



Project Data			
Customer Company		Offer Number	
Project Name		Offer Date	
Unit Project Code			

Product Specifications

ECRH 095



Roof type (ROOFTOP) package air conditioners, which operate either only cooling or reversible with the direct expansion refrigerant system providing the conditioning of the air indoor through ducts, which will meet the fresh air requirement needed and can perform all heating, cooling and ventilation processes in a compact unit. Rooftop units are designed for climates that need cooling only or reversible. Various capacity options available according to the size of the environment to be air-conditioned.

Main applications are business centers, airports, cinema and theatre halls, conference halls, industrial buildings, shopping malls, restaurants etc. Optimized heat recovery, fully automated system, economizer damper and free-cooling/free heating configurations available according to the needs of the place which will be conditioned efficiently with low energy consumption. Rooftop unit ranges are fully automated with several options – options differ depending on the working scenarios-. Thanks to its Plug&Play feature and design which shortens installation and commissioning time.



Product Model	ECRH 095
Product Group	Air Cooled Roof Type Air Conditioning Unit
Product Type	Mixed Air Unit Equipped with Rotary HREx, Supply and Return Fans
Unit Function	Heating-Cooling
Unit Heating Type	Dx Cooling + Natural Gas Heater
Unit Casing	Double Skin-Powdercoat Sheet
Unit Insulation	50 mm Rockwool
Operating conditions	Up to 42°C Temperature
Refrigerant	R410A
Voltage / Frequency / Phase (V / Hz / Ph)	380-400/3/50

Performance Data

Working Status		Cooling	Heating
Unit Capacity	kW	127.5	263.9
Compressor Power Total	kW	23.200000000000003	
Total Supply Fan Power	kW	6.47	6.47
Return Fan Power Total	kW	3.9	3.9
Condenser Fan Power Total	kW	2.8	2.8
Total Power Taken	kW	36.5	13.3

Dimensions



L	W	H
7350	2100	2425

Climatic Data

Summer		Outside Air	Return Air	Mixed Air
Temperature (DB)	°C	35	26	28.61
Relative humidity	%	35	50	49.2

Winter		Outside Air	Return Air	Mixed Air
Temperature (DB)	°C	-4	23	16.27
Relative humidity	%	89.92	50	52.73

Unit Data

Supply Air Flow	m ³ /h	16000
Supply Fan External Pressure	Pa	600
Return Air Flow	m ³ /h	16000
Return Fan External Pressure	Pa	250
Fresh Air Ratio	%	100
Fresh Air Flow	m ³ /h	16000
Return Air Ratio	%	0
Return Air Flow	m ³ /h	0
Exhaust Air Ratio	%	100
Exhaust Flow	m ³ /h	16000

Supply Coil Data

		Cooling	Heating
Capacity (Sensible / Latent)	kWatt	31.57 / 13.07 + 36.02 / 15.17	
Capacity (Total)	kWatt	44.64 + 51.19 (95.83)	
Air Inlet Temperature (DB / WB)	°C	28.61 / 20.71	
Air Inlet Relative Humidity	%	49.20	
Air Outlet Temperature	°C	15.78 / 14.63	
Air Outlet Relative Humidity	%	88.70	

Condenser Coil Data

		Cooling	Heating
Capacity (Total)	kWatt	55.34 + 63.71	

Condenser Data

Condenser Fan Type	-	AC
Number Of Condenser Fans	Piece	1 + 1
Condenser Total Fan Power	kWatt	2.8

Compressor Data

Compressor Type	-	Scroll - Scroll
Number Of Circuits	Piece	1 + 1
Capacity Control	-	2 Kademe - 2 Kademe

Fan Data

		Supply	Return
Air Flow	m ³ /h	16000	16000
Fan Speed	d/d	2171,73	1852,70
Fan Power	Watt	6466.44	3874.1

Fan LWA			LWA (In+Out)	LWA	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Supply Fan	Inlet	dB	88,89	87,95	77,50	80,10	80,20	81,10	82,00	82,90	79,10	75,20
	Outlet	dB		81,78	75,00	78,90	79,50	76,50	74,30	73,60	75,80	71,20
Return Fan	Inlet	dB	86,00	85,00	73,00	78,00	77,00	78,00	80,00	78,00	78,00	72,00
	Outlet	dB		80,00	71,00	77,00	77,00	75,00	72,00	72,00	76,00	68,00

Fan LPA	@10m		LPA (In+Out)	LPA	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Supply Fan	Inlet	dB	60,91	59,97	49,52	52,12	52,22	53,12	54,02	54,92	51,12	47,22
	Outlet	dB		53,80	47,02	50,92	51,52	48,52	46,32	45,62	47,82	43,22
Return Fan	Inlet	dB	58,82	57,54	45,12	50,72	49,22	50,62	52,42	50,82	50,52	44,42
	Outlet	dB		52,88	43,12	49,62	49,82	47,12	44,12	44,42	48,12	40,72

Filter Data

		SA Filter 1	SA Filter 2	SA Filtre 3	EA Filter
Filter Class	-	G4			
Filter Type	-	Synthetic Filter			

Heat Recovery Data

Heat Recovery Type	Alüminyum rotor - Enthalpy
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Cooling		Outside Air	Return Air
Air Inlet Temperature (DB / WB)	°C	35 / 22.75	26 / 18.71
Air Inlet Relative Humidity	%	35	50
Air Outlet Temperature (DB / WB)	°C	28.61	32.40
Air Outlet Relative Humidity	%	49.20	35.41
Heat Recovery Efficiency (Dry / Wet)	%	71.00 / 14.38	
Heat Recovery Capacity (Sensible / Latent)	kW	34.75 / 3.48	
Heat Recovery Capacity (Total)	kW	38.22	

Heating		Outside Air	Return Air
Air Inlet Temperature (DB / WB)	°C	-4 / -4.47	23 / 16.24
Air Inlet Relative Humidity	%	89.92	50
Air Outlet Temperature (DB / WB)	°C	16.27	3.75
Air Outlet Relative Humidity	%	52.73	95.00
Heat Recovery Efficiency (Dry / Wet)	%	71.31 / 64.08	
Heat Recovery Capacity (Sensible / Latent)	kW	109.68 / 48.14	
Heat Recovery Capacity (Total)	kW	157.83	

Natural Gas Heater Data

Doğal Gazlı Isıtıcı Markası	-	gmcair
Gas Type	-	Natural Gas
Heating Coil Capacity	kW	100
Air Inlet Temperature (DB / WB)	°C	16.27
Air Inlet Relative Humidity	%	52.73
Air Outlet Temperature (DB / WB)	°C	33.63
Air Outlet Relative Humidity	%	18.7
Burner Pressure (Min/Max)	m/bar	21