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OCHSNER

AIR FALCON 212 C11A M1-5



55 °C

35 °C

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

A⁺

A⁺⁺



27 dB



54 dB

■ 6 kW

■ 8 kW

■ 5 kW

■ 9 kW

■ 9 kW

■ 7 kW



2019

811/2013

Heat pump specification:		
Manufacturer:	OCHSNER	
Model:	AIR FALCON 212 C11A	

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:		
<p>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.</p>		

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 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	colder

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	9 kW	Seasonal space heating energy efficiency	η_s	129,7 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j			Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j		
$T_j = -7\text{ °C}$	Pdh	5,23 kW	$T_j = -7\text{ °C}$	COPd	2,91
$T_j = +2\text{ °C}$	Pdh	3,46 kW	$T_j = +2\text{ °C}$	COPd	3,49
$T_j = +7\text{ °C}$	Pdh	2,31 kW	$T_j = +7\text{ °C}$	COPd	6,08
$T_j = +12\text{ °C}$	Pdh	2,57 kW	$T_j = +12\text{ °C}$	COPd	6,83
$T_j =$ bivalent temperature	Pdh	7,11 kW	$T_j =$ bivalent temperature	COPd	2,46
$T_j =$ operation limit temperature	Pdh	5,29 kW	$T_j =$ operation limit temperature	COPd	1,89
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	7,11 kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	2,46
Bivalent temperature	T_{biv}	-15 °C	For air-to-water heat pumps: Operation limit temperature	TOL	-22 °C
Power input „compressor off“		0,0 W	Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode			Supplementary heater		
Off mode	P _{OFF}	13,23 W	Rated heat output (*)	P _{sup}	3,71 kW
Thermostat-off mode	P _{TO}	13,6 W	Type of energy input	elektrisch	
Standby mode	P _{SB}	13,23 W			
Crankcase heater mode	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)			
Annual energy consumption		Q _{HE}	6687 kWh	For water-/brine-to-water heat pumps:	-	-
				Rated brine or water flow rate, outdoor heat exchanger		

For heat pump combination heater:						
Declared load profile	-			Water heating energy efficiency	η_{wh}	
Daily electricity consumption	Q _{elec}			Daily fuel consumption	Q _{fuel}	-

Contact details	OCHSNER Wärmepumpen GmbH, Ochsner-Straße 1, A-3350 Haag					
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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

Model:	AIR FALCON 212 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	colder

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	6 kW	Seasonal space heating energy efficiency	η_s	87,9 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j			Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j		
$T_j = -7\text{ °C}$	Pdh	3,82 kW	$T_j = -7\text{ °C}$	COPd	1,87
$T_j = +2\text{ °C}$	Pdh	2,25 kW	$T_j = +2\text{ °C}$	COPd	2,17
$T_j = +7\text{ °C}$	Pdh	2,36 kW	$T_j = +7\text{ °C}$	COPd	4,72
$T_j = +12\text{ °C}$	Pdh	2,65 kW	$T_j = +12\text{ °C}$	COPd	6,72
$T_j =$ bivalent temperature	Pdh	4,35 kW	$T_j =$ bivalent temperature	COPd	1,17
$T_j =$ operation limit temperature	Pdh	2,6 kW	$T_j =$ operation limit temperature	COPd	1,11
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	4,35 kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	1,17
Bivalent temperature	T_{biv}	-15 °C	For air-to-water heat pumps: Operation limit temperature	TOL	-22 °C
Power input „compressor off“		0,0 W	Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode			Supplementary heater		
Off mode	P_{OFF}	13,23 W	Rated heat output (*)	P_{sup}	3,4 kW
Thermostat-off mode	P_{TO}	13,6 W	Type of energy input	elektrisch	
Standby mode	P_{SB}	13,23 W			
Crankcase heater mode	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)			
Annual energy consumption		Q_{HE}	6511 kWh	For water-/brine-to-water heat pumps:	-	-
				Rated brine or water flow rate, outdoor heat exchanger		

For heat pump combination heater:						
Declared load profile	-			Water heating energy efficiency	η_{wh}	
Daily electricity consumption	Q_{elec}			Daily fuel consumption	Q_{fuel}	-

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

Model:	AIR FALCON 212 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	average

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	8,5 kW	Seasonal space heating energy efficiency	η_s	164,3 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	Pdh	7,06 kW
$T_j = +2\text{ °C}$	Pdh	4,38 kW
$T_j = +7\text{ °C}$	Pdh	2,68 kW
$T_j = +12\text{ °C}$	Pdh	2,57 kW
$T_j =$ bivalent temperature	Pdh	7,06 kW
$T_j =$ operation limit temperature	Pdh	6,68 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	-
Bivalent temperature	T_{biv}	-7 °C
Power input „compressor off“		0,0 W

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	COPd	2,48
$T_j = +2\text{ °C}$	COPd	4,07
$T_j = +7\text{ °C}$	COPd	6,12
$T_j = +12\text{ °C}$	COPd	6,83
$T_j =$ bivalent temperature	COPd	2,48
$T_j =$ operation limit temperature	COPd	2,26
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode

Off mode	P_{OFF}	13,23 W
Thermostat-off mode	P_{TO}	13,6 W
Standby mode	P_{SB}	13,23 W
Crankcase heater mode	P_{CK}	0,0 W

Other items

Capacity control		
Sound power level	indoors	L_{WA} 27,2 dB(A)
	outdoors	54,2 dB(A)
Annual energy consumption	Q_{HE}	4200 kWh

For heat pump combination heater:

Declared load profile	-	
Daily electricity consumption	Q_{elec}	

Supplementary heater

Rated heat output (*)	P_{sup}	1,82 kW
Type of energy input	elektrisch	

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3960 m³/h
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-

Water heating energy efficiency	η_{wh}	
Daily fuel consumption	Q_{fuel}	-

Contact details

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

Model:	AIR FALCON 212 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	average

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	7,5 kW	Seasonal space heating energy efficiency	η_s	120,1 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j			Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j		
$T_j = -7\text{ °C}$	Pdh	6,68 kW	$T_j = -7\text{ °C}$	COPd	1,68
$T_j = +2\text{ °C}$	Pdh	4,09 kW	$T_j = +2\text{ °C}$	COPd	2,94
$T_j = +7\text{ °C}$	Pdh	2,79 kW	$T_j = +7\text{ °C}$	COPd	4,69
$T_j = +12\text{ °C}$	Pdh	2,63 kW	$T_j = +12\text{ °C}$	COPd	6,71
$T_j =$ bivalent temperature	Pdh	6,68 kW	$T_j =$ bivalent temperature	COPd	1,68
$T_j =$ operation limit temperature	Pdh	4,87 kW	$T_j =$ operation limit temperature	COPd	1,34
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	-	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	-
Bivalent temperature	T_{biv}	-7 °C	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Power input „compressor off“		0,0 W	Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode			Supplementary heater		
Off mode	P _{OFF}	13,23 W	Rated heat output (*)	P _{sup}	2,63 kW
Thermostat-off mode	P _{TO}	13,6 W	Type of energy input	elektrisch	
Standby mode	P _{SB}	13,23 W			
Crankcase heater mode	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 pumps:	-	-
Annual energy consumption	Q_{HE}	5035 kWh		Rated brine or water flow rate, outdoor heat exchanger		

For heat pump combination heater:						
Declared load profile	-			Water heating energy efficiency	η_{wh}	
Daily electricity consumption	Q_{elec}			Daily fuel consumption	Q_{fuel}	-

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

Model:	AIR FALCON 212 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	warmer

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	7 kW	Seasonal space heating energy efficiency	η_s	225,7 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	Pdh	-
$T_j = +2\text{ °C}$	Pdh	6,48 kW
$T_j = +7\text{ °C}$	Pdh	4,71 kW
$T_j = +12\text{ °C}$	Pdh	2,52 kW
$T_j =$ bivalent temperature	Pdh	6,48 kW
$T_j =$ operation limit temperature	Pdh	6,48 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	-
Bivalent temperature	T_{biv}	2 °C
Power input „compressor off“		0,0 W

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	COPd	-
$T_j = +2\text{ °C}$	COPd	3,13
$T_j = +7\text{ °C}$	COPd	5,81
$T_j = +12\text{ °C}$	COPd	6,76
$T_j =$ bivalent temperature	COPd	3,13
$T_j =$ operation limit temperature	COPd	3,13
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	-
For air-to-water heat pumps: Operation limit temperature	TOL	2 °C
Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode

Off mode	P_{OFF}	13,23 W
Thermostat-off mode	P_{TO}	13,6 W
Standby mode	P_{SB}	13,23 W
Crankcase heater mode	P_{CK}	0,0 W

Other items

Capacity control		
Sound power level	indoors	L_{WA} 27,2 dB(A)
	outdoors	54,2 dB(A)
Annual energy consumption	Q_{HE}	1636 kWh

For heat pump combination heater:

Declared load profile	-	
Daily electricity consumption	Q_{elec}	

Supplementary heater

Rated heat output (*)	P_{sup}	0,0 kW
Type of energy input	elektrisch	

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3960 m³/h
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-

Water heating energy efficiency	η_{wh}	
Daily fuel consumption	Q_{fuel}	-

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

Model:	AIR FALCON 212 C11A
	Inverter air/water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	yes
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	warmer

Item	Symbol	Value	Item	Symbol	Value
Rated heat output (*)	Prated	5 kW	Seasonal space heating energy efficiency	η_s	145 %

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	Pdh	-
$T_j = +2\text{ °C}$	Pdh	4,91 kW
$T_j = +7\text{ °C}$	Pdh	3,41 kW
$T_j = +12\text{ °C}$	Pdh	2,43 kW
$T_j =$ bivalent temperature	Pdh	4,91 kW
$T_j =$ operation limit temperature	Pdh	4,91 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	-
Bivalent temperature	T_{biv}	2 °C
Power input „compressor off“		0,0 W

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j

$T_j = -7\text{ °C}$	COPd	-
$T_j = +2\text{ °C}$	COPd	1,54
$T_j = +7\text{ °C}$	COPd	3,92
$T_j = +12\text{ °C}$	COPd	4,37
$T_j =$ bivalent temperature	COPd	1,54
$T_j =$ operation limit temperature	COPd	1,54
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	-
For air-to-water heat pumps: Operation limit temperature	TOL	2 °C
Heating water operating limit temperature	WTOL	60 °C

Power consumption in modes other than active mode

Off mode	P_{OFF}	13,23 W
Thermostat-off mode	P_{TO}	13,6 W
Standby mode	P_{SB}	13,23 W
Crankcase heater mode	P_{CK}	0,0 W

Other items

Capacity control		
Sound power level	indoors	L_{WA} 27,2 dB(A)
	outdoors	54,2 dB(A)
Annual energy consumption	Q_{HE}	1806 kWh

For heat pump combination heater:

Declared load profile	-	
Daily electricity consumption	Q_{elec}	

Supplementary heater

Rated heat output (*)	P_{sup}	0,0 kW
Type of energy input	elektrisch	

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3960 m³/h
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-

Water heating energy efficiency	η_{wh}	
Daily fuel consumption	Q_{fuel}	-

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).