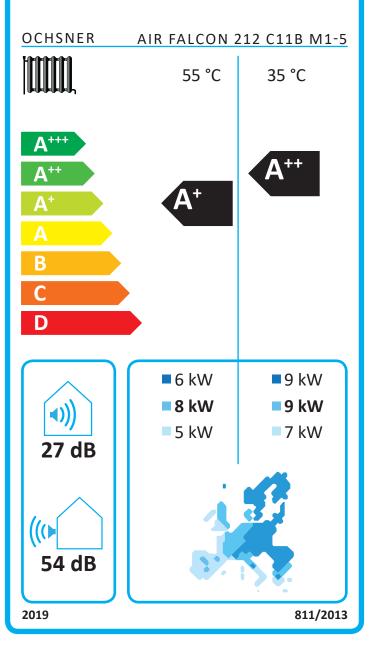


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Heat pump specification:					
Manufacturer:	OCHSNER				
Model:	AIR FALCON 212 C11B				

Information on energy efficiency class and rated output:

	average/low	average/medium
Energy efficiency class, central heating:	A++	A+
Rated heating output:	8,5 kW	7,5 kW
Energy efficiency, central heating:	164,3 %	120,1 %
Annual energy consumption, central heating:	4200 kWh	5035 kWh
Sound power level in internal spaces:	27,2 dB(A)	

Special provisions for assembly, installation and service:

The system was sized, connected, laid out and filled in accordance with applicable standards, regulations and ordinances by a qualified contractor. If the system consists of several sections, these must be connected and installed using original OCHSNER accessories as supplied by OCHSNER. System sections must be connected via the shortest route possible and must not exceed a connection distance of 5m. In accordance with the operating and installation manual, the system is used as intended for a private building heating system. Commissioning must only be carried out by OCHSNER Customer Service. Maintenance and inspection according to the manufacturer's instructions must be carried out at least every 12 months unless legal requirements and ordinances specify a shorter interval.

Additional details:	low	medium	
Rated heating output, cooler climate:	9 kW	6 kW	
Rated heating output, warmer climate:	7 kW	5 kW	
Energy efficiency for central heating, cooler climate:	129,7 %	87,9 %	
Energy efficiency for central heating, warmer climate:	225,7 %	145 %	
Annual energy consumption for central heating, cooler climate:	6687 kWh	6511 kWh	
Annual energy consumption for central heating, warmer climate:	1636 kWh	1806 kWh	
Sound power level in external spaces:	54,2 dB(A)		

Specification for temperature controller:

Manufacturer:	OCHSNER		
Model:	OTS-Regler		
Controller category with room remote control:	VI	-	
Contribution of controller to central heating energy efficiency with room remote control:	4	%	
Controller category without room remote control:	II	-	
Contribution of controller to central heating energy efficiency without room remote control:	2	%	



Model:		-		AIR FALCON	212 C11B		
				Inverter air/water heat pump			
Low-temperature heat pump:				no			
Equipped with a sup	plementary heate	r:		yes			
Heat pump combina	tion heater:			no			
emperature application:			low				
Climate conditions:				colder			
Item		Symbol	Value	Item		Symbol	Value
Rated heat output (*)	Prated	9 kW	Seasonal spa ciency	ice heating energy effi-	η _s	129,7 %
Declared capacity fo °C and outdoor temp		load at indoo	r temperature 20	Declared coe load at indoor	fficient of performance or temperature 20 °C and or	primary ene utdoor temp	ergy ratio for par perature T _j
Tj = -7 °C		Pdh	5,23 kW	T _j = -7 °C		COPd	2,91
Tj = +2 °C		Pdh	3,46 kW	T _j = +2 °C		COPd	3,49
Tj = +7 °C		Pdh	2,31 kW	T _j = +7 °C		COPd	6,08
T _j = +12 °C		Pdh	2,57 kW	T _j = +12 °C		COPd	6,83
,	t temperature	Pdh	7,11 kW		bivalent temperature	COPd	2,46
T _j = operati rature	on limit tempe-	Pdh	5,29 kW		operation limit tempe- rature	COPd	1,89
For air-to-water heat	• heat pumps: For air-to-water heat pumps: Pdh 7.11 kW		er heat pumps:	COPd	2,46		
T _j = -15 °C (if TOL	< – 20 °C)		.,	T _j = -15 °C	(if TOL< - 20 °C)		_,
		T _{biv}	-15 °C	For air-to-wat	er heat pumps:	TO	
Bivalent temperature	ivalent temperature			Operation lim	it temperature	TOL	-22 °C
Power input "compre	essor off"		0,0 W	Heating water rature	r operating limit tempe-	WTOL	60 °C
Power consumption	in modes other th	an active mo	de	Supplementa	ary heater	1	
Off mode		POFF	13,23 W	Rated heat o	utput (*)	Psup	3,71 kW
Thermostat-off mode	e	P _{TO}	13,6 W				
Standby mode		P _{SB}	13,23 W	Type of energy	gy input	elektrisch	
Crankcase heater m	ode	Рск	0,0 W				
Other items			۱ 				
Capacity control				For air-to-wat	er heat pumps:	_	3960 m³/h
Sound power level	indoors	L _{WA}	27,2 dB(A)	Rated air flow	/ rate, outdoors		
	outdoors		54,2 dB(A)	For water-/bri	ne-to-water heat pumps:		
Annual energy const	umption	Q _{HE}	6687 kWh	Rated brine o door heat exc	r water flow rate, out- hanger	-	-
For heat pump comb	bination heater:						
Declared load profile	9	-		Water heating	g energy efficiency	η _{wh}	
Daily electricity cons	sumption	Q _{elec}		Daily fuel con	sumption	Q _{fuel}	-
				·		I	
Contact details					/ärmepumpen GmbH, Och utput Prated is equal to the		



Model:				AIR FALCON 212 C11B			
				Inverter air/water heat pump			
Low-temperature heat pump:				no			
Equipped with a sup	Equipped with a supplementary heater:			yes			
Heat pump combination heater:			no				
Temperature applica	emperature application:			medium			
Climate conditions:				colder			
			T				
Item		Symbol	Value	Item	Symbol	Value	
Rated heat output (*)	Prated	6 kW	Seasonal space heating energy e ciency	ffi- _{Ŋs}	87,9 %	
Declared capacity fo °C and outdoor temp		load at indoo	r temperature 20	Declared coefficient of performan load at indoor temperature 20 °C			
Tj = -7 °C		Pdh	3,82 kW	T _j = -7 °C	COPd	1,87	
T _j = +2 °C		Pdh	2,25 kW	$T_j = +2 \ ^{\circ}C$	COPd	2,17	
T _j = +7 °C		Pdh	2,36 kW	T _i = +7 °C	COPd	4,72	
T _i = +12 °C		Pdh	2,65 kW	$T_i = +12 °C$	COPd	6,72	
,	t temperature	Pdh	4,35 kW	$T_j = bivalent temperature$		1,17	
T _j = operati rature	on limit tempe-	Pdh	2,6 kW	T _j = operation limit tempo rature	e- COPd	1,11	
For air-to-water heat	r air-to-water heat pumps:		4,35 kW	For air-to-water heat pumps:	COPd	1,17	
T _j = -15 °C (if TOL-	< – 20 °C)	Pdh	4,00 KW	T _j = -15 °C (if TOL< - 20 °C)		1,17	
		T _{biv}	-15 °C	For air-to-water heat pumps:	TO		
Bivalent temperature	ivalent temperature			Operation limit temperature	TOL	-22 °C	
Power input "compre	essor off"		0,0 W	Heating water operating limit temp rature	wtol	60 °C	
Power consumption	in modes other th	an active mo	de	Supplementary heater	I		
Off mode		POFF	13,23 W	Rated heat output (*)	Psup	3,4 kW	
Thermostat-off mode	9	P _{TO}	13,6 W				
Standby mode		P _{SB}	13,23 W	Type of energy input	elektrisch		
Crankcase heater m	ode	Рск	0,0 W				
Other items			1		I		
Capacity control				For air-to-water heat pumps:		3960 m³/h	
Sound power level	indoors	L _{WA}	27,2 dB(A)	Rated air flow rate, outdoors			
	outdoors		54,2 dB(A)	For water-/brine-to-water heat pu	mps:		
Annual energy const	umption	Q _{HE}	6511 kWh	Rated brine or water flow rate, our door heat exchanger	- t-	-	
For heat pump comb	ination heater:					1	
Declared load profile	•	-		Water heating energy efficiency	η_{wh}		
Daily electricity cons	umption	Q _{elec}		Daily fuel consumption	Q _{fuel}	-	



Model:				AIR FALCON 212 C11B			
				Inverter air/water heat pump			
Low-temperature he	at pump:			no			
Equipped with a sup	plementary heate	r:		yes			
Heat pump combina	tion heater:			no			
Temperature applica	ition:			low			
Climate conditions:				average			
Item		Symbol	Value	Item	Symbol	Value	
Rated heat output (*)	Prated	8,5 kW	Seasonal space heating energy ef ciency	fi- η _s	164,3 %	
Declared capacity fo °C and outdoor temp	or heating for part perature T _j	load at indoo	r temperature 20	Declared coefficient of performance load at indoor temperature 20 °C a	ce or primary ene and outdoor temp	ergy ratio for part perature T _j	
Tj = -7 °C		Pdh	7,06 kW	T _j = -7 °C	COPd	2,48	
T _j = +2 °C		Pdh	4,38 kW	T _j = +2 °C	COPd	4,07	
T _i = +7 °C		Pdh	2,68 kW	$T_i = +7 °C$	COPd	6,12	
T _i = +12 °C		Pdh	2,57 kW	$T_i = +12 \text{°C}$	COPd	6,83	
,	t temperature	Pdh	7,06 kW	$T_j = bivalent temperature$		2,48	
T _j = operati rature	on limit tempe-	Pdh	6,68 kW	T _j = operation limit tempe rature	- COPd	2,26	
For air-to-water heat pumps:		Pdh		For air-to-water heat pumps:	COPd	_	
T _j = -15 °C (if TOL	< – 20 °C)	Full	-	T _j = -15 °C (if TOL< - 20 °C)	COFU	-	
				For air-to-water heat pumps:			
Bivalent temperature	•	T _{biv}	-7 °C	Operation limit temperature	TOL	-10 °C	
Power input "compre	essor off"		0,0 W	Heating water operating limit temp rature	e- WTOL	60 °C	
Power consumption	in modes other th	an active mo	de	Supplementary heater			
Off mode		POFF	13,23 W	Rated heat output (*)	Psup	1,82 kW	
Thermostat-off mode	e	P _{TO}	13,6 W				
Standby mode		P _{SB}	13,23 W	Type of energy input	elektrisch		
Crankcase heater m	ode	P _{CK}	0,0 W				
Other items		·	·				
Capacity control				For air-to-water heat pumps:	-	3960 m³/h	
Sound power level	indoors	L _{WA}	27,2 dB(A)	Rated air flow rate, outdoors			
	outdoors		54,2 dB(A)	For water-/brine-to-water heat pun	nps:		
Annual energy cons	umption	Q _{HE}	4200 kWh	Rated brine or water flow rate, out- door heat exchanger	-	-	
For heat pump comb	pination heater:						
Declared load profile)	-		Water heating energy efficiency	η _{wh}		
Daily electricity cons	sumption	Q _{elec}		Daily fuel consumption	Q _{fuel}	-	
Contact details				OCHSNER Wärmepumpen GmbH	Ochsper Straft	ο 1 Δ.3350 Uco	
				the rated heat output Prated is equal			



Nodel:				AIR FALCON 212 C11B			
				Inverter air/water heat pump			
Low-temperature heat pump:			no				
Equipped with a sup	Equipped with a supplementary heater:			yes			
Heat pump combination heater:			no				
Femperature application:			medium				
Climate conditions:				average			
			T				
Item		Symbol	Value	Item	Symbol	Value	
Rated heat output (*)	Prated	7,5 kW	Seasonal space heating energy e ciency	effi- η _s	120,1 %	
Declared capacity fo °C and outdoor temp		load at indoo	r temperature 20	Declared coefficient of performat load at indoor temperature 20 °C			
T _j = -7 °C		Pdh	6,68 kW	T _j = -7 °C	COPd	1,68	
T _j = +2 °C		Pdh	4,09 kW	T _j = +2 °C	COPd	2,94	
T _j = +7 °C		Pdh	2,79 kW	T _j = +7 °C	COPd	4,69	
T _i = +12 °C		Pdh	2,63 kW		COPd	6,71	
,	t temperature	Pdh	6,68 kW	T _j = bivalent temperatur	e COPd	1,68	
T _j = operati rature	on limit tempe-	Pdh	4,87 kW	T _j = operation limit temp rature	e- COPd	1,34	
For air-to-water heat	pumps:	Dut		For air-to-water heat pumps:	00004	-	
T _j = -15 °C (if TOL-	< – 20 °C)	Pdh	-	$T_j = -15 \text{ °C}$ (if TOL< – 20 °C)	COPd		
			7.00	For air-to-water heat pumps:			
Bivalent temperature)	T _{biv}	-7 °C	Operation limit temperature	TOL	-10 °C	
Power input "compre	essor off"		0,0 W	Heating water operating limit tem rature	wTOL	60 °C	
Power consumption	in modes other th	an active mo	de	Supplementary heater			
Off mode		POFF	13,23 W	Rated heat output (*)	Psup	2,63 kW	
Thermostat-off mode	Э	P _{TO}	13,6 W			·	
Standby mode		P _{SB}	13,23 W	Type of energy input	elektrisch		
Crankcase heater m	ode	Рск	0,0 W				
Other items			1		I		
Capacity control	1		1	For air-to-water heat pumps:	_	3960 m³/h	
Sound power level	indoors	L _{WA}	27,2 dB(A)	Rated air flow rate, outdoors			
	outdoors		54,2 dB(A)	For water-/brine-to-water heat pu	imps:		
Annual energy const	umption	Q _{HE}	5035 kWh	Rated brine or water flow rate, ou door heat exchanger	ut-	-	
For heat pump comb	ination heater:					1	
Declared load profile)	-		Water heating energy efficiency	η _{wh}		
Daily electricity cons	umption	Q _{elec}		Daily fuel consumption	Q _{fuel}	-	



Model:				AIR FALCON 212 C11B			
				Inverter air/water heat pump			
Low-temperature heat pump:				no			
Equipped with a supplementary heater:			yes				
	Heat pump combination heater:			no			
	Emperature application:			low			
Climate conditions:				warmer			
						1	
Item		Symbol	Value	Item	Symbol	Value	
Rated heat output (*)	1	Prated	7 kW	Seasonal space heating energy efficiency	fi- η _s	225,7 %	
Declared capacity fo °C and outdoor temp		load at indoo	r temperature 20	Declared coefficient of performance load at indoor temperature 20 °C a			
Tj = -7 °C		Pdh	-	T _j = -7 °C	COPd	-	
$T_j = +2 °C$		Pdh	6,48 kW	$T_j = +2 °C$	COPd	3,13	
T _i = +7 °C		Pdh	4,71 kW	T _i = +7 °C	COPd	5,81	
T _i = +12 °C		Pdh	2,52 kW	T _i = +12 °C	COPd	6,76	
,	t temperature	Pdh	6,48 kW	T _j = bivalent temperature	COPd	3,13	
T _j = operati rature	on limit tempe-	Pdh	6,48 kW	T _j = operation limit tempe rature	- COPd	3,13	
For air-to-water heat	pumps:	Pdh		For air-to-water heat pumps:	COPd	_	
T _j = −15 °C (if TOL•	< – 20 °C)	Pan	-	T _j = -15 °C (if TOL< – 20 °C)	COPa	-	
	T _{biv}	2 °C	For air-to-water heat pumps:				
Bivalent temperature	ivalent temperature		Operation limit temperature	TOL	2 °C		
Power input "compre	essor off"		0,0 W	Heating water operating limit temporature	e- WTOL	60 °C	
Power consumption	in modes other th	an active mo	de	Supplementary heater	I		
Off mode		POFF	13,23 W	Rated heat output (*)	Psup	0,0 kW	
Thermostat-off mode	9	P _{TO}	13,6 W				
Standby mode		P _{SB}	13,23 W	Type of energy input	elektrisch		
Crankcase heater m	ode	P _{CK}	0,0 W				
Other items							
Capacity control				For air-to-water heat pumps:	-	3960 m³/h	
Sound power level	indoors	Lwa	27,2 dB(A)	Rated air flow rate, outdoors			
	outdoors		54,2 dB(A)	For water-/brine-to-water heat pur	ips:		
Annual energy const		Q _{HE}	1636 kWh	Rated brine or water flow rate, out- door heat exchanger			
For heat pump comb	ination heater:					1	
Declared load profile		-		Water heating energy efficiency	η_{wh}		
Daily electricity cons	umption	Q _{elec}		Daily fuel consumption	Q _{fuel}	-	
		-					



Model:				AIR FALCON 212 C11B			
				Inverter air/water heat pump			
Low-temperature he	_ow-temperature heat pump:			no			
Equipped with a sup	plementary heate	r:		yes			
Heat pump combina	tion heater:			no			
emperature application:			medium				
Climate conditions:				warmer			
Item		Symbol	Value	Item	Symbol	Value	
Rated heat output (*)	Prated	5 kW	Seasonal space heating energy effi ciency	- η _s	145 %	
Declared capacity fo °C and outdoor temp		load at indoo	r temperature 20	Declared coefficient of performance load at indoor temperature 20 °C an	e or primary en d outdoor temp	ergy ratio for part perature T _j	
Tj = -7 °C		Pdh	-	T _j = -7 °C	COPd	-	
T _j = +2 °C		Pdh	4,91 kW	$T_j = +2 °C$	COPd	1,54	
T _j = +7 °C		Pdh	3,41 kW	$T_j = +7 \ ^{\circ}C$	COPd	3,92	
T _j = +12 °C		Pdh	2,43 kW	T _j = +12 °C	COPd	4,37	
,	t temperature	Pdh	4,91 kW	T _j = bivalent temperature	COPd	1,54	
T _j = operati rature	on limit tempe-	Pdh	4,91 kW	T _j = operation limit tempe- rature	COPd	1,54	
For air-to-water heat	pumps:	Pdh	-	For air-to-water heat pumps:	COPd	-	
T _j = -15 °C (if TOL-	< – 20 °C)			T _j = -15 °C (if TOL< - 20 °C)			
				For air-to-water heat pumps:		2 °C	
Bivalent temperature	9	T _{biv}	2 °C	Operation limit temperature	TOL		
Power input "compre	essor off"		0,0 W	Heating water operating limit tempe rature	WTOL	60 °C	
Power consumption	in modes other th	an active mo	de	Supplementary heater			
Off mode		POFF	13,23 W	Rated heat output (*)	Psup	0,0 kW	
Thermostat-off mode	e	P _{TO}	13,6 W	-			
Standby mode		P _{SB}	13,23 W	Type of energy input	elektrisch		
Crankcase heater m	ode	P _{CK}	0,0 W				
Other items			·				
Capacity control				For air-to-water heat pumps:	_	3960 m³/h	
Sound power level	indoors	Lwa	27,2 dB(A)	Rated air flow rate, outdoors			
	outdoors		54,2 dB(A)	For water-/brine-to-water heat pump	os:		
Annual energy cons		Q _{HE}	1806 kWh	Rated brine or water flow rate, out- door heat exchanger			
For heat pump comb	bination heater:						
Declared load profile	9	-		Water heating energy efficiency	η _{wh}		
Daily electricity cons	sumption	Q _{elec}		Daily fuel consumption	Q _{fuel}	-	
Contact details					Dohanan Otra C		
Contact details	ace heaters and I			OCHSNER Wärmepumpen GmbH,	Jonsner-Straß	e 1, A-3350 Haa	