

OMNIA S 3.2 HYBRID 28C

POMPE DI CALORE IBRIDE REVERSIBILI ARIA-ACQUA

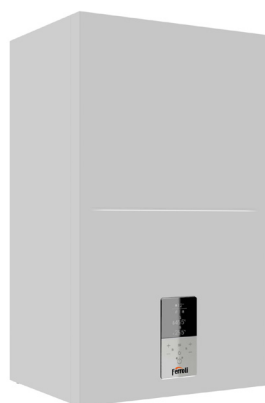
PER INSTALLAZIONE SPLITTATA CON PRODUZIONE SANITARIA ISTANTANEA

AIR-WATER REVERSIBLE HYBRID HEAT PUMPS FOR SPLIT INSTALLATION

WITH INSTANT SANITARY PRODUCTION



3QE47390



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IT

BOLLETTINO TECNICO

EN

TECHNICAL BULLETIN

Dati ERP / ERP data

Modello		4	6	8	10	UM
Classe di efficienza in riscaldamento	bassa temperatura (acqua prodotta 35°C)	187	191	200	201	ηs (%)
		A+++				class
	media temperatura (acqua prodotta 55°C)	128	137	131	136	ηs (%)
		A++				class
SEER	acqua prodotta 7°C	4,99	5,34	5,83	5,98	W/W
	acqua prodotta 18°C	7,77	8,21	8,95	8,78	W/W

NOTA: Classe di efficienza calcolata secondo regolamento europeo 811/2013. I valori si riferiscono ad unità prive di eventuali opzioni o accessori.

NOTA: Declared according to **European regulation 811/2013**. The values are referred to units without options and accessories.

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For low - temperature application (35°C)											
Mod	Average				Colder			Warmer			
	Energy efficiency class	Indoor unit sound power [dB(A)]	Outdoor unit sound power [dB(A)]	Prated [kW]	Seasonal energy efficiency [%]	Annual energy consumption [kWh]	Prated [kW]	Seasonal energy efficiency [%]	Annual energy consumption [kWh]	Prated [kW]	Seasonal energy efficiency [%]
OMNIA S 3.2 HYBRID 28C 4	A+++	39	55	6	187	2404	5	156	2834	5	258
OMNIA S 3.2 HYBRID 28C 6	A+++	39	57	7	191	2906	6	162	3364	6	262
OMNIA S 3.2 HYBRID 28C 8	A+++	39	59	8	200	3307	7	166	4080	8	281
OMNIA S 3.2 HYBRID 28C 10	A+++	39	60	9	201	3708	8	166	4533	8	281

For medium - temperature application (55°C)											
Mod	Average				Colder			Warmer			
	Energy efficiency class	Indoor unit sound power [dB(A)]	Outdoor unit sound power [dB(A)]	Prated [kW]	Seasonal energy efficiency [%]	Annual energy consumption [kWh]	Prated [kW]	Seasonal energy efficiency [%]	Annual energy consumption [kWh]	Prated [kW]	Seasonal energy efficiency [%]
OMNIA S 3.2 HYBRID 28C 4	A++	39	56	4	128	2766	3	104	3110	5	164
OMNIA S 3.2 HYBRID 28C 6	A++	39	58	6	137	3378	4	113	3634	5	165
OMNIA S 3.2 HYBRID 28C 8	A++	39	59	7	131	4085	6	113	4911	8	176
OMNIA S 3.2 HYBRID 28C 10	A++	39	60	8	136	4571	7	118	5480	8	184

SCHEDA PRODOTTO CALDAIA / GAS BOILER PRODUCT FICHE

Condensing boiler: YES			
Low-temperature boiler (**): YES			
B1 Boiler: NO			
Combination heater: YES			
Cogeneration space heater: NO			
Item	Symbol	Unit	Value
Seasonal space heating energy efficiency class (from A+++ to D)			A
Rated heat output	P_n	kW	24
Seasonal space heating energy efficiency	η_s	%	94
Useful heat output			
Useful heat output at rated heat output and high-temperature regime (*)	P₄	kW	24,0
Useful heat output at 30% of rated heat output and low-temperature regime (**)	P₁	kW	4,5
Useful efficiency			
Useful efficiency at rated heat output and high-temperature regime (*)	η_4	%	88,3
Useful efficiency at 30% of rated heat output and low-temperature regime (**)	η_1	%	98,8
Auxiliary electricity consumption			
At full load	el_{max}	kW	0,028
At part load	el_{min}	kW	0,011
In standby mode	PSB	kW	0,003
Other items			
Standby heat loss	P_{stby}	kW	0,042
Ignition burner power consumption	P_{ign}	kW	0,000
Annual energy consumption	Q_{HE}	GJ	44
Sound power level	L_{WA}	dB	48
Emissions of nitrogen oxides	NO_x	mg/kWh	39
For combination heaters			
Declared load profile			XL
Water heating energy efficiency class (from A+ to F)			A
Daily electricity consumption	Q_{elec}	kWh	0,148
Annual electricity consumption	AEC	kWh	32
Water heating energy efficiency	η_{wh}	%	87
Daily fuel consumption	Q_{fuel}	kWh	20,220
Annual fuel consumption	AFC	GJ	17

(*) High-temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature (at heater inlet).

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima medio - Bassa temperatura (35°C) / Heating mode - Average climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4								
Heat source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for low-temperature application (35°C).										
Parameters are declared for average climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{designh}	5,52	kW	Seasonal space heating energy efficiency		η _s	187	%	
Consumo di energia annuale		Q _{HE}	2404	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = - 7 °C		P _{dh}	4,88	kW	T _j = - 7 °C		COP _d	3,19	–	
T _i = + 2 °C		P _{dh}	3,06	kW	T _j = + 2 °C		COP _d	4,78	–	
T _i = + 7 °C		P _{dh}	1,93	kW	T _j = + 7 °C		COP _d	6,13	–	
T _i =+12°C		P _{dh}	1,48	kW	T _j =+12°C		COP _d	7,50	–	
T _j = T _{HP,off}		P _{dh}	4,48	kW	T _j = T _{HP,off}		COP _d	3,54	–	
T _j = T _{fb,off}		P _{dh}	4,48	kW	T _j = T _{fb,off}		COP _d	3,54	–	
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	–	
Switch temperature heat pump off		T _{hp,off}	-7	°C	Switch temperature boiler off		T _{fb,off}	-7	°C	
Degradation coefficient ⁽⁴⁾		C _{dh}	0,9	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		el _{max}	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load		el _{min}	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	39	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	55	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima più freddo - Bassa temperatura (35°C) / Heating mode - Colder climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4					
Hear source (air, water, brine, direct expansion)							air
Heat sink (water, brine)							water
Tipo di combustibile fossile (liquido / gas)							gas
Low temperature heat pump:							no
Heat pump combination heater:							no
Parameters are declared for low-temperature application (35°C).							
Parameters are declared for colder climate conditions.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C	Prated = Pdesi- gnh	4,56	kW	Seasonal space heating energy efficiency	η _s	156	%
Consumo di energia annuale	Q _{HE}	2834	kWh	Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating				Declared coefficient of performance for heating			
T _i = - 7 °C	Pdh	2,76	kW	Tj = - 7 °C	COPd	3,49	-
T _i = + 2 °C	Pdh	1,77	kW	Tj = + 2 °C	COPd	4,95	-
T _i = + 7 °C	Pdh	1,17	kW	Tj = + 7 °C	COPd	5,53	-
T _i =+12°C	Pdh	1,43	kW	Tj =+12°C	COPd	6,40	-
T j = T _{HP,off}	Pdh	2,54	kW	T j = T _{HP,off}	COPd	3,81	-
T j = T _{fb,off}	Pdh	2,54	kW	T j = T _{fb,off}	COPd	3,81	-
For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)	Pdh	3,724	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)	COPd	-	-
Switch temperature heat pump off	T _{hp,off}	-15	°C	Switch temperature boiler off	T _{fb,off}	-15	°C
Degradation coefficient ⁽⁴⁾	Cdh	0,90	—				
Heat pump: power input in modes other than active				Boiler			
Off mode	P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items				Power input of electrical auxiliaries at full load	elmax	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load	elmin	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)	Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy						

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima più caldo - Bassa temperatura (35°C) / Heating mode - Warmer climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4						
Hear source (air, water, brine, direct expansion)							air	
Heat sink (water, brine)							water	
Tipo di combustibile fossile (liquido / gas)							gas	
Low temperature heat pump:							no	
Heat pump combination heater:							no	
Parameters are declared for low-temperature application (35°C).								
Parameters are declared for warmer climate conditions.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C	Prated = Pdesi- gnh	5,35	kW		Seasonal space heating energy efficiency	η _s	258	%
Consumo di energia annuale	Q _{HE}	1095	kWh		Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating					Declared coefficient of performance for heating			
T _i = - 7 °C	Pdh	-	kW		Tj = - 7 °C	COPd	-	-
T _i = + 2 °C	Pdh	5,35	kW		Tj = + 2 °C	COPd	3,95	-
T _i = + 7 °C	Pdh	3,56	kW		Tj = + 7 °C	COPd	5,92	-
T _i =+12°C	Pdh	1,64	kW		Tj =+12°C	COPd	7,91	-
T j = T _{HP,off}	Pdh	5,35	kW		T j = T _{HP,off}	COPd	3,95	-
T j = T _{fb,off}	Pdh	5,35	kW		T j = T _{fb,off}	COPd	3,95	-
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)	COPd	-	-
Switch temperature heat pump off	T _{hp,off}	2	°C		Switch temperature boiler off	T _{fb,off}	2	°C
Degradation coefficient ⁽⁴⁾	Cdh	0,90	—					
Heat pump: power input in modes other than active					Boiler			
Off mode	P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items					Power input of electrical auxiliaries at full load	elmax	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable			Power input of electrical auxiliaries at part load	elmin	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	2770	m³/h		Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)		Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)		Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy							

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima medio - Media temperatura (55°C) / Heating mode - Average climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4								
Heat source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for medium-temperature application (55°C).										
Parameters are declared for average climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{desi- gnh}	4,40	kW	Seasonal space heating energy efficiency		η _s	128	%	
Consumo di energia annuale		Q _{HE}	2766	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = - 7 °C		P _{dh}	3,89	kW	T _j = - 7 °C		COP _d	2,17	–	
T _i = + 2 °C		P _{dh}	2,38	kW	T _j = + 2 °C		COP _d	3,30	–	
T _i = + 7 °C		P _{dh}	2,95	kW	T _j = + 7 °C		COP _d	4,03	–	
T _i =+12°C		P _{dh}	1,32	kW	T _j =+12°C		COP _d	5,17	–	
T _j = T _{HP,off}		P _{dh}	3,56	kW	T _j = T _{HP,off}		COP _d	2,42	–	
T _j = T _{fb,off}		P _{dh}	3,56	kW	T _j = T _{fb,off}		COP _d	2,42	–	
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	–	
Switch temperature heat pump off		T _{hp,off}	-7	°C	Switch temperature boiler off		T _{fb,off}	-7	°C	
Degradation coefficient ⁽⁴⁾		C _{dh}	0,90	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		elmax	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load		elmin	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	39	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	56	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima più freddo - Media temperatura (55°C) / Heating mode - Colder climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4						
Heat source (air, water, brine, direct expansion)							air	
Heat sink (water, brine)							water	
Tipo di combustibile fossile (liquido / gas)							gas	
Low temperature heat pump:							no	
Heat pump combination heater:							no	
Parameters are declared for medium-temperature application (55°C).								
Parameters are declared for colder climate conditions.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C	Prated = P _{desi- gnh}	3,37	kW		Seasonal space heating energy efficiency	η _s	104	%
Consumo di energia annuale	Q _{HE}	3110	kWh		Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating					Declared coefficient of performance for heating			
T _i = - 7 °C	P _{dh}	2,14	kW		T _j = - 7 °C	COP _d	2,32	–
T _i = + 2 °C	P _{dh}	1,28	kW		T _j = + 2 °C	COP _d	2,99	–
T _i = + 7 °C	P _{dh}	1,01	kW		T _j = + 7 °C	COP _d	3,76	–
T _i =+12°C	P _{dh}	1,36	kW		T _j =+12°C	COP _d	4,89	–
T _j = T _{HP,off}	P _{dh}	1,95	kW		T _j = T _{HP,off}	COP _d	2,47	–
T _j = T _{fb,off}	P _{dh}	1,95	kW		T _j = T _{fb,off}	COP _d	2,47	–
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)	P _{dh}	2,748	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	–
Switch temperature heat pump off	T _{hp,off}	-15	°C		Switch temperature boiler off	T _{fb,off}	-15	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—					
Heat pump: power input in modes other than active					Boiler			
Off mode	P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items					Power input of electrical auxiliaries at full load	el _{max}	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable			Power input of electrical auxiliaries at part load	el _{min}	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	2770	m³/h		Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)		Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)		Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrolis s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy							

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 4 - Modo riscaldamento - Clima più caldo - Media temperatura (55°C) / Heating mode - Warmer climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 4											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for medium-temperature application (55°C).													
Parameters are declared for warmer climate conditions.													
Item		Symbol	Value	Unit			Item		Symbol	Value	Unit		
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C		Prated = Pdesi- gnh	4,84	kW			Seasonal space heating energy efficiency		η _s	164	%		
Consumo di energia annuale		Q _{HE}	1549	kWh			Emissions of nitrogen oxides		NO _x	-	mg/kWh		
Declared capacity for heating					Declared coefficient of performance for heating								
T _i = - 7 °C		P _{dh}	-	kW			T _j = - 7 °C		COP _d	-	—		
T _i = + 2 °C		P _{dh}	4,84	kW			T _j = + 2 °C		COP _d	2,52	—		
T _i = + 7 °C		P _{dh}	3,23	kW			T _j = + 7 °C		COP _d	3,68	—		
T _i =+12°C		P _{dh}	1,47	kW			T _j =+12°C		COP _d	5,15	—		
T _j = T _{HP,off}		P _{dh}	4,84	kW			T _j = T _{HP,off}		COP _d	2,52	—		
T _j = T _{fb,off}		P _{dh}	4,84	kW			T _j = T _{fb,off}		COP _d	2,52	—		
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW			For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	—		
Switch temperature heat pump off		T _{hp,off}	2	°C			Switch temperature boiler off		T _{fb,off}	2	°C		
Degradation coefficient ⁽⁴⁾		C _{dh}	0,9	—									
Heat pump: power input in modes other than active					Boiler								
Off mode		P _{OFF}	0,014	kW			Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW		
Thermostat-off mode		P _{TO}	0,024	kW			Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW		
Standby mode		P _{SB}	0,014	kW			Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%		
Crankcase heater mode		P _{CK}	0	kW			Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%		
Other items													
Capacity control of heat pump		fisso/varia- bile	Variable				Power input of electrical auxiliaries at full load		elmax	0,028	kW		
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h			Power input of electrical auxiliaries at part load		elmin	0,011	kW		
Sound power level, indoors		L _{WA}	-	dB(A)			Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW		
Sound power level, outdoors		L _{WA}	-	dB(A)			Stand-by losses		P _{stby}	0,042	kW		
							Power input of ignition burner fossil fuel		P _{ign}	0,000	kW		
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy											

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima medio - Bassa temperatura (35°C) / Heating mode - Average climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for low-temperature application (35°C).													
Parameters are declared for average climate conditions.													
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit				
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{desi- gnh}	6,82	kW	Seasonal space heating energy efficiency		η _s	191	%				
Consumo di energia annuale		Q _{HE}	2906	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh				
Declared capacity for heating					Declared coefficient of performance for heating								
T _i = - 7 °C		P _{dh}	6,03	kW	T _j = - 7 °C		COP _d	3,09	-				
T _i = + 2 °C		P _{dh}	3,88	kW	T _j = + 2 °C		COP _d	4,85	-				
T _i = + 7 °C		P _{dh}	2,40	kW	T _j = + 7 °C		COP _d	6,63	-				
T _i =+12°C		P _{dh}	1,39	kW	T _j =+12°C		COP _d	7,58	-				
T _j = T _{HP,off}		P _{dh}	5,55	kW	T _j = T _{HP,off}		COP _d	3,48	-				
T _j = T _{fb,off}		P _{dh}	5,55	kW	T _j = T _{fb,off}		COP _d	3,48	-				
For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	-				
Switch temperature heat pump off		T _{hp,off}	-7	°C	Switch temperature boiler off		T _{fb,off}	-7	°C				
Degradation coefficient ⁽⁴⁾		C _{dh}	0,9	—									
Heat pump: power input in modes other than active					Boiler								
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW				
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW				
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%				
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%				
Other items					Power input of electrical auxiliaries at full load		el _{max}	0,028	kW				
Capacity control of heat pump		fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load		el _{min}	0,011	kW				
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW				
Sound power level, indoors		L _{WA}	39	dB(A)	Stand-by losses		P _{stby}	0,042	kW				
Sound power level, outdoors		L _{WA}	57	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW				
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy											

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (Pdesignh), and the nominal heat output of the boiler (Psup) is equal to the additional capacity for heating (sup (Tj)).

(4) If Cdh is not determined by measurements the default value of Cdh is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima più freddo - Bassa temperatura (35°C) / Heating mode - Colder climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for low-temperature application (35°C).													
Parameters are declared for colder climate conditions.													
Item				Symbol				Value				Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C				Prated = P _{desi- gnh}				5,63				kW	
Consumo di energia annuale				Q _{HE}				3364				kWh	
Declared capacity for heating													
T _i = − 7 °C				P _{dh}				3,42				kW	
T _i = + 2 °C				P _{dh}				2,06				kW	
T _i = + 7 °C				P _{dh}				1,47				kW	
T _i =+12°C				P _{dh}				1,44				kW	
T _j = T _{HP,off}				P _{dh}				3,12				kW	
T _j = T _{fb,off}				P _{dh}				3,12				kW	
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)				P _{dh}				4,596				kW	
Switch temperature heat pump off				T _{hp,off}				-15				°C	
Degradation coefficient ⁽⁴⁾				C _{dh}				0,9				—	
Heat pump: power input in modes other than active													
Off mode				P _{OFF}				0,014				kW	
Thermostat-off mode				P _{TO}				0,024				kW	
Standby mode				P _{SB}				0,014				kW	
Crankcase heater mode				P _{CK}				0				kW	
Other items													
Capacity control of heat pump				fisso/varia- bile				Variable 0					
For air-to-water HP: Rated air flow rate				Q _{airsource}				2770				m³/h	
Sound power level, indoors				L _{WA}				-				dB(A)	
Sound power level, outdoors				L _{WA}				-				dB(A)	
Contact details				Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy									

Item				Symbol				Value				Unit	
Seasonal space heating energy efficiency				η _s				162				%	
Emissions of nitrogen oxides				NO _x				-				mg/kWh	
Declared coefficient of performance for heating													
T _j = − 7 °C				COP _d				3,59				—	
T _j = + 2 °C				COP _d				5,21				—	
T _j = + 7 °C				COP _d				6,24				—	
T _j =+12°C				COP _d				6,71				—	
T _j = T _{HP,off}				COP _d				3,95				—	
T _j = T _{fb,off}				COP _d				3,95				—	
For air-to-water HP : Operation limit temperature (maximum -7°C)				COP _d				-				—	
Switch temperature boiler off				T _{fb,off}				-15				°C	

Boiler									
Useful heat output at rated heat output and high temperature regime (3)				P ₄		24,0		kW	
Useful heat output at 30% of rated heat output and high tempera- ture regime (3)				P ₁		8,1		kW	
Useful efficiency at rated heat output and high temperature regime (3)				η ₄		88,30		%	
Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)				η ₁		98,80		%	
Power input of electrical auxiliaries at full load				elmax		0,028		kW	
Power input of electrical auxiliaries at part load				elmin		0,011		kW	
Power input of electrical auxiliaries in stand-by mode				P _{SB}		0,004		kW	
Stand-by losses				P _{stby}		0,042		kW	
Power input of ignition burner fossil fuel				P _{ign}		0,000		kW	

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima più caldo - Bassa temperatura (35°C) / Heating mode - Warmer climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6					
Hear source (air, water, brine, direct expansion)							air
Heat sink (water, brine)							water
Tipo di combustibile fossile (liquido / gas)							gas
Low temperature heat pump:							no
Heat pump combination heater:							no
Parameters are declared for low-temperature application (35°C).							
Parameters are declared for warmer climate conditions.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C	Prated = Pdesi- gnh	5,94	kW	Seasonal space heating energy efficiency	η _s	262	%
Consumo di energia annuale	Q _{HE}	1197	kWh	Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating				Declared coefficient of performance for heating			
T _i = − 7 °C	P _{dh}	-	kW	T _j = − 7 °C	COP _d	-	–
T _i = + 2 °C	P _{dh}	5,94	kW	T _j = + 2 °C	COP _d	3,91	–
T _i = + 7 °C	P _{dh}	3,99	kW	T _j = + 7 °C	COP _d	5,89	–
T _i =+12°C	P _{dh}	1,80	kW	T _j =+12°C	COP _d	8,21	–
T _j = T _{HP,off}	P _{dh}	5,94	kW	T _j = T _{HP,off}	COP _d	3,91	–
T _j = T _{fb,off}	P _{dh}	5,94	kW	T _j = T _{fb,off}	COP _d	3,91	–
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)	P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	–
Switch temperature heat pump off	T _{hp,off}	2	°C	Switch temperature boiler off	T _{fb,off}	2	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—				
Heat pump: power input in modes other than active				Boiler			
Off mode	P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items				Power input of electrical auxiliaries at full load	el _{max}	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load	el _{min}	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)	Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrolis.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy						

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima medio - Media temperatura (55°C) / Heating mode - Average climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6								
Hear source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for medium-temperature application (55°C).										
Parameters are declared for average climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C		Prated = Pdesi- gnh	5,70	kW	Seasonal space heating energy efficiency		η _s	137	%	
Consumo di energia annuale		Q _{HE}	3378	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = − 7 °C		Pdh	5,05	kW	T _j = − 7 °C		COPd	2,17	–	
T _i = + 2 °C		Pdh	3,12	kW	T _j = + 2 °C		COPd	3,51	–	
T _i = + 7 °C		Pdh	2,09	kW	T _j = + 7 °C		COPd	4,54	–	
T _i =+12°C		Pdh	1,28	kW	T _j =+12°C		COPd	5,35	–	
T _j = T _{HP,off}		Pdh	4,62	kW	T _j = T _{HP,off}		COPd	2,47	–	
T _j = T _{fb,off}		Pdh	4,62	kW	T _j = T _{fb,off}		COPd	2,47	–	
For air-to-water heat pumps: T _i = − 15 °C (if TOL < − 20 °C)		Pdh	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COPd	-	–	
Switch temperature heat pump off		T _{hp,off}	-7	°C	Switch temperature boiler off		T _{fb,off}	-7	°C	
Degradation coefficient ⁽⁴⁾		Cdh	0,9	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		elmax	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load		elmin	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	39	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	58	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima più freddo - Media temperatura (55°C) / Heating mode - Colder climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6								
Heat source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for medium-temperature application (55°C).										
Parameters are declared for colder climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{desi- gnh}	4,26	kW	Seasonal space heating energy efficiency		η _s	113	%	
Consumo di energia annuale		Q _{HE}	3634	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = − 7 °C		P _{dh}	2,70	kW	T _j = − 7 °C		COP _d	2,46	–	
T _i = + 2 °C		P _{dh}	1,61	kW	T _j = + 2 °C		COP _d	3,36	–	
T _i = + 7 °C		P _{dh}	1,02	kW	T _j = + 7 °C		COP _d	3,94	–	
T _i =+12°C		P _{dh}	1,37	kW	T _j =+12°C		COP _d	5,27	–	
T _j = T _{HP,off}		P _{dh}	2,46	kW	T _j = T _{HP,off}		COP _d	2,66	–	
T _j = T _{fb,off}		P _{dh}	2,46	kW	T _j = T _{fb,off}		COP _d	2,66	–	
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)		P _{dh}	3,475	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	–	
Switch temperature heat pump off		T _{hp,off}	-15	°C	Switch temperature boiler off		T _{fb,off}	-15	°C	
Degradation coefficient ⁽⁴⁾		C _{dh}	0,90	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		elmax	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load		elmin	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	2770	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	-	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 6 - Modo riscaldamento - Clima più caldo - Media temperatura (55°C) / Heating mode - Warmer climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 6						
Hear source (air, water, brine, direct expansion)							air	
Heat sink (water, brine)							water	
Tipo di combustibile fossile (liquido / gas)							gas	
Low temperature heat pump:							no	
Heat pump combination heater:							no	
Parameters are declared for medium-temperature application (55°C).								
Parameters are declared for warmer climate conditions.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C	Prated = P _{desi- gnh}	5,03	kW		Seasonal space heating energy efficiency	η _s	165	%
Consumo di energia annuale	Q _{HE}	1601	kWh		Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating					Declared coefficient of performance for heating			
T _i = − 7 °C	P _{dh}	-	kW		T _j = − 7 °C	COP _d	-	–
T _i = + 2 °C	P _{dh}	5,03	kW		T _j = + 2 °C	COP _d	2,48	–
T _i = + 7 °C	P _{dh}	3,31	kW		T _j = + 7 °C	COP _d	3,67	–
T _i =+12°C	P _{dh}	1,60	kW		T _j =+12°C	COP _d	5,24	–
T _j = T _{HP,off}	P _{dh}	5,03	kW		T _j = T _{HP,off}	COP _d	2,48	–
T _j = T _{fb,off}	P _{dh}	5,03	kW		T _j = T _{fb,off}	COP _d	2,48	–
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)	P _{dh}	-	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	–
Switch temperature heat pump off	T _{hp,off}	2	°C		Switch temperature boiler off	T _{fb,off}	2	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,90	—					
Heat pump: power input in modes other than active					Boiler			
Off mode	P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items					Power input of electrical auxiliaries at full load	el _{max}	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable 0			Power input of electrical auxiliaries at part load	el _{min}	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	2770	m³/h		Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)		Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)		Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy							

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima medio - Bassa temperatura (35°C) / Heating mode - Average climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 8											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Type of fossil fuel (liquid / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for low-temperature application (35°C).													
Parameters are declared for average climate conditions.													
Item		Symbol	Value	Unit		Item		Symbol	Value	Unit			
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{designh}	8,12	kW		Seasonal space heating energy efficiency		η _s	200	%			
Annual energy consumption		Q _{HE}	3307	kWh		Emissions of nitrogen oxides		NO _x	-	mg/kWh			
Declared capacity for heating						Declared coefficient of performance for heating							
T _i = - 7 °C		P _{dh}	7,19	kW		T _j = - 7 °C		COP _d	3,35	-			
T _i = + 2 °C		P _{dh}	4,65	kW		T _j = + 2 °C		COP _d	5,09	-			
T _i = + 7 °C		P _{dh}	2,90	kW		T _j = + 7 °C		COP _d	6,81	-			
T _i = +12°C		P _{dh}	1,63	kW		T _j = +12°C		COP _d	8,10	-			
T _j = T _{HP,off}		P _{dh}	6,62	kW		T _j = T _{HP,off}		COP _d	3,73	-			
T _j = T _{fb,off}		P _{dh}	6,62	kW		T _j = T _{fb,off}		COP _d	3,73	-			
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	-			
Switch temperature heat pump off		T _{hp,off}	-7	°C		Switch temperature boiler off		T _{fb,off}	-7	°C			
Degradation coefficient ⁽⁴⁾		C _{dh}	0,9	—									
Heat pump: power input in modes other than active						Boiler							
Off mode		P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW			
Thermostat-off mode		P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁	8,1	kW			
Standby mode		P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%			
Crankcase heater mode		P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁	98,80	%			
Other items						Power input of electrical auxiliaries at full load		el _{max}	0,028	kW			
Capacity control of heat pump		fixed/vari- able	Variable			Power input of electrical auxiliaries at part load		el _{min}	0,011	kW			
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m³/h		Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW			
Sound power level, indoors		L _{WA}	39	dB(A)		Stand-by losses		P _{stby}	0,042	kW			
Sound power level, outdoors		L _{WA}	59	dB(A)		Power input of ignition burner fossil fuel		P _{ign}	0,000	kW			
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy											

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima più freddo - Bassa temperatura (35°C) / Heating mode - Colder climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):				OMNIA S 3.2 HYBRID 28C 8			
Heat source (air, water, brine, direct expansion)							air
Heat sink (water, brine)							water
Tipo di combustibile fossile (liquido / gas)							gas
Low temperature heat pump:							no
Heat pump combination heater:							no
Parameters are declared for low-temperature application (35°C).							
Parameters are declared for colder climate conditions.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C	Prated = P _{designh}	6,98	kW	Seasonal space heating energy efficiency	η _s	166	%
Consumo di energia annuale	Q _{HE}	4080	kWh	Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating				Declared coefficient of performance for heating			
T _i = - 7 °C	P _{dh}	4,46	kW	T _j = - 7 °C	COP _d	3,66	-
T _i = + 2 °C	P _{dh}	2,70	kW	T _j = + 2 °C	COP _d	5,21	-
T _i = + 7 °C	P _{dh}	1,66	kW	T _j = + 7 °C	COP _d	6,54	-
T _i = +12°C	P _{dh}	1,66	kW	T _j = +12°C	COP _d	7,07	-
T _j = T _{HP,off}	P _{dh}	4,07	kW	T _j = T _{HP,off}	COP _d	4,00	-
T _j = T _{fb,off}	P _{dh}	4,07	kW	T _j = T _{fb,off}	COP _d	4,00	-
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)	P _{dh}	5,691	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	-
Switch temperature heat pump off	T _{hp,off}	-15	°C	Switch temperature boiler off	T _{fb,off}	-15	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—				
Heat pump: power input in modes other than active				Boiler			
Off mode	P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items				Power input of electrical auxiliaries at full load	el _{max}	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load	el _{min}	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	4030	m ³ /h	Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)	Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy						

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima più caldo - Bassa temperatura (35°C) / Heating mode - Warmer climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 8						
Heat source (air, water, brine, direct expansion)							air	
Heat sink (water, brine)							water	
Tipo di combustibile fossile (liquido / gas)							gas	
Low temperature heat pump:							no	
Heat pump combination heater:							no	
Parameters are declared for low-temperature application (35°C).								
Parameters are declared for warmer climate conditions.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C	Prated = P _{desi- gnh}	7,57	kW		Seasonal space heating energy efficiency	η _s	281	%
Consumo di energia annuale	Q _{HE}	1423	kWh		Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating					Declared coefficient of performance for heating			
T _i = - 7 °C	P _{dh}	-	kW		T _j = - 7 °C	COP _d	-	-
T _i = + 2 °C	P _{dh}	7,57	kW		T _j = + 2 °C	COP _d	3,98	-
T _i = + 7 °C	P _{dh}	5,22	kW		T _j = + 7 °C	COP _d	6,26	-
T _i =+12°C	P _{dh}	2,45	kW		T _j =+12°C	COP _d	8,91	-
T _j = T _{HP,off}	P _{dh}	7,57	kW		T _j = T _{HP,off}	COP _d	3,98	-
T _j = T _{fb,off}	P _{dh}	7,57	kW		T _j = T _{fb,off}	COP _d	3,98	-
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	-
Switch temperature heat pump off	T _{hp,off}	2	°C		Switch temperature boiler off	T _{fb,off}	2	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—					
Heat pump: power input in modes other than active					Boiler			
Off mode	P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items					Power input of electrical auxiliaries at full load	el _{max}	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable			Power input of electrical auxiliaries at part load	el _{min}	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	4030	m ³ /h		Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	-	dB(A)		Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	-	dB(A)		Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy							

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima medio - Media temperatura (55°C) / Heating mode - Average climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 8								
Hear source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for medium-temperature application (55°C).										
Parameters are declared for average climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C		Prated = Pdesi- gnh	6,60	kW	Seasonal space heating energy efficiency		η _s	131	%	
Consumo di energia annuale		Q _{HE}	4085	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = − 7 °C		Pdh	5,84	kW	T _j = − 7 °C		COPd	2,16	–	
T _i = + 2 °C		Pdh	3,76	kW	T _j = + 2 °C		COPd	3,30	–	
T _i = + 7 °C		Pdh	2,43	kW	T _j = + 7 °C		COPd	4,34	–	
T _i =+12°C		Pdh	1,40	kW	T _j =+12°C		COPd	5,14	–	
T _j = T _{HP,off}		Pdh	5,38	kW	T _j = T _{HP,off}		COPd	2,41	–	
T _j = T _{fb,off}		Pdh	5,38	kW	T _j = T _{fb,off}		COPd	2,41	–	
For air-to-water heat pumps: T _i = − 15 °C (if TOL < − 20 °C)		Pdh	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COPd	-	–	
Switch temperature heat pump off		T _{hp,off}	-7	°C	Switch temperature boiler off		T _{fb,off}	-7	°C	
Degradation coefficient ⁽⁴⁾		Cdh	0,9	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		elmax	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load		elmin	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	39	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	59	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima più freddo - Media temperatura (55°C) / Heating mode - Colder climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 8										
Hear source (air, water, brine, direct expansion)												air
Heat sink (water, brine)												water
Tipo di combustibile fossile (liquido / gas)												gas
Low temperature heat pump:												no
Heat pump combination heater:												no
Parameters are declared for medium-temperature application (55°C).												
Parameters are declared for colder climate conditions.												
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit			
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C		Prated = Pdesig- gnh	5,78	kW	Seasonal space heating energy efficiency		η _s	113	%			
Consumo di energia annuale		Q _{HE}	4911	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh			
Declared capacity for heating					Declared coefficient of performance for heating							
T _i = − 7 °C		P _{dh}	3,86	kW	T _j = − 7 °C		COP _d	2,45	–			
T _i = + 2 °C		P _{dh}	2,21	kW	T _j = + 2 °C		COP _d	3,35	–			
T _i = + 7 °C		P _{dh}	1,44	kW	T _j = + 7 °C		COP _d	4,11	–			
T _i =+12°C		P _{dh}	1,47	kW	T _j =+12°C		COP _d	5,19	–			
T _j = T _{HP,off}		P _{dh}	3,50	kW	T _j = T _{HP,off}		COP _d	2,65	–			
T _j = T _{fb,off}		P _{dh}	3,50	kW	T _j = T _{fb,off}		COP _d	2,65	–			
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)		P _{dh}	4,713	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	–			
Switch temperature heat pump off		T _{hp,off}	-15	°C	Switch temperature boiler off		T _{fb,off}	-15	°C			
Degradation coefficient ⁽⁴⁾		C _{dh}	0,90	—								
Heat pump: power input in modes other than active					Boiler							
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW			
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW			
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%			
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%			
Other items					Power input of electrical auxiliaries at full load		el _{max}	0,028	kW			
Capacity control of heat pump		fisso/varia- bile	Variable		Power input of electrical auxiliaries at part load		el _{min}	0,011	kW			
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m ³ /h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW			
Sound power level, indoors		L _{WA}	-	dB(A)	Stand-by losses		P _{stby}	0,042	kW			
Sound power level, outdoors		L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW			
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy										

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 8 - Modo riscaldamento - Clima più caldo - Media temperatura (55°C) / Heating mode - Warmer climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 8											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for medium-temperature application (55°C).													
Parameters are declared for warmer climate conditions.													
Item				Symbol				Value				Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C				Prated = P _{desi- gnh}				7,55				kW	
Consumo di energia annuale				Q _{HE}				2254				kWh	
Declared capacity for heating													
T _i = − 7 °C				P _{dh}				-				kW	
T _i = + 2 °C				P _{dh}				7,55				kW	
T _i = + 7 °C				P _{dh}				4,86				kW	
T _i =+12°C				P _{dh}				2,32				kW	
T _j = T _{HP,off}				P _{dh}				7,55				kW	
T _j = T _{fb,off}				P _{dh}				7,55				kW	
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)				P _{dh}				-				kW	
Switch temperature heat pump off				T _{hp,off}				2				°C	
Degradation coefficient ⁽⁴⁾				C _{dh}				0,90				—	
Heat pump: power input in modes other than active													
Off mode				P _{OFF}				0,014				kW	
Thermostat-off mode				P _{TO}				0,024				kW	
Standby mode				P _{SB}				0,014				kW	
Crankcase heater mode				P _{CK}				0				kW	
Other items													
Capacity control of heat pump				fisso/varia- bile				Variable					
For air-to-water HP: Rated air flow rate				Q _{airsource}				4030				m³/h	
Sound power level, indoors				L _{WA}				-				dB(A)	
Sound power level, outdoors				L _{WA}				-				dB(A)	
Contact details				Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy									

Item				Symbol				Value				Unit	
Seasonal space heating energy efficiency				η _s				176				%	
Emissions of nitrogen oxides				NO _x				-				mg/kWh	
Declared coefficient of performance for heating													
T _j = − 7 °C				COP _d				-				—	
T _j = + 2 °C				COP _d				2,59				—	
T _j = + 7 °C				COP _d				3,92				—	
T _j =+12°C				COP _d				5,55				—	
T _j = T _{HP,off}				COP _d				2,59				—	
T _j = T _{fb,off}				COP _d				2,59				—	
For air-to-water HP : Operation limit temperature (maximum -7°C)				COP _d				-				—	
Switch temperature boiler off				T _{fb,off}				2				°C	

Boiler									
Useful heat output at rated heat output and high temperature regime (3)				P ₄		24,0		kW	
Useful heat output at 30% of rated heat output and high tempera- ture regime (3)				P ₁		8,1		kW	
Useful efficiency at rated heat output and high temperature regime (3)				η ₄		88,30		%	
Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)				η ₁		98,80		%	
Power input of electrical auxiliaries at full load				el _{max}		0,028		kW	
Power input of electrical auxiliaries at part load				el _{min}		0,011		kW	
Power input of electrical auxiliaries in stand-by mode				P _{SB}		0,004		kW	
Stand-by losses				P _{stby}		0,042		kW	
Power input of ignition burner fossil fuel				P _{ign}		0,000		kW	

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima medio - Bassa temperatura (35°C) / Heating mode - Average climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):	OMNIA S 3.2 HYBRID 28C 10
Heat source (air, water, brine, direct expansion)	air
Heat sink (water, brine)	water
Tipo di combustibile fossile (liquido / gas)	gas
Low temperature heat pump:	no
Heat pump combination heater:	no

Parameters are declared for low-temperature application (35°C).

Parameters are declared for average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C	Prated = P _{designh}	9,17	kW	Seasonal space heating energy efficiency	η_s	201	%
Consumo di energia annuale	Q _{HE}	3708	kWh	Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating				Declared coefficient of performance for heating			
T _i = - 7 °C	P _{dh}	8,11	kW	T _j = - 7 °C	COP _d	3,23	-
T _i = + 2 °C	P _{dh}	5,18	kW	T _j = + 2 °C	COP _d	5,09	-
T _i = + 7 °C	P _{dh}	3,32	kW	T _j = + 7 °C	COP _d	7,08	-
T _i = +12°C	P _{dh}	1,65	kW	T _j = +12°C	COP _d	8,41	-
T _j = T _{HP,off}	P _{dh}	7,46	kW	T _j = T _{HP,off}	COP _d	3,64	-
T _j = T _{fb,off}	P _{dh}	7,46	kW	T _j = T _{fb,off}	COP _d	3,64	-
For air-to-water heat pumps: T _i = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)	COP _d	-	-
Switch temperature heat pump off	T _{hp,off}	-7	°C	Switch temperature boiler off	T _{fb,off}	-7	°C
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—				

Heat pump: power input in modes other than active

Off mode	P _{OFF}	0,014	kW
Thermostat-off mode	P _{TO}	0,024	kW
Standby mode	P _{SB}	0,014	kW
Crankcase heater mode	P _{CK}	0	kW

Other items

Capacity control of heat pump	fisso/variabile	Variable 0
For air-to-water HP: Rated air flow rate	Q _{airsource}	4030 m ³ /h
Sound power level, indoors	L _{WA}	39 dB(A)
Sound power level, outdoors	L _{WA}	60 dB(A)

Contact details: Ferroli s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy

Boiler

Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Useful heat output at 30% of rated heat output and high temperature regime (3)	P ₁	8,1	kW
Useful efficiency at rated heat output and high temperature regime (3)	η_4	88,30	%
Useful efficiency at 30% of rated heat output and high temperature regime (3)	η_1	98,80	%
Power input of electrical auxiliaries at full load	elmax	0,028	kW
Power input of electrical auxiliaries at part load	elmin	0,011	kW
Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Stand-by losses	P _{stby}	0,042	kW
Power input of ignition burner fossil fuel	P _{ign}	0,000	kW

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima più freddo - Bassa temperatura (35°C) / Heating mode - Colder climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 10										
Hear source (air, water, brine, direct expansion)												air
Heat sink (water, brine)												water
Tipo di combustibile fossile (liquido / gas)												gas
Low temperature heat pump:												no
Heat pump combination heater:												no
Parameters are declared for low-temperature application (35°C).												
Parameters are declared for colder climate conditions.												
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit			
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C		Prated = Pdesi- gnh	7,75	kW	Seasonal space heating energy efficiency		η _s	166	%			
Consumo di energia annuale		Q _{HE}	4533	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh			
Declared capacity for heating					Declared coefficient of performance for heating							
T _i = − 7 °C		Pdh	4,83	kW	T _j = − 7 °C		COPd	3,60	–			
T _i = + 2 °C		Pdh	2,94	kW	T _j = + 2 °C		COPd	5,26	–			
T _i = + 7 °C		Pdh	1,92	kW	T _j = + 7 °C		COPd	7,08	–			
T _i =+12°C		Pdh	1,66	kW	T _j =+12°C		COPd	7,22	–			
T _j = T _{HP,off}		Pdh	4,41	kW	T _j = T _{HP,off}		COPd	3,97	–			
T _j = T _{fb,off}		Pdh	4,41	kW	T _j = T _{fb,off}		COPd	3,97	–			
For air-to-water heat pumps: T _i = − 15 °C (if TOL < − 20 °C)		Pdh	6,324	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COPd	-	–			
Switch temperature heat pump off		T _{hp,off}	-15	°C	Switch temperature boiler off		T _{fb,off}	-15	°C			
Degradation coefficient ⁽⁴⁾		Cdh	0,9	—								
Heat pump: power input in modes other than active					Boiler							
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW			
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW			
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%			
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%			
Other items					Power input of electrical auxiliaries at full load		elmax	0,028	kW			
Capacity control of heat pump		fisso/variable	Variable 0		Power input of electrical auxiliaries at part load		elmin	0,011	kW			
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW			
Sound power level, indoors		L _{WA}	-	dB(A)	Stand-by losses		P _{stby}	0,042	kW			
Sound power level, outdoors		L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW			
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy										

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima più caldo - Bassa temperatura (35°C) / Heating mode - Warmer climate - Low temperature (35°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 10											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for low-temperature application (35°C).													
Parameters are declared for warmer climate conditions.													
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit				
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{designh}	8,44	kW	Seasonal space heating energy efficiency		η _s	281	%				
Consumo di energia annuale		Q _{HE}	1588	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh				
Declared capacity for heating					Declared coefficient of performance for heating								
T _i = - 7 °C		P _{dh}	-	kW	T _j = - 7 °C		COP _d	-	-				
T _i = + 2 °C		P _{dh}	8,44	kW	T _j = + 2 °C		COP _d	3,84	-				
T _i = + 7 °C		P _{dh}	5,52	kW	T _j = + 7 °C		COP _d	6,18	-				
T _i =+12°C		P _{dh}	2,62	kW	T _j =+12°C		COP _d	9,04	-				
T _j = T _{HP,off}		P _{dh}	8,44	kW	T _j = T _{HP,off}		COP _d	3,84	-				
T _j = T _{fb,off}		P _{dh}	8,44	kW	T _j = T _{fb,off}		COP _d	3,84	-				
For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)		P _{dh}	-	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	-				
Switch temperature heat pump off		T _{hp,off}	2	°C	Switch temperature boiler off		T _{fb,off}	2	°C				
Degradation coefficient ⁽⁴⁾		C _{dh}	0,9	—									
Heat pump: power input in modes other than active					Boiler								
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW				
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW				
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%				
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%				
Other items					Power input of electrical auxiliaries at full load		el _{max}	0,028	kW				
Capacity control of heat pump		fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load		el _{min}	0,011	kW				
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m³/h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW				
Sound power level, indoors		L _{WA}	-	dB(A)	Stand-by losses		P _{stby}	0,042	kW				
Sound power level, outdoors		L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW				
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy											

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima medio - Media temperatura (55°C) / Heating mode - Average climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 10						
Hear source (air, water, brine, direct expansion)							air	
Heat sink (water, brine)							water	
Tipo di combustibile fossile (liquido / gas)							gas	
Low temperature heat pump:							no	
Heat pump combination heater:							no	
Parameters are declared for medium-temperature application (55°C).								
Parameters are declared for average climate conditions.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heat output ⁽³⁾ at Tdesignh = -10 (-11) °C	Prated = Pdesi- gnh	7,67	kW		Seasonal space heating energy efficiency	η _s	136	%
Consumo di energia annuale	Q _{HE}	4571	kWh		Emissions of nitrogen oxides	NO _x	-	mg/kWh
Declared capacity for heating					Declared coefficient of performance for heating			
T _i = − 7 °C	Pdh	6,78	kW		T _j = − 7 °C	COPd	2,24	−
T _i = + 2 °C	Pdh	4,29	kW		T _j = + 2 °C	COPd	3,42	−
T _i = + 7 °C	Pdh	2,77	kW		T _j = + 7 °C	COPd	4,52	−
T _i =+12°C	Pdh	1,58	kW		T _j =+12°C	COPd	5,50	−
T _j = T _{HP,off}	Pdh	6,23	kW		T _j = T _{HP,off}	COPd	2,51	−
T _j = T _{fb,off}	Pdh	6,23	kW		T _j = T _{fb,off}	COPd	2,51	−
For air-to-water heat pumps: T _i = − 15 °C (if TOL < − 20 °C)	Pdh	-	kW		For air-to-water HP : Operation limit temperature (maximum -7°C)	COPd	-	−
Switch temperature heat pump off	T _{hp,off}	-7	°C		Switch temperature boiler off	T _{fb,off}	-7	°C
Degradation coefficient ⁽⁴⁾	Cdh	0,9	—					
Heat pump: power input in modes other than active					Boiler			
Off mode	P _{OFF}	0,014	kW		Useful heat output at rated heat output and high temperature regime (3)	P ₄	24,0	kW
Thermostat-off mode	P _{TO}	0,024	kW		Useful heat output at 30% of rated heat output and high tempera- ture regime (3)	P ₁	8,1	kW
Standby mode	P _{SB}	0,014	kW		Useful efficiency at rated heat output and high temperature regime (3)	η ₄	88,30	%
Crankcase heater mode	P _{CK}	0	kW		Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)	η ₁	98,80	%
Other items					Power input of electrical auxiliaries at full load	elmax	0,028	kW
Capacity control of heat pump	fisso/varia- bile	Variable 0			Power input of electrical auxiliaries at part load	elmin	0,011	kW
For air-to-water HP: Rated air flow rate	Q _{airsource}	4030	m³/h		Power input of electrical auxiliaries in stand-by mode	P _{SB}	0,004	kW
Sound power level, indoors	L _{WA}	39	dB(A)		Stand-by losses	P _{stby}	0,042	kW
Sound power level, outdoors	L _{WA}	60	dB(A)		Power input of ignition burner fossil fuel	P _{ign}	0,000	kW
Contact details	Ferrolis s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy							

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima più freddo - Media temperatura (55°C) / Heating mode - Colder climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 10								
Hear source (air, water, brine, direct expansion)										air
Heat sink (water, brine)										water
Tipo di combustibile fossile (liquido / gas)										gas
Low temperature heat pump:										no
Heat pump combination heater:										no
Parameters are declared for medium-temperature application (55°C).										
Parameters are declared for colder climate conditions.										
Item		Symbol	Value	Unit	Item		Symbol	Value	Unit	
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C		Prated = P _{desig-nh}	6,71	kW	Seasonal space heating energy efficiency		η _s	118	%	
Consumo di energia annuale		Q _{HE}	5480	kWh	Emissions of nitrogen oxides		NO _x	-	mg/kWh	
Declared capacity for heating					Declared coefficient of performance for heating					
T _i = - 7 °C		P _{dh}	4,27	kW	T _j = - 7 °C		COP _d	2,54	-	
T _i = + 2 °C		P _{dh}	2,57	kW	T _j = + 2 °C		COP _d	3,51	-	
T _i = + 7 °C		P _{dh}	1,66	kW	T _j = + 7 °C		COP _d	4,37	-	
T _i =+12°C		P _{dh}	1,48	kW	T _j =+12°C		COP _d	5,38	-	
T _j = T _{HP,off}		P _{dh}	3,89	kW	T _j = T _{HP,off}		COP _d	2,76	-	
T _j = T _{fb,off}		P _{dh}	3,89	kW	T _j = T _{fb,off}		COP _d	2,76	-	
For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)		P _{dh}	5,477	kW	For air-to-water HP : Operation limit temperature (maximum -7°C)		COP _d	-	-	
Switch temperature heat pump off		T _{hp,off}	-15	°C	Switch temperature boiler off		T _{fb,off}	-15	°C	
Degradation coefficient ⁽⁴⁾		C _{dh}	0,90	—						
Heat pump: power input in modes other than active					Boiler					
Off mode		P _{OFF}	0,014	kW	Useful heat output at rated heat output and high temperature regime (3)		P ₄	24,0	kW	
Thermostat-off mode		P _{TO}	0,024	kW	Useful heat output at 30% of rated heat output and high temperature regime (3)		P ₁	8,1	kW	
Standby mode		P _{SB}	0,014	kW	Useful efficiency at rated heat output and high temperature regime (3)		η ₄	88,30	%	
Crankcase heater mode		P _{CK}	0	kW	Useful efficiency at 30% of rated heat output and high temperature regime (3)		η ₁	98,80	%	
Other items					Power input of electrical auxiliaries at full load		el _{max}	0,028	kW	
Capacity control of heat pump		fisso/varia- bile	Variable 0		Power input of electrical auxiliaries at part load		el _{min}	0,011	kW	
For air-to-water HP: Rated air flow rate		Q _{airsource}	4030	m ³ /h	Power input of electrical auxiliaries in stand-by mode		P _{SB}	0,004	kW	
Sound power level, indoors		L _{WA}	-	dB(A)	Stand-by losses		P _{stby}	0,042	kW	
Sound power level, outdoors		L _{WA}	-	dB(A)	Power input of ignition burner fossil fuel		P _{ign}	0,000	kW	
Contact details		Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy								

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RISCALDAMENTO AMBIENTE / ERP TECHNICAL DATA SHEET FOR SPACE HEATING

OMNIA S 3.2 HYBRID 28C 10 - Modo riscaldamento - Clima più caldo - Media temperatura (55°C) / Heating mode - Warmer climate - Medium temperature (55°C)

Technical data sheet for hybrid heat pump

Model(s):		OMNIA S 3.2 HYBRID 28C 10											
Heat source (air, water, brine, direct expansion)												air	
Heat sink (water, brine)												water	
Tipo di combustibile fossile (liquido / gas)												gas	
Low temperature heat pump:												no	
Heat pump combination heater:												no	
Parameters are declared for medium-temperature application (55°C).													
Parameters are declared for warmer climate conditions.													
Item				Symbol		Value		Unit					
Rated heat output ⁽³⁾ at T _{designh} = -10 (-11) °C				Prated = P _{desi- gnh}		8,06		kW					
Consumo di energia annuale				Q _{HE}		2308		kWh					
Declared capacity for heating													
T _i = − 7 °C				P _{dh}		-		kW					
T _i = + 2 °C				P _{dh}		8,06		kW					
T _i = + 7 °C				P _{dh}		5,55		kW					
T _i =+12°C				P _{dh}		2,53		kW					
T _j = T _{HP,off}				P _{dh}		8,06		kW					
T _j = T _{fb,off}				P _{dh}		8,06		kW					
For air-to-water heat pumps: T _j = − 15 °C (if TOL < − 20 °C)				P _{dh}		-		kW					
Switch temperature heat pump off				T _{hp,off}		2		°C					
Degradation coefficient ⁽⁴⁾				C _{dh}		0,90		—					
Heat pump: power input in modes other than active													
Off mode				P _{OFF}		0,014		kW					
Thermostat-off mode				P _{TO}		0,024		kW					
Standby mode				P _{SB}		0,014		kW					
Crankcase heater mode				P _{CK}		0		kW					
Other items													
Capacity control of heat pump				fisso/varia- bile		Variable 0							
For air-to-water HP: Rated air flow rate				Q _{airsource}		4030		m³/h					
Sound power level, indoors				L _{WA}		-		dB(A)					
Sound power level, outdoors				L _{WA}		-		dB(A)					
Contact details				Ferrol s.p.a. via Ritonda 78A - S.Bonifacio (VR) - Italy									

Item				Symbol		Value		Unit	
Seasonal space heating energy efficiency				η _s		184		%	
Emissions of nitrogen oxides				NO _x		-		mg/kWh	
Declared coefficient of performance for heating									
T _j = − 7 °C				COP _d		-		—	
T _j = + 2 °C				COP _d		2,59		—	
T _j = + 7 °C				COP _d		4,09		—	
T _j =+12°C				COP _d		5,82		—	
T _j = T _{HP,off}				COP _d		2,59		—	
T _j = T _{fb,off}				COP _d		2,59		—	
For air-to-water HP : Operation limit temperature (maximum -7°C)				COP _d		-		—	
Switch temperature boiler off				T _{fb,off}		2		°C	

Boiler							
Useful heat output at rated heat output and high temperature regime (3)		P ₄		24,0		kW	
Useful heat output at 30% of rated heat output and high tempera- ture regime (3)		P ₁		8,1		kW	
Useful efficiency at rated heat output and high temperature regime (3)		η ₄		88,30		%	
Useful efficiency at 30% of rated heat output and high tempera- ture regime (3)		η ₁		98,80		%	
Power input of electrical auxiliaries at full load		el _{max}		0,028		kW	
Power input of electrical auxiliaries at part load		el _{min}		0,011		kW	
Power input of electrical auxiliaries in stand-by mode		P _{SB}		0,004		kW	
Stand-by losses		P _{stby}		0,042		kW	
Power input of ignition burner fossil fuel		P _{ign}		0,000		kW	

(3) For heat pumps and heat pump combination heaters, the nominal heat output (Prated) is equal to the design load for heating (P_{designh}), and the nominal heat output of the boiler (P_{sup}) is equal to the additional capacity for heating (sup (T_j)).

(4) If C_{dh} is not determined by measurements the default value of C_{dh} is = 0.9

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 4 - Modo raffreddamento - Clima Medio - Bassa temperatura (7°C) / Cooling mode - Average climate - Low temperature (7°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 4				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	4.7	kW		Seasonal space cooling energy efficiency	η _{s,c}	197	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	4.66	kW		T _j =+35°C	EER _d	3.52	-
T _j =+30°C	P _{dc}	3.66	kW		T _j =+30°C	EER _d	4.76	-
T _j =+25°C	P _{dc}	2.21	kW		T _j =+25°C	EER _d	5.72	-
T _j =+20°C	P _{dc}	0.94	kW		T _j =+20°C	EER _d	5.72	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	2770	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 56	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details		Ferrolì spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolì.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 4 - Modo raffreddamento - Clima Medio - Media temperature (18°C) / Cooling mode - Average climate - Medium temperature (18°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 4				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	4.5	kW		Seasonal space cooling energy efficiency	η _{s,c}	308	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	4.51	kW		T _j =+35°C	EER _d	5.54	-
T _j =+30°C	P _{dc}	3.44	kW		T _j =+30°C	EER _d	7.23	-
T _j =+25°C	P _{dc}	2.19	kW		T _j =+25°C	EER _d	8.94	-
T _j =+20°C	P _{dc}	1.13	kW		T _j =+20°C	EER _d	10.48	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	2770	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 56	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details		Ferrolli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 6 - Modo raffreddamento - Clima Medio - Bassa temperatura (7°C) / Cooling mode - Average climate - Low temperature (7°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 6				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	6.3	kW		Seasonal space cooling energy efficiency	η _{s,c}	211	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	6.35	kW		T _j =+35°C	EER _d	2.93	-
T _j =+30°C	P _{dc}	4.76	kW		T _j =+30°C	EER _d	4.53	-
T _j =+25°C	P _{dc}	3.02	kW		T _j =+25°C	EER _d	6.32	-
T _j =+20°C	P _{dc}	1.39	kW		T _j =+20°C	EER _d	7.20	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	2770	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 60	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details		Ferroli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferroli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 6 - Modo raffreddamento - Clima Medio - Media temperature (18°C) / Cooling mode - Average climate - Medium temperature (18°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 6				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	6.5	kW		Seasonal space cooling energy efficiency	η _{s,c}	325	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	6.55	kW		T _j =+35°C	EER _d	4.69	-
T _j =+30°C	P _{dc}	4.84	kW		T _j =+30°C	EER _d	7.16	-
T _j =+25°C	P _{dc}	3.26	kW		T _j =+25°C	EER _d	9.64	-
T _j =+20°C	P _{dc}	1.41	kW		T _j =+20°C	EER _d	11.48	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	2770	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 58	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details		Ferroli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferroli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 8 - Modo raffreddamento - Clima Medio - Bassa temperatura (7°C) / Cooling mode - Average climate - Low temperature (7°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 8				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	7.4	kW		Seasonal space cooling energy efficiency	η _{s,c}	230	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	7.38	kW		T _j =+35°C	EER _d	3.39	-
T _j =+30°C	P _{dc}	5.72	kW		T _j =+30°C	EER _d	4.71	-
T _j =+25°C	P _{dc}	3.62	kW		T _j =+25°C	EER _d	6.65	-
T _j =+20°C	P _{dc}	1.64	kW		T _j =+20°C	EER _d	8.55	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	4030	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 60	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Low temperature application						
Contact details		Ferrolli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 8 - Modo raffreddamento - Clima Medio - Media temperature (18°C) / Cooling mode - Average climate - Medium temperature (18°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 8				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	8.4	kW		Seasonal space cooling energy efficiency	η _{s,c}	355	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	8.37	kW		T _j =+35°C	EER _d	5.09	-
T _j =+30°C	P _{dc}	6.47	kW		T _j =+30°C	EER _d	7.02	-
T _j =+25°C	P _{dc}	4.31	kW		T _j =+25°C	EER _d	10.67	-
T _j =+20°C	P _{dc}	1.80	kW		T _j =+20°C	EER _d	13.61	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	4030	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 60	dB					
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details		Ferrolli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 10 - Modo raffreddamento - Clima Medio - Bassa temperatura (7°C) / Cooling mode - Average climate - Low temperature (7°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 10				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	8.7	kW		Seasonal space cooling energy efficiency	η _{s,c}	236	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	8.73	kW		T _j =+35°C	EER _d	3.21	-
T _j =+30°C	P _{dc}	6.68	kW		T _j =+30°C	EER _d	4.47	-
T _j =+25°C	P _{dc}	4.26	kW		T _j =+25°C	EER _d	7.02	-
T _j =+20°C	P _{dc}	1.94	kW		T _j =+20°C	EER _d	9.54	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	4030	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 60	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used				Low temperature application				
Contact details				Ferrolli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolli.com				
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

FOGLIO DATI TECNICI ERP PER RAFFREDDAMENTO AMBIENTE ERP TECHNICAL DATA SHEET FOR SPACE COOLING

OMNIA S 3.2 HYBRID 28C 10 - Modo raffreddamento - Clima Medio - Media temperature (18°C) / Cooling mode - Average climate - Medium temperature (18°C)

Model(s):				OMNIA S 3.2 HYBRID 28C 10				
Outdoor side heat exchanger of chiller:				Air to water				
Indoor side heat exchanger chiller:				Water				
Type:				Compressor driven vapour compression				
Driver of compressor:				Electric motor				
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	10.0	kW		Seasonal space cooling energy efficiency	η _{s,c}	348	%
Declared cooling capacity for part load at given outdoor temperature T _j					Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	10.01	kW		T _j =+35°C	EER _d	4.64	-
T _j =+30°C	P _{dc}	7.71	kW		T _j =+30°C	EER _d	6.45	-
T _j =+25°C	P _{dc}	5.03	kW		T _j =+25°C	EER _d	10.36	-
T _j =+20°C	P _{dc}	2.32	kW		T _j =+20°C	EER _d	14.98	-
Degradation co-efficient for chillers (*)	C _{dc}	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.014	kW		Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW		Standby mode	P _{SB}	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	4030	m³/h
Sound power level, indoors / outdoors	L _{WA}	39 / 60	dB		For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m³/h
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV					
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)					
Standard rating conditions used		Medium temperature application						
Contact details		Ferrolli spa - 37047 San Bonifacio (Verona) Italy - Via Ritonda 78/A - tel. +39.045.6139411 - fax +39.045.6100933 - www.ferrolli.com						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.								

TABELLE PRESTAZIONALI - MODO RISCALDAMENTO / CAPACITY TABLES - HEATING MODE

OMNIA S 3.2 HYBRID 28C 4 - Prestazioni riscaldamento / Heating capacity

Tw_out °C	DB/WB °C*	Heating Capacity [W]						COP					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
25	-25	2053	1899	1566	1232	/	/	1.74	1.78	1.79	1.80	/	/
	-20	3086	2824	2276	1728	/	/	2.36	2.45	2.48	2.50	/	/
	-15	3602	3260	2989	2718	1682	/	3.03	3.17	3.35	3.53	3.25	/
	-10	4465	4001	3414	2828	2241	1654	3.36	3.60	3.63	3.65	3.68	3.70
	-7	5112	4678	3798	2917	2037	1156	3.67	3.85	3.89	3.93	3.97	4.01
	-5	5180	4692	3858	3024	2190	1356	4.03	4.22	4.26	4.30	4.34	4.38
	-2	5296	4841	3982	3122	2263	1403	4.55	4.71	4.75	4.80	4.84	4.88
	0	5412	4990	4105	3220	2335	1450	5.06	5.19	5.24	5.28	5.33	5.37
	2	5629	5182	4310	3439	2567	1695	5.28	5.45	5.52	5.58	5.65	5.71
	5	5994	5479	4601	3723	2844	1966	5.83	6.04	6.10	6.16	6.22	6.28
	7	6376	4603	4215	3826	2354	1955	6.67	6.98	7.41	7.84	7.28	6.96
	10	6370	5725	4781	3837	2893	1949	6.68	7.13	7.21	7.30	7.38	7.46
	12	6232	5625	4748	3870	2992	2114	6.69	7.21	7.29	7.39	7.48	7.56
	15	6026	5476	4698	3919	3141	2362	6.71	7.32	7.42	7.52	7.62	7.72
	20	5864	5358	4878	4398	2639	/	7.24	7.96	8.48	9.00	8.41	/
	25	5701	5081	4109	3136	/	/	7.91	8.75	9.00	9.25	/	/
	30	5776	5177	4249	3321	/	/	8.41	9.37	9.64	9.90	/	/
	35	5850	5290	4605	3920	/	/	8.96	10.05	10.34	10.63	/	/
	40	6298	5777	5030	4282	/	/	10.84	12.23	12.59	12.94	/	/
	43	6566	6076	5304	4531	/	/	12.20	13.87	14.28	14.68	/	/
	-25	1796	1652	1384	1115	/	/	1.48	1.52	1.54	1.55	/	/
	-20	2829	2575	2416	2257	1528	/	1.82	1.86	1.96	2.07	1.90	/
30	-15	3407	3066	2830	2595	1652	/	2.78	2.88	3.04	3.21	2.95	/
	-10	4290	3916	3375	2834	2292	1751	3.23	3.40	3.43	3.45	3.48	3.50
	-7	5034	4607	3751	2895	2038	1182	3.51	3.65	3.68	3.71	3.73	3.76
	-5	5076	4618	3803	2987	2172	1356	3.72	3.86	3.89	3.92	3.95	3.98
	-2	5173	4709	3890	3071	2251	1432	4.03	4.16	4.19	4.23	4.26	4.29
	0	5269	4800	3977	3154	2330	1507	4.34	4.46	4.50	4.54	4.57	4.61
	2	5436	4944	4141	3339	2536	1733	4.51	4.70	4.74	4.79	4.83	4.87
	5	5746	5188	4388	3588	2788	1988	4.85	5.03	5.08	5.13	5.18	5.23
	7	6222	4355	4018	3682	2339	1853	5.40	5.65	6.00	6.35	5.89	5.60
	10	6033	5281	4403	3525	2646	1768	5.16	5.41	5.48	5.54	5.61	5.67
	12	5907	5193	4385	3577	2768	1960	5.01	5.30	5.37	5.44	5.51	5.57
	15	5717	5062	4358	3655	2951	2247	4.78	5.13	5.20	5.28	5.35	5.42
	20	5743	5113	4736	4360	2814	/	5.75	6.22	6.63	7.04	6.58	/
	25	5768	5237	4320	3403	/	/	7.21	7.85	8.08	8.30	/	/
	30	5836	5327	4458	3589	/	/	7.48	8.20	8.44	8.68	/	/
	35	5903	5436	4725	4014	/	/	7.77	8.57	8.83	9.08	/	/
	40	6379	5773	5024	4274	/	/	9.51	10.57	10.88	11.19	/	/
	43	6665	6085	5309	4532	/	/	10.80	12.08	12.44	12.80	/	/
	-25	1711	1560	1371	1181	/	/	1.29	1.31	1.32	1.33	/	/
	-20	2444	2205	1812	1418	/	/	1.43	1.48	1.50	1.51	/	/
	-15	3253	2901	2674	2447	1548	/	2.39	2.48	2.62	2.76	2.54	/
	-10	4136	3824	3296	2769	2241	1713	2.85	2.95	2.97	3.00	3.02	3.04
	-7	4986	4700	3837	2974	2110	1247	3.11	3.10	3.16	3.22	3.28	3.34
35	-5	5018	4371	3632	2893	2154	1415	3.27	3.41	3.44	3.46	3.49	3.51
	-2	5058	4387	3645	2903	2161	1419	3.51	3.63	3.66	3.69	3.71	3.74
	0	5098	4403	3658	2913	2167	1422	3.74	3.85	3.88	3.92	3.95	3.98
	2	5280	4400	3712	3024	2335	1647	3.87	4.00	4.06	4.12	4.17	4.23
	5	5677	5080	4291	3502	2713	1924	4.33	4.49	4.53	4.58	4.62	4.66
	7 *	6255	4200	3890	3579	2308	1920	4.96	5.10	5.43	5.77	5.39	5.01
	10	6067	5355	4496	3636	2777	1917	4.82	4.97	5.03	5.09	5.15	5.21
	12	5941	5267	4463	3659	2855	2050	4.73	4.92	4.98	5.05	5.11	5.17
	15	5753	5136	4414	3693	2971	2249	4.59	4.84	4.91	4.98	5.05	5.12
	20	5774	5094	4775	4456	3007	/	5.13	5.46	5.82	6.18	5.78	/
	25	5805	5121	4323	3525	/	/	5.85	6.27	6.45	6.63	/	/
	30	5781	5319	4553	3786	/	/	6.51	7.01	7.22	7.43	/	/
	35	5966	5538	4726	3914	/	/	7.27	7.89	8.13	8.36	/	/
	40	6359	5731	5123	4515	/	/	8.57	9.37	9.65	9.93	/	/
	43	6594	5996	5372	4748	/	/	9.50	10.46	10.77	11.08	/	/
	-25	1531	1418	1253	1087	/	/	1.18	1.19	1.20	1.20	/	/
	-20	2166	1984	1685	1386	/	/	1.24	1.26	1.28	1.29	/	/
	-15	2934	2658	2151	1643	/	/	1.97	2.02	2.05	2.07	/	/
	-10	4017	3599	3364	3128	2089	/	2.43	2.49	2.63	2.78	2.56	/
	-7	4667	4265	3873	3480	2063	/	2.70	2.81	2.98	3.16	2.93	/
	-5	4738	4214	3831	3449	2056	/	2.82	2.96	3.14	3.32	3.07	/
	-2	4827	4373	3963	3554	2088	/	3.00	3.09	3.28	3.47	3.21	/
	0	4916	4533	4096	3659	2119	/	3.18	3.23	3.42	3.61	3.34	/
	2	5183	4772	4339	3906	2329	/	3.35	3.44	3.66	3.87	3.60	/
40	5	5588	5107	4666	4226	2576	/	3.77	3.86	4.09	4.33	4.01	/
	7	6259	4381	3665	2948	/	/	4.41	4.64	4.71	4.78	/	/
	10	5912	5241	4843	4445	2841	/	4.63	4.83	5.13	5.44	5.06	/
	12	5948	5258	4870	4481	2890	/	4.79	5.05	5.37	5.70	5.31	/
	15	6002	5284	4910	4536	2964	/	5.04	5.38	5.73	6.08	5.68	/
	20	6076	5593	4736	3878	/	/	5.48	5.89	6.06	6.23	/	/
	25	5910	5473	4894	4314	/	/	6.06	6.55	6.75	6.94	/	/
	30	5886	5480	4756	4032	/	/	6.39	6.97	7.17	7.37	/	/
	35	5861	5504	4774	4044	/	/	6.77	7.43	7.65	7.87	/	/
	40	6334	5777	5169	4560	/	/	7.88	8.70	8.96	9.22	/	/
	43	6617	6088	5459	4830	/	/	8.63	9.60	9.89	10.17	/	/
	-25	1371	1285	1075	864	/	/	1.10	1.09	1.10	1.10	/	/
	-20	1976	1832	1529	1225	/	/	1.13	1.14	1.15	1.15	/	/
	-15	2505	2222	1913	1603	/	/	1.56	1.59	1.60	1.61	/	/
	-10	3588	3254	2714	2174	/	/	2.02	2.05	2.07	2.09	/	/
	-7	4538	4300	3905	3510	2081	/	2.29	2.35	2.49	2.62	2.42	/
	-5	4627	4195	3844	3494	2157	/	2.45	2.54	2.68	2.83	2.60	/
	-2	4833	4327	3956	3584	2190	/	2.67	2.77	2.93	3.08	2.83	/
	0	5039	4460	4068	3675	2222	/	2.89	3.00	3.21	3.34	3.07	/
	2	5251	5100	4609	4118	2387	/	2.97	3.00	3.21	3.43	3.23	/
	5	5601	4824	4451	4078	2591	/	3.27	3.42	3.62	3.82	3.52	/
	7	5962	4300	3760	3219	2800	/	3.67	3.80	3.86	3.91	4.00	/
	10	6051	5477	5145	4813	3274	/	3.90	4.05	4.30	4.54	4.21	/
	12	6110	5555	4909	4261	/	/	4.02	4.18	4.47	4.56	/	/
	15	6199	5673	4554	3434	/	/	4.21	4.37	4.48	4.58	/	/
	20	6122	5633	4715	3796	/	/	4.66	4.88	5.00	5.12	/	/
	25	6045	5668	5010	4352	/	/	5.25	5.53	5.67	5.81	/	/
	30	6020	5674	5049	4424	/	/	5.62	5.97	6.12	6.27	/	/
	35	5994	5698	5067	4436	/	/	6.05	6.47	6.64	6.80	/	/
	40	6377	5890	5368	4846	/	/	6.86	7.38	7.57	7.76	/	/
	43	6606	6154	5654	5153	/	/	7.39	8.01	8.22	8.42	/	/

TABELLE PRESTAZIONALI - MODO RISCALDAMENTO / CAPACITY TABLES - HEATING MODE

OMNIA S 3.2 HYBRID 28C 6 - Prestazioni riscaldamento / Heating capacity

Tw_out °C	DB/WB °C*	Heating Capacity [W]						COP					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
25	-25	2566	2374	1957	1540	/	/	1.72	1.76	1.77	1.78	/	/
	-20	3642	3332	2686	2039	/	/	2.34	2.43	2.45	2.47	/	/
	-15	4430	4010	3677	3343	2069	/	2.97	3.11	3.28	3.46	3.18	/
	-10	5753	5149	4433	3717	3000	2284	3.41	3.61	3.64	3.66	3.69	3.71
	-7	6553	6239	5073	3906	2740	1573	3.71	3.86	3.90	3.95	3.99	4.03
	-5	6536	5939	4899	3859	2818	1778	3.98	4.17	4.21	4.25	4.28	4.32
	-2	6515	5963	4912	3861	2810	1759	4.41	4.57	4.61	4.66	4.70	4.74
	0	6494	5987	4925	3864	2802	1740	4.85	4.98	5.02	5.07	5.11	5.15
	2	6678	6148	5113	4078	3043	2008	4.96	5.11	5.17	5.23	5.29	5.35
	5	7038	6432	5401	4370	3339	2308	5.37	5.56	5.62	5.67	5.73	5.78
	7	7581	6753	5743	4734	3724	2714	5.87	6.18	6.25	6.31	6.38	6.44
	10	7428	6677	5576	4475	3374	2273	6.12	6.52	6.60	6.68	6.75	6.83
	12	7326	6614	5583	4551	3520	2489	6.21	6.68	6.77	6.86	6.94	7.02
	15	7174	6520	5593	4666	3739	2812	6.35	6.93	7.03	7.12	7.22	7.31
	20	6934	6336	5768	5201	3120	/	7.15	7.85	8.37	8.88	8.30	/
	25	6693	5966	4824	3681	/	/	8.32	9.21	9.47	9.73	/	/
30	-25	2245	2065	1730	1300	/	/	1.46	1.51	1.52	1.53	/	/
	-20	3339	3038	2850	2663	1803	/	1.80	1.85	1.95	2.05	1.88	/
	-15	4190	3771	3481	3192	2032	/	2.73	2.83	2.99	3.15	2.90	/
	-10	5496	4891	4204	3517	2830	2143	2.99	3.12	3.14	3.17	3.19	3.21
	-7	6296	6053	4902	3751	2599	1448	3.28	3.36	3.40	3.43	3.47	3.50
	-5	6317	5890	4831	3773	2714	1655	3.52	3.63	3.66	3.70	3.73	3.76
	-2	6344	5877	4843	3808	2774	1739	3.92	4.02	4.06	4.10	4.13	4.17
	0	6371	5864	4854	3843	2833	1822	4.31	4.40	4.45	4.49	4.54	4.58
	2	6477	5874	4920	3965	3011	2056	4.38	4.50	4.55	4.60	4.64	4.69
	5	6813	6062	5127	4193	3258	2323	4.51	4.64	4.69	4.73	4.78	4.82
	7	7455	6271	5367	4462	3558	2653	4.81	5.21	5.25	5.29	5.33	5.37
	10	7268	6322	5262	4202	3142	2082	5.24	5.49	5.56	5.62	5.69	5.75
	12	7239	6341	5351	4361	3371	2380	5.47	5.79	5.87	5.94	6.01	6.09
	15	7195	6370	5485	4599	3714	2828	5.82	6.24	6.33	6.42	6.50	6.59
	20	6966	6202	5245	4288	3413	/	6.28	6.79	7.24	7.68	7.18	/
	25	6736	6115	5045	3974	/	/	7.16	7.79	8.02	8.24	/	/
35	-25	2139	1951	1714	1476	/	/	1.28	1.30	1.31	1.32	/	/
	-20	2884	2602	2138	1673	/	/	1.42	1.46	1.48	1.49	/	/
	-15	4001	3569	3290	3010	1904	/	2.34	2.43	2.57	2.71	2.49	/
	-10	5111	4508	3886	3264	2641	2019	2.57	2.66	2.68	2.70	2.72	2.74
	-7	6211	6000	4870	3739	2609	1478	2.86	3.00	3.02	3.03	3.05	3.06
	-5	6247	5716	4713	3710	2706	1703	3.09	3.19	3.22	3.25	3.27	3.30
	-2	6300	5726	4729	3732	2735	1738	3.44	3.54	3.57	3.60	3.63	3.66
	0	6353	5737	4746	3755	2763	1772	3.79	3.89	3.92	3.96	3.99	4.02
	2	6531	5500	4634	3768	2902	2036	3.86	3.90	3.98	4.06	4.14	4.22
	5	6881	6158	5202	4246	3289	2333	4.25	4.42	4.46	4.51	4.55	4.59
	7 *	7409	6350	5446	4542	3638	2734	4.76	4.95	5.04	5.14	5.23	5.32
	10	7387	6406	5447	4488	3529	2570	4.86	5.04	5.12	5.20	5.28	5.36
	12	7354	6491	5449	4408	3366	2324	5.02	5.17	5.23	5.30	5.36	5.42
	15	7261	6482	5571	4661	3750	2839	5.28	5.57	5.65	5.73	5.81	5.89
	20	6982	6268	5875	5482	3700	/	5.91	6.28	6.70	7.11	6.65	/
	25	6702	6134	5178	4222	/	/	6.31	6.75	6.95	7.15	/	/
40	-25	1914	1772	1566	1359	/	/	1.17	1.17	1.18	1.19	/	/
	-20	2556	2342	1989	1636	/	/	1.23	1.25	1.27	1.28	/	/
	-15	3608	3269	2645	2021	/	/	1.93	1.98	2.01	2.03	/	/
	-10	4833	4330	4047	3764	2513	/	2.22	2.27	2.40	2.54	2.34	/
	-7	5789	5606	4827	4048	3269	2490	2.50	2.54	2.59	2.63	2.68	2.72
	-5	5965	5652	5092	4533	2589	/	2.74	2.87	3.04	3.22	2.98	/
	-2	6230	5794	5249	4704	2759	/	3.00	3.14	3.32	3.50	3.22	/
	0	6495	5936	5406	4876	2929	/	3.26	3.40	3.59	3.78	3.47	/
	2	6645	5951	5449	4947	3044	/	3.52	3.61	3.84	4.06	3.78	/
	5	6962	6363	5814	5265	3209	/	3.69	3.78	4.01	4.24	3.93	/
	7	7128	6444	5917	5391	3357	/	3.99	4.14	4.40	4.65	4.32	/
	10	7371	6587	6017	5447	3317	/	4.21	4.39	4.67	4.94	4.60	/
	12	7453	6763	6185	5606	3431	/	4.37	4.60	4.90	5.19	4.84	/
	15	7577	7027	6436	5845	3601	/	4.61	4.92	5.24	5.57	5.20	/
	20	7212	6552	5548	4543	/	/	4.70	5.05	5.20	5.34	/	/
	25	6646	6155	5504	4852	/	/	5.11	5.53	5.69	5.85	/	/
45	-25	1714	1606	1343	1080	/	/	1.09	1.08	1.09	1.09	/	/
	-20	2332	2162	1804	1446	/	/	1.12	1.13	1.14	1.14	/	/
	-15	3081	2733	2353	1972	/	/	1.53	1.56	1.57	1.58	/	/
	-10	4643	4211	3513	2814	/	/	2.07	2.10	2.12	2.14	/	/
	-7	5573	5400	4920	4440	2673	/	2.35	2.40	2.54	2.68	2.48	/
	-5	5844	5496	5036	4575	2823	/	2.54	2.61	2.74	2.87	2.61	/
	-2	6096	5586	5132	4679	2921	/	2.68	2.78	2.93	3.07	2.81	/
	0	6348	5675	5229	4782	3020	/	2.82	2.94	3.11	3.27	3.01	/
	2	6581	5800	5356	4912	3131	/	2.95	3.00	3.24	3.48	3.32	/
	5	6991	6131	5657	5183	3293	/	3.29	3.45	3.65	3.84	3.54	/
	7	7134	6300	5076	3852	3546	/	3.58	3.70	3.79	3.88	3.92	/
	10	7318	6624	6222	5821	3959	/	3.78	3.83	4.07	4.30	3.99	/
	12	7361	6766	6374	5982	/	/	3.93	4.03	4.21	4.39	/	/
	15	7425	6978	6601	6224	/	/	4.16	4.32	4.43	4.53	/	/
	20	7416	6824	6471	6109	/	/	4.42	4.62	4.74	4.86	/	/
	25	7207	6758	6474	6189	/	/	4.74	4.99	5.12	5.24	/	/
45	-25	1605	1485	1243	1014	/	/	1.05	1.04	1.05	1.05	/	/
	-20	2162	1982	1684	1386	/	/	1.12	1.13	1.14	1.14	/	/
	-15	2832	2582	2284	1986	/	/	1.42	1.43	1.44	1.44	/	/
	-10	3502	3252	2954	2656	/	/	1.72	1.73	1.74	1.74	/	/
	-7	4172	3922	3624	3326	/	/	2.02	2.03	2.04	2.04	/	/
	-5	4442	4192	3894	3596	/	/	2.22	2.23	2.24	2.24	/	/
	-2	4712	4462	4164	3866	/	/	2.42	2.43	2.44	2.44	/	/
	0	4982	4732	4434	4136	/	/	2.62	2.63	2.64	2.64	/	/

*Tw_out °C"	*DB/WB °C"	Heating Capacity [W]						COP							
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%		
50	-25														
	-20	2187	2036	1773	1509			1.07	1.08	1.09	1.09				
	-15	2702	2407	2136	1864			1.34	1.37	1.38	1.39				
	-10	4127	3760	3281	2802			1.72	1.75	1.77	1.78				
	-7	5287	5068	4635	4202	2572		2.01	2.07	2.18	2.30	2.11			
	-5	5440	5114	4676	4237	2590		2.23	2.27	2.41	2.54	2.35			
	-2	5659	5235	4824	4413	2788		2.36	2.40	2.54	2.68	2.47			
	0	5879	5356	4972	4589	2987		2.48	2.53	2.67	2.82	2.59			
	2	6047	5730	5316	4902	3182		2.54	2.63	2.79	2.95	2.73			
	5	6374	5905	5519	5134	3429		2.81	2.89	3.06	3.23	2.98			
	7	6868	6133	5196	4258			3.17	3.29	3.35	3.41				
	10	7006	6474	5350	4225			3.35	3.44	3.51	3.57				
	12	7098	6588	5455	4321			3.48	3.61	3.69	3.76				
	15	7236	6759	5612	4465			3.67	3.86	3.96	4.05				
	20	7284	6840	5788	4735			4.02	4.25	4.36	4.46				
	25	7332	7014	6257	5499			4.43	4.72	4.84	4.96				
	30	6909	6644	5999	5354			4.92	5.28	5.42	5.55				
	35	6486	6289	5739	5189			5.21	5.63	5.78	5.92				
	40	6928	6530	5612				5.68	6.19	6.50					
	43	7193	6838	5970				5.96	6.54	6.87					
55	-25														
	-20	1841	1771	1558	1344			0.99	1.00	1.01	1.01				
	-15	2257	2081	1808	1535			1.20	1.22	1.23	1.24				
	-10	3797	3463	3046	2628			1.69	1.71	1.73	1.74				
	-7	5217	5150	4717	4284	2639		1.96	2.00	2.10	2.21				
	-5	5305	5078	4708	4338	2809		2.01	2.06	2.18	2.29	2.11			
	-2	5363	5112	4740	4369	2831		2.05	2.09	2.21	2.33	2.14			
	0	5421	5146	4772	4399	2852		2.09	2.11	2.23	2.35	2.17			
	2	5691	5650	5240	4829	3130		2.41	2.45	2.59	2.73	2.52			
	5	6110	5801	5447	5092	3458		2.48	2.54	2.69	2.84	2.62			
	7	6899	6000	5191	4381			2.91	2.95	3.03	3.10				
	10	6931	6036	5205	4373			3.04	3.11	3.17	3.23				
	12	6952	6082	5359	4635			3.14	3.23	3.30	3.37				
	15	6984	6152	5590	5028			3.30	3.42	3.50	3.58				
	20	6808	6031	5296	4561			3.60	3.76	3.86	3.95				
	25	6632	5991	5377	4762			4.00	4.20	4.31	4.41				
	30	6603	5998	5452	4906			4.21	4.46	4.58	4.69				
	35	6574	6024	5128				4.45	4.75	4.99					
	40														
	43														
60	-25														
	-20														
	-15	2125	1978	1744	1509			1.05	1.05	1.06	1.07				
	-10	3320	3058	2721	2384			1.44	1.44	1.46	1.47				
	-7	4573	4276	3478	2679			1.75	1.79	1.81	1.82				
	-5	4728	4345	3532	2719			1.83	1.85	1.88	1.90				
	-2	4896	4453	3657	2861			1.91	1.92	1.95	1.97				
	0	5064	4561	3782	3003			1.99	1.99	2.02	2.04				
	2	5334	4991	4128	3264			2.05	2.08	2.12	2.16				
	5	5744	5217	4398	3579			2.27	2.29	2.33	2.36				
	7	6424	5644	4936	4227			2.55	2.60	2.65	2.69				
	10	6270	5763	4982	4201			2.60	2.65	2.70	2.75				
	12	6167	5693	4984	4276			2.64	2.71	2.74	2.78				
	15	6013	5587	4988	4389			2.70	2.79	2.81	2.82				
	20	5977	5584	4795	4005			3.06	3.07	3.15	3.23				
	25	5941	5654	4996	4337			3.55	3.59	3.69	3.78				
	30	6013	5752	5146	4540			3.83	3.91	4.01	4.11				
	35														
	40														
	43														
65	-25														
	-20														
	-15														
	-10														
	-7														
	-5														
	-2														
	0														
	2														
	5	4924	4228	3537	2846			1.84	1.91	1.96	2.01				
	7	5245	4402	3864	3325			2.02	2.14	2.19	2.24				
	10	5566	4542	4047	3551			2.21	2.34	2.39	2.43				
	12	6101	5039	4442	3844			2.56	2.77	2.84	2.90				
	15														
	20														
	25														
	30														
	35														
	40														
	43														

TABELLE PRESTAZIONALI - MODO RISCALDAMENTO / CAPACITY TABLES - HEATING MODE

OMNIA S 3.2 HYBRID 28C 8 - Prestazioni riscaldamento / Heating capacity

Tw_out °C	DB/WB °C	Heating Capacity [W]						COP					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
25	-25	4446	4113	3391	2668	/	/	2.25	2.29	2.31	2.33	/	/
	-20	5683	5200	4191	3182	/	/	2.80	2.90	2.93	2.96	/	/
	-15	6899	6244	5725	5206	3222	/	3.34	3.49	3.69	3.89	3.58	/
	-10	7446	6664	5737	4810	3883	2956	3.68	3.89	3.92	3.95	3.98	4.01
	-7	7637	7270	5911	4552	3192	1833	3.76	3.97	4.00	4.03	4.06	4.09
	-5	8047	7250	5985	4720	3454	2189	4.02	4.25	4.28	4.31	4.34	4.37
	-2	8296	7425	6119	4812	3506	2199	4.39	4.57	4.61	4.64	4.68	4.71
	0	8546	7600	6252	4905	3557	2209	4.77	4.89	4.93	4.98	5.02	5.06
	2	8661	7769	6461	5153	3844	2536	5.20	5.36	5.43	5.49	5.56	5.62
	5	9033	8095	6798	5500	4203	2905	5.95	6.17	6.23	6.29	6.35	6.41
	7	9508	8595	7297	6000	4702	3404	6.54	6.84	6.92	6.99	7.07	7.14
	10	10064	9046	7555	6063	4572	3080	7.44	7.93	8.02	8.12	8.21	8.30
	12	9982	9011	7607	6203	4799	3394	7.98	8.59	8.70	8.82	8.92	9.03
	15	9859	8959	7686	6412	5139	3865	8.79	9.59	9.72	9.86	9.99	10.12
	20	9653	8821	8031	7241	4344	/	10.14	11.14	11.87	12.60	11.77	/
30	25	9417	8393	6786	5179	/	/	10.44	11.55	11.88	12.21	/	/
	30	9181	8229	6754	5279	/	/	11.03	12.29	12.64	12.99	/	/
	35	9548	8635	7516	6397	/	/	11.31	12.68	13.05	13.42	/	/
	40	10026	9197	8007	6817	/	/	11.57	13.06	13.44	13.82	/	/
	43	10326	9555	8340	7125	/	/	12.25	13.92	14.33	14.73	/	/
	-25	3999	3679	3082	2484	/	/	1.96	2.03	2.05	2.06	/	/
	-20	5087	4629	4343	4057	2747	/	2.37	2.43	2.57	2.70	2.48	/
	-15	6443	5799	5354	4908	3125	/	2.87	2.98	3.15	3.32	3.05	/
	-10	7280	6479	5569	4659	3749	2839	3.33	3.49	3.52	3.54	3.57	3.59
	-7	7467	7109	5761	4413	3065	1717	3.40	3.53	3.56	3.58	3.61	3.63
	-5	7966	7205	5926	4646	3367	2087	3.69	3.81	3.84	3.88	3.91	3.94
	-2	8229	7495	6188	4880	3573	2265	3.96	4.07	4.11	4.14	4.18	4.21
	0	8493	7785	6450	5115	3779	2444	4.23	4.34	4.38	4.42	4.45	4.49
	2	8649	7855	6578	5302	4025	2748	4.50	4.64	4.70	4.75	4.81	4.86
	35	5	8952	8083	6837	5590	4344	3097	4.94	5.13	5.18	5.23	5.27
7		9199	8215	7026	5837	4648	3459	5.32	5.57	5.63	5.69	5.75	5.81
10		9278	8122	6771	5420	4069	2718	5.84	6.12	6.19	6.27	6.34	6.41
12		9324	8200	6927	5654	4380	3107	6.34	6.71	6.80	6.89	6.97	7.06
15		9393	8316	7160	6004	4847	3691	7.09	7.60	7.71	7.82	7.92	8.03
20		9507	8465	7841	7218	4658	/	8.33	9.00	9.59	10.19	9.52	/
25		8998	8169	6739	5309	/	/	8.75	9.52	9.80	10.07	/	/
30		8489	7749	6485	5221	/	/	9.16	10.04	10.34	10.63	/	/
35		8829	8130	7067	6003	/	/	9.45	10.43	10.74	11.04	/	/
40		9270	8389	7300	6211	/	/	10.02	11.13	11.46	11.79	/	/
43		9548	8717	7605	6493	/	/	11.27	12.61	12.98	13.35	/	/
-25		3590	3274	2876	2477	/	/	1.64	1.67	1.68	1.69	/	/
-20		4735	4271	3509	2746	/	/	2.11	2.17	2.20	2.22	/	/
-15		6105	5446	5020	4594	2906	/	2.43	2.53	2.67	2.82	2.59	/
-10		7084	6248	5386	4523	3661	2798	3.15	3.26	3.28	3.31	3.33	3.35
40	-7	7266	7000	5704	4409	3113	1817	3.21	3.20	3.26	3.32	3.38	3.44
	-5	7685	6994	5787	4581	3374	2167	3.22	3.30	3.34	3.37	3.41	3.44
	-2	8053	7332	6066	4800	3534	2268	3.49	3.59	3.63	3.66	3.70	3.73
	0	8420	7669	6344	5020	3695	2370	3.77	3.88	3.91	3.95	3.98	4.01
	2	8477	7100	5999	4897	3796	2694	3.95	4.10	4.17	4.24	4.30	4.37
	5	8856	8084	6829	5573	4318	3062	4.56	4.73	4.78	4.82	4.87	4.91
	7 *	9105	8400	7140	5880	4620	3360	5.07	5.15	5.25	5.35	5.44	5.54
	10	8942	7893	6626	5360	4093	2826	5.42	5.58	5.65	5.72	5.78	5.85
	12	8999	7980	6764	5549	4333	3116	5.67	5.90	5.97	6.05	6.12	6.20
	15	9085	8111	6971	5832	4692	3552	6.04	6.37	6.46	6.55	6.64	6.73
	20	9328	8374	7849	7325	4944	/	7.09	7.53	8.03	8.53	7.98	/
	25	8751	8009	6761	5513	/	/	7.64	8.18	8.42	8.66	/	/
	30	8173	7521	6437	5353	/	/	7.78	8.39	8.64	8.88	/	/
	35	8500	7890	6733	5576	/	/	8.05	8.74	9.00	9.26	/	/
	40	8925	8044	7191	6337	/	/	8.49	9.28	9.56	9.84	/	/
45	43	9193	8358	7489	6619	/	/	9.11	10.03	10.33	10.63	/	/
	-25	3344	3097	2736	2374	/	/	1.55	1.56	1.57	1.58	/	/
	-20	4320	3957	3361	2765	/	/	1.77	1.80	1.82	1.83	/	/
	-15	5566	5043	4080	3117	/	/	2.26	2.32	2.35	2.37	/	/
	-10	6872	6157	5754	5352	3573	/	2.62	2.68	2.84	2.99	2.76	/
	-7	7048	6710	6057	5404	3115	/	2.67	2.79	2.96	3.13	2.90	/
	-5	7451	6864	6209	5554	3234	/	2.90	3.01	3.20	3.39	3.15	/
	-2	7923	7302	6601	5900	3426	/	3.11	3.19	3.39	3.58	3.32	/
	0	8395	7740	6993	6247	3618	/	3.32	3.37	3.57	3.77	3.48	/
	2	8502	7804	7094	6383	3802	/	3.40	3.54	3.74	3.94	3.63	/
	5	8781	8026	7333	6641	4048	/	3.84	3.93	4.17	4.41	4.08	/
	7	8852	8002	7348	6694	4169	/	4.18	4.34	4.61	4.88	4.53	/
	10	8700	7774	7101	6429	3915	/	4.30	4.48	4.76	5.05	4.70	/
	12	8849	7944	7264	6585	4029	/	4.63	4.87	5.18	5.50	5.12	/

TABELLE PRESTAZIONALI - MODO RISCALDAMENTO / CAPACITY TABLES - HEATING MODE

OMNIA S 3.2 HYBRID 28C 10 - Prestazioni riscaldamento / Heating capacity

Tw_out °C°	°C°	Heating Capacity [W]						COP					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
25	-25	4680	4329	3569	2808	/	/	2.27	2.32	2.34	2.35	/	/
	-20	5982	5473	4412	3350	/	/	2.82	2.93	2.96	2.99	/	/
	-15	7263	6573	6027	5481	3392	/	3.37	3.53	3.73	3.93	3.61	/
	-10	8372	7493	6451	5409	4366	3324	3.60	3.81	3.84	3.86	3.89	3.91
	-7	8721	8285	6737	5189	3641	2093	3.81	3.92	3.98	4.03	4.09	4.14
	-5	8997	8126	6693	5260	3826	2393	4.10	4.29	4.34	4.39	4.43	4.48
	-2	9215	8227	6772	5317	3862	2407	4.50	4.68	4.73	4.77	4.82	4.86
	0	9433	8328	6851	5375	3898	2421	4.90	5.06	5.11	5.15	5.20	5.24
	2	9719	8621	7170	5720	4269	2818	5.18	5.34	5.41	5.47	5.54	5.60
	5	10242	9087	7631	6174	4718	3261	5.72	5.95	6.01	6.07	6.12	6.18
	7	10494	10220	8604	6989	5373	3757	5.94	6.05	6.16	6.27	6.37	6.48
	10	11196	10063	8404	6745	5085	3426	7.04	7.50	7.59	7.68	7.77	7.86
	12	11286	10189	8604	7018	5432	3846	7.46	8.03	8.13	8.24	8.34	8.44
	15	11420	10379	8904	7428	5953	4477	8.10	8.83	8.95	9.08	9.20	9.32
	20	10808	9876	8992	8107	4864	/	9.05	9.94	10.59	11.25	10.51	/
	25	9943	8863	7166	5469	/	/	9.59	10.61	10.92	11.22	/	/
	30	9774	8761	7191	5620	/	/	10.15	11.31	11.64	11.96	/	/
	35	10165	9192	8002	6811	/	/	10.73	12.03	12.38	12.73	/	/
	40	10673	9791	8525	7258	/	/	11.52	13.01	13.39	13.76	/	/
	43	10993	10172	8879	7585	/	/	12.03	13.67	14.07	14.47	/	/
30	-25	4210	3873	3244	2614	/	/	1.98	2.05	2.07	2.08	/	/
	-20	5354	4873	4572	4270	2891	/	2.39	2.46	2.59	2.73	2.50	/
	-15	6782	6104	5635	5166	3289	/	2.90	3.01	3.18	3.35	3.08	/
	-10	8144	7248	6230	5212	4194	3176	3.22	3.37	3.40	3.42	3.45	3.47
	-7	8483	8182	6624	5067	3509	1951	3.41	3.51	3.54	3.58	3.61	3.64
	-5	8862	8205	6734	5264	3793	2322	3.60	3.70	3.74	3.77	3.81	3.84
	-2	9109	8230	6797	5365	3932	2499	3.82	3.93	3.97	4.00	4.04	4.07
	0	9357	8254	6860	5465	4071	2676	4.05	4.15	4.19	4.23	4.26	4.30
	2	9568	8677	7268	5858	4449	3039	4.34	4.52	4.56	4.61	4.65	4.69
	5	10072	9005	7616	6228	4839	3450	4.80	4.99	5.04	5.09	5.13	5.18
	7	10275	9983	8453	6923	5393	3863	5.21	5.40	5.47	5.55	5.62	5.69
	10	10414	9116	7600	6084	4567	3051	5.64	5.91	5.98	6.05	6.12	6.19
	12	10497	9232	7799	6366	4933	3501	5.98	6.33	6.41	6.49	6.57	6.65
	15	10622	9405	8098	6790	5483	4175	6.49	6.96	7.06	7.16	7.25	7.35
	20	10756	9577	8871	8166	5270	/	7.96	8.60	9.17	9.74	9.10	/
	25	9896	8984	7411	5838	/	/	8.44	9.18	9.45	9.72	/	/
	30	9073	8282	6931	5580	/	/	8.79	9.63	9.92	10.20	/	/
	35	9436	8689	7553	6416	/	/	9.15	10.10	10.40	10.69	/	/
	40	9908	8966	7802	6638	/	/	9.81	10.90	11.22	11.54	/	/
	43	10205	9317	8128	6939	/	/	10.61	11.87	12.22	12.57	/	/
35	-25	3778	3446	3027	2607	/	/	1.66	1.68	1.70	1.71	/	/
	-20	4985	4496	3694	2891	/	/	2.13	2.20	2.22	2.24	/	/
	-15	6427	5733	5284	4836	3059	/	2.46	2.56	2.70	2.85	2.62	/
	-10	7885	6955	5995	5035	4075	3115	2.98	3.08	3.10	3.13	3.15	3.17
	-7	8314	8	2054	/	/	/	3.11	3.05	3.37	/	/	/
	-5	8799	8164	6743	5323	3902	2481	3.33	3.41	3.45	3.49	3.53	3.57
	-2	9131	8249	6831	5412	3994	2575	3.54	3.64	3.68	3.71	3.75	3.78
	0	9463	8335	6918	5502	4085	2668	3.76	3.86	3.89	3.93	3.96	3.99
	2	9719	8200	6907	5614	4320	3027	3.97	4.00	4.09	4.17	4.26	4.34
	5	10132	9068	7660	6252	4843	3435	4.51	4.68	4.73	4.77	4.82	4.86
	7 *	10322	10000	8452	6905	5357	3809	4.93	4.95	5.06	5.17	5.28	5.39
	10	10031	8855	7434	6013	4591	3170	5.13	5.28	5.35	5.41	5.48	5.54
	12	10111	8967	7601	6235	4868	3502	5.44	5.66	5.73	5.81	5.88	5.96
	15	10232	9134	7851	6568	5284	4001	5.90	6.22	6.31	6.40	6.49	6.58
	20	10673	9582	8982	8381	5657	/	6.72	7.14	7.61	8.09	7.56	/
	25	9819	8987	7587	6186	/	/	7.12	7.63	7.85	8.07	/	/
	30	8895	8186	7006	5826	/	/	7.95	8.57	8.83	9.08	/	/
	35	9251	8587	7328	6069	/	/	8.30	9.01	9.28	9.55	/	/
	40	9713	8754	7825	6896	/	/	8.47	9.26	9.54	9.81	/	/
	43	10005	9097	8150	7203	/	/	9.25	10.18	10.49	10.79	/	/
40	-25	3520	3260	2880	2499	/	/	1.57	1.57	1.59	1.60	/	/
	-20	4548	4166	3538	2910	/	/	1.79	1.82	1.84	1.85	/	/
	-15	5859	5308	4295	3281	/	/	2.28	2.34	2.37	2.40	/	/
	-10	7638	6843	6396	5948	3972	/	2.67	2.74	2.90	3.06	2.82	/
	-7	7956	7430	6725	6021	3517	/	2.83	2.93	3.12	3.31	3.08	/
	-5	8460	7560	6869	6177	3671	/	2.88	2.96	3.15	3.35	3.13	/
	-2	8857	7896	7173	6449	3830	/	3.02	3.08	3.27	3.47	3.22	/
	0	9254	8232	7477	6721	3988	/	3.16	3.20	3.39	3.58	3.31	/
	2	9578	8791	7992	7193	4287	/	3.35	3.46	3.68	3.89	3.62	/
	5	10096	9228	8432	7635	4654	/	3.83	3.92	4.16	4.39	4.07	/
	7	10448	10145	9216	8286	4921	/	4.18	4.29	4.57	4.85	4.53	/
	10	9935	8878	8110	7342	4471	/	4.17	4.35	4.62	4.90	4.55	/
	12	10015	8990	8221	7452	4559	/	4.42	4.66	4.95	5.26	4.89	/
	15	10134	9157	8387	7617	4692	/	4.80	5.12	5.45	5.79	5.40	/
	20	10679	9703	8216	6728	/	/	5.66	6.08	6.26	6.44	/	/
	25	9825	9099	8136	7172	/	/	6.00	6.49	6.68	6.87	/	/
	30	8852	8242	7153	6064	/	/	6.72	7.32	7.54	7.75	/	/
	35	9206	8645	7499	6352	/	/	6.97	7.65	7.88	8.10	/	/
	40	9666	8817	7889	6960	/	/	7.34	8.11	8.35	8.59	/	/
	43	9956	9161	8215	7268	/	/	8.07	8.98	9.25	9.51	/	/
45	-25	2963	2776	2322	1867	/	/	1.31	1.30	1.31	1.31	/	/
	-20	3892	3608	3011	2413	/	/	1.63	1.64	1.65	1.66	/	/
	-15	5566	4937	4250	3562	/	/	2.02	2.05	2.07	2.08	/	/
	-10	7376	6690	5580	4470	/	/	2.38	2.41	2.44	2.46	/	/
	-7	7683	7350	6734	6117	3772	/	2.52	2.55	2.71	2.87	2.67	/
	-5	8181	7433	6847	6261	3951	/	2.65	2.72	2.88	3.04	2.80	/
	-2	8535	7650	7011	6372	3936	/	2.76	2.84	3.00	3.17	2.92	/
	0	8889	7866	7174	6482	3920	/	2.87	2.97	3.14	3.31	3.04	/
	2	9244	8500	7247	6644	4230	/	3.01	3.20	3.38	3.56	3.28	/
	5	9786	8582	7919	7255	4609	/	3.40	3.55	3.76	3.97	3.66	/
	7	10279	10000	9277	8553	5551	/	3.77	3.75	4.03	4.31	4.09	/
	10	9873	8937	8395	7853	5341	/	3.67	3.72	3.94	4.17	3.86	/
	12	9952	9049	7996	6943	/	/	3.89	3.98	4.16	4.34	/	/
	15	10070	9216	7398	5579	/	/	4.22	4.38	4.49	4.59	/	/
	20	10283	9462	7919	6375	/	/	4.86	5.08	5.21	5.34	/	/
	25	9460	8871	7841	6811	/	/	5.15	5.43	5.57	5.70	/	/
	30	9923	9354	8324	7293	/	/	6.15	6.53	6.70	6.86	/	/
	35	10320	9811	8724	7637	/	/	6.40	6.84	7.02	7.19	/	/
	40	10836	10009	9122	8235	/	/	6.79	7.31	7.50	7.68	/	/
	43	11161	10398	9552	8706	/	/	7.58	8.21	8.43	8.64	/	/

TABELLE PRESTAZIONALI - MODO RAFFREDDAMENTO / CAPACITY TABLES - COOLING MODE

OMNIA S 3.2 HYBRID 28C 4 - Prestazioni raffreddamento / Cooling capacity

*Tw_out °C"	*DB/WB °C"	Cooling Capacity [W]						EER					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
5	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	4715	3676	3360	3044	1858	/	4,53	4,76	5,05	5,34	4,95	/
	25	5872	4651	4218	3785	2231	/	4,51	4,78	5,05	5,32	4,89	/
	30	5836	4693	4250	3807	2229	/	3,78	4,02	4,24	4,47	4,10	/
	35	5799	4506	4057	3607	2053	/	3,24	3,32	3,54	3,75	3,50	/
	40	3803	3105	2792	2479	1402	/	2,52	2,70	2,83	2,96	2,69	/
	43	2582	2120	1772	1423	1075	726	2,24	2,33	2,34	2,36	2,37	2,38
7	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	5265	4096	3706	3316	1933	/	4,73	4,95	5,27	5,58	5,20	/
	25	6304	4978	4291	3605	2231	/	4,65	4,88	4,92	4,95	5,02	/
	30	6206	4974	4283	3592	2210	/	3,99	4,20	4,24	4,28	4,35	/
	35	6107	4700	4254	3807	2222	/	3,32	3,45	3,72	3,99	3,80	/
	40	4363	3552	3208	2864	1655	/	2,64	2,81	2,96	3,12	2,86	/
	43	3134	2451	2100	1748	1045	/	2,35	2,41	2,43	2,45	2,49	/
10	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	5049	3787	3055	2323	/	/	5,91	6,25	6,45	6,64	/	/
	20	6009	4858	4175	3493	2810	2127	4,47	4,80	4,85	4,90	4,95	5,00
	25	6968	5721	4883	4045	3207	2369	3,80	4,09	4,14	4,19	4,24	4,29
	30	6803	5669	4834	3998	3163	2327	3,67	3,92	3,97	4,02	4,06	4,11
	35	6638	5450	4919	4388	2529	/	3,55	3,82	4,06	4,30	4,00	/
	40	5082	4296	3882	3469	2011	/	2,81	3,03	3,21	3,38	3,12	/
	43	3800	2987	2708	2429	1429	/	2,51	2,59	2,74	2,90	2,68	/
15	-5	4759	3832	3156	2479	/	/	10,30	11,74	12,17	12,60	/	/
	0	4538	3660	3018	2375	/	/	8,03	9,35	9,64	9,92	/	/
	5	4038	3235	2986	2736	1740	/	6,07	6,68	7,20	7,72	7,35	/
	10	6063	4872	4519	4165	2701	/	5,71	6,29	6,80	7,30	6,99	/
	15	8088	6794	6266	5739	3640	/	5,55	5,89	6,29	6,70	6,29	/
	20	8159	6801	6200	5598	3378	/	5,47	5,88	6,27	6,66	6,23	/
	25	8230	6963	6302	5640	3292	/	5,39	5,74	6,11	6,48	6,04	/
	30	7771	6669	6028	5386	3124	/	4,72	5,06	5,38	5,70	5,30	/
	35	7311	6024	5497	4970	3012	/	4,28	4,63	4,94	5,25	4,91	/
	40	5914	5147	4683	4219	2523	/	3,41	3,68	3,90	4,13	3,82	/
	43	5075	4040	3712	3383	2111	/	3,26	3,43	3,64	3,85	3,57	/
18	-5	5185	4182	3437	2691	/	/	10,32	11,97	12,28	12,59	/	/
	0	4961	4008	3297	2586	/	/	8,19	9,70	9,90	10,09	/	/
	5	4454	3557	3283	3009	1914	/	6,30	7,07	7,57	8,08	7,62	/
	10	6341	5079	4710	4342	2815	/	6,15	6,91	7,42	7,93	7,51	/
	15	8130	6911	6340	5768	3577	/	6,10	6,56	7,04	7,51	7,10	/
	20	8278	7013	6447	5880	3678	/	6,05	6,50	6,92	7,33	6,83	/
	25	8410	7274	6635	5996	3628	/	6,00	6,45	6,85	7,25	6,74	/
	30	8094	7032	6406	5779	3476	/	5,27	5,63	5,98	6,34	5,89	/
	35 *	7649	4500	3928	3355	/	/	4,73	5,50	5,59	5,62	/	/
	40	6358	5602	5130	4659	2868	/	3,75	4,07	4,31	4,54	4,19	/
	43	5556	4584	4199	3815	2352	/	3,56	3,79	4,01	4,23	3,90	/
20	-5	5468	4450	3661	2871	/	/	10,01	11,92	12,15	12,38	/	/
	0	5247	4277	3522	2767	/	/	8,08	9,81	9,95	10,09	/	/
	5	4747	3809	3520	3231	2065	/	6,34	7,29	7,78	8,28	7,76	/
	10	6443	5185	4815	4445	2896	/	6,40	7,37	7,89	8,40	7,91	/
	15	8139	7000	6388	5775	3500	/	6,44	7,06	7,62	8,17	7,80	/
	20	8331	7170	6643	6115	3949	/	6,42	6,94	7,39	7,84	7,32	/
	25	8523	7441	6845	6249	3921	/	6,40	6,98	7,43	7,87	7,33	/
	30	8195	7255	6664	6073	3786	/	5,63	6,05	6,44	6,84	6,38	/
	35	7866	6867	6328	5789	3658	/	5,06	5,48	5,88	6,27	5,92	/
	40	6627	5947	5483	5019	3179	/	3,95	4,34	4,60	4,86	4,50	/
	43	5884	5037	4609	4181	2565	/	3,74	4,04	4,28	4,52	4,17	/
25	-5	6094	4951	4082	3212	/	/	12,66	14,10	14,97	15,83	/	/
	0	5873	4779	3944	3109	/	/	10,70	13,31	13,36	13,40	/	/
	5	5373	4360	4025	3689	2348	/	8,28	9,77	10,37	10,97	10,17	/
	10	7113	5789	5370	4951	3212	/	8,37	9,89	10,52	11,15	10,39	/
	15	8853	7437	6932	6427	4249	/	8,43	9,29	10,04	10,79	10,32	/
	20	8984	7821	7282	6742	4438	/	8,15	8,98	9,57	10,16	9,50	/
	25	9115	8049	7441	6833	4375	/	7,90	8,85	9,41	9,97	9,28	/
	30	8773	7854	7250	6645	4228	/	6,75	7,44	7,89	8,34	7,72	/
	35	8430	7688	7122	6556	4232	/	5,84	6,39	6,83	7,28	6,84	/
	40	7878	7147	6658	6169	4070	/	4,80	5,41	5,71	6,01	5,51	/
	43	7546	5969	4886	3803	/	/	4,73	5,18	5,28	5,38	/	/

OMNIA S 3.2 HYBRID 28C 6 - Prestazioni raffreddamento / Cooling capacity

*Tw_out °C"	*DB/WB °C"	Cooling Capacity [W]						EER					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
5	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	5411	4218	3855	3493	2132	/	3,93	4,14	4,39	4,64	4,30	/
	25	7164	5674	5146	4618	2722	/	3,98	4,21	4,45	4,69	4,31	/
	30	6502	5229	4736	4242	2484	/	3,51	3,74	3,95	4,15	3,81	/
	35	6039	4737	4070	3402	2735	2067	3,06	3,22	3,24	3,27	3,29	3,31
	40	3803	3105	2792	2479	1402	988	2,52	2,70	2,83	2,96	2,69	2,55
	43	2582	2120	1772	1423	1075	726	2,24	2,33	2,34	2,36	2,37	2,38
7	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	6103	4836	4366	3896	2248	/	4,27	4,54	4,82	5,09	4,72	/
	25	7265	5919	5063	4206	3350	2493	4,07	4,34	4,38	4,42	4,46	4,50
	30	7145	5822	4989	4156	3322	2489	3,67	3,91	3,95	3,98	4,02	4,05
	35	7108	5800	5860	4719	3579	2438	2,97	3,00	3,16	3,33	3,49	3,65
	40	4505	3737	3371	3005	1727	1344	2,66	2,86	3,01	3,17	2,90	3,20
	43	3236	2579	2207	1835	1462	1090	2,37	2,46	2,48	2,49	2,51	2,52
10	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	5887	4415	3562	2708	/	/	5,33	5,65	5,82	5,99	/	/
	20	6626	5358	4605	3852	3099	2346	4,62	4,96	5,01	5,07	5,12	5,17

TABELLE PRESTAZIONALI - MODO RAFFREDDAMENTO / CAPACITY TABLES - COOLING MODE

OMNIA S 3.2 HYBRID 28C 8 - Prestazioni raffreddamento / Cooling capacity

Tw_out °C	*DB/WB °C*	Cooling Capacity [W]						EER					
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%
5	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	5683	4430	4049	3668	2239	/	4.96	5.21	5.53	5.85	5.42	/
	25	6474	5128	4651	4173	2460	/	4.36	4.61	4.87	5.14	4.73	/
	30	7266	5844	5292	4740	2775	/	3.85	4.10	4.33	4.56	4.19	/
	35	7395	5746	5173	4600	2618	/	3.22	3.45	3.65	3.84	3.54	/
	40	6609	5395	4851	4308	2437	/	2.62	2.81	2.95	3.09	2.80	/
	43	5092	4181	3494	2806	2119	1431	2.23	2.32	2.33	2.35	2.36	2.37
7	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	/	/	/	/	/	/	/	/	/	/	/	/
	20	6462	5121	4623	4125	2379	/	5.18	5.52	5.85	6.19	5.73	/
	25	7245	5830	5015	4200	3384	2569	4.56	4.87	4.92	4.96	5.01	5.05
	30	8029	6557	5634	4711	3788	2865	4.03	4.31	4.35	4.38	4.42	4.45
	35	8195	7450	6298	5196	4093	2991	3.21	3.35	3.51	3.64	3.76	3.89
	40	7113	5892	5308	4724	2697	1877	2.86	3.08	3.25	3.41	3.12	2.89
	43	5443	4351	3709	3068	2426	1784	2.39	2.49	2.51	2.52	2.54	2.55
10	-5	/	/	/	/	/	/	/	/	/	/	/	/
	0	/	/	/	/	/	/	/	/	/	/	/	/
	5	/	/	/	/	/	/	/	/	/	/	/	/
	10	/	/	/	/	/	/	/	/	/	/	/	/
	15	5972	4479	3613	2747	/	/	6.84	7.24	7.47	7.69	/	/
	20	7063	5711	4908	4106	3303	2500	5.46	5.86	5.93	5.99	6.06	6.12
	25	7817	6417	5477	4538	3598	2658	4.81	5.17	5.24	5.30	5.37	5.43
	30	8570	7141	6089	5036	3984	2931	4.25	4.54	4.60	4.65	4.71	4.76
	35	8769	7199	6498	5797	3341	/	3.80	4.09	4.35	4.60	4.28	/
	40	7421	6273	5669	5065	2936	/	3.14	3.38	3.58	3.77	3.48	/
	43	5643	4436	4021	3607	2122	/	2.58	2.67	2.83	2.99	2.76	/
15	-5	6387	5143	4236	3328	/	/	10.07	11.38	11.62	11.86	/	/
	0	6173	4979	4105	3230	/	/	8.69	9.94	10.16	10.38	/	/
	5	5959	4774	4406	4038	2568	/	7.30	7.96	8.52	9.08	8.55	/
	10	6288	5053	4686	4320	2801	/	8.54	9.32	10.00	10.69	10.11	/
	15	7334	6161	5682	5204	3300	/	7.38	7.83	8.37	8.91	8.37	/
	20	8380	6986	6368	5750	3469	/	6.22	6.69	7.13	7.58	7.09	/
	25	9263	7836	7092	6348	3705	/	5.52	5.87	6.25	6.63	6.18	/
	30	10145	8707	7869	7032	4078	/	4.93	5.28	5.61	5.95	5.53	/
	35	10214	8416	7680	6943	4208	/	4.43	4.77	5.10	5.44	5.12	/
	40	8883	7730	7033	6336	3790	/	3.51	3.79	4.02	4.25	3.93	/
	43	6732	5359	4924	4488	2801	/	3.16	3.32	3.52	3.73	3.46	/
18	-5	7402	5972	4908	3843	/	/	10.51	12.01	12.22	12.42	/	/
	0	6808	5501	4525	3549	/	/	9.28	10.69	10.91	11.13	/	/
	5	6214	4963	4581	4198	2670	/	8.04	8.88	9.48	10.09	9.46	/
	10	7199	5767	5349	4931	3198	/	9.05	10.00	10.71	11.41	10.75	/
	15	8336	7067	6475	5883	3630	/	7.71	8.32	8.93	9.54	9.03	/
	20	9473	8006	7360	6714	4202	/	6.36	6.86	7.31	7.76	7.24	/
	25	10401	8918	8140	7362	4467	/	5.75	6.20	6.60	6.99	6.51	/
	30	11329	9852	8979	8106	4886	/	5.26	5.65	6.01	6.37	5.93	/
	35 *	11131	8300	7847	7295	4863	/	4.69	5.05	5.41	5.76	5.43	/
	40	9692	8541	7823	7104	4376	/	3.81	4.15	4.40	4.65	4.30	/
	43	7546	6230	5707	5184	3196	/	3.48	3.71	3.93	4.15	3.84	/
20	-5	8213	6683	5498	4312	/	/	10.82	12.50	12.70	12.89	/	/
	0	7256	5914	4870	3826	/	/	9.76	11.31	11.55	11.79	/	/
	5	6298	5053	4670	4286	2740	/	8.69	9.69	10.34	10.99	10.29	/
	10	7911	6367	5912	5458	3556	/	9.45	10.55	11.29	12.02	11.31	/
	15	9108	7833	7147	6462	3916	/	7.94	8.70	9.39	10.08	9.62	/
	20	10305	8868	8216	7564	4885	/	6.43	6.95	7.40	7.85	7.33	/
	25	11253	9823	9036	8249	5176	/	5.92	6.46	6.87	7.28	6.78	/
	30	12200	10801	9921	9040	5636	/	5.54	5.94	6.33	6.72	6.28	/
	35	11740	10249	9444	8639	5459	/	4.89	5.26	5.64	6.03	5.70	/
	40	10234	9183	8467	7751	4909	/	4.07	4.47	4.74	5.01	4.64	/
	43	8151	6977	6385	5792	3554	/	3.75	4.06	4.30	4.53	4.18	/
25	-5	8735	7096	5850	4603	/	/	12.31	14.03	14.37	14.71	/	/
	0	7756	6312	5209	4105	/	/	11.05	12.86	13.10	13.34	/	/
	5	6777	5499	5076	4654	2962	/	9.78	10.76	11.52	12.28	11.57	/
	10	8300	6755	6266	5776	3747	/	10.53	11.60	12.45	13.30	12.59	/
	15	9726	8169	7615	7060	4668	/	8.67	9.55	10.32	11.09	10.61	/
	20	11151	9708	9039	8369	5509	/	6.81	7.50	7.99	8.49	7.93	/
	25	12757	11264	10413	9663	6123	/	6.33	7.09	7.54	7.99	7.44	/
	30	14363	12859	11870	10880	6923	/	6.00	6.61	7.01	7.41	6.86	/
	35	13586	12390	11478	10566	6820	/	5.42	5.94	6.35	6.77	6.36	/
	40	12275	11137	10375	9613	6342	/	4.34	4.89	5.16	5.42	4.97	/
	43	10042	7943	6602	5061	/	/	4.03	4.41	4.50	4.58	/	/

OMNIA S 3.2 HYBRID 28C 10 - Prestazioni raffreddamento / Cooling capacity

Tw_out °C	*DB/WB °C*	Cooling Capacity [W]						EER							
		130%	100%	90%	70%	50%	30%	130%	100%	90%	70%	50%	30%		
5	-5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	0	/	/	/	/	/	/	/	/	/	/	/	/	/	
	5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	10	/	/	/	/	/	/	/	/	/	/	/	/	/	
	15	/	/	/	/	/	/	/	/	/	/	/	/	/	
	20	6198	4832	4416	4001	2442	/	4.86	5.11	5.42	5.73	5.31	/	/	
	25	7130	5647	5121	4596	2709	/	4.24	4.49	4.74	5.00	4.60	/	/	
	30	8062	6484	5872	5260	3080	/	3.71	3.95	4.17	4.39	4.03	/	/	
	35	8126	6314	5685	5055	2877	/	3.12	3.28	3.47	3.66	3.37	/	/	
40	6609	5395	4851	4308	2437	/	2.62	2.81	2.95	3.09	2.80	/	/		
43	5092	4181	3494	2806	2119	1431	2.23	2.32	2.33	2.35	2.36	2.37	/		
7	-5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	0	/	/	/	/	/	/	/	/	/	/	/	/	/	
	5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	10	/	/	/	/	/	/	/	/	/	/	/	/	/	
	15	/	/	/	/	/	/	/	/	/	/	/	/	/	
	20	6722	5356	4840	4323	2504	/	4.98	5.31	5.63	5.96	5.52	/	/	
	25	7728	6253	5383	4512	3642	2771	4.37	4.68	4.72	4.77	4.81	4.85	/	
	30	8633	7174	6168	5162	4155	3149	3.86	4.12	4.16	4.19	4.23	4.26	/	
	35	8529	8200	6965	5729	4494	3258	3.21	3.25	3.42	3.53	3.65	3.76	/	
40	7043	5869	5290	4711	2697	2388	2.86	3.08	3.25	3.41	3.12	2.98	/		
43	5389	4334	3697	3059	2422	1784	2.39	2.49	2.51	2.52	2.54	2.55	/		
10	-5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	0	/	/	/	/	/	/	/	/	/	/	/	/	/	
	5	/	/	/	/	/	/	/	/	/	/	/	/	/	
	10	/	/	/	/	/	/	/	/	/	/	/	/	/	
	15	6302	4727	3813	2899	/	/	5.89	6.24	6.43	6.62	/	/	/	
	20	7193	5816	4999	4181	3364	2546	5.17	5.55	5.61	5.67	5.73	5.79	/	
	25	8264	6785	5791	4798	3804	2810	4.56	4.91	4.97	5.03	5.09	5.15	/	
	30	9335	7779	6633	5486	4340	3193	4.05	4.32	4.37	4.43	4.48	4.53	/	
	35	9482	7785	7027	6269	3613	/	3.72	4.01	4.26	4.51	4.19	/	/	
40	7421	6273	5669	5065	2936	/	3.14	3.38	3.58	3.77	3.48	/	/		
43	5643	4436	4021	3607	2122	/	2.58	2.67	2.83	2.99	2.76	/	/		
15	-5	6834	5503	4532	3561	/	/	9.92	11.21	11.45	11.68	/	/	/	
	0	6605	5328	4392	3456	/	/	8.56	9.79	10.01	10.23	/	/	/	
	5	6376	5108	4714	4321	2748	/	7.19	7.84	8.39	8.94	8.42	/	/	
	10	6545	5259	4878	4496	2916	/	8.73	9.53	10.23	10.92	10.33	/	/	
	15	7607	6389	5893	5397	3423	/	7.35	7.80	8.34	8.87	8.33	/	/	
	20	8668	7226	6587	5948	3589	/	5.97	6.42	6.85	7.28	6.81	/	/	
	25	9872	8352	7559	6786	3949	/	5.24	5.58	5.94	6.30	5.88	/	/	
	30	11076	9507	8593	7678	4453	/	4.62	4.95	5.26	5.58	5.19	/	/	
	35	11033	9091	8296	7500	4546	/	4.21	4.53	4.85	5.16	4.86	/	/	
40	8883	7730	7033	6336	3790	/	3.51	3.79	4.02	4.25	3.93	/	/		
43	6732	5359	4924	4488	2801	/	3.16	3.32	3.52	3.73	3.46	/	/		
18	-5	7936	6403	5258	4112	/	/	10.35	11.83	12.04	12.24	/	/	/	
	0	7299	5898	4848	3798	/	/	9.14	10.53	10.75	10.96	/	/	/	
	5	6662	5320	4909	4497	2857	/	7.92	8.74	9.34	9.93	9.32	/	/	
	10	7476	5989	5553	5117	3314	/	9.51	10.51	11.25	12.00	11.30	/	/	
	15	8680	7358	6740	6122	3772	/	7.91	8.54	9.17	9.80	9.28	/	/	
	20	9884	8354	7678	7002	4377	/	6.31	6.80	7.24	7.69	7.18	/	/	
	25	11110	9526	8692	7858	4762	/	5.55	5.99	6.37	6.75	6.28	/	/	
	30	12335	10726	9773	8819	5309	/	4.91	5.26	5.60	5.93	5.53	/	/	
	35	12055	9900	9195	8391	5256	/	4.49	4.55	5.15	5.51	5.21	/	/	
40	9711	8558	7836	7114	4376	/	3.81	4.15	4.40	4.65	4.30	/	/		
43	7561	6242	5716	5191	3196	/	3.48	3.71	3.93	4.15	3.84	/	/		
20	-5	8788	7151	5883	4614	/	/	10.66	12.31	12.50	12.69	/	/	/	
	0	7763	6328	5211	4094	/	/	9.61	11.14	11.38	11.61	/	/	/	
	5	6739	5407	4966	4586	2931	/	8.56	9.54	10.18	10.82	10.13	/	/	
	10	8171	6576	6106	5637	3673	/	10.18	11.37	12.16	12.95	12.18	/	/	
	15	9480	8153	7439	6726	4076	/	8.38	9.18	9.90	10.63	10.14	/	/	
	20	10789	9285	8602	7919	5114	/	6.57	7.10	7.56	8.02	7.49	/	/	
	25	11998	10474	9635	8796	5519	/	5.79	6.32	6.72	7.13	6.64	/	/	
	30	13206	11691	10738	9786	6101	/	5.14	5.51	5.87	6.23	5.82	/	/	
	35	12697	11084	10214	9343	5904	/	4.73	5.09	5.46	5.84	5.52	/	/	
40	10234	9183	8467	7751	4909	/	4.07	4.47	4.74	5.01	4.64	/	/		
43	8151	6997	6385	5792	3554	/	3.75	4.06	4.30	4.53	4.18	/	/		
25	-5	9346	7593	6260	4926	/	/	12.13	13.82	14.16	14.49	/	/	/	
	0	8299	6754	5574	4393	/	/	10.88	12.66	12.90	13.14	/	/	/	
	5	7251	5884	5432	4979	3169	/	9.63	10.60	11.35	12.10	11.40	/	/	
	10	8796	7159	6602	6122	3971	/	10.22	11.26	12.09	12.91	12.22	/	/	
	15	10641	8938	8331	7725	5107	/	8.84	9.74	10.52	11.30	10.81	/	/	
	20	12485	10869	10120	9370	6168	/	7.45	8.21	8.75	9.29	8.68	/	/	
	25	13929	12299	11370	10442	6686	/	6.42	7.18	7.64	8.10	7.54	/	/	
	30	15372	13763	12704	11645	7409	/	5.51	6.08	6.44	6.81	6.30	/	/	
	35	14507	13230	12256	11282	7283	/	5.06	5.54	5.92	6.31	5.93	/	/	
40	12275	11137	10375	9613	6342	/	4.34	4.89	5.16	5.42	4.97	/	/		
43	10042	7943	6502	5013	/	/	4.03	4.41	4.50	4.58	/	/	/		



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