

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

Product Specifications

FHR85

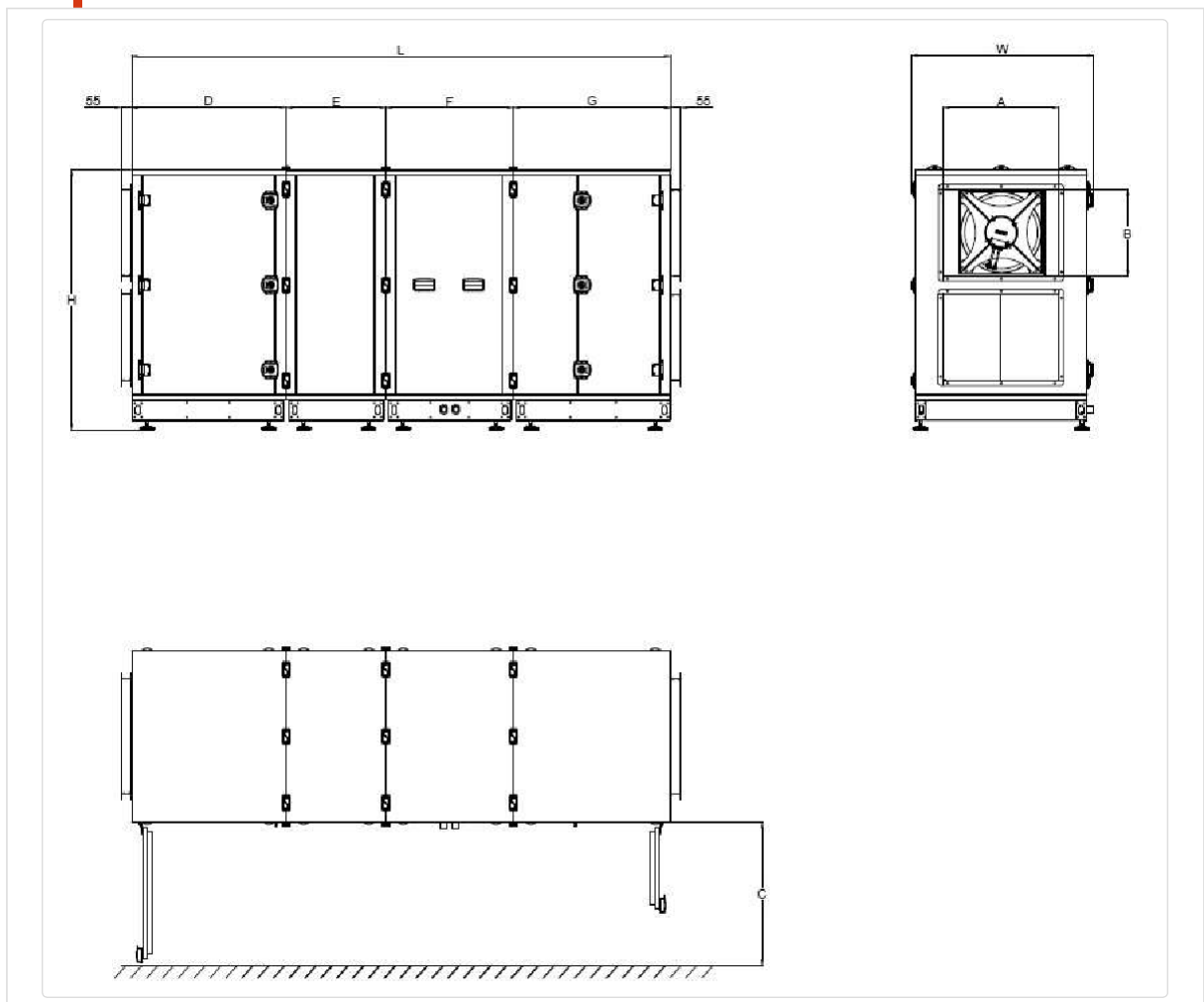


FHR Counter Flow Heat Recovery Units are used in restaurants, shops, historical buildings, offices and other places where clean air is needed. In places where air-conditioning is carried out by heating or cooling, low-quality air-conditioned indoor air is formed, where the internal carbon dioxide and other harmful gases are intense. By-pass damper provides free-cooling and anti-freeze protection of the heat exchanger. FHR Counter Flow Heat Recovery Devices operate on silent and high efficiency with plug fan motors. On the supply side there is a panel filter or an optional high-efficiency filter. With the control card sent as standard, the device can be operated at the desired flow rate.

- Counter Flow Heat Exchanger
- Low Sound Level
- EC Plug Fans
- By-Pass Damper (0-100%)
- M5+F7 Filters for Supply Side
- M5 Filter for Exhaust Side
- Plug&Play
- Optional Electric Heater
- Optional Heating/Cooling Coils
- Optional Sound Attenuator

Product Model	FHR85
Product Type	Commercial Type Heat Recovery
Heat Recovery Type	Aluminum Counterflow
Unit Casing	Double wall - Inside: 0.8 mm galvanized sheet
Unit isolation	50 mm 70 kg/m3-Rockwool
Casing Air Leakage	0
Unit Frame	-
Service Direction	Right
Voltage / Frequency / Phase (V / Hz / Ph)	380/50/3
Operating conditions	-20 ~ 46 ° C Temperature, 90% Max.RH Outdoor Air
Standard Air Density (kg/m ³)	1.2

Dimensions



L	W	H	A	B	C	D	E	F	G
3165	1790	1515	1200	500	1100	905	518	868	868

Performance Data

Supply Air Flow	m ³ /h	7100	Heat Recovery Efficiency	%	82.73
External Static Pressure	Pa	300	Heat Recovery Capacity	kW	61.2
Return Air Flow	m ³ /h	7100	Additional Heating Capacity	kW	0
External Static Pressure	Pa	300	Additional Cooling Capacity	kW	
Unit Total Power / Current	kW/A	4.38/7.2	Air Outlet Temperature	°C	16.49
SFP _{int,total}	W/m ³ /s	1225.93	Energy Efficiency Class	-	

Heat Recovery Data

Heat Recovery Type	Aluminum Counterflow - -
Fin Pitch (mm)	0

Winter		Outside Air	Return Air
Air Inlet Flow	m ³ /h	7100	7100
Air Inlet Temperature (DB / WB)	°C	-10 / -10.32	21 / 12.66
Air Inlet Relative Humidity	%	90	37
Air Outlet Temperature (DB / WB)	°C	16.49 / 5.86	0.85 / -0.47
Air Outlet Relative Humidity	%	12.49	78.77
Heat Recovery Pressure Drop	Pa	249.49	321.90
Heat Recovery Efficiency (Dry / Wet)	%	82.73 / 85.45	-
Heat Recovery Capacity (Dry / Wet)	kW	61.20 / 63.21	-61.20 / -63.21
Condensation	kg/h	0.00	21.52

Summer		Outside Air	Return Air
Air Inlet Flow	m ³ /h	7100	7100
Air Inlet Temperature (DB / WB)	°C	28 / 22.07	23 / 19.83
Air Inlet Relative Humidity	%	60	75
Air Outlet Temperature (DB / WB)	°C	23.90 / 20.87	27.10 / 21.08
Air Outlet Relative Humidity	%	76.46	58.74
Heat Recovery Pressure Drop	Pa	304.57	297.26
Heat Recovery Efficiency (Dry / Wet)	%	81.9492 / 81.95	-
Heat Recovery Capacity (Dry / Wet)	kW	-9.88 / -9.88	9.88 / 9.88
Condensation	kg/h	0.00	0.00

Filter Data

		SA Filter 1	SA Filter 2	EA Filter	EA Filtre 2
Filter Class	-		F7	M5	
Filter Class (ISO 16890)	-		ISO ePM1 50%	ISO ePM10 50%	
Filter Initial Pressure Drop	Pa		94.48	74.48	
Filter Final Pressure Drop	Pa		200	170	
Filter Average Pressure Drop	Pa		147.24	122.24	
Filter Surface Air Velocity	m/s		2.159	2.159	2.159

Fan Data

		Outside Air	Return Air
Air Flow	m ³ /h	7100	7100
Fan Speed	d/d	1855.19	1866.49
Nominal Fan Speed	d/d	2040	2040
Fan Power	Watt	2107.26	2270.27
Operating Point Current	A	3.47	3.73
Voltage / Frequency / Phase	V/Hz/Ph	380 / 50 / 3	380 / 50 / 3

Fan LWA			LWA (In+Out)	LWA	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Supply Fan	Inlet	dBA	87,07	79,98	67,70	69,20	78,70	77,30	73,60	71,20	71,40	68,60
	Outlet	dBA		86,15	70,60	71,10	79,20	82,70	82,40	78,10	75,30	71,00
Return Fan	Inlet	dBA	87,17	79,98	67,70	69,20	78,70	77,30	73,60	71,20	71,40	68,60
	Outlet	dBA		86,15	70,60	71,10	79,20	82,70	82,40	78,10	75,30	71,00

Fan LPA	@ 1 m		LPA (In+Out)	LPA	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Supply Fan	Inlet	dBA	79.09	72.00	59.72	61.22	70.72	69.32	65.62	63.22	63.42	60.62
	Outlet	dBA		78.17	62.62	63.12	71.22	74.72	74.42	70.12	67.32	63.02
Return Fan	Inlet	dBA	79.09	72.00	59.72	61.22	70.72	69.32	65.62	63.22	63.42	60.62
	Outlet	dBA		78.17	62.62	63.12	71.22	74.72	74.42	70.12	67.32	63.02