Model(s):				Outdoor unit: KHA-06RY1-B Indoor unit: K	MK-190L-1	00RY1						
Air-to-water heat pump:				YES								
Water-to-water heat pump:				NO YES								
Brine-to-water heat pump:			NO NO									
Low-temperature heat pump:			NO NO									
Equipped with a supplementary heate	r:			NO								
Heat pump combination heater:				NO								
Declared climate condition:				AVERAGE								
Parameters are declared for medium-	temperature	e application	1.									
	· · · · · · · · · · · · · · · · · · ·											
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni					
Rated heat output (*)	Prated	5.7	kW	Seasonal space heating energy efficiency	ηs	137.9	%					
Declared capacity for heating for part load and outdoor temperature Tj	at indoor temp	oerature 20 °0	0	Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °		itio for part lo	ad at					
Tj = -7℃	Pdh	5.04	kW	Tj = -7°C	COPd	2.17	-					
Tj = 2°C	Pdh	3.12	kW	Tj = 2℃	COPd	3.51	-					
Tj = 7℃	Pdh	2.08	kW	Tj = 7℃	COPd	4.54	-					
Tj = 12℃	Pdh	1.28	kW	Tj = 12℃	COPd	5.59	-					
Tj = bivalent temperature	Pdh	5.04	kW	Tj = bivalent temperature	COPd	2.17	-					
Tj = operating limit	Pdh	4.52	kW	Tj = operating limit	COPd	1.91	-					
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than a	ctive mode			Supplementary heater								
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	1 10	1410					
Standby mode	Psb	0.014	kW	Nated Heat Output ()	r sup	1.18	kW					
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical						
Crankcase heater mode	Pck	0.000	kW	1,7,5 21 211-137 11-12		2.000.100.						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m ³ /h					
Sound power level, indoors/outdoors	L _{WA}	38/58	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h					
Annual energy consumption	Q _{HE}	3345	kWh	heat exchanger								
For heat pump combination heater:												
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%					
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details		IERM Sp. z ramska 101		Warszawa, Polska								

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Model(s):				Outdoor unit: KHA-06RY1-B Indoor unit:	KMK- 190L	-100RY1			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heater	r:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				COLDER					
Parameters are declared for medium-t	emperature	application	l.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	4.3	kW	Seasonal space heating energy efficiency	ηs	111.1	%		
Declared capacity for heating for part load a and outdoor temperature Tj	t indoor temp	oerature 20 °0		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at		
Tj = -7℃	Pdh	2.70	kW	Tj = -7℃	COPd	2.46	-		
Tj = 2℃	Pdh	1.60	kW	Tj = 2°C	COPd	3.36	-		
Tj = 7°C	Pdh	1.02	kW	Tj = 7°C	COPd	3.94	-		
Tj = 12℃	Pdh	1.37	kW	Tj = 12°C	COPd	6.35	-		
Tj = bivalent temperature	Pdh	3.47	kW	Tj = bivalent temperature	COPd	1.86	-		
Tj = operating limit	Pdh	2.09	kW	Tj = operating limit	COPd	1.13	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than ac	tive mode			Supplementary heater					
Off mode	Poff	0.014	kW	Detail be at entract (**)	Б				
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	5.10	kW		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	3681	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
	AEC	_	kWh	Annual fuel consumption	AFC	-	GJ		

^(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):				Outdoor unit: KHA-06RY1-B Indoor unit:	KMK- 190L	-100RY1							
Air-to-water heat pump:				YES									
Water-to-water heat pump:				NO									
Brine-to-water heat pump:				NO									
Low-temperature heat pump:			NO										
Equipped with a supplementary heate	r:		NO										
Heat pump combination heater:				NO									
Declared climate condition:				WARMER									
Parameters are declared for medium-	temperature	e application	1.										
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit						
Rated heat output (*)	Prated	5.1	kW	Seasonal space heating energy efficiency	ηs	164.7	%						
Declared capacity for heating for part load a and outdoor temperature Tj	nt indoor temp	perature 20 °C		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at						
Tj = -7℃	Pdh	-	kW	Tj = -7℃	COPd	-	-						
Tj = 2°C	Pdh	5.02	kW	Tj = 2°C	COPd	2.48	-						
Ti = 7°C	Pdh	3.31	kW	Ti = 7°C	COPd	3.67	-						
Tj = 12℃	Pdh	1.60	kW	Ti = 12°C	COPd	5.29	-						
Tj = bivalent temperature	Pdh	3.31	kW	Tj = bivalent temperature	COPd	3.67	-						
Tj = operating limit	Pdh	5.02	kW	Tj = operating limit	COPd	2.48	-						
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-						
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C						
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-						
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C						
Power consumption in modes other than ac	tive mode			Supplementary heater									
Off mode	Poff	0.014	kW	D 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-								
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0	kW						
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical							
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical							
Other items													
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m³/h						
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h						
Annual energy consumption	Q _{HE}	1640	kWh	heat exchanger									
For heat pump combination heater:													
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$	-	%						
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh						
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ						
Contact details		IERM Sp. z ramska 101		Warszawa, Polska									

Madal(a):				Outdoor unit: KHA-06RY1-B Indoor unit: K	MK-240I -1	00RY3						
Model(s):												
Air-to-water heat pump: Water-to-water heat pump:				YES NO								
Brine-to-water heat pump:												
Low-temperature heat pump:			NO NO									
Equipped with a supplementary heate	r:			NO								
Heat pump combination heater:	••			NO								
Declared climate condition:				AVERAGE								
Parameters are declared for medium-	temperature	e application	1.									
	•						-					
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni					
Rated heat output (*)	Prated	5.7	kW	Seasonal space heating energy efficiency	ηs	137.9	%					
Declared capacity for heating for part load a and outdoor temperature Tj	at indoor temp	oerature 20 °0		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		itio for part lo	ad at					
Tj = -7°C	Pdh	5.04	kW	Tj = -7℃	COPd	2.17	-					
Tj = 2℃	Pdh	3.12	kW	Tj = 2℃	COPd	3.51	-					
Tj = 7℃	Pdh	2.08	kW	Tj = 7°C	COPd	4.54	-					
Tj = 12℃	Pdh	1.28	kW	Tj = 12℃	COPd	5.59	-					
Tj = bivalent temperature	Pdh	5.04	kW	Tj = bivalent temperature	COPd	2.17	-					
Tj = operating limit	Pdh	4.52	kW	Tj = operating limit	COPd	1.91	-					
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than ac	tive mode			Supplementary heater								
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	1.18	kW					
Standby mode	Psb	0.014	kW	ivaled fleat output ()	r sup	1.10	KVV					
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical						
Crankcase heater mode	Pck	0.000	kW	37 1								
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m ³ /h					
Sound power level, indoors/outdoors	Lwa	38/58	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h					
Annual energy consumption	Q _{HE}	3345	kWh	heat exchanger								
For heat pump combination heater:												
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%					
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details		IERM Sp. z ramska 101		Warszawa, Polska								

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Model(s):				Outdoor unit: KHA-06RY1-B Indoor unit:	KMK-240L	-100RY3		
Air-to-water heat pump:				YES				
Water-to-water heat pump:				NO				
Brine-to-water heat pump:				NO				
Low-temperature heat pump:				NO				
Equipped with a supplementary heater	er:			NO				
Heat pump combination heater:				NO				
Declared climate condition:				COLDER				
Parameters are declared for medium-	temperature	e application	١.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni	
Rated heat output (*)	Prated	4.3	kW	Seasonal space heating energy efficiency	ηs	111.1	%	
Declared capacity for heating for part load and outdoor temperature Tj	at indoor temp	perature 20 °C		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp	, ,,	itio for part lo	ad at	
Tj = -7℃	Pdh	2.70	kW	Tj = -7℃	COPd	2.46	-	
Tj = 2℃	Pdh	1.60	kW	Tj = 2℃	COPd	3.36	-	
Tj = 7℃	Pdh	1.02	kW	Tj = 7°C	COPd	3.94	-	
Tj = 12°C	Pdh	1.37	kW	Tj = 12°C	COPd	6.35	-	
Tj = bivalent temperature	Pdh	3.47	kW	Tj = bivalent temperature	COPd	1.86	-	
Tj = operating limit	Pdh	2.09	kW	Tj = operating limit	COPd	1.13	-	
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-	
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-	
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C	
Power consumption in modes other than a	ctive mode			Supplementary heater				
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	5.10	kW	
Standby mode	Psb	0.014	kW	rated float daspat ()	1 Sup	3.10	KV	
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical		
Crankcase heater mode	Pck	0.000	kW					
Other items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /l	
Annual energy consumption	Q _{HE}	3681	kWh	heat exchanger				
For heat pump combination heater:								
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%	
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW	
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	G	
Contact details		IERM Sp. z ramska 101.		Warszawa, Polska				

Model(s):				Outdoor unit: KHA-06RY1-B Indoor unit:	KMK-240L-	100RY3							
Air-to-water heat pump:				YES									
Water-to-water heat pump:				NO									
Brine-to-water heat pump:				NO									
Low-temperature heat pump:				NO									
Equipped with a supplementary heate	r:		NO										
Heat pump combination heater:				NO									
Declared climate condition:				WARMER									
Parameters are declared for medium-	temperature	e application	l.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit						
Rated heat output (*)	Prated	5.1	kW	Seasonal space heating energy efficiency	ηs	164.7	%						
Declared capacity for heating for part load a and outdoor temperature Tj	at indoor temp	perature 20 °C		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at						
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-						
Tj = 2°C	Pdh	5.02	kW	Tj = 2°C	COPd	2.48	-						
Ti = 7°C	Pdh	3.31	kW	Ti = 7°C	COPd	3.67	-						
Tj = 12℃	Pdh	1.60	kW	Tj = 12℃	COPd	5.29	-						
Tj = bivalent temperature	Pdh	3.31	kW	Tj = bivalent temperature	COPd	3.67	-						
Tj = operating limit	Pdh	5.02	kW	Tj = operating limit	COPd	2.48	_						
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd		_						
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C						
Cycling interval capacity for heating	Pcych	_	kW	Cycling interval efficiency	COPcyc		-						
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C						
Power consumption in modes other than ac				Supplementary heater	WIGE								
Off mode	Poff	0.014	kW	, , , , , , , , , , , , , , , , , , ,									
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0	kW						
Thermostat-off mode	Pto	0.024	kW										
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical							
Other items													
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2770	m³/h						
Sound power level, indoors/outdoors	Lwa	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h						
Annual energy consumption	Q _{HE}	1640	kWh	heat exchanger									
For heat pump combination heater:													
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%						
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh						
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ						
Contact details		IERM Sp. z ramska 101		Warszawa, Polska									

		Tech	nical	parameters			
Model(s):				Outdoor unit: KHA-08RY1-B Indoor unit: KI	MK-190L-10	00RY1	
Air-to-water heat pump:				YES			
Water-to-water heat pump:				NO			
Brine-to-water heat pump:				NO			
Low-temperature heat pump:				NO			
Equipped with a supplementary heater	er:			NO			
Heat pump combination heater:				NO			
Declared climate condition:				AVERAGE			
Parameters are declared for medium-	temperature	e application	1.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.6	kW	Seasonal space heating energy efficiency	ηs	131.5	%
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0	C	Declared coefficient of performance or primindoor temperature 20 °C and outdoor temp		atio for part lo	ad at
Tj = -7℃	Pdh	5.84	kW	Tj = -7℃	COPd	2.16	-
Tj = 2°C	Pdh	3.75	kW	Tj = 2℃	COPd	3.30	-
Tj = 7°C	Pdh	2.42	kW	Tj = 7°C	COPd	4.34	-
Tj = 12℃	Pdh	1.39	kW	Tj = 12°C	COPd	5.33	-
Tj = bivalent temperature	Pdh	5.84	kW	Tj = bivalent temperature	COPd	2.16	-
Tj = operating limit	Pdh	4.90	kW	Tj = operating limit	COPd	1.84	-
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than ac	ctive mode			Supplementary heater			
Off mode	Poff	0.014	kW		_		
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	1.69	kW
Thermostat-off mode	Pto	0.024	kW	Time of anarovinnut		Electrical	
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical	
Other items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h
Sound power level, indoors/outdoors	L _{WA}	42/59	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h
Annual energy consumption	Q _{HE}	4056	kWh	heat exchanger			
For heat pump combination heater:							
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details		IERM Sp. z ramska 101		1 Warszawa, Polska			
	ut of a supp	lementary h	eater Ps	, the rated heat output Prated is equal to tl up is equal to the supplementary capacity ation coefficient is Cdh = 0,9.			ing

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Madal/a):				Outdoor unit: KHA-08RY1-B Indoor unit:	KMK-190I -	-100RY1	
Model(s):				YES	141111111111111111111111111111111111111	10017.	
Air-to-water heat pump: Water-to-water heat pump:				NO YES			
Brine-to-water heat pump:				NO			
Low-temperature heat pump:				NO			
Equipped with a supplementary heate	p.			NO			
Heat pump combination heater:	1.			NO			
Declared climate condition:				COLDER			
Parameters are declared for medium-	temnerature	annlication	1				
raidilicicis aic ucolaicu loi iliculuii	temperature	з аррпоацог	1.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5.8	kW	Seasonal space heating energy efficiency	ηs	112.0	%
Declared capacity for heating for part load a and outdoor temperature Tj	at indoor temp	perature 20 °(C	Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		itio for part lo	ad at
Tj = -7℃	Pdh	3.86	kW	Tj = -7°C	COPd	2.48	-
Tj = 2°C	Pdh	2.21	kW	Tj = 2℃	COPd	3.35	-
Tj = 7°C	Pdh	1.44	kW	Tj = 7℃	COPd	4.11	-
Tj = 12°C	Pdh	1.46	kW	Tj = 12℃	COPd	5.92	-
Tj = bivalent temperature	Pdh	4.71	kW	Tj = bivalent temperature	COPd	1.90	-
Tj = operating limit	Pdh	2.80	kW	Tj = operating limit	COPd	1.22	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C
Power consumption in modes other than ac	tive mode			Supplementary heater			
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	2.97	kW
Standby mode	Psb	0.014	kW	reaced real output ()	1 sup	2.91	KVV
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical	
Crankcase heater mode	Pck	0.000	kW				
Other items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h
Annual energy consumption	Q _{HE}	4950	kWh	heat exchanger			
For heat pump combination heater:							
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details		HERM Sp. z		1 Warszawa, Polska			

		Tech	nical	parameters					
Model(s):				Outdoor unit: KHA-08RY1-B Indoor unit:	KMK-190L-	100RY1			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heate	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				WARMER					
Parameters are declared for medium-	temperature	e application							
			-						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	7.6	kW	Seasonal space heating energy efficiency	ηs	175.8	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °C		Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °		atio for part lo	ad at		
Tj = -7℃	Pdh	-	kW	Tj = -7℃	COPd	-	-		
Tj = 2℃	Pdh	7.55	kW	Tj = 2℃	COPd	2.59	-		
Tj = 7°C	Pdh	4.86	kW	Tj = 7℃	COPd	3.92	-		
Tj = 12℃	Pdh	2.31	kW	Tj = 12°C	COPd	5.55	-		
Tj = bivalent temperature	Pdh	4.86	kW	Tj = bivalent temperature	COPd	3.92	-		
Tj = operating limit	Pdh	7.55	kW	Tj = operating limit	COPd	2.59	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C		
Power consumption in modes other than ac	ctive mode			Supplementary heater					
Off mode	Poff	0.014	kW	B + 11 + + + + +++	_				
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0	kW		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Floatrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items					I				
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	2259	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	η _{vh}	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z oramska 101		1 Warszawa, Polska					
	heat pump	combination	heaters,	the rated heat output Prated is equal to tlup is equal to the supplementary capacity			ng		

Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

		Tech	nical	pa	arameters							
Model(s):				Ou	utdoorunit: KHA-08RY1-B Indoorunit: KI	MK-240L-10	00RY3					
Air-to-water heat pump:					YES							
Water-to-water heat pump:				NO NO								
Brine-to-water heat pump:			NO									
Low-temperature heat pump:					NO							
Equipped with a supplementary heater	er:				NO							
Heat pump combination heater:					NO							
Declared climate condition:					AVERAGE							
Parameters are declared for medium-	temperature	application	-									
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	6.6	kW		Seasonal space heating energy efficiency	ηs	131.5	%				
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °C	;		Declared coefficient of performance or primindoor temperature 20 °C and outdoor temp		atio for part lo	ad at				
Tj = -7℃	Pdh	5.84	kW		Tj = -7°C	COPd	2.16	-				
Tj = 2℃	Pdh	3.75	kW		Tj = 2°C	COPd	3.30	-				
Tj = 7°C	Pdh	2.42	kW		Tj = 7°C	COPd	4.34	-				
Tj = 12℃	Pdh	1.39	kW		Tj = 12℃	COPd	5.33	-				
Tj = bivalent temperature	Pdh	5.84	kW		Tj = bivalent temperature	COPd	2.16	-				
Tj = operating limit	Pdh	4.90	kW		Tj = operating limit	COPd	1.84	-				
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW		For air-to-water heat pumps: Tj = -15℃	COPd	-	-				
Bivalent temperature	Tbiv	-7	°C	ľ	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C				
Cycling interval capacity for heating	Pcych	-	kW		Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.9			Heating water operating limit temperature	WTOL	60	°C				
Power consumption in modes other than ac	ctive mode				Supplementary heater							
Off mode	Poff	0.014	kW			_						
Standby mode	Psb	0.014	kW		Rated heat output (**)	Psup	1.69	kW				
Thermostat-off mode	Pto	0.024	kW		Type of energy input		Electrical					
Crankcase heater mode	Pck	0.000	kW		Type of energy input		Electrical					
Other items												
Capacity control		variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h				
Sound power level, indoors/outdoors	L _{WA}	42/59	dB		For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h				
Annual energy consumption	Q _{HE}	4056	kWh		heat exchanger							
For heat pump combination heater:												
Declared load profile		-			Water heating energy efficiency	$\eta_{\sf vh}$	-	%				
Daily electricity consumption	Q _{clec}	-	kWh		Daily fuel consumption	Q _{fuel}	-	kWh				
Annual electricity consumption	AEC	-	kWh		Annual fuel consumption	AFC	-	GJ				
Contact details		IERM Sp. z ramska 101 <i>i</i>		1 W	/arszawa, Polska							

^(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):				Outdoor unit: KHA-08RY1-B Indoor unit:	KMK-240L-	-100RY3					
Air-to-water heat pump:				YES							
Water-to-water heat pump:				NO NO							
Brine-to-water heat pump:				NO							
Low-temperature heat pump:				NO							
Equipped with a supplementary heate	r:			NO							
Heat pump combination heater:				NO							
Declared climate condition:				COLDER							
Parameters are declared for medium-	emperature	e application	l.								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	5.8	kW	Seasonal space heating energy efficiency	ηs	112.0	%				
Declared capacity for heating for part load a and outdoor temperature Tj	t indoor temp	perature 20 °C		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		atio for part lo	ad at				
Tj = -7℃	Pdh	3.86	kW	Tj = -7°C	COPd	2.48	-				
Tj = 2℃	Pdh	2.21	kW	Tj = 2℃	COPd	3.35	-				
Tj = 7°C	Pdh	1.44	kW	Tj = 7°C	COPd	4.11	-				
Tj = 12°C	Pdh	1.46	kW	Tj = 12℃	COPd	5.92	-				
Tj = bivalent temperature	Pdh	4.71	kW	Tj = bivalent temperature	COPd	1.90	-				
Tj = operating limit	Pdh	2.80	kW	Tj = operating limit	COPd	1.22	-				
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-				
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C				
Power consumption in modes other than ac	tive mode			Supplementary heater							
Off mode	Poff	0.014	kW	D-4-d b444 (**)							
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	2.97	kW				
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical					
Crankcase heater mode	Pck	0.000	kW	Type of officially input		Licotrical					
Other items											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m ³ /h				
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h				
Annual energy consumption	Q _{HE}	4950	kWh	heat exchanger							
For heat pump combination heater:											
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$		%				
Daily electricity consumption	Q _{clec}	_	kWh	Daily fuel consumption	Q _{fuel}	_	kWh				
, , ,	AEC		H	Annual fuel consumption	AFC		GJ				

^(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

		Tech	nical	parameters					
Model(s):				Outdoor unit: KHA-08RY1-B Indoor unit: k	KMK-240L-	100RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heate	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				WARMER					
Parameters are declared for medium-	temperature	e application	١.						
		ı							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	7.6	kW	Seasonal space heating energy efficiency	ηs	175.8	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °C		Declared coefficient of performance or prima indoor temperature 20 °C and outdoor temperature 20	, ,,	tio for part loa	ad at		
Tj = -7℃	Pdh	-	kW	Tj = -7°C	COPd	-	-		
Tj = 2℃	Pdh	7.55	kW	Tj = 2°C	COPd	2.59	-		
Tj = 7℃	Pdh	4.86	kW	Tj = 7°C	COPd	3.92	-		
Tj = 12℃	Pdh	2.31	kW	Tj = 12℃	COPd	5.55	-		
Tj = bivalent temperature	Pdh	4.86	kW	Tj = bivalent temperature	COPd	3.92	-		
Tj = operating limit	Pdh	7.55	kW	Tj = operating limit	COPd	2.59	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-		
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C		
Power consumption in modes other than ac	ctive mode			Supplementary heater					
Off mode	Poff	0.014	kW	Detect heat output (**)	D				
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0	kW		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Liectrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	2259	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z oramska 101		1 Warszawa, Polska					
	ut of a supp	lementary h	eater Ps	the rated heat output Prated is equal to the up is equal to the supplementary capacity fation coefficient is Cdh = 0,9.			ng		

^{2€}

Model(s):				Outdoor unit: KHA-10RY1-B Indoor unit: K	MK-190L-10	00RY1			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
ow-temperature heat pump:				NO					
Equipped with a supplementary heate	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				AVERAGE					
Parameters are declared for medium-	temperatur	e application	١.						
tem	Symbol	Value	Unit	Item	Symbol	Value	Uni		
Rated heat output (*)	Prated	7.7	kW	Seasonal space heating energy efficiency	ηs	136.6	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0		Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °		tio for part lo	ad at		
⁻j = -7℃	Pdh	6.78	kW	Tj = -7°C	COPd	2.24	-		
⁻j = 2℃	Pdh	4.28	kW	Tj = 2°C	COPd	3.42	-		
⁻j = 7°C	Pdh	2.77	kW	Tj = 7℃	COPd	4.52	-		
- j = 12℃	Pdh	1.58	kW	Tj = 12℃	COPd	5.68	-		
j = bivalent temperature	Pdh	6.78	kW	Tj = bivalent temperature	COPd	2.24	-		
j = operating limit	Pdh	5.38	kW	Tj = operating limit	COPd	1.83	-		
or air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.014	kW	Detail heat output (**\					
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	2.29	kV		
hermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	Type of chergy input		Liectrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/l		
Sound power level, indoors/outdoors	L _{WA}	42/60	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/l		
Annual energy consumption	Q _{HE}	4539	kWh	heat exchanger					
or heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	G.		
Contact details		HERM Sp. z pramska 101		Warszawa, Polska					

Model(s):				Outdoor unit: KHA-10RY1-B Indoor unit:	KMK-190L-	·100RY1				
Air-to-water heat pump:				YES						
Water-to-water heat pump:				NO						
Brine-to-water heat pump:				NO						
Low-temperature heat pump:				NO						
Equipped with a supplementary heater	er:			NO						
Heat pump combination heater:				NO						
Declared climate condition:				COLDER						
Parameters are declared for medium	temperature	application	1.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	6.7	kW	Seasonal space heating energy efficiency	ηs	116.4	%			
Declared capacity for heating for part load and outdoor temperature Tj	at indoor temp	erature 20 °C		Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °		atio for part lo	ad at			
Tj = -7℃	Pdh	4.27	kW	Tj = -7℃	COPd	2.54	-			
Tj = 2℃	Pdh	2.57	kW	Tj = 2°C	COPd	3.51	-			
Tj = 7°C	Pdh	1.65	kW	Tj = 7°C	COPd	4.37	-			
Tj = 12℃	Pdh	1.47	kW	Tj = 12℃	COPd	5.96	-			
Tj = bivalent temperature	Pdh	5.47	kW	Tj = bivalent temperature	COPd	2.00	-			
Tj = operating limit	Pdh	2.80	kW	Tj = operating limit	COPd	1.22	-			
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-			
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C			
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-			
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C			
Power consumption in modes other than a	ctive mode			Supplementary heater						
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	3.91	kW			
Standby mode	Psb	0.014	kW	rated fleat sulput ()	1 Sup	3.91	KVV			
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical				
Crankcase heater mode	Pck	0.000	kW							
Other items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m ³ /h			
Sound power level, indoors/outdoors	Lwa	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h			
Annual energy consumption	Q _{HE}	5540	kWh	heat exchanger						
For heat pump combination heater:										
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$	-	%			
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWl			
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ			
Contact details		IERM Sp. z ramska 101		Warszawa, Polska						

Madal(a):				Outdoor unit: KHA-10RY1-B Indoor unit:	KMK 100I	100DV1			
Model(s):				YES					
Air-to-water heat pump:				NO YES					
Water-to-water heat pump:									
Brine-to-water heat pump: Low-temperature heat pump:				NO NO					
Equipped with a supplementary heater				NO					
Heat pump combination heater:	-			NO NO					
Declared climate condition:				WARMER					
Parameters are declared for medium-t	emperature	e application	<u> </u>						
		- арриоанон	•						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	8.6	kW	Seasonal space heating energy efficiency	ηs	180.3	%		
Declared capacity for heating for part load a and outdoor temperature Tj	t indoor tem	perature 20 °C		Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °	ary energy ra perature Tj	itio for part lo	ad at		
Tj = -7℃	Pdh	-	kW	Tj = -7℃	COPd	-	-		
Tj = 2℃	Pdh	8.06	kW	Tj = 2℃	COPd	2.59	-		
Tj = 7℃	Pdh	5.54	kW	Tj = 7℃	COPd	4.10	-		
Tj = 12℃	Pdh	2.53	kW	Tj = 12℃	COPd	5.82	-		
Tj = bivalent temperature	Pdh	5.54	kW	Tj = bivalent temperature	COPd	4.10	-		
Tj = operating limit	Pdh	8.15	kW	Tj = operating limit	COPd	2.61	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C		
Power consumption in modes other than ac	tive mode			Supplementary heater					
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	0.49	14)//		
Standby mode	Psb	0.014	kW	rvated fleat output ()	r sup	0.48	kW		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	1,7,5 - 1 - 1 - 1 - 1 - 1		2.00000.			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h		
Sound power level, indoors/outdoors	L_{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h		
Annual energy consumption	Q _{HE}	2516	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z		Warszawa, Polska					

		Tech	nical	parameters					
Model(s):				Outdoor unit: KHA-10RY1-B Indoor unit: K	MK-240L-1	00RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heate	r:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				AVERAGE					
Parameters are declared for medium-	temperature	e application	١.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	7.7	kW	Seasonal space heating energy efficiency	ηs	136.6	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0		Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 °		atio for part lo	ad at		
Tj = -7℃	Pdh	6.78	kW	Tj = -7℃	COPd	2.24	-		
Tj = 2℃	Pdh	4.28	kW	Tj = 2℃	COPd	3.42	-		
Tj = 7℃	Pdh	2.77	kW	Tj = 7℃	COPd	4.52	-		
Tj = 12℃	Pdh	1.58	kW	Tj = 12℃	COPd	5.68	-		
Tj = bivalent temperature	Pdh	6.78	kW	Tj = bivalent temperature	COPd	2.24	-		
Tj = operating limit	Pdh	5.38	kW	Tj = operating limit	COPd	1.83	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than a	tive mode			Supplementary heater					
Off mode	Poff	0.014	kW	5					
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	2.29	kW		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Flootrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m³/h		
Sound power level, indoors/outdoors	L _{WA}	42/60	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	4539	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z oramska 101		1 Warszawa, Polska					
	ut of a supp	lementary h	eater Psi	the rated heat output Prated is equal to tup is equal to the supplementary capacity ation coefficient is Cdh = 0,9.			ing		

Model(s):				Outdoor unit: KHA-10RY1-B Indoor unit:	KMK-240L-	100RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heate	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				COLDER					
Parameters are declared for medium	-temperature	application	l						
ltem	Symbol	Value	Unit	Item	Symbol	Value	Uni		
Rated heat output (*)	Prated	6.7	kW	Seasonal space heating energy efficiency	ηs	116.4	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor temp	erature 20 °C		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at		
Tj = -7°C	Pdh	4.27	kW	Tj = -7℃	COPd	2.54	-		
Tj = 2℃	Pdh	2.57	kW	Tj = 2℃	COPd	3.51	-		
Tj = 7℃	Pdh	1.65	kW	Tj = 7°C	COPd	4.37	-		
Tj = 12℃	Pdh	1.47	kW	Tj = 12℃	COPd	5.96	-		
Tj = bivalent temperature	Pdh	5.47	kW	Tj = bivalent temperature	COPd	2.00	-		
Γj = operating limit	Pdh	2.80	kW	Tj = operating limit	COPd	1.22	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.014	kW	Rated heat output (**)	Psup	3.91	kW		
Standby mode	Psb	0.014	kW	realed real output ()	i sup	3.91	KV		
Thermostat-off mode	Pto	0.024	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	,, ,, ,,					
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4030	m ³ /h		
Sound power level, indoors/outdoors	Lwa	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	5540	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kW		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	G.		
Contact details		IERM Sp. z ramska 101		Warszawa, Polska					

Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	ymbol rated	application Value 8.6	. Unit	Outdoor unit: KHA-10RY1-B Indoor unit: YES NO NO NO NO NO WARMER	KMK-240L-		
Water-to-water heat pump: Brine-to-water heat pump: Low-temperature heat pump: Equipped with a supplementary heater: Heat pump combination heater: Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indeand outdoor temperature Tj	ymbol rated	Value	Unit	NO NO NO NO NO WARMER	Symbol		
Brine-to-water heat pump: Low-temperature heat pump: Equipped with a supplementary heater: Heat pump combination heater: Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indeand outdoor temperature Tj	ymbol rated	Value	Unit	NO NO NO NO WARMER	Symbol		
Low-temperature heat pump: Equipped with a supplementary heater: Heat pump combination heater: Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indeand outdoor temperature Tj	ymbol rated	Value	Unit	NO NO NO WARMER	Symbol		
Equipped with a supplementary heater: Heat pump combination heater: Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indeand outdoor temperature Tj	ymbol rated	Value	Unit	NO NO WARMER	Symbol		
Heat pump combination heater: Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indeand outdoor temperature Tj	ymbol rated	Value	Unit	NO WARMER	Symbol		
Declared climate condition: Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	ymbol rated	Value	Unit	WARMER	Symbol		
Parameters are declared for medium-temp Item Sy Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	ymbol rated	Value	Unit		Symbol		
Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	ymbol rated	Value	Unit	Item	Symbol	V.	
Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	rated			Item	Symbol	M-1	
Rated heat output (*) Pr Declared capacity for heating for part load at indo and outdoor temperature Tj	rated					Value	Unit
Declared capacity for heating for part load at indo and outdoor temperature Tj				Seasonal space heating energy efficiency	ηs	180.3	%
		oerature 20 °C		Declared coefficient of performance or primindoor temperature 20 °C and outdoor temp	ary energy ra		
·, · -	Pdh	-	kW	Tj = -7℃	COPd	-	_
Tj = 2°C F	Pdh	8.06	kW	Tj = 2℃	COPd	2.59	-
,	Pdh	5.54	kW	Tj = 7°C	COPd	4.10	-
1, 7 0	Pdh	2.53	kW	Tj = 12℃	COPd	5.82	_
Ti = bix-1t-t	Pdh	5.54	kW	Tj = bivalent temperature	COPd	4.10	-
	Pdh	8.15	kW	Tj = operating limit	COPd	2.61	-
, , , , , , , , , , , , , , , , , , ,	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
, , ,	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating P	o _{cych}	-	kW	Cycling interval efficiency	COPcyc	-	-
	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C
Power consumption in modes other than active m	mode			Supplementary heater			
Off mode	Poff	0.014	kW				
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0.48	kW
Thermostat-off mode	Pto	0.024	kW	Time of anarovinnut			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical	
Other items							
				For air-to-water heat pumps:		4020	2.11
Capacity control		variable		Rated air flow rate, outdoors	-	4030	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h
Annual energy consumption	Q _{HE}	2516	kWh	neat exchanger			
For heat pump combination heater:							
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$	-	%
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
		HERM Sp. z ramska 101		1 Warszawa, Polska			

Model(s):			(Outdoorunit: KHA-12RY3-B Indoorunit: KI	MK-240L-16	ORY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heater	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				AVERAGE					
Parameters are declared for medium-	temperature	e application	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	11.6	kW	Seasonal space heating energy efficiency	ηs	135.1	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0	С	Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at		
Tj = -7°C	Pdh	10.24	kW	Tj = -7°C	COPd	2.01	-		
Tj = 2°C	Pdh	6.52	kW	Tj = 2℃	COPd	3.44	-		
Tj = 7°C	Pdh	4.36	kW	Tj = 7℃	COPd	4.59	-		
Tj = 12℃	Pdh	3.29	kW	Tj = 12℃	COPd	6.05	-		
Tj = bivalent temperature	Pdh	10.24	kW	Tj = bivalent temperature	COPd	2.01	-		
Tj = operating limit	Pdh	9.10	kW	Tj = operating limit	COPd	1.79	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.020	kW	Detect head automat (**)	Б				
Standby mode	Psb	0.020	kW	Rated heat output (**)	Psup	1.23	kW		
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Liectrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m³/h		
Sound power level, indoors/outdoors	L _{WA}	43/64	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	6928	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details									

^(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):				Outdoor unit: KHA-12RY3-B Indoor unit:	KMK-240L-	-160RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heater	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				COLDER					
Parameters are declared for medium-	-temperature	e application	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	10.3	kW	Seasonal space heating energy efficiency	ηs	117.7	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor temp	perature 20 °0		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temperature		tio for part lo	ad at		
Tj = -7℃	Pdh	6.63	kW	Tj = -7°C	COPd	2.63	-		
Tj = 2°C	Pdh	4.06	kW	Tj = 2°C	COPd	3.60	-		
Tj = 7°C	Pdh	2.78	kW	Tj = 7°C	COPd	4.54	-		
Tj = 12℃	Pdh	3.33	kW	Tj = 12°C	COPd	6.25	-		
Tj = bivalent temperature	Pdh	8.41	kW	Tj = bivalent temperature	COPd	1.84	-		
Tj = operating limit	Pdh	4.19	kW	Tj = operating limit	COPd	1.13	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.020	kW	B + 11 + 1 + 1(##)					
Standby mode	Psb	0.020	kW	Rated heat output (**)	Psup	6.11	kW		
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Floatrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m³/h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	8420	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z ramska 101		Warszawa, Polska					

^(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):				Outdoor unit: KHA-12RY3-B Indoor unit:	KMK-240L-	160RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heat	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				WARMER					
Parameters are declared for medium	-temperatur	e application	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	12.5	kW	Seasonal space heating energy efficiency	ηs	173.8	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0		Declared coefficient of performance or primindoor temperature 20 °C and outdoor temp		tio for part lo	ad at		
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-		
Tj = 2℃	Pdh	12.07	kW	Tj = 2℃	COPd	2.31	-		
Tj = 7°C	Pdh	8.04	kW	Tj = 7℃	COPd	3.86	-		
Tj = 12℃	Pdh	3.75	kW	Tj = 12℃	COPd	5.70	-		
Tj = bivalent temperature	Pdh	8.04	kW	Tj = bivalent temperature	COPd	3.86	-		
Tj = operating limit	Pdh	12.07	kW	Tj = operating limit	COPd	2.31	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.020	kW	Rated heat output (**)	P _{sup}	0.43	kW		
Standby mode	Psb	0.020	kW	rated fleat output ()	1 sup	0.43	KVV		
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	7. 67 .					
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	3780	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile				Water heating energy efficiency	$\eta_{ m wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		IERM Sp. z ramska 101/		Warszawa, Polska					

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Ma dal(a).				Outdoor unit: KHA-14RY3-B Indoor unit: K	MK-240L-1	SUBV3			
Model(s):				YES					
Air-to-water heat pump:				NO YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO NO					
Low-temperature heat pump: Equipped with a supplementary heate	\r.			NO					
Heat pump combination heater:	ži.			NO					
Declared climate condition:				AVERAGE					
Parameters are declared for medium-	temperatur	annlication	`	710210102					
arameters are declared for medium	temperature	з арріісацої	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	12.08	kW	Seasonal space heating energy efficiency	ηs	135.6	%		
Declared capacity for heating for part load and outdoor temperature Tj	at indoor tem	perature 20 °0		Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		tio for part lo	ad at		
Tj = -7℃	Pdh	10.68	kW	Tj = -7°C	COPd	2.01	-		
Tj = 2℃	Pdh	6.86	kW	Tj = 2°C	COPd	3.43	-		
Tj = 7℃	Pdh	4.63	kW	Tj = 7°C	COPd	4.66	-		
Ti = 12℃	Pdh	3.31	kW	Ti = 12°C	COPd	6.13	-		
Tj = bivalent temperature	Pdh	10.68	kW	Tj = bivalent temperature	COPd	2.01	-		
Tj = operating limit	Pdh	9.19	kW	Tj = operating limit	COPd	1.76	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than a	ctive mode	<u> </u>		Supplementary heater					
Off mode	Poff	0.020	kW	Detail beat subset (**)	Б	4.40			
Standby mode	Psb	0.020	kW	Rated heat output (**)	Psup	1.40	kW		
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Liectrical			
OII '1				1					
Other items Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	43/65	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m³/h		
Annual energy consumption	Q _{HE}	7203	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWł		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z		Warszawa, Polska					

^(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

		Tech	nical	parameters					
Model(s):			(Outdoor unit: KHA-14RY3-B Indoor unit: I	KMK-240L-	160RY3			
Air-to-water heat pump:				YES					
Water-to-water heat pump:				NO					
Brine-to-water heat pump:				NO					
Low-temperature heat pump:				NO					
Equipped with a supplementary heater	er:			NO					
Heat pump combination heater:				NO					
Declared climate condition:				COLDER					
Parameters are declared for medium-	temperature	e applicatior	١.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	11.0	kW	Seasonal space heating energy efficiency	*	118.9	%		
Declared capacity for heating for part load	1			Declared coefficient of performance or prim	ηs arv energy ra				
and outdoor temperature Tj	at indoor term	perature 20 V		indoor temperature 20 °C and outdoor temp	perature Tj	illo loi partio	au ai		
Tj = -7°C	Pdh	6.89	kW	Tj = -7°C	COPd	2.66	-		
Tj = 2°C	Pdh	4.32	kW	Tj = 2°C	COPd	3.66	-		
Tj = 7°C	Pdh	3.06	kW	Tj = 7℃	COPd	4.72	-		
Tj = 12℃	Pdh	3.33	kW	Tj = 12℃	COPd	6.25	-		
Tj = bivalent temperature	Pdh	8.94	kW	Tj = bivalent temperature	COPd	1.79	-		
Tj = operating limit	Pdh	4.20	kW	Tj = operating limit	COPd	1.13	-		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.020	kW	Rated heat output (**)	Psup	6.80	kW		
Standby mode	Psb	0.020	kW	rated fleat sulput ()	1 Sup	0.60	KVV		
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Electrical			
Crankcase heater mode	Pck	0.000	kW	,, ,, ,,					
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m³/h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h		
Annual energy consumption	Q _{HE}	8867	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf vh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z oramska 101		Warszawa, Polska					
	ut of a supp	lementary h	eater Psu	the rated heat output Prated is equal to the p is equal to the supplementary capacity tion coefficient is Cdh = 0.9.			ing		

		Tech	nical	parameters			
Model(s):				Outdoor unit: KHA-14RY3-B Indoor unit:	KMK-240L-	160RY3	
Air-to-water heat pump:				YES			
Water-to-water heat pump:				NO			
Brine-to-water heat pump:				NO			
Low-temperature heat pump:				NO			
Equipped with a supplementary heate	r:			NO			
Heat pump combination heater:				NO			
Declared climate condition:				WARMER			
Parameters are declared for medium-	emperature	e application	1.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.7	kW	Seasonal space heating energy efficiency	ηs	176.4	%
Declared capacity for heating for part load a				Declared coefficient of performance or prim			
and outdoor temperature Tj				indoor temperature 20 °C and outdoor temp		partio	
Tj = -7℃	Pdh	-	kW	Tj = -7°C	COPd	-	-
Tj = 2°C	Pdh	13.04	kW	Tj = 2°C	COPd	2.20	-
Tj = 7℃	Pdh	8.83	kW	Tj = 7°C	COPd	3.91	-
Tj = 12℃	Pdh	4.08	kW	Tj = 12℃	COPd	5.90	-
Tj = bivalent temperature	Pdh	8.83	kW	Tj = bivalent temperature	COPd	3.91	-
Tj = operating limit	Pdh	13.04	kW	Tj = operating limit	COPd	2.20	-
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	•	-
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C
Power consumption in modes other than ac	tive mode			Supplementary heater			
Off mode	Poff	0.020	kW	Rated heat output (**)	Psup	0.66	kW
Standby mode	Psb	0.020	kW	ration float output ()	1 Sup	0.00	KVV
Thermostat-off mode	Pto	0.030	kW	Type of energy input		Electrical	
Crankcase heater mode	Pck	0.000	kW	37 1			
Other items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h
Sound power level, indoors/outdoors	L_{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h
Annual energy consumption	Q _{HE}	4092	kWh	heat exchanger			
For heat pump combination heater:							
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWl
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details		IERM Sp. z ramska 101		Warszawa, Polska			

^(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):				Outdoor unit: KHA-16RY3-B Indoor unit: K	MK-240L-1	60RY3				
Air-to-water heat pump:		YES								
Water-to-water heat pump:		NO								
Brine-to-water heat pump:		NO								
Low-temperature heat pump:		NO								
Equipped with a supplementary heater:		NO								
Heat pump combination heater:		NO								
Declared climate condition:				AVERAGE						
Parameters are declared for medium-	temperature	application	l							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	13.0	kW	Seasonal space heating energy efficiency	ηs	133.2	%			
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or prim indoor temperature 20 °C and outdoor temp		atio for part lo	ad at			
Tj = -7℃	Pdh	11.52	kW	Tj = -7°C	COPd	1.99	-			
Tj = 2℃	Pdh	7.18	kW	Tj = 2℃	COPd	3.34	-			
Tj = 7°C	Pdh	4.67	kW	Tj = 7°C	COPd	4.61	-			
Tj = 12℃	Pdh	3.31	kW	Tj = 12℃	COPd	6.07	-			
Tj = bivalent temperature	Pdh	11.52	kW	Tj = bivalent temperature	COPd	1.99	-			
Tj = operating limit	Pdh	10.33	kW	Tj = operating limit	COPd	1.80	-			
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-			
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C			
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-			
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than a	ctive mode			Supplementary heater						
Off mode	Poff	0.020	kW	Rated heat output (**)	Psup	2.67	kW			
Standby mode	Psb	0.020	kW							
Thermostat-off mode	Pto	0.030	kW	Type of energy input	Electrical					
Crankcase heater mode	Pck	0.000	kW							
Other items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m³/h			
Sound power level, indoors/outdoors	L _{WA}	43/68	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	-	m ³ /h			
Annual energy consumption	Q _{HE}	7896	kWh	heat exchanger						
For heat pump combination heater:										
Declared load profile		-		Water heating energy efficiency	$\eta_{ m wh}$	-	%			
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWI			
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ			
Contact details		IERM Sp. z ramska 101		Warszawa, Polska						

^{\$}

Model(s):				Outdoor unit: KHA-16RY3-B Indoor unit:	KMK-240L-	160RY3			
					TUNIT Z-TOL	1001(13			
Air-to-water heat pump:		YES							
Water-to-water heat pump:		NO NO							
Brine-to-water heat pump:		NO NO							
Low-temperature heat pump:		NO NO							
Equipped with a supplementary heater	۶۱. 								
Heat pump combination heater: Declared climate condition:	NO COLDER								
	4			COLDER					
Parameters are declared for medium-	-temperature	e application	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	11.8	kW	Seasonal space heating energy efficiency	ηs	121.8	%		
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj					
Tj = -7°C	Pdh	7.64	kW	Tj = -7°C	COPd	2.65	-		
Ti = 2°C	Pdh	4.42	kW	Tj = 2°C	COPd	3.79	-		
Tj = 7°C	Pdh	2.97	kW	Ti = 7°C	COPd	4.81	-		
Tj = 12℃	Pdh	3.43	kW	Tj = 12℃	COPd	6.29	-		
Tj = bivalent temperature	Pdh	9.61	kW	Tj = bivalent temperature	COPd	1.86	-		
Tj = operating limit	Pdh	5.21	kW	Tj = operating limit	COPd	1.23	_		
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than a	ctive mode			Supplementary heater					
Off mode	Poff	0.020	kW		_				
Standby mode	Psb	0.020	kW	Rated heat output (**)	Psup	6.59	kW		
Thermostat-off mode	Pto	0.030	kW	Type of energy input					
Crankcase heater mode	Pck	0.000	kW	Type of energy input	Electrical				
Other items							_		
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m³/h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	-	_	m³/h		
Annual energy consumption	Q _{HE}	9310	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details	KLIMA-THERM Sp. z o. o. ul. Ostrobramska 101A, 04-041 Warszawa, Polska								

Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

		Tech	nicai	parameters					
Model(s):				Outdoor unit: KHA-16RY3-B Indoor unit: I	KMK-240L-	160RY3			
Air-to-water heat pump:		YES							
Water-to-water heat pump:		NO							
Brine-to-water heat pump:		NO							
Low-temperature heat pump:		NO							
Equipped with a supplementary heater	:	NO							
Heat pump combination heater:		NO							
Declared climate condition:		WARMER							
Parameters are declared for medium-t	emperature	application	1.						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	13.8	kW	Seasonal space heating energy efficiency	ηs	175.9	%		
Declared capacity for heating for part load a and outdoor temperature Tj	I at indoor temperature 20 °C				eclared coefficient of performance or primary energy ratio for part load at door temperature 20 °C and outdoor temperature Tj				
Tj = -7℃	Pdh	-	kW	Tj = -7°C	COPd	-	-		
Tj = 2℃	Pdh	13.38	kW	Tj = 2°C	COPd	2.29	-		
Tj = 7℃	Pdh	8.86	kW	Ti = 7°C	COPd	3.84	-		
Tj = 12℃	Pdh	4.06	kW	Tj = 12°C	COPd	5.86	-		
Tj = bivalent temperature	Pdh	8.86	kW	Tj = bivalent temperature	COPd	3.84	-		
Tj = operating limit	Pdh	13.38	kW	Tj = operating limit	COPd	2.29	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15℃	COPd	-	-		
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	62	°C		
Power consumption in modes other than act	tive mode			Supplementary heater					
Off mode	Poff	0.014	kW			2.12			
Standby mode	Psb	0.014	kW	Rated heat output (**)	Psup	0.42	kW		
Thermostat-off mode	Pto	0.029	kW	Type of energy input	Electrical				
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items									
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor	_	-	m³/h		
Annual energy consumption	Q_{HE}	4116	kWh	heat exchanger					
For heat pump combination heater:									
Declared load profile		-		Water heating energy efficiency	$\eta_{\sf wh}$	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
Contact details		HERM Sp. z		Warszawa, Polska					

^(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.