

PACKAGED ROOFTOP COOLING UNITS



Air treatment 50UA

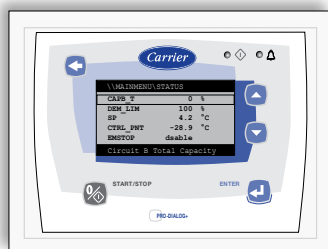
Options/accessories

- Electric heaters, various capacities*
- Hot-water coils, various capacities*
- Various coil protection options*
- Fresh-air slidding panel*
- Manual outdoor air damper*
- Economizer, thermostatic or enthalpy control, with or without CO₂ sensor control*
- Supply fan with various high static pressure options with or without soft starter*
- Standard supply fan with or without soft starter*
- Various filter options*
- Stainless steel drain pan*
- Energy recovery module*
- Various return/exhaust air options*
- Various temperature sensor options*
- CCN/JBus, Lon or BACnet gateways*
- Dirty filter detection*
- Supply air flow detection*
- Smoke detector*
- Fire thermostat*
- Duct connection fixing frame*
- Various packaging options*
- Vertical supply roof curb**
- Vertical supply roof curb with longitudinal adjustment**
- Vertical supply roof curb with transversal adjustment**
- Horizontal supply roof curb**
- Transition roof curb (French ERP)**
- Remote user interface (Pro-Dialog+)**

* Option ** Accessory

Features

- Seven sizes with nominal cooling capacities from 44 to 115 kW.
- 50UA units are packaged rooftop cooling units, available with additional heating options (hot-water coil or electric heaters).
- Versatile and efficient air conditioners, designed for outdoor installation.
- Self-contained, can be installed in commercial and industrial applications.
- Units use the ozone-friendly refrigerant R-410A that does not affect the ozone layer.
- Components are specifically designed for R-410A refrigerant.
- Reduced size and weight make these units ideal for today's lightweight building structures.
- Cabinet made of powder-painted sheet metal.
- Compressors are hermetic scroll compressors and mounted on vibration isolators.
- Crankcase heaters are standard for all units.
- Low-noise shrouded axial Flying Bird fans, made of composite plastic material.
- Heat exchangers made of high-quality staggered copper tubing, mechanically bonded into pre-coated corrugated aluminium fins.
- Leak-tight refrigerant circuits with brazed connections and reduced vibration levels. Access to pressure transducers and temperature sensors without losing charge.
- Units are fully wired in accordance with EN standards.
- Simplified electrical connections.



Pro-Dialog+ operator interface

Physical data

50UA		045	055	065	075	085	100	120
Nominal cooling capacity*	kW	44.1	50.9	61.1	71.5	88.9	102.5	114.5
Nominal power input, cooling	kW	14.4	17.9	21.2	27.0	28.7	34.2	40.3
EER	kW/kW	3.06	2.85	2.88	2.65	3.10	3.01	2.84
Operating weight	kg	815	955	1033	1043	1555	1645	1765
Refrigerant charge		R-410A						
Control		Pro-Dialog+						
Compressor		Hermetic scroll						
No. of circuits/No. of compressors		1/1	1/2	2/2	2/2	2/2	2/3	2/4
Indoor/outdoor coil		Copper tubes, aluminium fins						
Indoor fan and motor		One, centrifugal						
Air flow	l/s	2528	3444	3472	3944	5550	5550	5550
Outdoor fan and motor		Axial Flying Bird fans with rotating shroud, direct-drive motor						
Quantity ... air flow	l/s	1 ... 5400	2 ... 6700	2 ... 10100	2 ... 10100	2 ... 10300	2 ... 10600	2 ... 10600
Sound power level 10 ⁻¹² W**	dB(A)	86.5	84.4	90.6	90.6	90.7	91.0	91.3
Electric heaters								
Type		Option 84	Option 85	Option 85	Option 85	Option 86	Option 86	Option 86
Heating capacity	kW	27	36	36	36	54	54	54
Capacity steps		18 - 9	18 - 18	18 - 18	18 - 18	27 - 54	27 - 54	27 - 54
Rated current	A	39	52	52	52	78	78	78
Dimensions								
Length	mm	2125	2125	2125	2125	3581	3581	3581
Width	mm	2193	2193	2193	2193	2196	2196	2196
Height	mm	1413	1442	1796	1796	1825	1825	1825

* Nominal Eurovent conditions: outdoor air dry bulb temperature of 35°C, indoor air wet bulb temperature of 19°C.

** In accordance with ISO 961461 and certified by Eurovent. The values have been rounded and are for information only.

Electrical data

50UA**		045	055	065	075	085	100	120
Nominal voltage	V-ph-Hz	400-3-50 ± 10%						
Maximum power input*	kW	21.68	27.41	33.52	40.50	44.58	52.98	59.38
Nominal current drawn*	A	28.73	36.76	43.00	52.12	55.97	66.55	77.79
Maximum start-up current	A	206	173	183	204	246	261	226

* Based on an outdoor air dry bulb temperature of 35°C and an indoor air wet bulb temperature of 19°C.

** Standard unit without any options and accessories.

Energy recovery module (option)

The energy recovery module (ERM) is an individual dual-flow unit, equipped with a high-efficiency Eurovent-certified air-to-air heat recovery wheel with 63% to 88% efficiency, an integrated variable-air-volume plug fan and a control system for plug-and-play installation. Specially designed for economical indoor air extraction and to take in fresh air to meet current and future requirements for high-energy-efficiency buildings.

- Unit cabinet is made of galvanised and powder-painted sheet metal.
- Fitted with G4 filters on the fresh-air side as standard to protect the heat recovery wheel against dust.
- Insulated duct, power and control wiring between ERM and rooftop unit - supplied by the factory with the duct kit.
- Heat exchanger reclaims up to 90% of the heat from the extract air and transfers it to the supply air.
- High-efficiency plug fans for exhaust air are more energy-efficient and require less maintenance.



PACKAGED ROOFTOP HEAT PUMPS



Air treatment 50UH

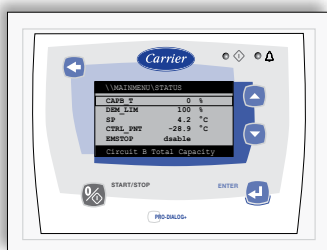
Options/accessories

- Electric heaters, various capacities*
- Hot-water coils, various capacities*
- Various coil protection options*
- Fresh-air slidding panel*
- Manual outdoor air damper*
- Economizer, thermostatic or enthalpy control, with or without CO₂ sensor control*
- Supply fan with various high static pressure options with or without soft starter*
- Standard supply fan with or without soft starter*
- Various filter options*
- Stainless steel drain pan*
- Energy recovery module*
- Various return/exhaust air options*
- Various temperature sensor options*
- CCN/JBus, Lon or BACnet gateways*
- Dirty filter detection*
- Supply air flow detection*
- Smoke detector*
- Fire thermostat*
- Duct connection fixing frame*
- Various packaging options*
- Vertical supply roof curb**
- Vertical supply roof curb with longitudinal adjustment**
- Vertical supply roof curb with transversal adjustment**
- Horizontal supply roof curb**
- Transition roof curb (French ERP)**
- Remote user interface (Pro-Dialog+)**

* Option ** Accessory

Features

- Seven sizes with nominal cooling capacities from 44 to 109 kW and nominal heating capacities from 44 to 112 kW.
- 50UH units are packaged reversible rooftop heat pumps, available with additional heating options (hot-water coil or electric heaters).
- Versatile and efficient heat pumps, designed for outdoor installation.
- Self-contained, can be installed in commercial and industrial applications.
- Units use the ozone-friendly refrigerant R-410A that does not affect the ozone layer.
- Components are specifically designed for R-410A refrigerant.
- Reduced size and weight make these units ideal for today's lightweight building structures.
- Cabinet made of powder-painted sheet metal.
- Compressors are hermetic scroll compressors and mounted on vibration isolators.
- Crankcase heaters are standard for all units.
- Low-noise shrouded axial Flying Bird fans, made of composite plastic material.
- Heat exchangers made of high-quality staggered copper tubing, mechanically bonded into pre-coated corrugated aluminium fins.
- Leak-tight refrigerant circuits with brazed connections and reduced vibration levels. Access to pressure transducers and temperature sensors without losing charge.
- Units are fully wired in accordance with EN standards.
- Simplified electrical connections.
- Reduced defrost cycle duration due to the new coil design and an auto-adaptive control algorithm.



Pro-Dialog+ operator interface

Physical data

50UH		045	055	065	075	085	100	120
Nominal cooling capacity*	kW	43.5	50.1	59.1	69.1	84.5	96.7	108.8
Nominal power input, cooling	kW	14.4	17.7	20.7	26.5	27.5	33.8	38.7
EER	kW/kW	3.03	2.83	2.86	2.61	3.07	2.86	2.81
Nominal heating capacity**	kW	43.5	54.4	62.0	74.5	85.1	98.7	120.7
Nominal power input, heating	kW	13.2	16.0	20.1	24.8	24.4	30.7	37.5
COP	kW/kW	3.30	3.41	3.09	3.01	3.49	3.21	3.22
Operating weight	kg	820	965	1043	1053	1565	1655	1775
Refrigerant charge		R-410A						
Control		Pro-Dialog+						
Compressor		Hermetic scroll						
No. of circuits/No. of compressors		1/1	1/2	2/2	2/2	2/2	2/3	2/4
Indoor/outdoor coil		Copper tubes, aluminium fins						
Indoor fan and motor		One, centrifugal						
Air flow	l/s	2528	3444	3472	3944	5550	5550	5550
Outdoor fan and motor		Axial Flying Bird fans with rotating shroud, direct-drive motor						
Quantity ... air flow	l/s	1 ... 5400	2 ... 6700	2 ... 10100	2 ... 10100	2 ... 10300	2 ... 10600	2 ... 10600
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Capacity steps		18 - 9	18 - 18	18 - 18	18 - 18	27 - 54	27 - 54	27 - 54
Rated current	A	39	52	52	52	78	78	78
Dimensions								
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Width	mm	2193	2193	2193	2193	2196	2196	2196
Height	mm	1413	1442	1796	1796	1825	1825	1825

* Nominal Eurovent conditions: outdoor air dry bulb temperature of 35°C, indoor air wet bulb temperature of 19°C.

** Nominal Eurovent conditions: outdoor air wet bulb temperature of 6°C, indoor air dry bulb temperature of 20°C.

*** In accordance with ISO 961461 and certified by Eurovent. The values have been rounded and are for information only.

Electrical data

50UH**		045	055	065	075	085	100	120
Nominal voltage	V-ph-Hz	400-3-50 ± 10%						
Maximum power input*	kW	21.68	27.41	33.52	40.50	44.58	52.98	59.38
Nominal current drawn*	A	25.27	31.55	36.82	45.67	47.30	58.80	77.11
Maximum start-up current	A	206	173	183	204	246	261	226

* Based on an outdoor air dry bulb temperature of 35°C and an indoor air wet bulb temperature of 19°C.

** Standard unit without any options and accessories.

Energy recovery module (option)

The energy recovery module (ERM) is an individual dual-flow unit, equipped with a high-efficiency Eurovent-certified air-to-air heat recovery wheel with 63% to 88% efficiency, an integrated variable-air-volume plug fan and a control system for plug-and-play installation. Specially designed for economical indoor air extraction and to take in fresh air to meet current and future requirements for high-energy-efficiency buildings.

- Unit cabinet is made of galvanised and powder-painted sheet metal.
- Fitted with G4 filters on the fresh-air side as standard to protect the heat recovery wheel against dust.
- Insulated duct, power and control wiring between ERM and rooftop unit - supplied by the factory with the duct kit.
- Heat exchanger reclaims up to 90% of the heat from the extract air and transfers it to the supply air.
- High-efficiency plug fans for exhaust air are more energy-efficient and require less maintenance.

