

# 38RA

## AIR-COOLED CONDENSING UNITS



### 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	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
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

\* 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	32.9	40.5	47.2	56.1	64.1	73.4	80.1	94.3	112.1	128.1
Maximum start-up current†	A	178	151	156	166	210	218	226	204	223	273

\* 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 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).

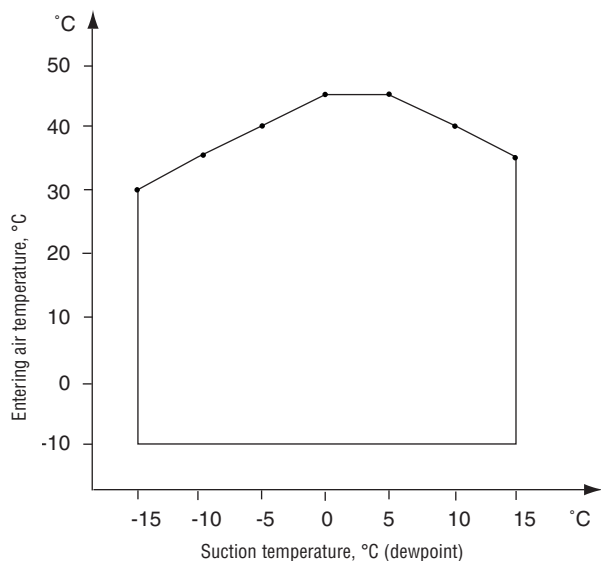
### Dimensions, mm

38RA	A	B	C
040-080	2071	1081	1329
090-160	2071	2278	1329



### Operating limits

#### 38RA Operating range





Programmable TSTAT thermostat

## FEATURES

- Ten sizes with nominal cooling capacities from 40 to 151 kW
- Units feature the latest technological innovations: scroll compressors, low-noise fans made of a composite material, microprocessor control and ozone-friendly refrigerant HFC-407C, and include all refrigeration and control components for quick connection to a direct-expansion airhandling unit.
- Equipped with the exceptionally quiet, revolutionary second-generation Flying Bird fan. The fan is not fixed to the top unit panel, but supported by an extremely rigid tower chassis to prevent transmission of vibrations to the unit casing.
- Scroll compressors run extremely quietly and vibration-free, and are very durable and reliable.
- 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. Two independent refrigerant circuits from size 38RA 090 onwards.
- Designed for year-round operation.
- Electrical connections are simplified.
- Large panels, removable without tools, and hinged door of the control box for easy access to all components.

## OPTIONS/ACCESSORIES

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