



Quality Management System Approval

38RA 040-160

Nominal cooling capacity 40-151 kW

The new generation of 38RA condensing units features the latest technological innovations: Scroll compressors, low-noise fans made of a composite material, microprocessor control and ecological refrigerant HFC-407C. The 38RA units include all refrigeration and control components for quick connection to a direct expansion air-handling unit.

Features

- The 38RA units are equipped with the revolutionary second-generation Flying Bird fan. This is exceptionally quiet, and does not generate the low-frequency noise, irritating to the human ear. At part load or low outdoor temperatures the fan automatically switches to the low speed. To reduce the operating noise even further, the fan is not fixed to the top unit panel, but supported by an extremely rigid tower chassis. This innovative mounting method prevents the transmission of vibrations to the unit casing and results in a more aesthetic flat top panel.
- The scroll compressors run extremely quietly and vibration-free. They are well known for their durability and reliability. The motor is cooled by suction gas. An internal safety device allows reverse rotation due to incorrect wiring, without impairing compressor operation. In addition these compressors need no maintenance. The use of two compressors per circuit (except size 38RA 040) permits a reduction of the start-up current and of the power input at part load.
- The ecological refrigerant HFC-407C has no effect on the ozone layer, and is the replacement for R-22 in air conditioning applications with small and medium capacities. It has been extensively tested by Carrier and offers the same reliability and even slightly superior performances to those of R-22.
- The refrigerant circuit includes all components for easy connection to a direct-expansion air handling unit: filter drier, moisture sight glass, high and low pressure switch, as well as solenoid valves for pumpdown (to be installed on the evaporator). All pipes and the refrigeration components are welded. The capillaries, a source of leaks in the past, have been replaced. From size 38RA 090 onwards, two independent refrigerant circuits ensure partial cooling capacity in all circumstances, and more flexible operation at part load.
- The 38RA units are designed for year-round operation, and operate without the use of accessories down to -10°C. A control algorithm intelligently manages operation of the fans.
- Electrical connections are simplified, and the standard 38RA units include a main switch, and a single entry point for the three-phase without neutral power supply serves the whole unit.

- The control circuit of the 38RA units is equipped with a standard low-voltage transformer (24 V). This transformer can also supply the other electrical components of the air conditioning system: ambient thermostat, pumpdown solenoid valves, indoor unit fan.
- Large panels, removable without tools, and the hinged door of the control box ensure perfect accessibility and permit easy access to the components.
- Head pressure control, based on the fan speed.
- Solenoid valve control for evaporator pumpdown (valves supplied as a kit with the unit).
- The system also monitors all condensing unit safety devices and signals any anomaly on the ambient thermostat.

PRO-DIALOG Plus control

- The 38RA condensing unit is controlled by the PRO-DIALOG Plus control board, connected to a low-voltage Carrier TSTAT ambient thermostat (available as an accessory).

PRO-DIALOG Plus control ensures:

- Compressor operating control: balancing of operating times and number of start-ups, short-cycle protection, minimum operating time to ensure oil return to the compressor.

Carrier thermostats

- The electronic ambient thermostats TSTAT (accessory) permit remote control of the 38RA condensing units. They are available as programmable and non-programmable thermostats.



Programmable TSTAT thermostat

Options and accessories

	Option	Accessory
Condenser anti-corrosion pre-treatment for light marine and urban applications	x	
Condenser post-assembly corrosion treatment for heavy-duty rural, urban and industrial applications	x	
Electronic compressor starter for reduction of start-up current (38RA 040-080)	x	
Programmable or non-programmable electronic thermostat		x

Physical data

38RA		040	050	060	070	080	090	100	120	140	160
Net nominal cooling capacity*	kW	39.9	49.5	58.0	68.0	77.0	87.0	95.0	114.0	133.0	151.0
Operating weight (unit supplied with nitrogen holding charge)	kg	479	572	590	601	625	1100	1108	1136	1202	1250
Compressors	Hermetic scroll compressor, 48.3 r/s										
Quantity, circuit A		1	2	2	2		1	1	2	2	2
Quantity, circuit B		-	-	-	-	-	2	2	2	2	2
No. of capacity steps		1	2	2	2	2	2	2	2	2	2
Minimum capacity	%	100	46	39	50	50	44	40	50	50	50
Control type	PRO-DIALOG Plus										
Air heat exchanger	Grooved copper tubes, aluminium fins										
Fans	Axial Flying Bird 2 fans with rotating shroud										
Quantity		1	1	1	1	1	2	2	2	2	2
Total air flow (high speed)	l/s	3870	3660	4080	5600	5600	7350	7950	8160	11200	11200
Speed (high/low speed)	r/s	11.5/5.8	11.5/5.8	11.5/5.8	15.6/7.8	15.6/7.8	11.5/5.8	11.5/5.8	11.5/5.8	15.6/7.8	15.6/7.8
Refrigerant connections	in										
Suction line diameter		1-5/8	1-5/8	1-5/8	1-5/8	2-1/8	1-5/8	1-5/8	1-5/8	1-5/8	2-1/8
Liquid line diameter		7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8

* Net nominal cooling capacity based on nominal conditions = saturated suction temperature (dew point) = 5°C, suction superheat = 5 K, sub-cooling = 8.3 K, outdoor air temperature 35°C.

Electrical data

38RA		040	050	060	070	080	090	100	120	140	160
Power circuit											
Nominal power supply	V-ph-Hz	400-3-50									
Voltage range	V	360-440									
Control circuit supply		The control circuit is supplied via the unit-mounted transformer									
Maximum unit power input*	kW	19.2	23.5	27.8	32.8	38.6	42.7	47.0	55.6	65.6	77.2
Nominal unit current draw**	A	27.9	33.5	40.1	48.9	54.1	61.4	68.0	88.1	97.8	108.1
Maximum unit current draw***	A	36.6	45.0	52.5	62.3	71.2	81.6	89.0	104.8	124.5	142.3
Maximum unit current draw****	A	32.9	40.5	47.2	56.1	64.1	73.4	80.1	94.3	112.1	128.1
Maximum start-up current											
Standard unit†	A	178	151	156	166	210	218	226	204	223	273
With electronic starter control‡	A	117	106	109	119	148	-	-	-	-	-

* Power input of the compressor(s) + fan(s) at maximum operating conditions for each unit: saturated suction temperature = 10°C and maximum air entering temperature of 45°C ± 1 K depending on the unit, and 400 V nominal voltage (values given on the unit name plate).

** Nominal unit current draw at nominal conditions: saturated suction temperature (dew point) = 5°C, suction superheat = 5 K, sub-cooling = 8.3 K, outdoor air temperature 35°C. The current values are given at 400 V nominal voltage.

*** Maximum unit operating current at maximum unit power input and 360 V.

**** Maximum unit operating current at maximum unit power input and 400 V (values given on the unit name plate).

† Maximum instantaneous starting current at 400 V nominal voltage with direct compressor starting (maximum operating current of the smallest compressor(s) + fan current + locked rotor current of the largest compressor).

‡ Maximum instantaneous starting current at 400 V nominal voltage and with compressor with electronic starter (maximum operating current of the smallest compressor(s) + fan current + reduced start-up current of the largest compressor).

Sound levels

38RA	040	050	060	070	080	090	100	120	140	160
Sound power level, dB(A) 10⁻¹² W	82	82	82	86	87	85	85	85	89	90

According to ISO standard 3744 or ISO 9614-1 and Eurovent 8/1.

Electrical data notes:

- 38RA 040-160 units have a single power connection point.
- The control box includes the following standard features:
 - starter and motor protection devices for each compressor and the fan(s)
 - the control devices
- Field connections:

All connections to the system and the electrical installations must be in full accordance with all applicable local codes.
- The Carrier 38RA units are designed and built to ensure conformance with these codes. The recommendations of European standard EN 60204-1 (corresponds to IEC 60204-1) (machine safety - electrical machine components - part 1: general regulations) are specifically taken into account, when designing the electrical equipment.

NOTES:

- Generally the recommendations of IEC 60364 are accepted as compliance with the requirements of the installation directives. Conformance with EN 60204-1 is the best means of ensuring compliance with the Machines Directive § 1.5.1.
 - Annex B of EN 60204-1 describes the electrical characteristics used for the operation of the machines.
1. The operating environment for the 38RA units is specified below:
- a. Environment* - Environment as classified in EN 60721 (corresponds to IEC 60721):

- outdoor installation*
 - ambient temperature range: -10°C to $+45^{\circ}\text{C} \pm 1\text{ K}$, class 4K3*
 - altitude: $\leq 2000\text{ m}$
 - presence of hard solids, class 4S2 (no significant dust present)
 - presence of corrosive and polluting substances, class 4C2 (negligible)
 - vibration and shock, class 4M2
- a. Competence of personnel, class BA4* (trained personnel - IEC 60364)
2. Power supply frequency variation: $\pm 2\text{ Hz}$.
 3. The neutral (N) conductor must not be connected directly to the unit (if necessary use transformers)
 4. Over-current protection of the power supply conductors is not provided with the unit.
 5. The factory-installed disconnect switches/circuit breakers are of a type that is suitable to interrupt the power in accordance with EN60947-3 (corresponds to IEC 60947-3).
 6. The units are designed for connection to TN networks (IEC 60364). For IT networks the earth connection must not be at the network earth. Provide a local earth, consult competent local organisations to complete the electrical installation.

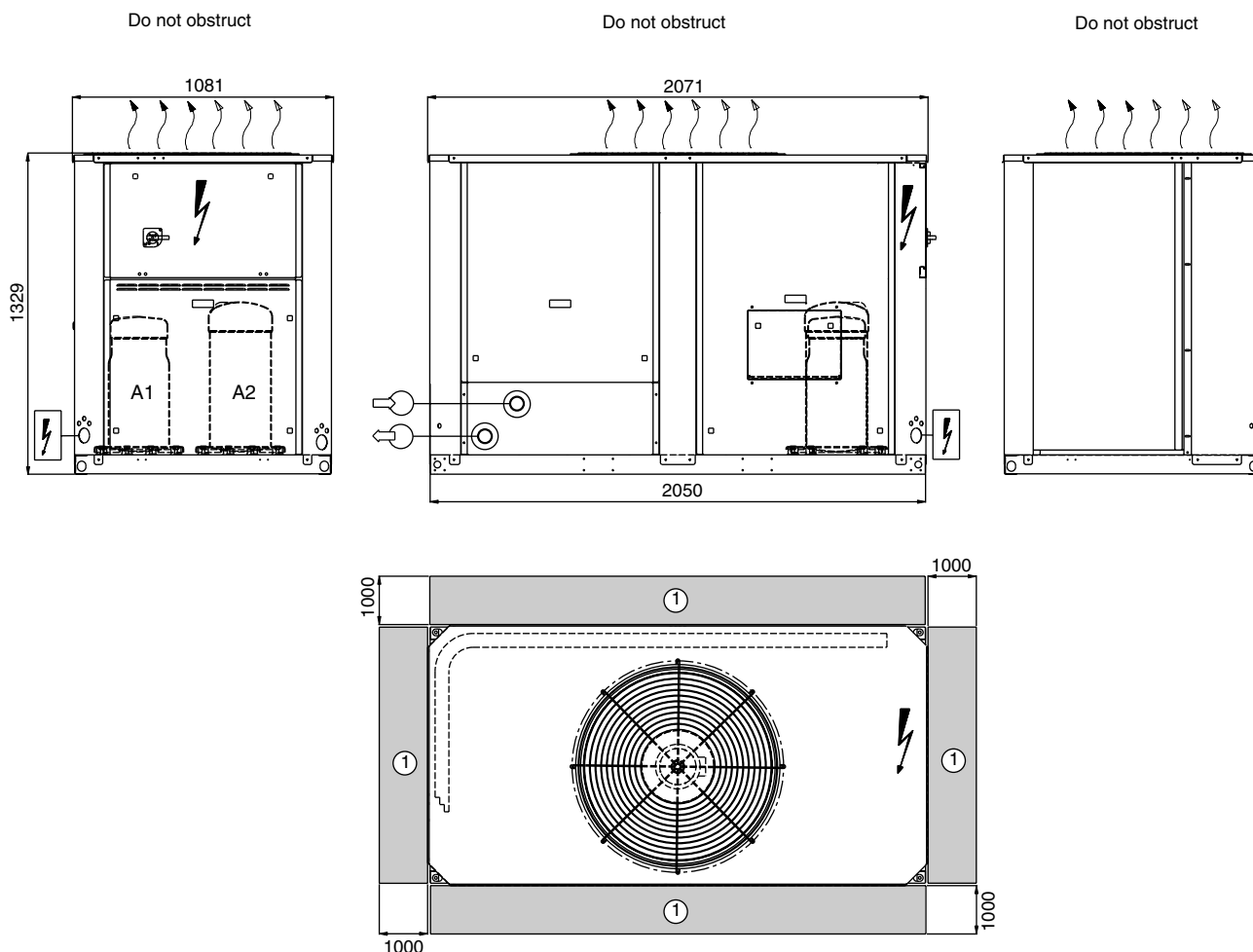
NOTE:

If particular aspects of an actual installation do not conform to the conditions described above, or if there are other conditions which should be considered, always contact your local Carrier representative.

* The required protection level for this class is IP43BW (according to reference document IEC 60529). All 38RA units are protected to IP45CW and fulfil this protection condition.

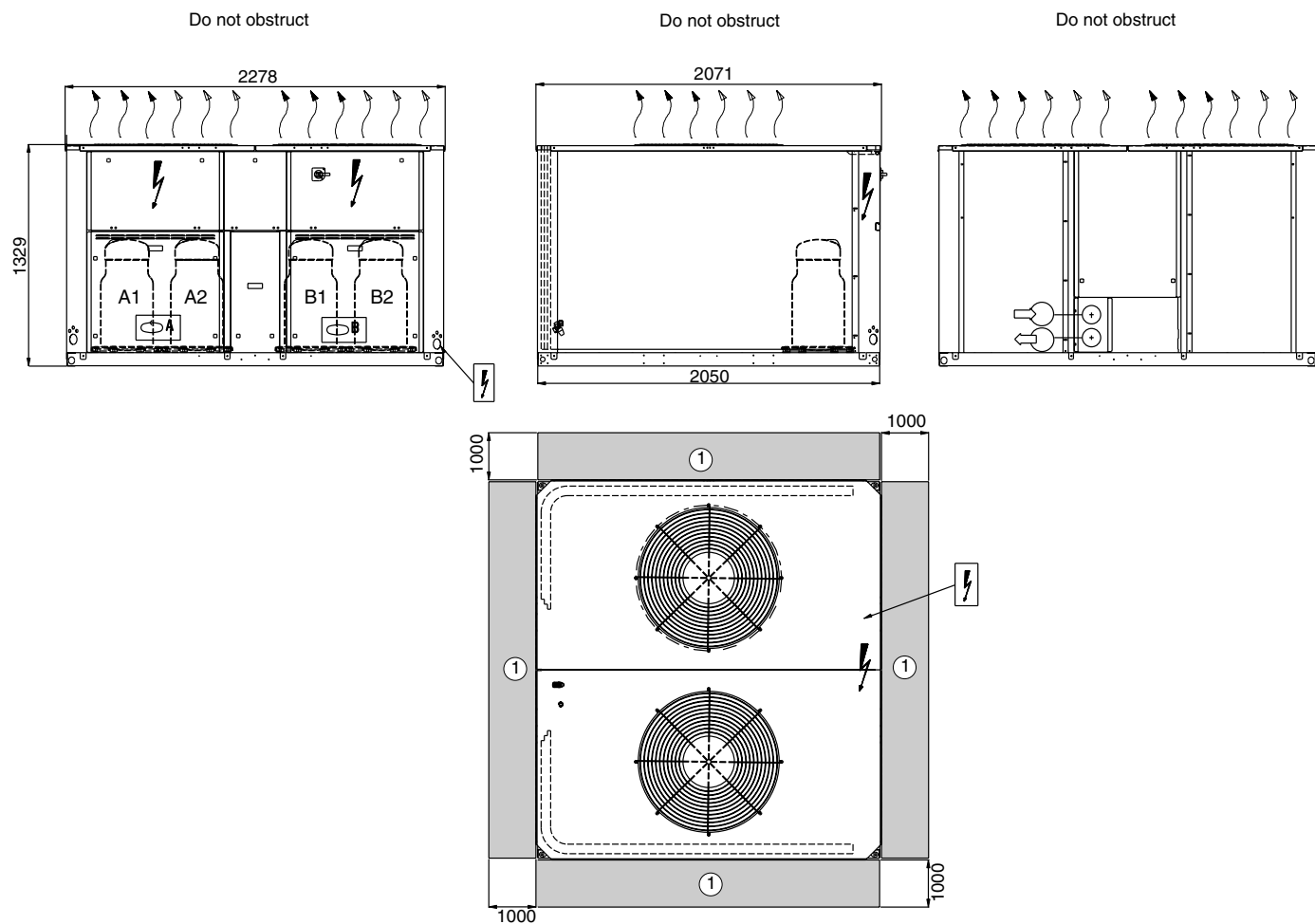
Dimensions/clearances

38RA 040-080



Dimensions/clearances

38RA 090-160



Legend:

All dimensions are given in mm.

-  Power supply
-  Refrigerant inlet
-  Refrigerant outlet
-  Required clearances for maintenance
-  Air outlet, do not obstruct
-  Power cable entry

NOTE:

Non-contractual drawings. For a specific installation, consult the certified dimensional drawings, available on request.

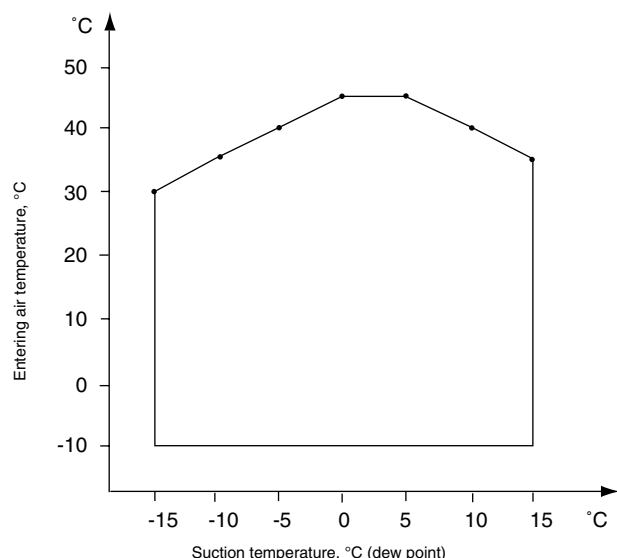
Cooling capacities

38RA Entering air temperature, °C																			
	h _g °C	20			25			30			35			40			45		
		CAP kW	COMP kW	UNIT kW	CAP kW	COMP kW	UNIT kW	CAP kW	COMP kW	UNIT kW	CAP kW	COMP kW	UNIT kW	CAP kW	COMP kW	UNIT kW	CAP kW	COMP kW	UNIT kW
040	-15	21.8	8.11	9.31	20.6	9.24	10.4	19.3	10.4	11.6	-	-	-	-	-	-	-	-	-
050		26.3	10.2	11.4	24.7	11.4	12.6	23.1	12.7	13.9	-	-	-	-	-	-	-	-	-
060		31.8	12.5	13.7	29.8	14.1	15.3	27.9	15.8	17	-	-	-	-	-	-	-	-	-
070		37.2	14.2	16.8	35.1	16.1	18.7	32.9	17.9	20.5	-	-	-	-	-	-	-	-	-
080		43.1	16.2	18.8	40.6	18.6	21.2	38	20.9	23.5	-	-	-	-	-	-	-	-	-
090		47	18.8	21.2	44.2	21.2	23.6	41.4	23.6	26	-	-	-	-	-	-	-	-	-
100		52	21.1	23.5	49.2	24	26.4	46.1	26.8	29.2	-	-	-	-	-	-	-	-	-
120		63	25	28.8	60	28.5	32.3	56	32.1	35.9	-	-	-	-	-	-	-	-	-
140	-10	73	29.2	34.4	68	32.9	38.1	64	36.7	41.9	-	-	-	-	-	-	-	-	-
160		84	33.3	38.5	79	38.1	43.3	74	42.8	48	-	-	-	-	-	-	-	-	-
040		26.9	8.4	9.6	25.4	9.56	10.8	23.9	10.7	11.9	22.4	11.9	13.1	-	-	-	-	-	-
050		33.1	10.4	11.6	31.1	11.7	12.9	29.2	13	14.2	27.2	14.3	15.5	-	-	-	-	-	-
060		38.9	12.9	14.1	36.7	14.6	15.8	34.4	16.3	17.5	32.1	18	19.2	-	-	-	-	-	-
070		46.2	14.8	17.4	43.6	16.7	19.3	41.1	18.6	21.2	38.5	20.5	23.1	-	-	-	-	-	-
080		53	17.1	19.7	50	19.5	22.1	47	21.9	24.5	44	24.3	26.9	-	-	-	-	-	-
090		58	19.3	21.7	55	21.8	24.2	52	24.4	26.8	48.5	26.9	29.3	-	-	-	-	-	-
100	-5	64	21.8	24.2	61	24.8	27.2	57	27.7	30.1	53	30.6	33	-	-	-	-	-	-
120		78	26.2	30	74	29.8	33.6	69	33.5	37.3	65	37.1	40.9	-	-	-	-	-	-
140		90	30.5	35.7	85	34.3	39.5	80	38.1	43.3	75	42	47.2	-	-	-	-	-	-
160		103	35.2	40.4	98	40	45.2	92	44.9	50	86	49.8	55	-	-	-	-	-	-
040		32.8	8.84	10	31	10	11.2	29.3	11.2	12.4	27.5	12.4	13.6	25.8	13.6	14.8	-	-	-
050		40.6	10.8	12	38.4	12.2	13.4	36.1	13.6	14.8	33.9	15	16.2	31.6	16.3	17.5	-	-	-
060		47.4	13.5	14.7	44.8	15.3	16.5	42.1	17	18.2	39.5	18.8	20	36.9	20.5	21.7	-	-	-
070		56	15.7	18.3	53	17.6	20.2	50	19.6	22.2	47.3	21.5	24.1	44.3	23.4	26	-	-	-
080	0	64	18.3	20.9	61	20.7	23.3	57	23.2	25.8	54	25.6	28.2	50	28	30.6	-	-	-
090		72	20.1	22.5	68	22.8	25.2	64	25.4	27.8	60	28.1	30.5	56	30.7	33.1	-	-	-
100		78	22.9	25.3	74	25.9	28.3	70	29	31.4	65	32	34.4	61	35	37.4	-	-	-
120		95	27.8	31.6	90	31.5	35.3	84	35.3	39.1	79	39	42.8	74	42.7	46.5	-	-	-
140		110	32.3	37.5	104	36.2	41.4	98	40.1	45.3	92	44.1	49.3	87	48	53	-	-	-
160		125	37.5	42.7	119	42.5	47.7	112	47.5	53	105	52	58	98	57	63	-	-	-
040		39.5	9.41	10.6	37.4	10.6	11.8	35.4	11.9	13.1	33.3	13.1	14.3	31.3	14.3	15.5	29.3	15.5	16.7
050		49.1	11.4	12.6	46.5	12.8	14	43.9	14.3	15.5	41.3	15.7	16.9	38.6	17.2	18.4	36	18.7	19.9
060	5	57	14.4	15.6	54	16.2	17.4	51	18	19.2	48.1	19.8	21	45	21.7	22.9	42	23.5	24.7
070		68	16.9	19.5	64	18.8	21.4	61	20.8	23.4	57	22.8	25.4	54	24.7	27.3	50	26.7	29.3
080		77	19.7	22.3	73	22.2	24.8	69	24.7	27.3	65	27.2	29.8	61	29.7	32.3	57	32.2	34.8
090		86	21.3	23.7	82	24.1	26.5	77	26.8	29.2	73	29.6	32	68	32.3	34.7	64	35.1	37.5
100		94	24.4	26.8	89	27.5	29.9	84	30.6	33	79	33.8	36.2	74	36.9	39.3	70	40	42.4
120		114	29.8	33.6	108	33.7	37.5	102	37.5	41.3	96	41.3	45.1	90	45.1	48.9	84	48.9	53
140		132	34.6	39.8	125	38.6	43.8	118	42.7	47.9	112	46.7	52	105	51	56	98	55	60
160		150	40.4	45.6	142	45.5	51	134	51	56	127	56	61	119	61	66	111	66	71
040	10	47	10.1	11.3	44.6	11.4	12.6	42.3	12.6	13.8	39.9	13.9	15.1	37.6	15.2	16.4	35.2	16.4	17.6
050		58	12.2	13.4	55	13.7	14.9	52	15.2	16.4	49.5	16.7	17.9	46.5	18.2	19.4	43.5	19.8	21
060		68	15.5	16.7	65	17.4	18.6	61	19.2	20.4	58	21.1	22.3	54	23	24.2	51	24.9	26.1
070		80	18.2	20.8	76	20.3	22.9	72	22.3	24.9	68	24.3	26.9	64	26.4	29	60	28.4	31
080		91	21.3	23.9	86	23.9	26.5	82	26.5	29.1	77	29	31.6	73	31.6	34.2	-	-	-
090		103	22.9	25.3	98	25.7	28.1	92	28.6	31	87	31.4	33.8	82	34.2	36.6	77	37.1	39.5
100		113	26.2	28.6	107	29.5	31.9	101	32.7	35.1	95	35.9	38.3	90	39.2	41.6	84	42.4	44.8
120		135	32.2	36	128	36.2	40	121	40.1	43.9	114	44	47.8	107	48	52	-	-	-
140	15	156	37.4	42.6	149	41.6	46.8	141	45.7	51	133	49.9	55	125	54	59	117	58	63
160		178	43.7	48.9	169	49	54	160	54	59	151	60	65	142	65	70	-	-	-
040		55	11	12.2	53	12.3	13.5	50	13.6	14.8	47.2	14.9	16.1	44.5	16.1	17.3	41.8	17.4	18.6
050		69	13.2	14.4	65	14.7	15.9	62	16.3	17.5	58	17.9	19.1	55	19.4	20.6	52	21	22.2
060		81	16.8	18	77	18.8	20	73	20.7	21.9	69	22.7	23.9	65	24.7	25.9	-	-	-
070		94	19.9	22.5	89	22	24.6	85	24.1	26.7	80	26.2	28.8	75	28.3	30.9	-	-	-
080		107	23.2	25.8	101	25.8	28.4	96	28.5	31.1	91	31.2	33.8	86	33.8	36.4	-	-	-
090		121	24.8	27.2	115	27.7	30.1	109	30.6	33	103	33.6	36	97	36.5	38.9	91	39.4	41.8
100	20	133	28.5	30.9	126	31.8	34.2	120	35.2	37.6	113	38.5	40.9	107	41.9	44.3	-	-	-
120		158	35	38.8	150	39.1	42.9	142	43.1	46.9	135	47.2	51	127	51	55	-	-	-
140		183	40.8	46	174	45.1	50	165	49.4	55	156	54	59	147	58	63	-	-	-
160		208	47.5	53	198	53	58	187	58	64	177	64	69	167	69	75	-	-	-
040		65	12	13.2	61	13.3	14.5	58	14.6	15.8	55	16	17.2	52	17.3	18.5	-	-	-
050		80	14.3	15.5	76	16	17.2	72	17.6	18.8	68	19.2	20.4	64	20.8	22	-	-	-
060		95	18.3	19.5	90	20.4	21.6	85	22.4	23.6	81	24.5	25.7	-	-	-	-	-	-
070		109	21.8	24.4	103	23.9	26.5	98	26.1	28.7	93	28.3	30.9	-	-	-	-	-	-
080	25	124	25.2	27.8	118	28	30.6	112	30.8	33.4	106	33.5	36.1	-	-	-	-	-	-
090		141	27	29.4	134	30	32.4	127	33	35.4	121	36	38.4	114	39.1	41.5	-	-	-
100		155	31.1	33.5	148	34.6	37	140	38	40.4	133	41.5	43.9	-	-	-	-	-	-
120		184	38.2	42	175	42.4	46.2	166	46.6	50	157	51	55	-	-	-	-	-	-
140		212	44.6	49.8	202	49.1	54	192	54	59	181	58	63	-	-	-	-	-	-
160		241	52	57	229	57	63	218	63	68	206	69	74	-	-	-	-	-	-

Legend:
SST - Saturated suction temperature (dew point), °C
 Sub-cooling = 8.3 K, superheat = 5 K
CAP kW - Cooling capacity
COMP kW - Compressor power input
UNIT kW - Unit power input (compressors, fans, control)

Operating limits

38RA Operating range



Evaporator coil selection

38RA 050-080 - The circuit of these units includes two compressors, operating in parallel. To ensure oil return to the compressors at low load, it may be necessary to split the evaporator coil into two independent circuits.

The table below gives the split in % of the cooling capacity for each evaporator circuit.

38RA	Evaporator circuit A1, %	Evaporator circuit A2, %
050	46	54
060	40	60
070	50	50
080	50	50

38RA 090-160 - These units have two independent refrigerant circuits, and the evaporator coil must be circuited with two independent circuits.

The table below gives the split in % of the cooling capacity for each evaporator circuit.

38RA	Evaporator circuit A, %	Evaporator circuit B, %
090	45	55
100	40	60
120	50	50
140	50	50
160	50	50

Guide specifications

Air-cooled condensing units
Nominal cooling capacity 40-151 kW
Carrier model: 38RA

Part 1 - General

System description

- Air-cooled condensing unit for outdoor installation, equipped with hermetic scroll compressors, low-noise axial fans, and a microprocessor control system. The units are designed to operate with HFC-407C refrigerant which has no effect on the ozone layer.

Quality assurance

- 38RA units comply with requirements of European directives:
 - machinery directive 98/37/CE, modified,
 - low voltage directive 73/23/EEC, modified.
 - electromagnetic compatibility directive 89/336/EEC, modified and with the applicable recommendations of European standards:
 - machine safety, electrical equipment in machines, general regulations: EN 60204-1,
 - radiated electromagnetic emissions: EN 50081-1,
 - conducted electromagnetic emissions: EN 50081-2,
 - electromagnetic immunity EN 50082-2.
- 38RA units have been designed and tested in a facility with a quality assurance system certified ISO 9001.
- 38RA units have been assembled in a facility with an environment management system certified ISO 14001.
- The published performances have been established in accordance with Eurovent standard.
- All units undergo a run test before shipment.

Part 2 - Products

Equipment

Compressors

- Hermetic scroll compressor with only three moving parts, 2-pole electric motor, cooled by suction gas with overload protection through an internal thermostat and/or thermal relay. Crankcase heater prevents the dilution of the oil by refrigerant. Oil level sight glass and polyolester synthetic oil charge.

Air heat exchanger/fan

- One (38RA 040-080) or two (38RA 090-160) vertical coils with slotted aluminium fins expanded into grooved copper tubes. Coil protection grille made of steel wire, coated in polyethylene.
- Low-noise axial Carrier Flying Bird fan with 11 blades and a rotating shroud, made of a composite material. Three-phase, two-speed motor (11.5/5.8 r/s or 15.6/7.8 r/s), insulation class F, protection category IP 55, overload protection by thermal relay. Vertical air flow with protection grille made of steel wire, coated in polyethylene.

Refrigerant circuit

- Each circuit includes: liquid line valve, moisture sight glass, filter drier, pressure and temperature sensors, manually reset high-pressure switch. All components of the refrigerant circuit are welded for total and lasting leak-tightness. Suction piping connections and leaving liquid line connections to be welded.
- Each unit is delivered with one or two low-voltage solenoid valves (24 V) for pumpdown to be installed on the evaporator entering liquid line.
 - 38RA 040: one solenoid valve
 - 38RA 050-080: two solenoid valves
 - 38RA 090-160: one solenoid valve for each refrigerant circuit
- The refrigerant circuit is tested under pressure at the factory, dehydrated and protected by a nitrogen holding charge.

Control and power circuit control box

- The control box is accessible via a hinged door. It includes a main disconnect switch, fuses and circuit breakers, compressor contactors, fans, thermal relays, a low-voltage control circuit transformer (24 V) and a Pro-Dialog control board. The whole unit is supplied by single-entry three-phase power supply without neutral.

Chassis/cabinet

- Chassis and cabinet made of galvanised sheet steel. Painted in oven-baked polyester powder paint in light grey colour (RAL 7035). Removable panels with 1/4 turn locks.

Pro-Dialog control system

Ensures the following functions:

Control

- Control of the cooling stages, based on the information transmitted by the ambient thermostat with equalising of compressor run time and number of start-ups. The system ensures complete prevention of excessive compressor cycling.
- Head pressure control by auto-adaptive algorithm (fan speed control).
- Pumpdown of the refrigerant circuit at shutdown and start-up.

Safety

- The system checks the evolution of the parameters (temperatures, pressures etc.), and responds to maintain the compressor within the operating range. If one parameter exceeds its limit value, the unit is switched off and a flashing alarm signal is generated. Each alarm can easily be identified by a specific flashing code. The following faults cause the refrigerant circuit or the unit to be shut down:
 - Low suction pressure
 - High discharge pressure
 - Low suction temperature
 - Electrical compressor overload
 - Reverse compressor rotation
 - Temperature sensor and pressure transducer fault
 - Board and loss of communication fault
 - Customer safety device tripping

Remote control of the condensing unit

- The condensing unit is remotely controlled by an ambient TSTAT thermostat. The thermostat permits:
 - Unit start/stop control (with or without time programming)
 - Selection of the operating mode: cooling, heating or automatic
 - Cooling and heating set point selection.



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Environmental Management System Approval

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