Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-14k	Model(s): AOWD-MB LOGIK-14K2									
Air-to-water heat pump		Y		Low-temperature heat pump		N				
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν				
Brine-to-water heat pump		N		Heat pump combination heater		Y				
Parameters declared for				Medium-temperature application						
Parameters declared for				Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	137	%			
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor	hergy ratio for temperature 7	r part load at Ij			
Tj = -7 C	Pdh	4.3	kW	T. 7 %	CODI	2.47				
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = -7$ C	COPd	2.47	_			
Tj = 2 C	Pdh	2.7	kW	T: - 2 °C	CODI	2.10				
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	5.19	_			
$Tj = 7 \ ^{\circ}C$	Pdh	1.7	kW	$T_i - 7 \circ C$	COP4	1 80				
Degradation co-efficient (**)	Cdh	0.95	-	IJ - / C	COrd	4.09	_			
$Tj = 12^{\circ}C$	Pdh	1.6	kW	Ti – 12℃	COP4	6.61				
Degradation co-efficient (**)	Cdh	0.94	_	IJ - 12 C	COrd	0.01	_			
Tj = bivalent temperature	Pdh	4.3	kW	Tj = bivalent temperature	COPd	2.47	_			
Tj = operation limit temperature	Pdh	3.6	kW	Tj = operation limit temperature	COPd	1.56	-			
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_			
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	C			
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_			
	5			Heating water operating limit temperature	WTOL	65	°C			
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater	T				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.4	kW			
Thermostat-off mode	P _{TO}	0.025	kW							
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items					1				
Capacity control		variable	I	For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h			
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h			
Annual energy consumption	\mathbf{Q}_{HE}	2882	kWh	rate, outdoor heat exchanger						
		For l	heat pump co	mbination heater:						
Declared load profile		XL		Water heating energy efficiency	ηwh	128	%			
Daily electricity consumption	Qelec	6.237	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1372	kWh	Annual fuel consumption	AFC	NA	GJ			
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s):AOWD-MB LOGIK-14K2									
Air-to-water heat pump		Y		Low-temperature heat pump		Ν			
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater		Y			
Parameters declared for				Medium-temperature application					
Parameters declared for				Colder climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	ηs	112	%		
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	r part load at Fj		
Tj = -7 °C	Pdh	2.6	kW	Ti – 7 °C	COP4	2.05			
Degradation co-efficient (**)	Cdh	0.99	-	IJ = = / C	COPa	2.03	_		
$Tj = 2 \ C$	Pdh	1.6	kW	T: - 2 °C	COD4	2 77			
Degradation co-efficient (**)	Cdh	0.97	-	IJ-2 C	COPa	5.77	_		
$Tj = 7 \ ^{\circ}C$	Pdh	1.3	kW	T: - 7 °C	COD4	5 15			
Degradation co-efficient (**)	Cdh	0.95	-	IJ = / C	COPa	5.15	_		
Tj = 12℃	Pdh	1.5	kW	T: 10°0	CODI	7.01			
Degradation co-efficient (**)	Cdh	0.95	_	1j = 12 C	COPd	/.21	_		
Tj = bivalent temperature	Pdh	3.5	kW	Tj = bivalent temperature	COPd	1.76	-		
Tj = operation limit temperature	Pdh	2.5	kW	Tj = operation limit temperature	COPd	1.20	-		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20 $^{\circ}C$)	Pdh	3.5	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	1.76	_		
Bivalent temperature	Tbiv	-15	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-22	Ĉ		
Cycling interval capacity for beating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	-		
	reyen	INA	KW	Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater		1		
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.5	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h		
Sound power level, outdoors	L _{WA}	58	dB	For water- or brine-to-water heat		NIA			
Annual energy consumption	Q _{HE}	3721	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n		
		For l	heat pump co	mbination heater:			•		
Declared load profile		XL		Water heating energy efficiency	ηwh	90	%		
Daily electricity consumption	Qelec	8.826	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1942	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-14K	2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater		Y			
Parameters declared for				Medium-temperature application	I				
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	170	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA			
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COrd	INA	_		
$Tj = 2 \ C$	Pdh	5.2	kW	$T_i - 2 \circ$	COP4	2.44			
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COrd	2.44	_		
$Tj = 7 \ ^{\circ}C$	Pdh	3.2	kW	T: - 7 °C	COP4	2.67			
Degradation co-efficient (**)	Cdh	0.98	-	IJ - / C	COrd	5.07	_		
$Tj = 12^{\circ}C$	Pdh	1.5	kW	T: - 12°0	COD4	5 70			
Degradation co-efficient (**)	Cdh	0.95	_	$I_{j} = I_{2} C$	COPa	5.79	_		
Tj = bivalent temperature	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.44	_		
Tj = operation limit temperature	Pdh	5.2	kW	Tj = operation limit temperature	COPd	2.44	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_		
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Peych	NA	ĿW	Cycling interval efficiency	COPcyc	NA	-		
	reyen	INA	KW	Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater		1		
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h		
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat		NIA			
Annual energy consumption	$Q_{\rm HE}$	1604	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n		
		For 1	neat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	120	%		
Daily electricity consumption	Qelec	6.665	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1466	kWh	Annual fuel consumption	AFC	NA	GJ		
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-14K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	192	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Ij	
Tj = -7 °C	Pdh	4.8	kW	T:- 7 °C	COD4	2.42		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = -7C	COPa	5.45	_	
$Tj = 2 \ ^{\circ}C$	Pdh	3.1	kW	T: - 2 °C	COD4	1.02		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.83	_	
$Tj = 7 \ ^{\circ}C$	Pdh	1.9	kW	T: - 7 °C	COD4	5.05		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - / C	coru	5.95	_	
Tj = 12 °C	Pdh	1.7	kW	Ti – 12℃	COP4	8 40		
Degradation co-efficient (**)	Cdh	0.94	_	IJ - 12 C	COru	0.49	_	
Tj = bivalent temperature	Pdh	4.8	kW	Tj = bivalent temperature	COPd	3.43	_	
Tj = operation limit temperature	Pdh	4.4	kW	Tj = operation limit temperature	COPd	2.46	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater	1	[
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.6	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	3200	m 3 /h	
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	2306	kWh	rate, outdoor heat exchanger		1111	III 5 /II	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	128	%	
Daily electricity consumption	Qelec	6.237	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1372	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-14k	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	168	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	r part load at Ij	
Tj = -7 °C	Pdh	2.9	kW	T:- 7 °C	COD4	2.42		
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = - / C$	COPa	3.43	_	
$Tj = 2 \ ^{\circ}C$	Pdh	1.8	kW	T: - 2 °C	COD4	5 41		
Degradation co-efficient (**)	Cdh	0.97	-	IJ - 2 C	COPa	5.41	_	
$Tj = 7 \ C$	Pdh	1.3	kW	T; - 7 °C	COP4	6.24		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - / C	coru	0.24	_	
$Tj = 12^{\circ}C$	Pdh	1.5	kW	$T_i = 12^{\circ}$	COP4	8 38	_	
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 12 C		0.30	_	
Tj = bivalent temperature	Pdh	3.7	kW	Tj = bivalent temperature	COPd	2.85	_	
Tj = operation limit temperature	Pdh	3.2	kW	Tj = operation limit temperature	COPd	1.65	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	3.7	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	COPd	2.85	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	Ĉ	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater		[
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.8	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items					1		
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h	
Sound power level, outdoors	L _{WA}	58	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	2630	kWh	rate, outdoor heat exchanger				
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	90	%	
Daily electricity consumption	Qelec	8.826	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1942	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)			
Model(s): AOWD-MB LOGIK-14K	2						
Air-to-water heat pump		Y		Low-temperature heat pump		N	
Water-to-water heat pump		N		Equipped with a supplementary heater		N	
Brine-to-water heat pump		N		Heat pump combination heater		Y	
Parameters declared for				Low-temperature application			
Parameters declared for				Warmer climate condition			
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	239	%
Declared capacity for heating for part outdoor tem	load at indo	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en	ergy ratio for temperature 7	r part load at Fj
Tj = − 7 °C	Pdh	NA	kW	T : T *O	CODI		
Degradation co-efficient (**)	Cdh	NA	_	$1_{j} = -7$ C	COPd	NA	_
$Tj = 2 \ C$	Pdh	5.1	kW	T. 2 %	CODI	2.05	
Degradation co-efficient (**)	Cdh	0.99	_	$I_j = 2 C$	COPa	3.85	_
$Tj = 7 \ ^{\circ}C$	Pdh	3.4	kW	T: - 7 °C	COD4	5.80	
Degradation co-efficient (**)	Cdh	0.98	-	IJ = / C	COPa	5.80	_
Tj = 12 °C	Pdh	1.5	kW	T: - 12°0	COD4	7.20	
Degradation co-efficient (**)	Cdh	0.95	_	1j = 12 C	COPa	7.20	_
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.85	-
Tj = operation limit temperature	Pdh	5.1	kW	Tj = operation limit temperature	COPd	3.85	-
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_
				Heating water operating limit temperature	WTOL	65	°C
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater		
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW
Thermostat-off mode	P _{TO}	0.025	kW				
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0.025	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat		NA	m 3 /h
Annual energy consumption	Q _{HE}	1124	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11
		For l	heat pump co	ombination heater:			
Declared load profile		XL		Water heating energy efficiency	ηwh	120	%
Daily electricity consumption	Qelec	6.665	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1466	kWh	Annual fuel consumption	AFC	NA	GJ
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-18K2									
Air-to-water heat pump		Y		Low-temperature heat pump		Ν			
Water-to-water heat pump		N		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		N		Heat pump combination heater	Y				
Parameters declared for				Medium-temperature application	1				
Parameters declared for				Average climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	137	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	4.3	kW	T: - 7 °C	COP4	2 47			
Degradation co-efficient (**)	Cdh	0.99	-	IJ = -7C	COPa	2.47	_		
$Tj = 2 \ C$	Pdh	2.7	kW	T: - 2 °C	COD4	2 10			
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	5.19	_		
$Tj = 7 \ C$	Pdh	1.7	kW	T: - 7 °C	COD4	4.80			
Degradation co-efficient (**)	Cdh	0.95	-	IJ = / C	COPa	4.89	_		
Tj = 12 °C	Pdh	1.6	kW	Ti – 12°C	COP4	6.61			
Degradation co-efficient (**)	Cdh	0.94	_	IJ - 12 C	COFU	0.01	_		
Tj = bivalent temperature	Pdh	4.3	kW	Tj = bivalent temperature	COPd	2.47	_		
Tj = operation limit temperature	Pdh	3.6	kW	Tj = operation limit temperature	COPd	1.56	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
				Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.4	kW		
Thermostat-off mode	Рто	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	3200	m 3 /h		
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h		
Annual energy consumption	Q _{HE}	2882	kWh	rate, outdoor heat exchanger					
		For l	neat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	128	%		
Daily electricity consumption	Qelec	6.237	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1372	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-18k	Model(s): AOWD-MB LOGIK-18K2									
Air-to-water heat pump		Y		Low-temperature heat pump		N				
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N				
Brine-to-water heat pump		Ν		Heat pump combination heater		Y				
Parameters declared for				Medium-temperature application						
Parameters declared for				Colder climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	120	%			
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor	ergy ratio for temperature 7	r part load at Fj			
$Tj = -7 \ ^{\circ}C$	Pdh	3.3	kW	Ti – 7 °C	COP4	2.55				
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	coru	2.33	_			
Tj = 2 C	Pdh	1.8	kW	$T_i = 2 $ °C	COPd	3.67				
Degradation co-efficient (**)	Cdh	0.97	-	11 2 0	coru	5.07				
$Tj = 7 \ ^{\circ}C$	Pdh	1.3	kW	$T_i = 7 °C$	COPd	5 15	_			
Degradation co-efficient (**)	Cdh	0.95	-		coru	5.15				
Tj = 12 °C	Pdh	1.5	kW	$T_i = 12^{\circ}C$	COPd	7.21	_			
Degradation co-efficient (**)	Cdh	0.95	-	1, 120	Coru	/.21				
Tj = bivalent temperature	Pdh	4.0	kW	Tj = bivalent temperature	COPd	1.91	-			
Tj = operation limit temperature	Pdh	2.5	kW	Tj = operation limit temperature	COPd	1.20	-			
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < -20°C)	Pdh	4.0	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	1.91	-			
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C			
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_			
				Heating water operating limit temperature	WTOL	65	Ĉ			
Power consumption in mo	des other tha	n active mod	le	Supplemen	ntary heater					
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	2.5	kW			
Thermostat-off mode	P _{TO}	0.025	kW	_						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items				1	1	1			
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h			
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat						
Annual energy consumption	Q _{HE}	3976	kWh	pumps: Rated brine or water flow rate, outdoor heat exchanger	-	NA	m 3 /h			
		For l	heat pump co	mbination heater:						
Declared load profile		XL		Water heating energy efficiency	ηwh	90	%			
Daily electricity consumption	Qelec	8.826	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1942	kWh	Annual fuel consumption	AFC	NA	GJ			
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Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-18K	Model(s): AOWD-MB LOGIK-18K2									
Air-to-water heat pump		Y		Low-temperature heat pump		N				
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν				
Brine-to-water heat pump		N		Heat pump combination heater		Y				
Parameters declared for				Medium-temperature application						
Parameters declared for				Warmer climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	ηs	183	%			
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	part load at			
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA				
Degradation co-efficient (**)	Cdh	NA	-	IJ/C	COPa	INA	_			
$Tj = 2 \ C$	Pdh	6.0	kW	Ti – 2 °C	COP4	2 50				
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	coru	2.50	_			
$Tj = 7 \degree C$	Pdh	3.9	kW	$T_i = 7 °C$	COPd	4 00	_			
Degradation co-efficient (**)	Cdh	0.98	-			4.00				
$Tj = 12 \degree C$	Pdh	1.7	kW	$T_i = 12^{\circ}$	COPd	6.13	_			
Degradation co-efficient (**)	Cdh	0.95	-	1 120	coru	0.15				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.50	-			
Tj = operation limit temperature	Pdh	6.0	kW	Tj = operation limit temperature	COPd	2.50	-			
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL ≤ -20 °C)	COPd	NA	_			
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	Ċ			
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_			
	5			Heating water operating limit temperature	WTOL	65	°C			
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater	1				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW			
Thermostat-off mode	P _{TO}	0.025	kW	-						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items						1			
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h			
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat		NA	m 3 /h			
Annual energy consumption	\mathbf{Q}_{HE}	1722	kWh	rate, outdoor heat exchanger		1474	III 5 /II			
		For l	heat pump co	ombination heater:						
Declared load profile		XL		Water heating energy efficiency	ηwh	120	%			
Daily electricity consumption	Qelec	6.665	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1466	kWh	Annual fuel consumption	AFC	NA	GJ			
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-18K	.2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	ηs	199	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = -7 °C	Pdh	5.1	kW	Ti – 7 °C	COP4	3 77		
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	COPa	5.22	_	
$Tj = 2 \ C$	Pdh	3.4	kW	$T_i - 2 $ °C	COP4	186		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	coru	4.80	_	
$Tj = 7 \degree C$	Pdh	2.0	kW	$T_i = 7 °C$	COPd	7.09	_	
Degradation co-efficient (**)	Cdh	0.95	-			7.09		
$Tj = 12^{\circ}C$	Pdh	1.7	kW	$T_i = 12^{\circ}$	COPd	8 49	_	
Degradation co-efficient (**)	Cdh	0.94	-	1 120	coru	0.49		
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.22	-	
Tj = operation limit temperature	Pdh	4.4	kW	Tj = operation limit temperature	COPd	2.46	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
	5			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater	1	1	
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.6	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items					1		
Capacity control		variable	ſ	For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h	
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	2386	kWh	rate, outdoor heat exchanger				
		For l	heat pump co	mbination heater:				
Declared load profile		XL	1	Water heating energy efficiency	ηwh	128	%	
Daily electricity consumption	Qelec	6.237	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1372	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation leaters and h	requirements neat pump combination heaters)			
Model(s): AOWD-MB LOGIK-18k	32						
Air-to-water heat pump		Y		Low-temperature heat pump		N	
Water-to-water heat pump		N		Equipped with a supplementary heater		N	
Brine-to-water heat pump		N		Heat pump combination heater		Y	
Parameters declared for				Low-temperature application			
Parameters declared for				Colder climate condition			
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	164	%
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Fj
Tj = − 7 °C	Pdh	3.2	kW	T : T *0	CODI	2.47	
Degradation co-efficient (**)	Cdh	0.99	-	$T_j = -7$ °C	COPd	3.47	_
Tj = 2 C	Pdh	1.9	kW	T. 2 %	CODI	5.10	
Degradation co-efficient (**)	Cdh	0.97	-	$I_j = 2 C$	COPa	5.18	_
$Tj = 7 \ ^{\circ}C$	Pdh	1.3	kW	T: - 7 °C	COD4	6.24	
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 7 C	COrd	0.24	_
$Tj = 12^{\circ}C$	Pdh	1.5	kW	$T_i = 12^{\circ}$	COP4	8.38	
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 12 C	COrd	0.30	_
Tj = bivalent temperature	Pdh	3.9	kW	Tj = bivalent temperature	COPd	2.77	_
Tj = operation limit temperature	Pdh	3.2	kW	Tj = operation limit temperature	COPd	1.65	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20 °C)	Pdh	3.9	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	2.77	-
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_
	-			Heating water operating limit temperature	WTOL	65	°C
Power consumption in mo	des other tha	n active mod	le	Supplemen	ntary heater	1	1
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.025	kW				
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric	
Crankcase heater mode	Рск	0.025	kW				
Other	items				1	1	
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h
Sound power level, outdoors	L _{WA}	58	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h
Annual energy consumption	\mathbf{Q}_{HE}	2825	kWh	rate, outdoor heat exchanger			
		For	heat pump co	ombination heater:			
Declared load profile		XL		Water heating energy efficiency	ηwh	90	%
Daily electricity consumption	Qelec	8.826	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1942	kWh	Annual fuel consumption	AFC	NA	GJ
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-18K2									
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater	Y				
Parameters declared for				Low-temperature application					
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	239	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COP4	NA			
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COPa	INA	_		
$Tj = 2 \ C$	Pdh	5.1	kW	$T_i - 2 \circ$	COP4	3.85			
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COrd	5.65	_		
$Tj = 7 \ ^{\circ}C$	Pdh	3.4	kW	T: - 7 °C	COD4	5.80			
Degradation co-efficient (**)	Cdh	0.98	-	IJ - / C	COrd	5.80	_		
$Tj = 12^{\circ}C$	Pdh	1.5	kW	Ti - 12°0	COD4	7 20			
Degradation co-efficient (**)	Cdh	0.95	-	$I_{J} = I_{2} \cup$	COPa	7.20	_		
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.85	_		
Tj = operation limit temperature	Pdh	5.1	kW	Tj = operation limit temperature	COPd	3.85	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20 $^{\circ}C$)	COPd	NA	_		
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	reyen	1111	K ()	Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mod	des other tha	n active mod	e	Supplemer	ntary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3200	m 3 /h		
Sound power level, outdoors	L_{WA}	58	dB	For water- or brine-to-water heat		NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	1124	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11		
		For l	neat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	120	%		
Daily electricity consumption	Qelec	6.665	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1466	kWh	Annual fuel consumption	AFC	NA	GJ		
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Y		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application	1			
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	145	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Ij	
Tj = -7 °C	Pdh	8.3	kW	T:- 7 °C	COD4	2.22		
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = - / C$	COPa	2.33	_	
$Tj = 2 \ C$	Pdh	5.2	kW	T: - 2 °C	COD4	2.57		
Degradation co-efficient (**)	Cdh	0.98	-	IJ - 2 C	COPa	5.57	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.3	kW	T; - 7 °C	COP4	1.96		
Degradation co-efficient (**)	Cdh	0.97	-	IJ - / C	coru	4.90	_	
$Tj = 12^{\circ}C$	Pdh	3.0	kW	$T_i = 12^{\circ}$	COP4	6.56	_	
Degradation co-efficient (**)	Cdh	0.96	-	IJ - 12 C		0.50	_	
Tj = bivalent temperature	Pdh	8.3	kW	Tj = bivalent temperature	COPd	2.33	_	
Tj = operation limit temperature	Pdh	8.7	kW	Tj = operation limit temperature	COPd	1.81	-	
For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	Ĉ	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.3	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items						1	
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	5060	kWh	rate, outdoor heat exchanger		1111	III 5 /II	
For heat pump combination heater:								
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)			
Model(s): AOWD-MB LOGIK-28K	2						
Air-to-water heat pump		Y		Low-temperature heat pump		N	
Water-to-water heat pump		N		Equipped with a supplementary heater		Y	
Brine-to-water heat pump		N		Heat pump combination heater	Y		
Parameters declared for				Medium-temperature application	I		
Parameters declared for				Colder climate condition			
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	ηs	125	%
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj
Tj = -7 °C	Pdh	5.2	kW	T: _ 7 °O	CODI	2.82	
Degradation co-efficient (**)	Cdh	0.99	_	IJ = -7C	COPa	2.83	_
$Tj = 2 \ C$	Pdh	2.9	kW	T: - 2 °C	COD4	2 72	
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	5.75	_
$Tj = 7 \ ^{\circ}C$	Pdh	2.4	kW	T: - 7 °C	COP4	4 4 4	
Degradation co-efficient (**)	Cdh	0.96	-	IJ - / C	COrd	4.44	_
$Tj = 12^{\circ}C$	Pdh	3.0	kW	T: - 12°O	COD4	7.10	
Degradation co-efficient (**)	Cdh	0.96	-	$I_{J} = I_{2} C$	COPa	7.10	_
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature	Pdh	4.1	kW	Tj = operation limit temperature	COPd	1.06	-
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	6.7	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	2.09	_
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C
Power consumption in mo	des other tha	n active mod	e	Supplementary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	3.9	kW
Thermostat-off mode	P _{TO}	0.025	kW				
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric	
Crankcase heater mode	Рск	0.025	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h
Annual energy consumption	\mathbf{Q}_{HE}	6322	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11
		For l	heat pump co	mbination heater:			
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%
Daily electricity consumption	Qelec	7.905	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ
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	(heat p	I ump space h	nformation leaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Y		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application	I			
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	190	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	part load at	
Tj = -7 °C	Pdh	NA	kW	T: _ 7 °O	COD4			
Degradation co-efficient (**)	Cdh	NA	-	IJ = -7C	COPa	INA	_	
$Tj = 2 \ ^{\circ}C$	Pdh	8.6	kW	T: - 2 °C	COD4	2.50		
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COPa	2.39	_	
$Tj = 7 \ C$	Pdh	6.3	kW	T: - 7 °C	COP4	4.21		
Degradation co-efficient (**)	Cdh	0.99	-	IJ - / C	COrd	4.21	_	
Tj = 12 °C	Pdh	3.0	kW	T: - 12°O	COD4	(22)		
Degradation co-efficient (**)	Cdh	0.96	-	$I_{J} = I_{2} C$	COPa	0.32	_	
Tj = bivalent temperature	Pdh	8.6	kW	Tj = bivalent temperature	COPd	2.59	-	
Tj = operation limit temperature	Pdh	8.6	kW	Tj = operation limit temperature	COPd	2.59	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	le	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	2372	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.505	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Y		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	ηs	177	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor	nergy ratio for temperature 7	part load at	
Tj = -7 °C	Pdh	7.4	kW	T:- 7 °C	COD4	2 12		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = -7C	COPa	5.12	_	
$Tj = 2 \degree C$	Pdh	4.4	kW	T: - 2 °C	COD4	4 4 4		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.44	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.0	kW	T: - 7 °C	COP4	5 21		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 7 C	coru	5.51	_	
$Tj = 12 \degree C$	Pdh	3.2	kW	Ti − 12°C	COP4	7.60		
Degradation co-efficient (**)	Cdh	0.94	-	IJ - 12 C	COrd	7.09	_	
Tj = bivalent temperature	Pdh	7.4	kW	Tj = bivalent temperature	COPd	3.12	_	
Tj = operation limit temperature	Pdh	7.8	kW	Tj = operation limit temperature	COPd	2.77	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.2	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	3827	kWh	rate, outdoor heat exchanger		1171	11 5 / 11	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Y		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	165	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Fj	
Tj = − 7 °C	Pdh	5.7	kW		CODI			
Degradation co-efficient (**)	Cdh	0.99	_	$T_{j} = -7$ C	COPd	3.45	-	
$Tj = 2 \degree C$	Pdh	3.5	kW	T. 0 %	CODI	5.16		
Degradation co-efficient (**)	Cdh	0.97	_	$I_{j} = 2 C$	COPa	5.16	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.6	kW	T: - 7 °C	COD4	6.60		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 7 C	COrd	0.09	_	
Tj = 12 °C	Pdh	3.0	kW	$T_i = 12^{\circ}$	COP4	7 53		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COrd	7.55	_	
Tj = bivalent temperature	Pdh	7.4	kW	Tj = bivalent temperature	COPd	2.70	_	
Tj = operation limit temperature	Pdh	6.1	kW	Tj = operation limit temperature	COPd	1.87	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	7.4	kW	For air-to-water heat pumps: Tj = -15°C (if TOL < -20 °C)	COPd	2.70	_	
Bivalent temperature	Tbiv	-15	C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	5			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	2.9	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items					1	1	
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	5303	kWh	rate, outdoor heat exchanger				
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%	
Daily electricity consumption	Qelec	7.905	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Y		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	257	%	
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C at the second s	or primary en and outdoor t	ergy ratio for emperature T	r part load at Fj	
Tj = -7 °C	Pdh	NA	kW	T:- 7 °C	COD4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ = -7C	COPa	NA	_	
Tj = 2 ℃	Pdh	9.4	kW	T: - 2 °C	COD4	2.95		
Degradation co-efficient (**)	Cdh	0.99	_	IJ-2 C	COrd	3.63	_	
$Tj = 7 \ ^{\circ}C$	Pdh	6.1	kW	T; – 7 °C	COP4	6.07		
Degradation co-efficient (**)	Cdh	0.98	_	IJ - 7 C	COrd	0.07	_	
Tj = 12 °C	Pdh	3.2	kW	$T_{i} = 12^{\circ}$	COD4	7 92		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COrd	7.03	_	
Tj = bivalent temperature	Pdh	9.4	kW	Tj = bivalent temperature	COPd	3.85	-	
Tj = operation limit temperature	Pdh	9.4	kW	Tj = operation limit temperature	COPd	3.85	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $\le -20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	1942	kWh	rate, outdoor heat exchanger		1474	111 5 711	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.505	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-281	TK2									
Air-to-water heat pump		Y		Low-temperature heat pump		Ν				
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν				
Brine-to-water heat pump		Ν		Heat pump combination heater		Y				
Parameters declared for				Medium-temperature application	ium-temperature application					
Parameters declared for				Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	135	%			
Declared capacity for heating for part load at indoor temperature 20 °C a outdoor temperature Tj				Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at j			
Tj = − 7 °C	Pdh	7.8	kW	Ti = -7 °C	COPd	2 14	_			
Degradation co-efficient (**)	Cdh	0.99	_	IJ - / C		2.14				
Tj = 2 C	Pdh	5.0	kW	$T_i = 2^{\circ}$	COPd	3 37	_			
Degradation co-efficient (**)	Cdh	0.98	-	1j 2 C		5.57				
$Tj = 7 \ ^{\circ}C$	Pdh	3.3	kW	$T_i = 7 °C$	COP4	4 53	_			
Degradation co-efficient (**)	Cdh	0.97	-	1j / C	coru	ч.55				
$Tj = 12^{\circ}C$	Pdh	3.0	kW	Ti − 12°C	COD4	5 44				
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COPa	5.44	_			
Tj = bivalent temperature	Pdh	7.8	kW	Tj = bivalent temperature	COPd	2.14	-			
Tj = operation limit temperature	Pdh	8.6	kW	Tj = operation limit temperature	COPd	2.07	-			
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL ≤ -20 °C)	COPd	NA				
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	Ĉ			
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_			
	regen		R ()	Heating water operating limit temperature	WTOL	65	°C			
Power consumption in mo	des other tha	n active mod	e	Supplementary heater						
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.4	kW			
Thermostat-off mode	P _{TO}	0.025	kW							
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h			
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h			
Annual energy consumption	\mathbf{Q}_{HE}	5261	kWh	rate, outdoor heat exchanger	_	NA	111 5 /11			
		For l	heat pump co	mbination heater:						
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%			
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ			
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Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-287	TK2									
Air-to-water heat pump		Y		Low-temperature heat pump		Ν				
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν				
Brine-to-water heat pump		Ν		Heat pump combination heater	Y					
Parameters declared for				Medium-temperature application						
Parameters declared for				Colder climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	ηs	120	%			
Declared capacity for heating for part outdoor terr	Declared capacity for heating for part load at indoor temperature 20 °C a outdoor temperature Tj				or primary en and outdoor t	ergy ratio for emperature T	part load at j			
Tj = − 7 °C	Pdh	5.1	kW	$Ti = -7 \degree C$	COPd	2 75	_			
Degradation co-efficient (**)	Cdh	0.99	_	IJ - / C		2.75				
Tj = 2 C	Pdh	3.0	kW	$T_i = 2^{\circ}$	COPd	3.4	_			
Degradation co-efficient (**)	Cdh	0.97	-	1j 2 C						
$Tj = 7 \ ^{\circ}C$	Pdh	3.2	kW	$T_i = 7 °C$	COP4	4.61	_			
Degradation co-efficient (**)	Cdh	0.96	-	1j / C	coru	4.01				
$Tj = 12^{\circ}C$	Pdh	3.0	kW	Ti − 12°C	COD4	5 70				
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COPa	5.79	_			
Tj = bivalent temperature	Pdh	6.8	kW	Tj = bivalent temperature	COPd	2.20	-			
Tj = operation limit temperature	Pdh	4.4	kW	Tj = operation limit temperature	COPd	1.22	-			
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	6.8	kW	For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	COPd	2.20	_			
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C			
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	-			
	reyen	1474	ĸw	Heating water operating limit temperature	WTOL	65	°C			
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater	(
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	3.6	kW			
Thermostat-off mode	P _{TO}	0.025	kW							
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h			
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h			
Annual energy consumption	Q _{HE}	6706	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n			
		For l	heat pump co	mbination heater:						
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%			
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ			
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Information requirements (heat pump space heaters and heat pump combination heaters)										
Model(s): AOWD-MB LOGIK-28T	°K2									
Air-to-water heat pump		Y		Low-temperature heat pump		N				
Water-to-water heat pump		N		Equipped with a supplementary heater		N				
Brine-to-water heat pump		Ν		Heat pump combination heater	Y					
Parameters declared for				Medium-temperature application	1					
Parameters declared for				Warmer climate condition						
Item	symbol	value	unit	Item	symbol	value	unit			
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	168	%			
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at			
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COP4	NA				
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COPa	INA	_			
$Tj = 2 \ C$	Pdh	8.9	kW	$T_i - 2 \%$	COP4	2.12				
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	coru	2.12	_			
$Tj = 7 \degree C$	Pdh	6.3	kW	$T_i = 7 \circ C$	COPd	3 99	_			
Degradation co-efficient (**)	Cdh	0.98	-			5.77				
$Tj = 12^{\circ}C$	Pdh	3.0	kW	Ti = 12℃	COPd	5 29	_			
Degradation co-efficient (**)	Cdh	0.96	-	1 12 0		5.27				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	2.12	-			
Tj = operation limit temperature	Pdh	8.9	kW	Tj = operation limit temperature	COPd	2.12	-			
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_			
Bivalent temperature	Tbiv	2	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C			
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	-			
	5			Heating water operating limit temperature	WTOL	65	°C			
Power consumption in mo	des other tha	n active mod	e	Supplementary heater						
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.1	kW			
Thermostat-off mode	P _{TO}	0.025	kW							
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric				
Crankcase heater mode	P _{CK}	0.025	kW							
Other	items									
Capacity control		variable	ſ	For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h			
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h			
Annual energy consumption	$Q_{\rm HE}$	2751	kWh	rate, outdoor heat exchanger						
		For l	heat pump co	mbination heater:						
Declared load profile		XL	1	Water heating energy efficiency	ηwh	123	%			
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh			
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ			
Eqpvcev'f gvcku≺ ucv@gwtqhtgfitqwr@eqo0'				P co g"cpf "cf f tguu"qh'\j g"uwr r hgt <"" E IO cts w² u'f g"Ugpvo gpcv; 9."2: 24;	Gwtqhtgf 'U0 'Dctegnqpc0	CO Frckp				

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28T	ĨK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	ηs	176	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature T	part load at	
Tj = -7 C	Pdh	7.4	kW	T : 7 %	CODI	2.12		
Degradation co-efficient (**)	Cdh	0.99	_	$T_{j} = -7$ C	COPd	3.12	-	
Tj = 2 C	Pdh	4.2	kW	T. 0 %	CODI	4.17		
Degradation co-efficient (**)	Cdh	0.98	_	$I_J = 2 C$	COPa	4.17	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.84	kW	T: - 7 °C	COD4	5.02		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - / C	COru	5.92	_	
Tj = 12 °C	Pdh	3.2	kW	Ti – 12℃	COP4	7 18		
Degradation co-efficient (**)	Cdh	0.94	_	IJ - 12 C	COru	/.10	_	
Tj = bivalent temperature	Pdh	7.4	kW	Tj = bivalent temperature	COPd	3.12	_	
Tj = operation limit temperature	Pdh	8.0	kW	Tj = operation limit temperature	COPd	2.84	-	
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	ĉ	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	5			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items					1		
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	3882	kWh	rate, outdoor heat exchanger				
		For l	ombination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvcev'f gvcku≺ ucv@wtqhtgfitqwr0eqo0'				P cog"cpf"cfftguu'qh'yjg'uwrrnkgt<"" E Ю ctsw²u'fg'Ugpvogpcv;9."2:24;	Gwtqhtgf "U0 "Dctegnqpc0	CO Jrckp		

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-28T	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater	N			
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	142	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load a indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	5.4	kW	Ti – 7 °C	COP4	2.75		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = = / C	COPa	2.73	—	
$Tj = 2 \ ^{\circ}C$	Pdh	3.2	kW	T: - 2 °C	COP4	4.52		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	coru	4.52	_	
$Tj = 7 \degree C$	Pdh	2.6	kW	$T_i = 7 °C$	COPd	5.63	_	
Degradation co-efficient (**)	Cdh	0.94	-			5.05		
Tj = 12 °C	Pdh	3.2	kW	$T_i = 12^{\circ}$	COPd	7.01	_	
Degradation co-efficient (**)	Cdh	0.95	_	1 120		7.01		
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.71	-	
Tj = operation limit temperature	Pdh	6.1	kW	Tj = operation limit temperature	COPd	1.87	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	6.0	kW	For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	COPd	1.71	_	
Bivalent temperature	Tbiv	-15	ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	5			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	2.9	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items					1		
Capacity control		variable	I	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	5935	kWh	rate, outdoor heat exchanger				
		For 1	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%	
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvcev'f gvckn< ucvgwtqhtgfitqwr@cqo0'				P cog"cpf"cfftguu'qh'yjg'uwrrnkgt<"" E Ю ctsw²u'fg'Ugpvogpcv;9."2:24;	Gwtqhtgf 'U00 'Dctegnqpc01	CO Irckp		

	eaters and i	reat pump combination neaters)	Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-28TK2												
Y		Low-temperature heat pump		Ν								
N		Equipped with a supplementary heater	N									
N		Heat pump combination heater		Y								
		Low-temperature application										
		Warmer climate condition										
value	unit	Item	symbol	value	unit							
9	kW	Seasonal space heating energy efficiency	ηs	226	%							
loor temperatu [j	re 20 °C and	d Declared coefficient of performance or primary energy ratio for part load a indoor temperature 20 °C and outdoor temperature Tj										
NA	kW	T: - 7 °C	COP4	NA								
NA	-	IJ = -7 C	COPa	NA	_							
8.6	kW	T: - 2 °C	COD4	2.02								
0.99	-	IJ-2 C	COPa	2.95	_							
5.4	kW	T: - 7 °O	COD4	5.4								
0.97	-	IJ-/ C	COPa	5.4	_							
3.0	kW	T: - 12°0	COD4	7.04								
0.95	-	$I_{j} = I_{2} \cup$	COPa	/.04	_							
8.6	kW	Tj = bivalent temperature	COPd	2.93	_							
8.6	kW	Tj = operation limit temperature	COPd	2.93	-							
NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_							
2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C							
NA	kW	Cycling interval efficiency	COPcyc	NA	_							
1111	R.O.	Heating water operating limit temperature	WTOL	65	°C							
han active mod	e	Supplementary heater										
0.025	kW	Rated heat output (*)	Psup	0.4	kW							
0.025	kW											
0.025	kW	Type of energy input		Electric								
0.025	kW											
variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h							
68	dB	For water- or brine-to-water heat		NA	m 2 /h							
2001	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11							
For	heat pump co	ombination heater:										
XL		Water heating energy efficiency	ηwh	123	%							
6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh							
1431	kWh	Annual fuel consumption	AFC	NA	GJ							
	·	P co g"cpf "cfftguu"qh'\jg"uwrrnkgt<" E IO cts w ² u'fg"Ugpvo gpcv; 9."2: 24;	Gwtqhtgf "U0 "Dctegnqpc0	CO hrckp	·							
	Y N N 9 door temperatur 1 NA 8.6 0.99 5.4 0.97 3.0 0.95 8.6 0.97 3.0 0.95 8.6 0.95 8.6 0.025 <t< td=""><td>Y N N N 9 kW door temperature 20 °C and rj NA kW 0.07 - 8.6 kW 0.99 - 5.4 kW 0.97 - 8.6 kW 0.97 - 8.6 kW 0.97 - 8.6 kW 0.95 - 8.6 kW 0.025 kW 0.68 dB 2001 kWh</td><td>YLow-temperature heat pumpNEquipped with a supplementary heaterNHeat pump combination heaterLow-temperature applicationValueunitItem9kWSeasonal space heating energy efficiencydoor temperature 20 °C and ISDeclared coefficient of performance or indoor temperature 20 °C andNAkWTj = -7 °CNAkWTj = -7 °CNAkWTj = 2 °C0.99-5.4kWTj = 7 °C3.0kWTj = 12°C0.97-3.0kWTj = operation limit temperature8.6kWTj = operation limit temperature8.6kWTj = operation limit temperatureNAkWFor air-to-water heat pumps: Tj = -15° (Tf ToL < -20°C)</td>2°CPrainto-water heat pumps: Operation limit temperatureNAkWFor air-to-water heat pumps: Operation limit temperatureNAkW0.025kW0.025kW0.025kW0.025kW2001kWhAFor air-to-water heat pumps: Rated air flow rate, outdoors6.506kWhDaily fuel consumption1431kWhAnnual fuel consumption1431kWhAnnual fuel consumption1431kWh</t<>	Y N N N 9 kW door temperature 20 °C and rj NA kW 0.07 - 8.6 kW 0.99 - 5.4 kW 0.97 - 8.6 kW 0.97 - 8.6 kW 0.97 - 8.6 kW 0.95 - 8.6 kW 0.025 kW 0.68 dB 2001 kWh	YLow-temperature heat pumpNEquipped with a supplementary heaterNHeat pump combination heaterLow-temperature applicationValueunitItem9kWSeasonal space heating energy efficiencydoor temperature 20 °C and ISDeclared coefficient of performance or indoor temperature 20 °C andNAkWTj = -7 °CNAkWTj = -7 °CNAkWTj = 2 °C0.99-5.4kWTj = 7 °C3.0kWTj = 12°C0.97-3.0kWTj = operation limit temperature8.6kWTj = operation limit temperature8.6kWTj = operation limit temperatureNAkWFor air-to-water heat pumps: Tj = -15° (Tf ToL < -20°C)	Y Low-temperature heat pump N Equipped with a supplementary heater N Heat pump combination heater Low-temperature application Interpretation Value unit Item 9 kW Seasonal space heating energy efficiency η_s door temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance or primary en indoor temperature 20 °C and outdoor to performance 20 °C and outdoor 10 °C and 0000 °C and 00000 °C and 0000 °C and 0000 °C and 0000 °C and	Y Low-temperature heat pump N N Equipped with a supplementary heater N N Heat pump combination heater Y Low-temperature application Value Y Value unit Item symbol value 9 kW Seasonal space heating energy efficiency ns 226 door temperature 20 °C and Declared coefficient of performance or primary energy ratio for indoor temperature 20 °C and outdoor temperature 1 NA NA kW Tj = -7 °C COPd NA 8.6 kW Tj = 2 °C COPd 2.93 0.99 - Tj = 7 °C COPd 5.4 4.0.977 - COPd 2.93 2.93 5.4 kW Tj = 12°C COPd 7.04 0.95 - Tj = 12°C COPd 2.93 8.6 kW Tj = operation limit temperature COPd 2.93 8.6 kW Tj = -15° (if TOL < -20°C)							

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	152	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	primary energy ratio for part load nd outdoor temperature Tj			
Tj = -7 °C	Pdh	9.1	kW	T:- 7 °C	COD4	2.42		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = -7C	COPa	2.42	_	
Tj = 2 °C	Pdh	5.3	kW	T: - 2 °C	COD4	2.62		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	5.02	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.4	kW	T: - 7 °C	COP4	5 47		
Degradation co-efficient (**)	Cdh	0.97	-	IJ-7 C	COrd	5.47	_	
Tj = 12 °C	Pdh	3.4	kW	T: - 12°0	COD4	7.20		
Degradation co-efficient (**)	Cdh	0.96	_	1j = 12 C	COPa	7.20	_	
Tj = bivalent temperature	Pdh	9.1	kW	Tj = bivalent temperature	COPd	2.42	-	
Tj = operation limit temperature	Pdh	9.5	kW	Tj = operation limit temperature	COPd	2.05	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.5	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	5486	kWh	rate, outdoor heat exchanger	_	nA (111 5 /11	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation leaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater		Y		
Parameters declared for				Medium-temperature application	Medium-temperature application			
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	119	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	primary energy ratio for part load ad outdoor temperature Tj		
Tj = -7 °C	Pdh	5.5	kW	T:- 7 °C	COD4	2 77		
Degradation co-efficient (**)	Cdh	0.99	-	$I_J = -7$ C	COPa	2.77	_	
$Tj = 2 \ ^{\circ}C$	Pdh	3.1	kW	T: - 2 °C	COD4	2.49		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	5.46	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.0	kW	$T_{i} = 7 \%$	COP4	4.17		
Degradation co-efficient (**)	Cdh	0.96	-	IJ - / C	coru	4.17	_	
$Tj = 12^{\circ}C$	Pdh	3.1	kW	$T_i = 12^{\circ}$	COP4	5.42		
Degradation co-efficient (**)	Cdh	0.99	-	IJ - 12 C		5.42	_	
Tj = bivalent temperature	Pdh	7.5	kW	Tj = bivalent temperature	COPd	2.10	_	
Tj = operation limit temperature	Pdh	5.2	kW	Tj = operation limit temperature	COPd	1.22	-	
For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	Pdh	7.5	kW	For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	COPd	2.10	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	3.8	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	7415	kWh	rate, outdoor heat exchanger		1111	111 5 711	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%	
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvcev"fgvchn≺ ucv@wtqhtgfitqwr0eqo0'				P co g"cpf "cfftguu'qh'y g"uwrn nlgt<" E lOctsw²u'fg"Ugpvogpcv; 9."2:24;	'Gwtqhtgf 'UU ''Dctegnqpc(I	CO Jrckp		

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)					
Model(s): AOWD-MB LOGIK-36K	2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater	Y				
Parameters declared for				Medium-temperature application					
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	169	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = − 7 °C	Pdh	NA	kW		CODI				
Degradation co-efficient (**)	Cdh	NA	_	$T_j = -7$ °C	COPd	NA	_		
Tj = 2 C	Pdh	10.1	kW	T. 2 %	CODI	2.55			
Degradation co-efficient (**)	Cdh	0.99	_	$I_j = 2 C$	COPa	2.55	_		
$Tj = 7 \ ^{\circ}C$	Pdh	6.5	kW	T: - 7 °C	COD4	2 00			
Degradation co-efficient (**)	Cdh	0.99	_	IJ - 7 C	COrd	3.90	_		
Tj = 12 °C	Pdh	2.9	kW	$T_i = 12^{\circ}$	COP4	5 10			
Degradation co-efficient (**)	Cdh	0.96	_	IJ - 12 C	COrd	5.19	_		
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	2.55	-		
Tj = operation limit temperature	Pdh	10.1	kW	Tj = operation limit temperature	COPd	2.55	-		
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_		
Bivalent temperature	Tbiv	2	C	For air-to-water heat pumps: Operation limit temperature	TOL	2	ĉ		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	5			Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplementary heater					
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW		
Thermostat-off mode	P _{TO}	0.025	kW	_					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items						I		
Capacity control		variable	ſ	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h		
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h		
Annual energy consumption	Q_{HE}	3157	kWh	rate, outdoor heat exchanger					
		For l	heat pump co	ombination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%		
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ		
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36k	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	176	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor	hergy ratio for temperature 7	r part load at Ij	
$Tj = -7 \ ^{\circ}C$	Pdh	8.0	kW	T. 7 %	CODI	2.00		
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = -7$ C	COPd	2.90	_	
$Tj = 2 \ ^{\circ}C$	Pdh	4.6	kW	T: - 2 °C	CODI	4.41		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.41	_	
$Tj = 7 \ ^{\circ}C$	Pdh	4.8	kW	$Ti - 7 \circ$	COP4	5 80		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - / C	COrd	5.09	_	
Tj = 12 °C	Pdh	3.2	kW	Ti – 12℃	COP4	6.97		
Degradation co-efficient (**)	Cdh	0.94	_	IJ - 12 C	COrd	0.97	_	
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.90	_	
Tj = operation limit temperature	Pdh	8.5	kW	Tj = operation limit temperature	COPd	2.59	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	5			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.5	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items					1		
Capacity control		variable	I	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	4163	kWh	rate, outdoor heat exchanger				
		For l	heat pump co	mbination heater:				
Declared load profile		XL	1	Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		N		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	152	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en	ergy ratio for temperature 7	part load at	
Tj = -7 C	Pdh	6.1	kW	T: _ 7 °O	COD4	2.22		
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = -7$ C	COPd	3.23	_	
$Tj = 2 \ ^{\circ}C$	Pdh	3.3	kW	T: - 2 °C	COD4	4.72		
Degradation co-efficient (**)	Cdh	0.97	-	IJ-2 C	COPa	4.72	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.7	kW	$T_i = 7 °C$	COP4	5 59		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 7 C	coru	5.59	_	
Tj = 12 °C	Pdh	3.2	kW	Ti – 12℃	COP4	6.85		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COrd	0.85	_	
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.50	_	
Tj = operation limit temperature	Pdh	6.0	kW	Tj = operation limit temperature	COPd	1.86	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	8.0	kW	For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	COPd	2.50	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	6262	kWh	rate, outdoor heat exchanger	_	INA	111 5 711	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%	
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	223	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	ance or primary energy ratio for part load 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA		
Degradation co-efficient (**)	Cdh	NA	-	IJ/ C	COPa	INA	_	
$Tj = 2 \ C$	Pdh	9.6	kW	$T_i - 2 \circ$	COP4	3 47		
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	Coru	3.47	_	
Tj = 7 ℃	Pdh	5.9	kW	$T_i = 7 °C$	COP4	5 4 5	_	
Degradation co-efficient (**)	Cdh	0.98	-	IJ - / C	coru	5.45	_	
Tj = 12 °C	Pdh	3.0	kW	$T_i = 12^{\circ}$	COP4	6 55		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 12 C	COrd	0.55	_	
Tj = bivalent temperature	Pdh	9.6	kW	Tj = bivalent temperature	COPd	3.47	-	
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	3.47	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	$L_{\scriptscriptstyle W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	2266	kWh	rate, outdoor heat exchanger			111 5 711	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-36TK2									
Air-to-water heat pump		Y		Low-temperature heat pump		Ν			
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		Ν		Heat pump combination heater	Y				
Parameters declared for				Medium-temperature application					
Parameters declared for				Average climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	140	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Γj		
Tj = -7 °C	Pdh	9.0	kW	Ti – 7 °C	COP4	2.45			
Degradation co-efficient (**)	Cdh	0.99	-	IJ = = / C	СОРа	2.43	_		
Tj = 2 C	Pdh	5.2	kW	$T_i - 2 \circ$	COP4	3 14			
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	coru	3.44	_		
$Tj = 7 \ ^{\circ}C$	Pdh	3.5	kW	T: - 7 °C	COD4	1.62			
Degradation co-efficient (**)	Cdh	0.97	-	IJ - / C	COrd	4.03	_		
Tj = 12 °C	Pdh	2.9	kW	T: - 12°O	COD4	5.21			
Degradation co-efficient (**)	Cdh	0.96	_	$I_{j} = I_{2} C$	COPa	5.21	_		
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	2.45	_		
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	2.15	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	-		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.4	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h		
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	5907	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n		
		For h	neat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%		
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-367	ТК2								
Air-to-water heat pump		Y		Low-temperature heat pump		Ν			
Water-to-water heat pump		N		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		Ν		Heat pump combination heater	Y				
Parameters declared for				Medium-temperature application					
Parameters declared for				Colder climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	124	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	r part load at Fj		
Tj = − 7 °C	Pdh	5.8	kW	$Ti = -7 ^{\circ}C$	COP4	2.95	_		
Degradation co-efficient (**)	Cdh	0.99	-	IJ - / C		2.95			
$Tj = 2 \degree C$	Pdh	3.5	kW	$T_i = 2 $ °C	COPd	3 50	_		
Degradation co-efficient (**)	Cdh	0.98	-	1 2 0		5.50			
$Tj = 7 \ ^{\circ}C$	Pdh	2.7	kW	$T_i = 7 °C$	COP4	4.83			
Degradation co-efficient (**)	Cdh	0.96	-		coru	7.05			
$Tj = 12^{\circ}C$	Pdh	3.4	kW	Ti − 12°C	COD4	6.08			
Degradation co-efficient (**)	Cdh	0.96	_	IJ - 12 C	COPa	0.08	_		
Tj = bivalent temperature	Pdh	7.6	kW	Tj = bivalent temperature	COPd	2.20	-		
Tj = operation limit temperature	Pdh	4.1	kW	Tj = operation limit temperature	COPd	1.06	-		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	7.6	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	2.20	_		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
				Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplementary heater					
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4.9	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items					1			
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h		
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	7206	kWh	rate, outdoor heat exchanger		1474	11.5.71		
		For l	heat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%		
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-367	TK2								
Air-to-water heat pump		Y		Low-temperature heat pump		Ν			
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		Ν		Heat pump combination heater	Y				
Parameters declared for				Medium-temperature application					
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	165	%		
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature T	r part load at Fj		
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COP4	NA			
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_		
$Tj = 2 \ C$	Pdh	10.1	kW	$T_{i} - 2 $ °C	COP4	2.55			
Degradation co-efficient (**)	Cdh	0.99	_	IJ-2 C		2.33	_		
$Tj = 7 \ ^{\circ}C$	Pdh	6.0	kW	$T_i = 7 °C$	COP4	3.63			
Degradation co-efficient (**)	Cdh	0.99	-		coru	5.05			
$Tj = 12^{\circ}C$	Pdh	3.3	kW	Ti – 12℃	COP4	5 30			
Degradation co-efficient (**)	Cdh	0.96	-	IJ - 12 C	COrd	5.50	_		
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	2.55	-		
Tj = operation limit temperature	Pdh	10.1	kW	Tj = operation limit temperature	COPd	2.55	-		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	-		
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	regen		R ()	Heating water operating limit temperature	WTOL	65	Ĉ		
Power consumption in mo	des other tha	n active mod	e	Supplementary heater					
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items					1			
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h		
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	3236	kWh	rate, outdoor heat exchanger		1474	11.5.71		
		For l	heat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%		
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ		
Eqpvcev"fgvckn< ucvQgwtqhtgfitqwr(deqo ()'				P co g"cpf "cfftguu"qh'y g"uwrrhgt<" E iO ctsw²u"fg"Ugpvo gpcv; 9."2: 24;	'Gwtqhtgf 'UU ''Dctegnqpc(I	CO Irckp			

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-36T	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	ηs	189	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	primary energy ratio for part load nd outdoor temperature Tj		
Tj = -7 °C	Pdh	8.3	kW	T:- 7 °C	COD4	2.15		
Degradation co-efficient (**)	Cdh	0.99	-	$I_J = - / C$	COPa	3.15	_	
$Tj = 2 \ ^{\circ}C$	Pdh	4.6	kW	T: - 2 °C	COD4	4.22		
Degradation co-efficient (**)	Cdh	0.98	-	IJ - 2 C	COPa	4.32	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.3	kW	T; - 7 °C	COP4	7.46		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 7 C	coru	7.40	_	
$Tj = 12^{\circ}C$	Pdh	3.2	kW	$T_i = 12^{\circ}$	COP4	7 44	_	
Degradation co-efficient (**)	Cdh	0.94	-	IJ - 12 C		/.++	_	
Tj = bivalent temperature	Pdh	8.3	kW	Tj = bivalent temperature	COPd	3.15	_	
Tj = operation limit temperature	Pdh	8.3	kW	Tj = operation limit temperature	COPd	2.74	-	
For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.7	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items						1	
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	4069	kWh	rate, outdoor heat exchanger		1474	III 5 /II	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.507	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-361	°K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	150	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	nt of performance or primary energy ratio for part load a temperature 20 °C and outdoor temperature Ti			
Tj = − 7 °C	Pdh	5.7	kW	T: 7 %	CODI	2.05		
Degradation co-efficient (**)	Cdh	0.99	_	$I_{J} = -7$ C	COPd	2.95	_	
$Tj = 2 \ ^{\circ}C$	Pdh	3.4	kW	T: - 2 °C	COD4	4 71		
Degradation co-efficient (**)	Cdh	0.97	-	IJ - 2 C	COPa	4./1	_	
$Tj = 7 \ C$	Pdh	2.8	kW	T; - 7 °C	COP4	6.23		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - / C	coru	0.23	_	
$Tj = 12^{\circ}C$	Pdh	3.2	kW	$T_i = 12^{\circ}$	COP4	6.85	_	
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 12 C		0.85	_	
Tj = bivalent temperature	Pdh	7.8	kW	Tj = bivalent temperature	COPd	2.73	_	
Tj = operation limit temperature	Pdh	6.0	kW	Tj = operation limit temperature	COPd	1.86	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	7.8	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	COPd	2.73	_	
Bivalent temperature	Tbiv	-15	C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	Ĉ	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4	kW	
Thermostat-off mode	Рто	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items				1	ſ	I	
Capacity control		variable	I	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	6194	kWh	rate, outdoor heat exchanger				
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	101	%	
Daily electricity consumption	Qelec	7.906	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1739	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)							
Model(s): AOWD-MB LOGIK-36T	K2										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		N		Equipped with a supplementary heater		N					
Brine-to-water heat pump		N		Heat pump combination heater	Y						
Parameters declared for				Low-temperature application							
Parameters declared for				Warmer climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	ηs	223	%				
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	primary energy ratio for part load d outdoor temperature Tj					
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COP4	NA					
Degradation co-efficient (**)	Cdh	NA	_	IJ = -7C	COPa	NA	_				
$Tj = 2 \ ^{\circ}C$	Pdh	10.1	kW	T: - 2 °C	COD4	2 70					
Degradation co-efficient (**)	Cdh	0.99	_	IJ-2 C	COFu	3.70	—				
$Tj = 7 \ C$	Pdh	6.0	kW	$T_{i} - 7 \circ$	COP4	5.63					
Degradation co-efficient (**)	Cdh	0.98	-	IJ - / C	coru	5.05	_				
Tj = 12 °C	Pdh	3.0	kW	Ti - 12°C	COP4	6.22					
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COFu	0.22	_				
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	3.70	-				
Tj = operation limit temperature	Pdh	10.1	kW	Tj = operation limit temperature	COPd	3.70	_				
For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL $< -20^{\circ}$ C)	COPd	NA	_				
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
	5			Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	Рск	0.025	kW								
Other	items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	m 3 /h				
Sound power level, outdoors	$L_{\scriptscriptstyle W\!A}$	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h				
Annual energy consumption	\mathbf{Q}_{HE}	2399	kWh	rate, outdoor heat exchanger		INA	III 5 / II				
		For l	heat pump co	ombination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%				
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1431	kWh	Annual fuel consumption	AFC	NA	GJ				
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Information requirements (heat pump space heaters and heat pump combination heaters)											
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Model(s): AOWD-MB LOGIK-40K	12										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		N		Equipped with a supplementary heater		N					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application							
Parameters declared for				Average climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	149	%				
Declared capacity for heating for part outdoor tem	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor 1	ergy ratio for emperature 7	r part load at Fj					
Tj = − 7 °C	Pdh	10.3	kW	$T_i = -7 $ °C	COP4	2 11					
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	coru	2.11	_				
$Tj = 2 \ ^{\circ}C$	Pdh	6.8	kW	T: - 2 °C	COD4	2.01					
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COPa	5.61	_				
$Tj = 7 \ ^{\circ}C$	Pdh	4.3	kW	T: _ 7 °O	CODI	5.01					
Degradation co-efficient (**)	Cdh	0.97	_	IJ = / C	COPa	5.01	_				
Tj = 12℃	Pdh	3.6	kW	T: 10°0	CODI	7.00					
Degradation co-efficient (**)	Cdh	0.94	_	$I_{j} = I_{2} C$	COPd	1.32	_				
Tj = bivalent temperature	Pdh	10.3	kW	Tj = bivalent temperature	COPd	2.11	_				
Tj = operation limit temperature	Pdh	9.7	kW	Tj = operation limit temperature	COPd	1.77	_				
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_				
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	Ĉ				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	2.2	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h				
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 2 /h				
Annual energy consumption	$Q_{\rm HE}$	6388	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n				
		For l	heat pump co	mbination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%				
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ				
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-40k	2										
Air-to-water heat pump		Y		Low-temperature heat pump		Ν					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application	1						
Parameters declared for				Colder climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	129	%				
Declared capacity for heating for part outdoor tem	load at indo	or temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load a indoor temperature 20 °C and outdoor temperature Tj							
Tj = -7 °C	Pdh	7.8	kW	T: _ 7 °O	CODI	2.77					
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = - / C$	COPa	2.77	_				
Tj = 2 C	Pdh	4.4	kW	T: - 2 °C	COD4	2.05					
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	3.95	_				
$Tj = 7 \ ^{\circ}C$	Pdh	2.8	kW	T: - 7 °C	COP4	5 5 5					
Degradation co-efficient (**)	Cdh	0.95	_	IJ - / C	COrd	5.55	_				
Tj = 12 °C	Pdh	3.3	kW	Ti = 12°0	COD4	7.45					
Degradation co-efficient (**)	Cdh	0.94	_	$I_{J} = I_{Z} C$	COPa	7.45	_				
Tj = bivalent temperature	Pdh	9.9	kW	Tj = bivalent temperature	COPd	1.96	_				
Tj = operation limit temperature	Pdh	7.0	kW	Tj = operation limit temperature	COPd	1.18	_				
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	9.9	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	1.96	_				
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	5.0	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h				
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h				
Annual energy consumption	$Q_{\rm HE}$	9034	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11				
		For 1	heat pump co	ombination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%				
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ				
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-40k											
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application							
Parameters declared for				Warmer climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	180	%				
Declared capacity for heating for part outdoor terr	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	part load at					
Tj = -7 °C	Pdh	NA	kW	$T_i = 7 °C$	COP4	NA					
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COFU	INA	_				
Tj = 2 C	Pdh	12.2	kW	$T_i = 2^{\circ}$	COP4	2 27	_				
Degradation co-efficient (**)	Cdh	1.00	_	1j 2 C	coru	2.27					
$Tj = 7 \ ^{\circ}C$	Pdh	8.1	kW	$T_i = 7 °C$	COPd	3 74	_				
Degradation co-efficient (**)	Cdh	0.99	_			5.74					
Tj = 12 °C	Pdh	3.5	kW	$T_i = 12^{\circ}C$	COPd	6.29	_				
Degradation co-efficient (**)	Cdh	0.95	_	1j 12 0	coru	0.27					
Tj = bivalent temperature	Pdh	12.2	kW	Tj = bivalent temperature	COPd	2.27	-				
Tj = operation limit temperature	Pdh	12.2	kW	Tj = operation limit temperature	COPd	2.27	-				
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_				
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW				
Thermostat-off mode	Рто	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items						1				
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h				
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h				
Annual energy consumption	$Q_{\rm HE}$	3558	kWh	rate, outdoor heat exchanger		1111	111 5 711				
		For l	neat pump co	mbination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%				
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ				
Eqpvcevfgvckn< ucvQgwtqhtgfitqwr0eqo0'				P co g"cpf "cfftguu"qh'y g"uwr rhgt<" E IO ctsw²u"fg"Ugpvo gpcv; 9."2: 24;	Gwtqhtgf 'U0 'Dctegnqpc0	CO Irckp					

Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-40K	32										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν					
Brine-to-water heat pump		Ν		Heat pump combination heater		Y					
Parameters declared for				Low-temperature application	1						
Parameters declared for				Average climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	188	%				
Declared capacity for heating for part outdoor tem	or temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj								
Tj = -7 °C	Pdh	10.7	kW	Ti – 7 °C	COP4	2.08					
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	COrd	2.98	_				
Tj = 2 C	Pdh	6.1	kW	$T_i - 2 \circ$	COP4	1 38					
Degradation co-efficient (**)	Cdh	0.98	_	IJ-2 C	coru	4.30	_				
$Tj = 7 \ ^{\circ}C$	Pdh	4.1	kW	T: - 7 °C	COD4	7.02					
Degradation co-efficient (**)	Cdh	0.96	_	IJ = / C	COPa	7.03	_				
Tj = 12℃	Pdh	3.4	kW	T: 10°0	CODI	0.40					
Degradation co-efficient (**)	Cdh	0.93	_	$1_{j} = 12 \text{ C}$	COPd	9.49	_				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	2.98	_				
Tj = operation limit temperature	Pdh	10.2	kW	Tj = operation limit temperature	COPd	2.62	-				
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_				
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	1.8	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h				
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NIA					
Annual energy consumption	$Q_{\rm HE}$	5194	kWh	rate, outdoor heat exchanger	_	INA	m 3 /m				
		For l	heat pump co	mbination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%				
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ				
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Parameters declared forLow-temperature applicationParameters declared forColder climate conditionItemsymbolvalueunitItemsymbolvalueRated heat output (*)Prated11kWSeasonal space heating energy efficiencyns181Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature TjDeclared coefficient of performance or primary energy ratio for p indoor temperature 20 °C and outdoor temperature TjTj = -7 °CPdh6.9kWTj = -7 °CCOPd3.88Degradation co-efficient (**)Cdh0.99-Tj = -7 °CCOPd5.71Tj = 7 °CPdh4.1kWTj = 2 °CCOPd5.71Degradation co-efficient (**)Cdh0.97-Tj = 7 °CCOPd7.20Degradation co-efficient (**)Cdh0.93-Tj = 7 °CCOPd7.20Degradation co-efficient (**)Cdh0.93-Tj = 12 °CCOPd8.77Tj = 12 °CPdh3.2kWTj = 12 °CCOPd8.77Degradation co-efficient (**)Cdh0.93-Tj = bivalent temperatureCOPd2.74Tj = bivalent temperaturePdh9.2kWTj = operation limit temperatureCOPd2.74Tj = operation limit temperaturePdh9.2kWFor air-to-water heat pumps: 												
$\begin{tabular}{ c c c c c c } \hline Parameters declared for & Colder climate condition \\ \hline Item & symbol & value & unit & Item & symbol & value \\ \hline Rated heat output (*) & Prated & 11 & kW & Seasonal space heating energy efficiency & \etas & 181 \\ \hline Peclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj & Declared coefficient of performance or primary energy ratio for prindoor temperature Tj & Declared coefficient of performance or primary energy ratio for prindoor temperature Tj & Declared coefficient of performance or primary energy ratio for prindoor temperature Tj & Cdh & 0.99 & - & Tj = -7 °C & COPd & 3.88 \\ \hline Degradation co-efficient (**) & Cdh & 0.99 & - & Tj = 2 °C & COPd & 5.71 \\ \hline Degradation co-efficient (**) & Cdh & 0.97 & - & Tj = 2 °C & COPd & 5.71 \\ \hline Degradation co-efficient (**) & Cdh & 0.93 & - & Tj = 7 °C & COPd & 7.20 \\ \hline Degradation co-efficient (**) & Cdh & 0.93 & - & Tj = 12 °C & COPd & 7.20 \\ \hline Degradation co-efficient (**) & Cdh & 0.93 & - & & Tj = 12 °C & COPd & 8.77 \\ \hline Degradation co-efficient (**) & Cdh & 0.93 & - & Tj = 12 °C & COPd & 8.77 \\ \hline Tj = bivalent temperature & Pdh & 9.2 & kW & Tj = bivalent temperature & COPd & 2.74 \\ \hline Tj = operation limit temperature & Pdh & 9.2 & kW & Tj = operation limit temperature & COPd & 1.89 \\ \hline For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) & Pdh & 9.2 & kW & Tj = operation limit temperature & COPd & 2.74 \\ \hline Bivalent temperature & Tbiv & -15 & °C & For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) & Pdh & 9.2 & kW & Tj = operation limit temperature & COPd & 2.74 \\ \hline For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) & Pdh & 9.2 & kW & Tj = operation limit temperature & COPd & 2.74 \\ \hline Tj = bivalent temperature & Tbiv & -15 & °C & For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) & Pdh & 9.2 & kW & Tj = operation limit temperature & COPd & 2.74 \\ \hline For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) & Pdh & 9.2 & kW & Tj = operation limit temperature & COP$												
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$ \begin{array}{ c c c c c c } \hline Rated heat output (*) & Prated & 11 & kW & Seasonal space heating energy efficiency & \etas & 181 \\ \hline Peclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj \\ \hline Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj \\ \hline Tj = -7 °C & Pdh & 6.9 & kW \\ \hline Degradation co-efficient (**) & Cdh & 0.99 & - \\ \hline Tj = 2 °C & Pdh & 4.1 & kW \\ \hline Degradation co-efficient (**) & Cdh & 0.97 & - \\ \hline Tj = 7 °C & Pdh & 4.1 & kW \\ \hline Degradation co-efficient (**) & Cdh & 0.97 & - \\ \hline Tj = 7 °C & Pdh & 2.7 & kW \\ \hline Degradation co-efficient (**) & Cdh & 0.93 & - \\ \hline Tj = 12 °C & Pdh & 3.2 & kW \\ \hline Tj = bivalent temperature Pdh & 9.2 & kW & Tj = bivalent temperature COPd \\ \hline Tj = operation limit temperature Pdh & 9.2 & kW \\ \hline Tj = operation limit temperature Pdh & 9.2 & kW \\ \hline Tj = operation limit temperature Pdh & 9.2 & kW \\ \hline Tj = -15 °C (if TOL < -20 °C) \\ \hline Pol & 3.88 \\ \hline To L & -22 \\ \hline Pol & -2 \\ \hline To L & -22 \\ \hline Pol & -2 \\ \hline To L & -22 \\ \hline Pol & -2 \\ \hline Pol$	unit											
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Degradation co-efficient (**)Cdh0.93-IJ = 12 CCOPd8.77Tj = bivalent temperaturePdh9.2kWTj = bivalent temperatureCOPd2.74Tj = operation limit temperaturePdh7.9kWTj = operation limit temperatureCOPd1.89For air-to-water heat pumps: Tj = -15°C (if TOL < - 20°C)												
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Bivalent temperature Tbiv -15 °C For air-to-water heat pumps: Operation limit temperature TOL -22 Cycling interval efficiency	_											
Cycling interval efficiency COPcyc NA	°C											
Cycling interval capacity for heating Pcych NA kW	-											
Heating water operating limit temperature WTOL 65	°C											
Power consumption in modes other than active mode Supplementary heater												
Off mode P _{OFF} 0.025 kW Rated heat output (*) Psup 3.1	kW											
Thermostat-off mode P _{TO} 0.025 kW												
Standby mode P _{SB} 0.025 kW Type of energy input Electric												
Crankcase heater mode P _{CK} 0.025 kW												
Other items												
Capacity controlvariableFor air-to-water heat pumps: Rated air flow rate, outdoors-5015	m 3 /h											
Sound power level, outdoors L _{wa} 68 dB For water- or brine-to-water heat pumper. Pated bring or water flow NA	m 2 /h											
Annual energy consumption $Q_{\rm HE}$ 6044kWhpumps: Kated of the of water flow-NArate, outdoor heat exchanger	III 3 /II											
For heat pump combination heater:												
Declared load profile XL Water heating energy efficiency nwh 87	%											
Daily electricity consumption Qelec 9.164 kWh Daily fuel consumption Qfuel NA	kWh											
Annual electricity consumption AEC 2016 kWh Annual fuel consumption AFC NA	GJ											
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-40K	2				·			
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application	1			
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	273	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = -7 °C	Pdh	NA	kW	T:- 7 °C	COD4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ=-/C	COPa	INA	_	
$Tj = 2 \ ^{\circ}C$	Pdh	11.6	kW	T: - 2 °C	COD4	2.65		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = 2 C	COPa	3.05	_	
$Tj = 7 \ ^{\circ}C$	Pdh	7.3	kW	T: - 7 °C	COD4	5 74		
Degradation co-efficient (**)	Cdh	0.98	-	IJ - / C	COPa	5.74	_	
$Tj = 12^{\circ}C$	Pdh	3.3	kW	T: - 12°0	COD4	0.29		
Degradation co-efficient (**)	Cdh	0.93	_	1j = 12 C	COPa	9.38	_	
Tj = bivalent temperature	Pdh	11.6	kW	Tj = bivalent temperature	COPd	3.65	-	
Tj = operation limit temperature	Pdh	11.6	kW	Tj = operation limit temperature	COPd	3.65	-	
For air-to-water heat pumps: $Tj = -15^{\circ}$ (if TOL < -20° C)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval canacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
cycling interval capacity for nearing			K VV	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mod	des other that	n active mod	e	Supplementary heater				
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	2236	kWh	rate, outdoor heat exchanger	_	INA	m 5 /n	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-407	TK2										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application							
Parameters declared for				Average climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	150	%				
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at				
Tj = -7 °C	Pdh	10.5	kW	$T_i = 7 °C$	COP4	2.02					
Degradation co-efficient (**)	Cdh	1.00	-	IJ / C	COFU	2.02	_				
Tj = 2 C	Pdh	6.6	kW	$T_i = 2^{\circ}$	COP4	3.76	_				
Degradation co-efficient (**)	Cdh	0.99	-	1j 2 C		5.70					
$Tj = 7 \ C$	Pdh	4.5	kW	$T_i = 7 °C$	COPd	5 51	_				
Degradation co-efficient (**)	Cdh	0.98	-		0014	5.51					
Tj = 12 °C	Pdh	3.5	kW	$T_i = 12^{\circ}C$	COPd	7.06	_				
Degradation co-efficient (**)	Cdh	0.96	-	1j 12 0	coru	7.00					
Tj = bivalent temperature	Pdh	10.5	kW	Tj = bivalent temperature	COPd	2.02					
Tj = operation limit temperature	Pdh	11.5	kW	Tj = operation limit temperature	COPd	2.02	-				
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	-				
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	le	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.4	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h				
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h				
Annual energy consumption	$Q_{\rm HE}$	6391	kWh	rate, outdoor heat exchanger		1474	111 5 7 11				
		For l	heat pump co	mbination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%				
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ				
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-401	TK2										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application							
Parameters declared for				Colder climate condition	Colder climate condition						
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	117	%				
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor 1	ergy ratio for temperature 7	part load at				
Tj = -7 °C	Pdh	7.8	kW	Ti – 7 °C	COP4	2.55					
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	COrd	2.33	_				
Tj = 2 C	Pdh	4.4	kW	$T_i = 2 $ °C	COP4	3 71	_				
Degradation co-efficient (**)	Cdh	0.98	-	1 2 0	coru	5.71					
$Tj = 7 \ C$	Pdh	2.9	kW	$T_i = 7 °C$	COPd	4 61	_				
Degradation co-efficient (**)	Cdh	0.96	-			4.01					
Tj = 12 °C	Pdh	3.3	kW	$T_i = 12^{\circ}C$	COPd	5.24	_				
Degradation co-efficient (**)	Cdh	0.96	-	1 12 0	coru	5.24					
Tj = bivalent temperature	Pdh	9.6	kW	Tj = bivalent temperature	COPd	1.79	-				
Tj = operation limit temperature	Pdh	6.7	kW	Tj = operation limit temperature	COPd	1.06	-				
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	9.6	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	1.79	_				
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	le	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	5.3	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items						1				
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h				
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h				
Annual energy consumption	$Q_{\rm HE}$	9548	kWh	rate, outdoor heat exchanger		1474	111 5 711				
		For l	heat pump co	ombination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%				
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ				
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-40T	°K2										
Air-to-water heat pump		Y		Low-temperature heat pump		N					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		N					
Brine-to-water heat pump		Ν		Heat pump combination heater		Y					
Parameters declared for				Medium-temperature application							
Parameters declared for				Warmer climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	169	%				
Declared capacity for heating for part outdoor tem	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	part load at					
Tj = -7 °C	Pdh	NA	kW	$T_i = 7 °C$	COP4	NA					
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COFU	INA	_				
Tj = 2 C	Pdh	12.3	kW	$T_i = 2^{\circ}C$	COP4	2.51	_				
Degradation co-efficient (**)	Cdh	0.99	_	1j 2 C	coru	2.31					
$Tj = 7 \degree C$	Pdh	7.9	kW	$T_i = 7 °C$	COPd	3 50	_				
Degradation co-efficient (**)	Cdh	0.99	_			5.50					
$Tj = 12 \degree C$	Pdh	3.6	kW	$T_i = 12^{\circ}C$	COPd	5.80	_				
Degradation co-efficient (**)	Cdh	0.96	_	1j 12 0	coru	5.00					
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.51	-				
Tj = operation limit temperature	Pdh	12.3	kW	Tj = operation limit temperature	COPd	2.51	-				
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_				
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	Рск	0.025	kW								
Other	items			D		1					
Capacity control		variable	(For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h				
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h				
Annual energy consumption	$Q_{\rm HE}$	3822	kWh	rate, outdoor heat exchanger							
		For l	neat pump co	mbination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%				
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ				
Eqpvcev'f gvcku≺ ucv@wtqhtgfitqwr0eqo0'				P co g"cpf "cff tguu'qh'y g'uwr r nlgt<" E lO ctsw² u'f g'Ugpvo gpcv; 9. '2: 24;	Gwtqhtgf "U0 "Dctegnqpc0	CO Irckp					

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)			
Model(s): AOWD-MB LOGIK-40T	K2						
Air-to-water heat pump		Y		Low-temperature heat pump		N	
Water-to-water heat pump		N		Equipped with a supplementary heater		N	
Brine-to-water heat pump		N		Heat pump combination heater		Y	
Parameters declared for				Low-temperature application			
Parameters declared for				Average climate condition			
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	180	%
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at
Tj = -7 °C	Pdh	10.8	kW	Ti – 7 °C	COP4	3.01	
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	COrd	5.01	_
$Tj = 2 \ ^{\circ}C$	Pdh	6.7	kW	T: - 2 °C	COP4	4.50	
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.30	_
$Tj = 7 \ ^{\circ}C$	Pdh	4.5	kW	T: - 7 °O	COD4	5.92	
Degradation co-efficient (**)	Cdh	0.97	_	IJ = / C	COPa	5.82	_
Tj = 12℃	Pdh	3.3	kW	T: 10°0	CODI	7.45	
Degradation co-efficient (**)	Cdh	0.94	_	$1_{j} = 12 \text{ C}$	COPd	7.45	_
Tj = bivalent temperature	Pdh	10.8	kW	Tj = bivalent temperature	COPd	3.01	_
Tj = operation limit temperature	Pdh	9.9	kW	Tj = operation limit temperature	COPd	2.51	-
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	ĉ
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_
				Heating water operating limit temperature	WTOL	65	°C
Power consumption in mo	des other tha	n active mod	e	Supplementary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.025	kW				
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0.025	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 2 /h
Annual energy consumption	$Q_{\rm HE}$	5517	kWh	rate, outdoor heat exchanger	_	INA	III 3 /II
		For l	heat pump co	mbination heater:			
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-40T	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application	1			
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	ηs	159	%	
Declared capacity for heating for part outdoor tem	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj		
Tj = -7 °C	Pdh	7.0	kW	Ti – 7 °C	COP4	3.40		
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	COrd	5.40	_	
$Tj = 2 \ C$	Pdh	4.2	kW	T: - 2 °C	COD4	5.04		
Degradation co-efficient (**)	Cdh	0.97	-	IJ-2 C	COPa	5.04	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.0	kW	T: _ 7 °O	COD4	6.04		
Degradation co-efficient (**)	Cdh	0.95	_	IJ = / C	COPa	0.04	_	
Tj = 12℃	Pdh	3.3	kW	T: 10°0	CODI	7.00		
Degradation co-efficient (**)	Cdh	0.95	_	$I_{j} = I_{2} C$	COPd	1.23	_	
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	2.42	_	
Tj = operation limit temperature	Pdh	7.6	kW	Tj = operation limit temperature	COPd	1.79	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	9.0	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	2.42	_	
Bivalent temperature	Tbiv	-15	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-22	Ĉ	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	3.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	6685	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
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Information requirements (heat pump space heaters and heat pump combination heaters)											
Model(s): AOWD-MB LOGIK-401	°K2										
Air-to-water heat pump		Y		Low-temperature heat pump		Ν					
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν					
Brine-to-water heat pump		N		Heat pump combination heater		Y					
Parameters declared for				Low-temperature application							
Parameters declared for				Warmer climate condition							
Item	symbol	value	unit	Item	symbol	value	unit				
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	244	%				
Declared capacity for heating for part outdoor tem	or temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj								
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA					
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_				
Tj = 2 C	Pdh	11.7	kW	$T_i = 2 $ °C	COP4	3 43	_				
Degradation co-efficient (**)	Cdh	0.99	_	1 2 0	coru	5.45					
$Tj = 7 \ C$	Pdh	7.5	kW	$T_i = 7 °C$	COPd	5 41	_				
Degradation co-efficient (**)	Cdh	0.98	-	· · · · · · · · · · · · · · · · · · ·		5.11					
Tj = 12℃	Pdh	3.5	kW	$T_i = 12^{\circ}$	COPd	7.85	_				
Degradation co-efficient (**)	Cdh	0.94	-	1 12 0	coru	7.05					
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	3.43	-				
Tj = operation limit temperature	Pdh	11.7	kW	Tj = operation limit temperature	COPd	3.43	-				
For air-to-water heat pumps: $Tj = -15$ °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_				
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_				
				Heating water operating limit temperature	WTOL	65	°C				
Power consumption in mo	des other tha	n active mod	e	Supplementary heater							
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.3	kW				
Thermostat-off mode	P _{TO}	0.025	kW								
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric					
Crankcase heater mode	P _{CK}	0.025	kW								
Other	items				1	1					
Capacity control		variable	ſ	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h				
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h				
Annual energy consumption	$Q_{\rm HE}$	2531	kWh	rate, outdoor heat exchanger							
		For l	heat pump co	ombination heater:							
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%				
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh				
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ				
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	(heat p	I ump space h	nformation leaters and h	requirements neat pump combination heaters)					
Model(s): AOWD-MB LOGIK-45k	K2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater		Y			
Parameters declared for		Medium-temperature application							
Parameters declared for				Average climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	147	%		
Declared capacity for heating for part outdoor terr	load at indo	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for temperature	r part load at Fj		
Tj = -7 °C	Pdh	11.8	kW	T:- 7 °C	COD4	2.10			
Degradation co-efficient (**)	Cdh	1.00	-	IJ = -7C	COPa	2.10	_		
$Tj = 2 \ C$	Pdh	6.8	kW	Ti - 2 %	COP4	2.91			
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COrd	5.01	_		
$Tj = 7 \ ^{\circ}C$	Pdh	4.8	kW	$T_i = 7 °C$	COPd	4 77	_		
Degradation co-efficient (**)	Cdh	0.98	-		coru				
$Tj = 12^{\circ}C$	Pdh	3.6	kW	$T_i = 12^{\circ}$	COP4	7 36			
Degradation co-efficient (**)	Cdh	0.94	-	1 120	coru	7.50			
Tj = bivalent temperature	Pdh	11.8	kW	Tj = bivalent temperature	COPd	2.10	-		
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.74	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $\le -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	NA	_		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
				Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	le	Supplemen	ntary heater	1	1		
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	3.4	kW		
Thermostat-off mode	P _{TO}	0.025	kW	-					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items				1	1	1		
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h		
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h		
Annual energy consumption	Q _{HE}	7352	kWh	rate, outdoor heat exchanger					
		For l	heat pump co	ombination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%		
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-45k									
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater	Y				
Parameters declared for		Medium-temperature application							
Parameters declared for				Colder climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	132	%		
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor 1	ergy ratio for temperature 7	part load at		
Tj = -7 °C	Pdh	7.8	kW	Ti – 7 °C	COP4	2 77			
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	COrd	2.77	_		
Tj = 2 C	Pdh	5.2	kW	$T_i = 2 $ °C	COP4	4.23	_		
Degradation co-efficient (**)	Cdh	0.98	-	1 2 0	coru	4.23			
$Tj = 7 \ ^{\circ}C$	Pdh	2.9	kW	$T_i = 7 °C$	COPd	5 24	_		
Degradation co-efficient (**)	Cdh	0.95	-			5.24			
Tj = 12 °C	Pdh	3.3	kW	$T_i = 12^{\circ}C$	COPd	7 55	_		
Degradation co-efficient (**)	Cdh	0.94	-	11 12 0		7.55			
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.99	-		
Tj = operation limit temperature	Pdh	7.0	kW	Tj = operation limit temperature	COPd	1.18	-		
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	10.7	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	1.99	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
				Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	le	Supplemer	ntary heater	1	[
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	6.0	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items						1		
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h		
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	9572	kWh	rate, outdoor heat exchanger		1112	111 5 711		
		For l	heat pump co	ombination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%		
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ		
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-45K	12	·	·			·		
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Medium-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	186	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COPd	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ = -7C	COPa	INA	_	
Tj = 2 ℃	Pdh	14.2	kW	T: - 1 %	CODI	2.20		
Degradation co-efficient (**)	Cdh	1.00	_	IJ = 2 C	COPa	2.30	_	
$Tj = 7 \ ^{\circ}C$	Pdh	8.4	kW	T: _ 7 °O	CODI	2.72		
Degradation co-efficient (**)	Cdh	0.99	_	$I_{j} = /C$	COPa	3./3	_	
Tj = 12 °C	Pdh	4.2	kW	T: 10%	CODI			
Degradation co-efficient (**)	Cdh	0.96	_	$T_J = 12^{\circ}C$	COPd	6.75	_	
Tj = bivalent temperature	Pdh	14.2	kW	Tj = bivalent temperature	COPd	2.30	_	
Tj = operation limit temperature	Pdh	14.2	kW	Tj = operation limit temperature	COPd	2.30	_	
For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	INA	K VV	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NIA		
Annual energy consumption	$Q_{\rm HE}$	4008	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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	-	-	-		-	-	-	

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-45K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	185	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Fj	
Tj = -7 °C	Pdh	11.5	kW	T: - 7 °C	COD4	2.71		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = = / C	COPa	2.71	_	
$Tj = 2 \ C$	Pdh	7.1	kW	T: - 2 °C	COD4	4 20		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.39	_	
$Tj = 7 \ ^{\circ}C$	Pdh	4.4	kW	T: _ 7 °O	COD4	(20		
Degradation co-efficient (**)	Cdh	0.96	_	IJ = / C	COPa	0.89	_	
Tj = 12℃	Pdh	3.5	kW	T: 10°0	CODI	10.20		
Degradation co-efficient (**)	Cdh	0.93	_	$1_{j} = 12 \text{ C}$	COPd	10.30	_	
Tj = bivalent temperature	Pdh	11.5	kW	Tj = bivalent temperature	COPd	2.71	_	
Tj = operation limit temperature	Pdh	11.5	kW	Tj = operation limit temperature	COPd	2.38	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pevch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	INA	K W	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	1.5	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	5682	kWh	rate, outdoor heat exchanger	_	INA	m 5 /n	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%	
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-45k	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for		Low-temperature application						
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	184	%	
Declared capacity for heating for part outdoor terr	load at indo	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Ij	
Tj = -7 °C	Pdh	6.9	kW	Ti – 7 °C	COP4	3.88		
Degradation co-efficient (**)	Cdh	0.99	-	IJ / C	COrd	5.00	_	
$Tj = 2 \ ^{\circ}C$	Pdh	4.5	kW	$T_i - 2 \circ$	COP4	5.03		
Degradation co-efficient (**)	Cdh	0.97	-	IJ-2 C	COrd	5.95	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.7	kW	$T_i - 7 \circ C$	COP4	7 20		
Degradation co-efficient (**)	Cdh	0.93	-	IJ - / C	COrd	7.20	_	
$Tj = 12^{\circ}C$	Pdh	3.2	kW	T: - 12°O	COD4	0.00		
Degradation co-efficient (**)	Cdh	0.93	_	$I_{J} = I_{2} C$	COPa	8.98	_	
Tj = bivalent temperature	Pdh	9.7	kW	Tj = bivalent temperature	COPd	2.72	_	
Tj = operation limit temperature	Pdh	7.9	kW	Tj = operation limit temperature	COPd	1.89	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20 °C)	Pdh	9.7	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20 $^{\circ}C$)	COPd	2.72	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater	ſ	I	
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4.1	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NIA		
Annual energy consumption	$Q_{\rm HE}$	6257	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11	
		For 1	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-45K	12	·	·			·		
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for		Low-temperature application						
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	268	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_	
$Tj = 2 \ C$	Pdh	14.0	kW	T: - 2 °C	COP4	2 2 9		
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COPa	5.56	_	
$Tj = 7 \ ^{\circ}C$	Pdh	8.4	kW	T: - 7 °O	COD4	5.57		
Degradation co-efficient (**)	Cdh	0.98	_	IJ = / C	COPa	5.57	_	
Tj = 12℃	Pdh	3.8	kW	T: 10°0	CODI	0.22		
Degradation co-efficient (**)	Cdh	0.94	_	$1_{j} = 12 \text{ C}$	COPd	9.32	_	
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.38	_	
Tj = operation limit temperature	Pdh	14.0	kW	Tj = operation limit temperature	COPd	3.38	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater		1	
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	2755	kWh	rate, outdoor heat exchanger	_	INA	m 3 /m	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-457	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν			
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Medium-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	150	%	
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C at the second s	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Fj	
Tj = -7 °C	Pdh	11.8	kW	T:- 7 °C	COD4	2.21		
Degradation co-efficient (**)	Cdh	1.00	_	IJ = -7C	COPa	2.21	_	
Tj = 2 ℃	Pdh	6.9	kW	T: - 2 °C	COD4	2.65		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = 2 C	COPa	3.05	_	
$Tj = 7 \ C$	Pdh	4.5	kW	T: - 7 °O	COD4	5.51		
Degradation co-efficient (**)	Cdh	0.98	-	IJ = / C	COPa	5.51	_	
Tj = 12℃	Pdh	3.5	kW	T: 10°0	CODI	7.00		
Degradation co-efficient (**)	Cdh	0.96	_	$T_{J} = 12 \text{ C}$	COPd	7.06	-	
Tj = bivalent temperature	Pdh	11.8	kW	Tj = bivalent temperature	COPd	2.21	-	
Tj = operation limit temperature	Pdh	11.5	kW	Tj = operation limit temperature	COPd	2.02	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20°C)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cualing interval consoits for bosting	Dowah	NA	1rW/	Cycling interval efficiency	COPcyc	NA	-	
	reyen	INA	K W	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater			
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NIA		
Annual energy consumption	Q _{HE}	7176	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n	
		For l	neat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%	
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ	
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-45TK2									
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		N		Heat pump combination heater		Y			
Parameters declared for				Medium-temperature application					
Parameters declared for				Colder climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	118	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	7.8	kW	$T_i = 7 °C$	COP4	2.55			
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	COFU	2.33	_		
Tj = 2 ℃	Pdh	4.4	kW	$T_i = 2^{\circ}$	COP4	3 71	_		
Degradation co-efficient (**)	Cdh	0.98	_	1j 2 C		5.71			
$Tj = 7 \degree C$	Pdh	2.9	kW	$T_i = 7 °C$	COPd	4.61	_		
Degradation co-efficient (**)	Cdh	0.96	_		0014	4.01			
$Tj = 12 \degree C$	Pdh	3.3	kW	Ti = 12℃	COPd	5.03	_		
Degradation co-efficient (**)	Cdh	0.96	_	1J 12 0	coru	5.05			
Tj = bivalent temperature	Pdh	10.4	kW	Tj = bivalent temperature	COPd	1.82	-		
Tj = operation limit temperature	Pdh	6.7	kW	Tj = operation limit temperature	COPd	1.06	-		
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	10.4	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	1.82	_		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	5			Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	6.3	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items					1			
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h		
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow	_	NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	10373	kWh	rate, outdoor heat exchanger		1111			
		For l	heat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%		
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-457	TK2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		N		Heat pump combination heater		Y			
Parameters declared for				Medium-temperature application					
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	ηs	159	%		
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Γj		
Tj = -7 °C	Pdh	NA	kW	$T_i = 7 °C$	COP4	NA			
Degradation co-efficient (**)	Cdh	NA	-	IJ / C	COFU	INA	_		
$Tj = 2 \ C$	Pdh	14.6	kW	$T_i = 2^{\circ}$	COP4	2 31			
Degradation co-efficient (**)	Cdh	1.00	_	1j 2 C	coru	2.31			
$Tj = 7 \ ^{\circ}C$	Pdh	8.8	kW	$T_i = 7 °C$	COPd	3.29	_		
Degradation co-efficient (**)	Cdh	0.99	_			5.29			
$Tj = 12 \degree C$	Pdh	3.9	kW	Ti = 12℃	COPd	5 47			
Degradation co-efficient (**)	Cdh	0.97	_	1J 12 0	coru	5.47			
Tj = bivalent temperature	Pdh	14.6	kW	Tj = bivalent temperature	COPd	2.31	-		
Tj = operation limit temperature	Pdh	14.6	kW	Tj = operation limit temperature	COPd	2.31	-		
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	-		
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
				Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	tary heater	1	1		
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0	kW		
Thermostat-off mode	Рто	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW			-			
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h		
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	4801	kWh	rate, outdoor heat exchanger		1111	111 5 711		
		For l	neat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%		
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ		
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Information requirements (heat pump space heaters and heat pump combination heaters)									
Model(s): AOWD-MB LOGIK-457	TK2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν				
Brine-to-water heat pump		Ν		Heat pump combination heater	Y				
Parameters declared for				Low-temperature application					
Parameters declared for				Average climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	179	%		
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	11.6	kW	T:- 7 °C	COD4	2.80			
Degradation co-efficient (**)	Cdh	0.99	_	IJ = = / C	СОРа	2.89	_		
$Tj = 2 \ C$	Pdh	6.7	kW	T: - 2 °C	COP4	4.50			
Degradation co-efficient (**)	Cdh	0.98	_	IJ-2 C	COrd	4.50	_		
$Tj = 7 \ ^{\circ}C$	Pdh	4.5	kW	$T_i = 7 °C$	COPd	5.82	_		
Degradation co-efficient (**)	Cdh	0.97	-		coru	5.62			
$Tj = 12^{\circ}C$	Pdh	3.4	kW	$T_i = 12^{\circ}$	COP4	7 53	_		
Degradation co-efficient (**)	Cdh	0.95	-	IJ - 12 C	coru	7.55	_		
Tj = bivalent temperature	Pdh	11.6	kW	Tj = bivalent temperature	COPd	2.89	-		
Tj = operation limit temperature	Pdh	11.1	kW	Tj = operation limit temperature	COPd	2.28	-		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	NA	_		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	-		
	-			Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater		I		
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.9	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	Рск	0.025	kW						
Other	items						1		
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h		
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	5927	kWh	rate, outdoor heat exchanger		1474	111 5 711		
		For l	heat pump co	ombination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%		
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ		
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-457	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	158	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = − 7 °C	Pdh	7.0	kW	Ti = -7 °C	COP4	3 40	_	
Degradation co-efficient (**)	Cdh	0.99	_	1j - / C	coru	5.40		
Tj = 2 C	Pdh	4.2	kW	$T_i = 2 °C$	COPd	5.04	_	
Degradation co-efficient (**)	Cdh	0.97	-	1j 2 0	coru	5.04		
$Tj = 7 \ ^{\circ}C$	Pdh	3.0	kW	Ti - 7 °C	COP4	6.06		
Degradation co-efficient (**)	Cdh	0.95	_	1j - / C	COLO	0.00	_	
Tj = 12 °C	Pdh	3.2	kW	T: - 12°0	COD4	(17		
Degradation co-efficient (**)	Cdh	0.95	_	$I_{J} = I_{2} C$	COPa	6.17	_	
Tj = bivalent temperature	Pdh	9.7	kW	Tj = bivalent temperature	COPd	2.38	_	
Tj = operation limit temperature	Pdh	7.6	kW	Tj = operation limit temperature	COPd	1.79	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20^{\circ}C)	Pdh	9.7	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	COPd	2.38	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other that	n active mod	e	Supplemen	ntary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	4.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	7293	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvce√f gvckn≺ ucvQgwtqhtgf i tqwr 0eqo 0'			·	P co g''cpf ''cf f tguu''qh'\j g''uwr r nkgt<"' E iO cts w² u'f g''Ugpvo gpcv; 9.''2: 24;	'Gwtqhtgf 'U0 'Dctegnqpc0	CO Irckp		

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)					
Model(s): AOWD-MB LOGIK-45T	K2								
Air-to-water heat pump		Y		Low-temperature heat pump		N			
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν			
Brine-to-water heat pump		N		Heat pump combination heater	Y				
Parameters declared for		Low-temperature application							
Parameters declared for				Warmer climate condition					
Item	symbol	value	unit	Item	symbol	value	unit		
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	240	%		
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at		
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA			
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_		
$Tj = 2 \ C$	Pdh	13.7	kW	$T_i - 2 \circ$	COP4	2.90			
Degradation co-efficient (**)	Cdh	0.99	_	IJ-2 C	COLO	2.90	_		
$Tj = 7 \ ^{\circ}C$	Pdh	8.5	kW	T: - 7 °C	COD4	5.26			
Degradation co-efficient (**)	Cdh	0.98	_	IJ = / C	COPa	5.30	_		
Tj = 12℃	Pdh	3.7	kW	T: 10°0	CODI	7.07			
Degradation co-efficient (**)	Cdh	0.95	_	$1_{j} = 12 \text{ C}$	COPd	/.86	_		
Tj = bivalent temperature	Pdh	13.7	kW	Tj = bivalent temperature	COPd	2.90	_		
Tj = operation limit temperature	Pdh	13.7	kW	Tj = operation limit temperature	COPd	2.90	-		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_		
Bivalent temperature	Tbiv	2	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_		
	reyen		K VV	Heating water operating limit temperature	WTOL	65	°C		
Power consumption in mo	des other tha	n active mod	e	Supplemen	ntary heater	ſ	1		
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0.3	kW		
Thermostat-off mode	P _{TO}	0.025	kW						
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0.025	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h		
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 2 /h		
Annual energy consumption	$Q_{\rm HE}$	2995	kWh	rate, outdoor heat exchanger	_	INA	m 3 /m		
		For l	heat pump co	mbination heater:					
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%		
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ		
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	-		-		-	-			

(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
\$2							
	Y		Low-temperature heat pump		N		
	N		Equipped with a supplementary heater		N		
	N		Heat pump combination heater	Y			
			Medium-temperature application	Medium-temperature application			
			Average climate condition				
symbol	value	unit	Item	symbol	value	unit	
Prated	14	kW	Seasonal space heating energy efficiency	ηs	146	%	
load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Pdh	12.3	kW	T:- 7 °C	COD4	2.19		
Cdh	1.00	_	IJ = -7C	COPa	2.18	_	
Pdh	6.8	kW	T: - 2 °C	COD4	2.91		
Cdh	0.99	-	IJ = 2 C	COPa	3.81	_	
Pdh	4.8	kW	T: - 7 °C	COD4	4 77		
Cdh	0.97	_	IJ = 7 C	COPa	4.//	_	
Pdh	3.6	kW	T: 10%	CODI	7.26		
Cdh	0.94	_	$T_{j} = 12 C$	COPd	7.36	_	
Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.18	-	
Pdh	8.5	kW	Tj = operation limit temperature	COPd	1.40	-	
Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20°C)	COPd	NA	_	
Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Dowah	NA	1.7337	Cycling interval efficiency	COPcyc	NA	-	
Peyen	INA	K VV	Heating water operating limit temperature	WTOL	65	°C	
des other tha	n active mod	e	Supplemen	ntary heater			
P _{OFF}	0.025	kW	Rated heat output (*)	Psup	5.5	kW	
P _{TO}	0.025	kW					
P _{SB}	0.025	kW	Type of energy input		Electric		
P _{CK}	0.025	kW					
items							
	variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
L_{WA}	68	dB	For water- or brine-to-water heat		NIA		
Q _{HE}	7675	kWh	rate, outdoor heat exchanger	_	NA	m 3 /n	
-	For l	heat pump co	ombination heater:				
	XL		Water heating energy efficiency	ηwh	110	%	
Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh	
AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ	
			P cog"cpf "cfftguu"qh'ýg"uwrrnkgt<" E 10 ctsw²u'fg"Ugpvogpcv; 9."2:24;	' Gwtqhtgf 'UC 'Dctegnqpc(L	CO Jrckp		
	(heat p 22 23 24 25 39 97 97 10000 97 10000 97 9000 <td>Interact of the second of the</td> <td>Information (near procession of a strain of a s</td> <td>Identification static strengt221YLow-temperature heat pumpNEquipped with a supplementary heater1NEquipped with a supplementary heater1NHeat pump combination heater1NHeat pump combination heater2VVerage climate condition3NSeasonal space heating energy of ficiency1014KWSeasonal space heating energy of ficiency1012.3KWAction of the ficiency1012.3KWAction of the ficiency1010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01110.01210.01314KWToperation limit temperature1410.115101610.11710.21814KW<!--</td--><td>Substrational presentation presents and presents of the section of</td><td>Substrate substrate substra</td></td>	Interact of the second of the	Information (near procession of a strain of a s	Identification static strengt221YLow-temperature heat pumpNEquipped with a supplementary heater1NEquipped with a supplementary heater1NHeat pump combination heater1NHeat pump combination heater2VVerage climate condition3NSeasonal space heating energy of ficiency1014KWSeasonal space heating energy of ficiency1012.3KWAction of the ficiency1012.3KWAction of the ficiency1010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01010.01110.01210.01314KWToperation limit temperature1410.115101610.11710.21814KW </td <td>Substrational presentation presents and presents of the section of</td> <td>Substrate substrate substra</td>	Substrational presentation presents and presents of the section of	Substrate substra	

	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54K	2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν			
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	132	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Tj = -7 °C	Pdh	7.8	kW	Ti – 7 °C	COP4	2 77		
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	COFU	2.77	_	
$Tj = 2 \ C$	Pdh	5.2	kW	T: - 2 °C	COP4	4.22		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.23	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.9	kW	T: _ 7 °O	COD4	5.24		
Degradation co-efficient (**)	Cdh	0.95	_	IJ = / C	COPa	5.24	_	
Tj = 12℃	Pdh	3.3	kW	T: 10°0	CODI	7.55		
Degradation co-efficient (**)	Cdh	0.94	_	$I_{j} = I_{2} C$	COPd	1.55	_	
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.99	_	
Tj = operation limit temperature	Pdh	7.0	kW	Tj = operation limit temperature	COPd	1.18	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	10.7	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	1.99	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	INA	K VV	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	6.0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h	
Sound power level, outdoors	$L_{\scriptscriptstyle W\!A}$	68	dB	For water- or brine-to-water heat		NIA		
Annual energy consumption	$Q_{\rm HE}$	9572	kWh	rate, outdoor heat exchanger	_	NA	m 3 /h	
		For 1	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54K	.2							
Air-to-water heat pump		Y		Low-temperature heat pump		Ν		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	186	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = -7 °C	Pdh	NA	kW	T: - 7 °C	COD4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ = = / C	COPa	INA	_	
$Tj = 2 \ ^{\circ}C$	Pdh	14.2	kW	T: - 2 °C	COD4	2.20		
Degradation co-efficient (**)	Cdh	1.00	-	IJ-2 C	COPa	2.30	_	
$Tj = 7 \ ^{\circ}C$	Pdh	8.4	kW	T: _ 7 °O	COD4	2.72		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = / C	COPa	3./3	_	
Tj = 12℃	Pdh	4.2	kW	T: 10°0	CODI	(75		
Degradation co-efficient (**)	Cdh	0.96	_	1j = 12 C	COPd	6.75	_	
Tj = bivalent temperature	Pdh	14.2	kW	Tj = bivalent temperature	COPd	2.30	_	
Tj = operation limit temperature	Pdh	14.2	kW	Tj = operation limit temperature	COPd	2.30	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $\le -20^{\circ}C$)	COPd	NA	_	
Bivalent temperature	Tbiv	2	ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	Ĉ	
Cycling interval capacity for heating	Pevch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater	ſ	1	
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	4008	kWh	rate, outdoor heat exchanger	_	INA	m 3 /m	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54K	32	·	·			·		
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	184	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C at the second s	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Tj = -7 °C	Pdh	12.2	kW	T; - 7 °C	COP4	2.68		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = -7C	COPa	2.08	_	
$Tj = 2 \ C$	Pdh	7.1	kW	T: - 2 °C	COD4	4 20		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.39	_	
$Tj = 7 \ ^{\circ}C$	Pdh	4.7	kW	T: - 7 °O	COD4	(9(
Degradation co-efficient (**)	Cdh	0.96	_	IJ = / C	COPa	0.80	_	
Tj = 12℃	Pdh	3.5	kW	T: 10°0	CODI	10.20		
Degradation co-efficient (**)	Cdh	0.93	_	$1_{j} = 12 \text{ C}$	COPd	10.30	_	
Tj = bivalent temperature	Pdh	12.2	kW	Tj = bivalent temperature	COPd	2.68	_	
Tj = operation limit temperature	Pdh	11.2	kW	Tj = operation limit temperature	COPd	2.38	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemen	Supplementary heater			
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	2.8	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NIA		
Annual energy consumption	$Q_{\rm HE}$	6072	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%	
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54H	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν			
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application	1			
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	184	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = -7 C	Pdh	6.9	kW	T: 7 %	CODI	2.00		
Degradation co-efficient (**)	Cdh	0.99	_	$I_{J} = -7$ C	COPd	3.88	_	
$Tj = 2 \ C$	Pdh	4.5	kW	T: - 2 °C	COD4	5.02		
Degradation co-efficient (**)	Cdh	0.97	_	IJ=2 C	COPa	5.93	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.7	kW	T: - 7 °C	COD4	7 20		
Degradation co-efficient (**)	Cdh	0.93	_	IJ = / C	COPa	7.20	_	
Tj = 12 °C	Pdh	3.2	kW	T: - 12°O	COD4	0.00		
Degradation co-efficient (**)	Cdh	0.93	_	$I_{J} = I_{2} C$	COPa	8.98	_	
Tj = bivalent temperature	Pdh	9.7	kW	Tj = bivalent temperature	COPd	2.71	_	
Tj = operation limit temperature	Pdh	7.9	kW	Tj = operation limit temperature	COPd	1.89	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	9.7	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	COPd	2.71	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1111	R W	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4.1	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	6257	kWh	rate, outdoor heat exchanger			111 5 711	
		Forl	neat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvcev'f gvckn< ucvQgwtqhtgf i tqwr 0eqo 0'				P co g'cpf 'cf f tguu'qh'\j g''uwr r nlgt<" E 10 cts w²u'f g''Ugpvo gpcv; 9.'2: 24;	Gwtqhtgf 'U0 'Dctegnqpc0	CO Irckp		

	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54k	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater		Y		
Parameters declared for				Low-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	267	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	part load at	
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_	
$Tj = 2 \ C$	Pdh	14.2	kW	T: - 2 °C	COP4	2 25		
Degradation co-efficient (**)	Cdh	0.99	-	IJ-2 C	COPa	5.55	_	
$Tj = 7 \ ^{\circ}C$	Pdh	8.4	kW	T: - 7 °O	COD4	5.57		
Degradation co-efficient (**)	Cdh	0.98	_	IJ = / C	COPa	5.57	_	
Tj = 12℃	Pdh	3.8	kW	T: 10°0	CODI	0.22		
Degradation co-efficient (**)	Cdh	0.94	_	$1_{j} = 12 \text{ C}$	COPd	9.32	_	
Tj = bivalent temperature	Pdh	14.2	kW	Tj = bivalent temperature	COPd	3.35	_	
Tj = operation limit temperature	Pdh	14.2	kW	Tj = operation limit temperature	COPd	3.35	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	ĉ	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	2800	kWh	rate, outdoor heat exchanger	_	INA	m 3 /m	
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation leaters and h	requirements neat pump combination heaters)			
Model(s): AOWD-MB LOGIK-541	TK2						
Air-to-water heat pump		Y		Low-temperature heat pump		N	
Water-to-water heat pump		Ν		Equipped with a supplementary heater	Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y		
Parameters declared for				Medium-temperature application			
Parameters declared for				Average climate condition			
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	150	%
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	part load at
Tj = -7 °C	Pdh	12.1	kW	Ti – 7 °C	COP4	2.16	
Degradation co-efficient (**)	Cdh	1.00	-	IJ / C	COru	2.10	_
Tj = 2 ℃	Pdh	6.9	kW	$T_i = 2 $ °C	COP4	3.65	_
Degradation co-efficient (**)	Cdh	0.99	-	1 2 0	coru	5.05	
$Tj = 7 \ ^{\circ}C$	Pdh	4.5	kW	Ti = 7 °C	COPd	5 51	_
Degradation co-efficient (**)	Cdh	0.98	-		Coru	5.51	
Tj = 12 °C	Pdh	3.5	kW	$T_i = 12^{\circ}C$	COPd	7.06	_
Degradation co-efficient (**)	Cdh	0.96	-	1 12 0	coru	7.00	
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	2.16	-
Tj = operation limit temperature	Pdh	11.5	kW	Tj = operation limit temperature	COPd	2.02	-
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15$ °C (if TOL ≤ -20 °C)	COPd	NA	_
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_
				Heating water operating limit temperature	WTOL	65	°C
Power consumption in mo	des other tha	n active mod	le	Supplementary heater			
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	2.5	kW
Thermostat-off mode	P _{TO}	0.025	kW				
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric	
Crankcase heater mode	Рск	0.025	kW				
Other	items						1
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h
Annual energy consumption	$Q_{\rm HE}$	7404	kWh	rate, outdoor heat exchanger		1111	111 5 711
		For l	heat pump co	ombination heater:			
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54T	°K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater		N		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Medium-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	118	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Tj = -7 °C	Pdh	7.8	kW	T: - 7 °C	COP4	2.55		
Degradation co-efficient (**)	Cdh	0.99	-	IJ = = / C	COPa	2.33	_	
Tj = 2 C	Pdh	4.4	kW	$T_i - 2 \circ$	COP4	3 71		
Degradation co-efficient (**)	Cdh	0.98	_	IJ-2 C	coru	5.71	_	
$Tj = 7 \ ^{\circ}C$	Pdh	2.9	kW	T: - 7 °C	COD4	4.61		
Degradation co-efficient (**)	Cdh	0.96	-	IJ - / C	COrd	4.01	_	
$Tj = 12 \degree C$	Pdh	3.3	kW	T: - 12°C	COD4	5.02		
Degradation co-efficient (**)	Cdh	0.96	_	$I_{J} = I_{2} C$	COPa	5.02	_	
Tj = bivalent temperature	Pdh	10.4	kW	Tj = bivalent temperature	COPd	1.82	-	
Tj = operation limit temperature	Pdh	6.7	kW	Tj = operation limit temperature	COPd	1.06	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	10.4	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < - 20°C)	COPd	1.82	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other that	n active mod	e	Supplementary heater				
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	6.3	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	$L_{\scriptscriptstyle W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	10373	kWh	rate, outdoor heat exchanger		INA	111 5 711	
		For l	neat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54T	°K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		N		Equipped with a supplementary heater	N			
Brine-to-water heat pump		Ν		Heat pump combination heater		Y		
Parameters declared for				Medium-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	ηs	159	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature 7	r part load at Fj	
Tj = − 7 °C	Pdh	NA	kW	$T_i = -7 $ °C	COP4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ - / C	coru			
$Tj = 2 \ ^{\circ}C$	Pdh	14.6	kW	$T_i - 2 \circ$	COP4	2.31		
Degradation co-efficient (**)	Cdh	1.00	_	IJ-2 C	COLO	2.31	_	
$Tj = 7 \ ^{\circ}C$	Pdh	8.8	kW	T: - 7 °C	COD4	2 20		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = / C	COPa	3.29	_	
Tj = 12℃	Pdh	3.9	kW	T: 10°0	CODI	5.47		
Degradation co-efficient (**)	Cdh	0.97	_	$I_{j} = I_{2} C$	COPd	5.47	_	
Tj = bivalent temperature	Pdh	14.6	kW	Tj = bivalent temperature	COPd	2.31	_	
Tj = operation limit temperature	Pdh	14.6	kW	Tj = operation limit temperature	COPd	2.31	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL $< -20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	2	Ĉ	For air-to-water heat pumps: Operation limit temperature	TOL	2	Ĉ	
Cycling interval capacity for heating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen	1474	KW	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater	ſ	1	
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.025	kW	Rated heat output (*)	Psup	0	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	\mathbf{P}_{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	$L_{W\!A}$	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	$Q_{\rm HE}$	4801	kWh	rate, outdoor heat exchanger	_	INA	m 3 /n	
		For 1	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-547	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Average climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	ηs	179	%	
Declared capacity for heating for part outdoor tem	load at indo	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for temperature 7	r part load at Fj	
Tj = -7 °C	Pdh	11.6	kW	T: _ 7 °O	COD4	2.80		
Degradation co-efficient (**)	Cdh	0.99	_	$I_J = - / C$	COPa	2.89	_	
Tj = 2 C	Pdh	6.7	kW	T: - 2 °C	COD4	4.50		
Degradation co-efficient (**)	Cdh	0.98	-	IJ-2 C	COPa	4.30	_	
$Tj = 7 \ ^{\circ}C$	Pdh	4.5	kW	$T_i - 7 \circ C$	COP4	5.82		
Degradation co-efficient (**)	Cdh	0.97	-	IJ - / C	coru	5.82	_	
Tj = 12 °C	Pdh	3.4	kW	Ti − 12°C	COD4	7 52		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - 12 C	COPa	7.55	_	
Tj = bivalent temperature	Pdh	11.6	kW	Tj = bivalent temperature	COPd	2.89	-	
Tj = operation limit temperature	Pdh	11.1	kW	Tj = operation limit temperature	COPd	2.29	-	
For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	_	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for beating	Peych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	reyen		K VV	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplemer	ntary heater			
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	1.9	kW	
Thermostat-off mode	Рто	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	Рск	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat		NA	m 2 /h	
Annual energy consumption	Q _{HE}	5927	kWh	rate, outdoor heat exchanger	_	INA	111 5 /11	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	110	%	
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1594	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements leat pump combination heaters)				
Model(s): AOWD-MB LOGIK-547	TK2							
Air-to-water heat pump		Y		Low-temperature heat pump		Ν		
Water-to-water heat pump		N		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		N		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Colder climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	158	%	
Declared capacity for heating for part outdoor tem	load at indo perature Tj	or temperatur	e 20 °C and	Declared coefficient of performance c indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at	
Tj = -7 °C	Pdh	7.0	kW	T: - 7 °C	COP4	2 40		
Degradation co-efficient (**)	Cdh	0.99	_	IJ / C	COPa	5.40	_	
Tj = 2 ℃	Pdh	4.2	kW	$T_i - 2 \circ$	COP4	5.04		
Degradation co-efficient (**)	Cdh	0.97	_	IJ-2 C	coru	5.04	_	
$Tj = 7 \ ^{\circ}C$	Pdh	3.0	kW	T: - 7 °C	COP4	6.06		
Degradation co-efficient (**)	Cdh	0.95	_	IJ - / C	COrd	0.00	_	
$Tj = 12 \degree C$	Pdh	3.2	kW	Ti - 12°C	COD4	6.17		
Degradation co-efficient (**)	Cdh	0.95	_	1j = 12 C	COPa	6.17	_	
Tj = bivalent temperature	Pdh	9.7	kW	Tj = bivalent temperature	COPd	2.38	_	
Tj = operation limit temperature	Pdh	7.6	kW	Tj = operation limit temperature	COPd	1.79	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	9.7	kW	For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	COPd	2.38	_	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcvch	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	10901			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	4.4	kW	
Thermostat-off mode	P _{TO}	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5015	m 3 /h	
Sound power level, outdoors	L_{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	\mathbf{Q}_{HE}	7293	kWh	rate, outdoor heat exchanger		INA	111 5 711	
		For l	neat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	87	%	
Daily electricity consumption	Qelec	9.164	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	2016	kWh	Annual fuel consumption	AFC	NA	GJ	
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	(heat p	I ump space h	nformation eaters and h	requirements neat pump combination heaters)				
Model(s): AOWD-MB LOGIK-54T	K2							
Air-to-water heat pump		Y		Low-temperature heat pump		N		
Water-to-water heat pump		Ν		Equipped with a supplementary heater		Ν		
Brine-to-water heat pump		Ν		Heat pump combination heater	Y			
Parameters declared for				Low-temperature application				
Parameters declared for				Warmer climate condition				
Item	symbol	value	unit	Item	symbol	value	unit	
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	ηs	241	%	
Declared capacity for heating for part outdoor terr	load at indo perature Tj	or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor 1	ergy ratio for emperature 7	part load at	
Tj = -7 °C	Pdh	NA	kW	Ti – 7 °C	COP4	NA		
Degradation co-efficient (**)	Cdh	NA	_	IJ / C	COrd	INA	_	
Tj = 2 C	Pdh	13.7	kW	$T_i = 2 °C$	COP4	2.90	_	
Degradation co-efficient (**)	Cdh	0.99	_	1 2 0	coru	2.90		
$Tj = 7 \ ^{\circ}C$	Pdh	8.5	kW	$T_i = 7 $ °C	COPd	5.36	_	
Degradation co-efficient (**)	Cdh	0.98	-	· · · · · · · · · · · · · · · · · · ·		5.50		
Tj = 12 °C	Pdh	3.7	kW	$T_i = 12^{\circ}$	COPd	7.86	_	
Degradation co-efficient (**)	Cdh	0.95	-	11 12 0		7.00		
Tj = bivalent temperature	Pdh	13.7	kW	Tj = bivalent temperature	COPd	2.90	-	
Tj = operation limit temperature	Pdh	13.7	kW	Tj = operation limit temperature	COPd	2.90	-	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if TOL < $-20^{\circ}C$)	Pdh	NA	kW	For air-to-water heat pumps: Tj = -15° C (if TOL < -20° C)	COPd	NA	-	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
	-			Heating water operating limit temperature	WTOL	65	°C	
Power consumption in mo	des other tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0.025	kW	Rated heat output (*)	Psup	0.3	kW	
Thermostat-off mode	Рто	0.025	kW					
Standby mode	P _{SB}	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0.025	kW					
Other	items						1	
Capacity control		variable	1	For air-to-water heat pumps: Rated air flow rate, outdoors	-	5015	m 3 /h	
Sound power level, outdoors	L _{WA}	68	dB	For water- or brine-to-water heat	_	NA	m 3 /h	
Annual energy consumption	$Q_{\rm HE}$	2995	kWh	rate, outdoor heat exchanger		1474	111 5 711	
		For l	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	113	%	
Daily electricity consumption	Qelec	7.036	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1548	kWh	Annual fuel consumption	AFC	NA	GJ	
Eqpvcev [#] f gvckn< ucvQgwtqhtgf i tqwr (&qo 0'				P co g"cpf "cf f tguu"qh'y g"uwr r ngt<" E 10 cts w²u'f g"Ugpvo gpcv; 9."2: 24;	'Gwtqhtgf 'U0 'Dctegnqpc0	CO Irckp		