2	23.8	46	11.6	22.3	51	12.0	20.3	55	12.2
−12	37.1	28	10.5	34.9	32	11.1	32.7	37	11.7	30.6	42	12.2	28.5	47	12.6	26.9	51	13.1	24.5	56	13.4
−8	43.6	29	11.2	41.1	34	11.9	38.6	38	12.6	36.2	43	13.2	33.8	48	13.7	31.8	52	14.3	29.2	57	14.7
−4	50.9	30	11.9	48.0	35	12.7	45.2	39	13.5	42.5	44	14.2	39.8	49	14.8	37.6	53	15.6	34.5	58	16.0
0	59.0	32	12.5	55.8	36	13.5	52.6	41	14.3	49.4	45	15.2	46.4	50	16.0	44	55	16.8	40.4	59	17.4
4	67.9	33	13.2	64.3	38	14.2	60.7	42	15.2	57.1	47	16.2	53.7	51	17.1	51	56	18.1	46.9	61	18.8
8	77.6	35	13.8	73.6	39	15.0	69.6	44	16.1	65.6	48	17.2	61.8	53	18.2	58.8	57	19.4	54.1	62	20.2
10	82.8	35	14.1	78.5	40	15.4	74.3	45	16.6	70.1	49	17.7	66.1	54	18.8	62.9	58	20.1	58.0	63	20.9
12	88.2	36	14.4	83.7	41	15.7	79.2	45	17.0	74.8	50	18.2	70.5	54	19.4	67.2	59	20.7	62.0	63	21.6

38AG 025

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			48		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
−16	38.8	31	13.1	36.1	36	13.7	33.5	40	14.1	30.9	45	14.5	28.5	49–	14.7	25.9	53	14.9	24.5	56	15.0
−12	46.0	33	14.4	42.9	37	15.0	39.9	42	15.6	37.0	46	16.1	34.2	51	16.5	31.3	55	16.7	29.7	57	16.8
−8	53.9	35	15.7	50.4	39	16.4	47.0	44	17.1	43.7	48	17.8	40.6	52	18.3	37.3	56	18.6	35.5	59	18.8
−4	62.6	37	17.0	58.7	41	17.9	54.9	46	18.8	51.2	50	19.5	47.6	54	20.2	44.0	58	20.6	41.9	61	20.9
0	72.1	39	18.4	67.7	44	19.5	63.5	48	20.4	59.3	52	21.3	55.3	56	22.1	51.2	60	22.6	49.0	62	23.0
4	82.3	42	19.8	77.5	46	21.1	72.8	50	22.2	68.2	54	23.3	63.7	59	24.2	59.2	62	24.8	–	–	–
6	87.8	43	20.5	82.6	47	21.9	77.7	51	23.1	72.8	56	24.2	68.1	60	25.3	–	–	–	–	–	–
8	93.4	44	21.3	88.0	49	22.7	82.8	53	24.1	77.7	57	25.3	72.7	61	26.4	–	–	–	–	–	–
10	99.1	46	22.1	93.5	50	23.6	88.1	54	25.0	82.6	58	26.3	77.4	62	27.5	–	–	–	–	–	–
12	105.1	47	22.9	99.2	51	24.5	93.5	55	26.0	87.9	59	27.3	–	–	–	–	–	–	–	–	–

38AG 030

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			48		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
−16	44.7	30	15.2	41.7	34	15.7	38.6	39	16.1	35.5	44	16.4	32.4	48	16.5	29.3	53	16.4	27.4	55	16.3
−12	52.9	32	16.5	49.6	36	17.2	46.2	41	17.8	42.8	45	18.2	39.4	50	18.5	36.0	54	18.6	34.0	57	18.6
−8	61.9	33	17.8	58.3	38	18.7	54.6	42	19.5	50.8	47	20.1	47.1	51	20.6	43.3	56	20.9	41.1	58	21.0
−4	71.8	35	19.2	67.8	40	20.3	63.7	44	21.2	59.6	49	22.0	55.5	53	22.7	51.4	57	23.2	49.0	60	23.5
0	82.5	37	20.5	78.1	42	21.8	73.6	46	23.0	69.2	50	24.0	64.7	55	24.9	60.2	59	25.6	57.5	62	25.9
4	94.2	39	21.9	89.3	44	23.4	84.4	48	24.8	79.5	52	26.0	74.5	57	27.1	69.6	61	28.0	66.6	64	28.5
6	100.3	40	22.6	95.2	45	24.2	90.1	49	25.7	84.9	54	27.0	79.8	58	28.2	74.6	62	29.2	–	–	–
8	106.6	42	23.3	101.3	46	25.0	95.9	50	26.6	90.6	55	28.0	85.2	59	29.3	79.7	63	30.5	–	–	–
10	113.2	43	24.0	107.6	47	25.8	102.0	52	27.5	96.4	56	29.1	90.7	60	30.5	85.1	64	31.7	–	–	–
12	120.0	44	24.7	114.1	48	26.7	108.3	53	28.5	102.4	57	30.1	96.5	61	31.7	–	–	–	–	–	–

38AG 035

	Temperature air entering condenser (°C)																			
	20			25			30			35			40			45			48		
SST	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW	CAP	SCT	kW
−16	57.8	31	20.2	54.5	35	20.9	51.1	40	21.5	47.9	44	22.0	44.7	49	22.5	41.6	54	22.8	39.7	56	23.0
−12	67.8	32	22.0	64.1	37	22.9	60.3	41	23.7	56.6	46	24.3	52.9	50	24.3	49.4	55	25.4	47.2	58	25.7
−8	79.0	34	23.9	74.6	39	25.0	70.4	43	25.9	66.2	48	26.8	62.1	52	27.5	58.0	57	28.1	55.6	59	28.5
−4	91.2	36	25.9	86.3	40	27.1	81.5	45	28.3	76.7	49	29.3	72.1	54	30.2	67.5	58	31.0	64.8	61	31.5
0	104.5	38	27.9	99.0	42	29.4	93.6	47	30.8	88.3	51	32.0	83.1	56	33.1	77.9	60	34.1	–	–	–
4	118.9	40	30.1	112.8	45	31.8	106.8	49	33.4	100.8	53	34.8	95.0	58	36.1	89.2	62	37.3	–	–	–
6	126.5	42	31.2	120.1	46	33.0	113.7	50	34.7	107.5	55	36.2	101.3	59	37.7	–	–	–	–	–	–
8	134.4	43	32.3	127.7	47	34.3	121.0	51	36.1	114.3	56	37.7	107.8	60	39.3	–	–	–	–	–	–
10	142.6	44	33.5	135.5	48	35.6	128.4	53	37.5	121.4	57	39.3	114.5	61	40.9	–	–	–	–	–	–
12	151.1	45	34.7	143.5	50	36.9	136.1	54	38.9	128.8	58	40.8	121.5	62	42.6	–	–	–	–	–	–

Legend :

SST – Compressor saturated suction temperature (°C).
CAP – Capacity (kW).
SCT – Saturated temperature entering the condenser (°C)
kW – Compressor power input (kW).

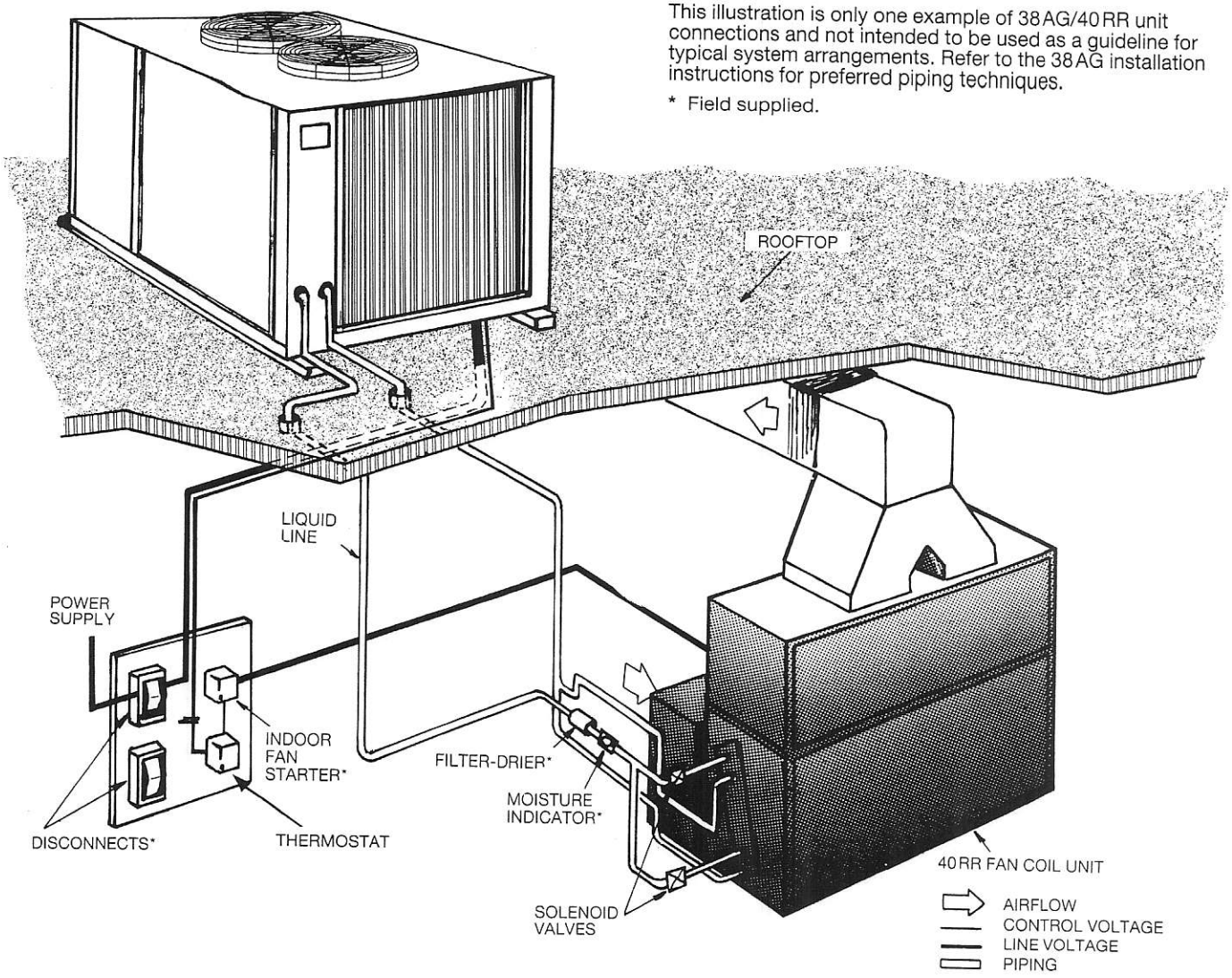
TYPICAL PIPING AND WIRING

38AG
CONDENSING UNIT

Notes :

This illustration is only one example of 38AG/40RR unit connections and not intended to be used as a guideline for typical system arrangements. Refer to the 38AG installation instructions for preferred piping techniques.

* Field supplied.



GUIDE SPECIFICATION

Furnish and install ..... 38AG air cooled condensing units. The unit(s) will be supplied fully assembled, fully wired and designed for use with refrigerant R-22.

Total cooling capacity shall be ..... with saturated suction temperature (SST) of ..... and temperature of air entering condenser (OAT) of ..... .

Compressor shall be hermetic (38AG 009-013) or semi-hermetic (38AG 015 to 035). Compressors shall be fitted with vibration isolators. Compressor power input shall not exceed ..... kW at specified operating conditions.

Condenser coil shall be constructed with aluminium plate fins mechanically bonded to non-ferrous tubing. Condenser fan(s) shall be direct driven propeller type and arrangement for vertical air discharge. Fan motor(s) shall be factory lubricated and inherently protected.

Controls shall be factory wired and placed in a convenient and readily accessible location. Control box equipment will include all necessary electrical components for starting and security of fan and compressor motors, high and low pressure switches.

Dimensions – the entire unit shall have a width of not more than ....., a depth of not more than ....., and overall height of not more ..... .

Accessories shall include : electric or pressostatic cylinder bank unloaders (according to size), remote control unit, coil protection grilles, mounting legs, evaporator anti-freeze thermostat, solenoid valve and relay (020-035) winter start (009-015), remote control transformer/relay package (009-015), oil pressure safety switch (015), Motormaster control.

Carrier s.a.

Carrier

Subsidiary of Carrier Corporation

BP 6 - Route de Thil
01120 Montluel France
Phone : 72 01 36 36
Telex : 900386
Telefax : 78 06 23 45

Printed in France

13876 - 76, 12-89 — Supersedes Order N° : 13876 - 76, 05-87