

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	low (35°C) - average										Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A7 / W35-30 (87% r. H.)	A2 / W35 (84% r. H.)	A-10 / W35 (-)	A-7 / W34 (74% r. H.)	A2 / W30 (84% r. H.)	A7 / W27 (87% r. H.)	A12 / W24 (89% r. H.)	Abiv / W_							
							(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)							
Arkteos Site de kerquessaud F - 44350 Guérande	Zuran 4 120W	270-16-24	c,d	R410A	5.5	Heizleistung / Heat. cap. [kW]	12.0	11.3	14.7	13.6	11.3	12.7	13.4	13.6	-7 / 34	2.07	3.74	67.7	-		
						El. Leistung / Input power [kW]	2.8	3.3	6.0	5.3	3.1	2.6	2.2	5.3							
						COP [-]	4.3	3.4	2.4	2.5	3.6	4.9	6.2	2.5							
	AJPAC 245W tri	278-17-05	c,d,e	R410A	7.5	Heizleistung / Heat. cap. [kW]	23.8	20.9	23.2	25.6	20.9	24.5	26.3	25.6	-7 / 34	4.00	3.62	65.2	56.1		
						El. Leistung / Input power [kW]	5.8	6.4	9.4	9.7	6.0	5.3	4.9	9.7							
						COP [-]	4.1	3.3	2.5	2.6	3.5	4.6	5.4	2.6							
De Dietrich Thermique 57 rue de la Gare F - 67580 Mertzwiller	Alezio S4.5 MREM V200	327-17-54	c,d	R410A	1.3	Heizleistung / Heat. cap. [kW]	4.5	2.9	4.0	3.8	3.0	3.5	2.8	4.0	-10 / 35	0.79	4.83	55.1	36.9		
						El. Leistung / Input power [kW]	0.9	0.7	1.5	1.2	0.6	0.6	0.3	1.5							
						COP [-]	5.1	4.3	2.7	3.3	5.0	6.4	9.5	2.7							
	Alezio S16 TRIH V200	326-17-53	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	14.3	8.0	11.9	10.4	8.2	10.0	10.1	11.9	-10 / 35	2.45	3.97	69.0	52.7		
						El. Leistung / Input power [kW]	3.4	2.3	4.8	3.5	2.1	2.0	1.7	4.8							
						COP [-]	4.2	3.5	2.5	2.9	3.9	5.1	5.8	2.5							
	BLW Split 6C	337-18-07	c,d	R410A	1.4	Heizleistung / Heat. cap. [kW]	5.8	2.4	4.6	3.6	2.5	3.4	3.8	4.6	-10 / 35	1.02	4.15	62.2	42.9		
						El. Leistung / Input power [kW]	1.4	0.6	1.9	1.3	0.6	0.5	0.6	1.9							
						COP [-]	4.3	4.0	2.4	2.7	4.4	6.2	6.7	2.4							
	BLW Split 16C	338-18-08	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	14.2	7.8	12.3	10.5	8.1	10.0	11.8	12.3	-10 / 35	2.44	4.06	68.9	37.3		
						El. Leistung / Input power [kW]	3.3	2.2	4.7	3.5	2.1	1.9	2.0	4.7							
						COP [-]	4.3	3.5	2.6	3.0	3.9	5.3	6.0	2.6							
Erset S.a.r.l 67 rue de Morat F - 68000 Colmar	Mistral Compact 11	298-17-25	a,d	R410A	2.3	Heizleistung / Heat. cap. [kW]	8.3	5.7	8.8	9.8	5.9	5.9	7.1	9.8	-7 / 35	1.45	4.03	59.7	57.2		
						El. Leistung / Input power [kW]	1.8	1.6	3.6	3.7	1.5	1.1	1.1	3.7							
						COP [-]	4.6	3.5	2.5	2.7	3.9	5.4	6.5	2.7							
Hoval Aktiengesellschaft Austrasse 70 FL - 9490 Vaduz	Belaria twin I (20)	232-15-04	a,d	R407C	8.5	Heizleistung / Heat. cap. [kW]	20.2	17.1	14.1	15.4	9.8	13.4	15.9	15.4	-7 / 34	4.00	3.91	-	-		
						El. Leistung / Input power [kW]	5.3	5.2	5.2	5.2	2.6	2.6	2.6	5.3							
						COP [-]	3.8	3.3	2.7	2.9	3.8	5.2	6.2	2.9							
	Belaria twin IR (20)	228-14-15	a,d	R407C	13.0	Heizleistung / Heat. cap. [kW]	24.4	17.4	14.1	15.8	17.5	13.1	15.5	15.8	-7 / 34	4.20	3.75	-	-		
						El. Leistung / Input power [kW]	5.9	5.3	5.4	5.4	4.9	2.7	2.6	5.4							
						COP [-]	4.1	3.3	2.6	2.9	3.6	4.9	5.9	2.9							
	Belaria dual AR (60)	287-17-14	b,e	R410A	14.8	Heizleistung / Heat. cap. [kW]	69.5	50.3	43.9	47.2	50.1	35.5	41.8	47.2	-7 / 34	11.90	4.03	72.9	-		
						El. Leistung / Input power [kW]	15.6	13.8	14.8	14.9	13.1	7.2	7.1	14.9							
						COP [-]	4.5	3.6	3.0	3.2	3.8	4.9	5.9	3.2							

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	low (35°C) - average										Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A7 / W35-30 (87% r. H.)	A2 / W35 (84% r. H.)	A-10 / W35 (-)	A-7 / W34 (74% r. H.)	A2 / W30 (84% r. H.)	A7 / W27 (87% r. H.)	A12 / W24 (89% r. H.)	Abiv / W— (0)							
							Heizleistung / Heat. cap. [kW]	El. Leistung / Input power [kW]	COP [-]	Heizleistung / Heat. cap. [kW]	El. Leistung / Input power [kW]	COP [-]	Heizleistung / Heat. cap. [kW]	El. Leistung / Input power [kW]	COP [-]	Heizleistung / Heat. cap. [kW]					
F. Zaugg AG Kälte / Klima / Wärmepumpen Biergutstrasse 22 CH - 3608 Thun	WP ECP-M-14-A	231-15-03	c,d	R410A	5.5	low (35°C) - average	Heizleistung / Heat. cap. [kW]	10.7	12.3	13.0	11.8	12.3	13.6	13.4	13.0	-10 / 35	1.80	3.54	66.9	n.a.	
							El. Leistung / Input power [kW]	2.7	3.9	5.3	4.5	3.5	2.9	2.2	5.3						
							COP [-]	4.1	3.1	2.4	2.6	3.5	4.6	6.1	2.4						
IDM Energiesysteme GmbH Seblas 16-18 A - 9971 Matri in Osttirol	AERO ILM 2-8 230V	314-17-41	a,d	R410A	3.2	low (35°C) - average	Heizleistung / Heat. cap. [kW]	4.5	3.9	5.6	5.0	3.0	2.7	1.4	5.6	-10 / 35	0.79	4.59	50.9	43.9	
							El. Leistung / Input power [kW]	0.9	0.9	1.9	1.5	0.6	0.4	0.3	1.9						
							COP [-]	5.1	4.3	2.9	3.3	4.9	6.4	5.1	2.9						
Ochsner Wärmepumpen GmbH Krackowizerstrasse 4 A - 4020 Linz	Eagle 717	243-15-15	c,d	R410A	7.6	low (35°C) - average	Heizleistung / Heat. cap. [kW]	7.1	7.1	13.5	12.8	9.2	6.6	7.5	10.3	-2 / 32	1.20	4.48	63.4	n.a.	
							El. Leistung / Input power [kW]	1.5	1.7	4.2	4.1	1.9	1.2	1.1	2.7						
							COP [-]	4.8	4.2	3.2	3.1	4.8	5.6	6.8	3.8						
Sapac AG Mühlweg 2 CH - 1734 Tentlingen	Mistral Compact 11	298-17-25	a,d	R410A	2.3	low (35°C) - average	Heizleistung / Heat. cap. [kW]	8.3	5.7	8.8	9.8	5.9	5.9	7.1	9.8	-7 / 34	1.45	4.03	59.7	57.2	
							El. Leistung / Input power [kW]	1.8	1.6	3.6	3.7	1.5	1.1	1.1	3.7						
							COP [-]	4.6	3.5	2.5	2.7	3.9	5.4	6.5	2.7						
Templari s.r.l. Via Pitagora 20/A I - 35030 Rubano	KITA L Split (3 Phase)	246-15-18	c,d	R410A	13.0	low (35°C) - average	Heizleistung / Heat. cap. [kW]	11.9	12.2	17.7	19.1	11.8	10.1	10.6	19.1	-7 / 34	2.01	4.77	63.9	n.a.	
							El. Leistung / Input power [kW]	2.3	2.8	6.3	6.4	2.4	1.5	1.4	6.4						
							COP [-]	5.1	4.3	2.8	3.0	4.8	6.7	7.6	3.0						
Walter Meier (Klima Schweiz) AG Bahnstrasse 24 CH - 8603 Schwerzenbach	LSI 80 SHW-AA	310-17-37	c,d	R410A	4.6	low (35°C) - average	Heizleistung / Heat. cap. [kW]	5.0	7.0	8.9	9.2	7.1	5.5	6.4	9.2	-7 / 34	0.87	4.33	56.9	38.6	
							El. Leistung / Input power [kW]	1.0	1.7	3.0	2.9	1.7	0.9	0.8	2.9						
							COP [-]	4.9	4.0	2.9	3.2	4.2	5.8	7.6	3.2						
	LSI 112 SHW-AA	311-17-38	c,d	R410A	4.6	low (35°C) - average	Heizleistung / Heat. cap. [kW]	6.6	7.5	12.0	10.8	7.5	6.9	6.4	10.8	-7 / 34	1.15	4.32	58.7	38.6	
							El. Leistung / Input power [kW]	1.3	1.9	4.8	3.9	1.8	1.1	0.7	3.9						
							COP [-]	5.1	3.9	2.5	2.8	4.2	6.1	8.7	2.8						
	LSI 140 SHW-SG	304-17-31	c,d	R410A	5.5	low (35°C) - average	Heizleistung / Heat. cap. [kW]	9.3	-	15.4	13.8	8.6	8.5	7.4	13.8	-7 / 34	1.56	3.62	-	-	
							El. Leistung / Input power [kW]	2.1	-	6.8	5.7	2.3	1.7	1.1	5.7						
							COP [-]	4.5	-	2.3	2.4	3.7	5.1	6.8	2.4						
	LSI 230 SHW-SG	305-17-32	c,d	R410A	7.7	low (35°C) - average	Heizleistung / Heat. cap. [kW]	16.9	-	24.1	21.2	15.6	16.2	19.2	21.2	-7 / 34	2.89	3.38	-	-	
							El. Leistung / Input power [kW]	3.9	-	10.9	9.9	4.7	3.1	3.2	9.9						
							COP [-]	4.3	-	2.2	2.1	3.3	5.2	6.0	2.1						
Waterkotte GmbH Gewerkenstrasse 15 D - 44628 Herne	Basic Line 5008.5 - 230V	346-18-16	c,d	R410A	2.1	low (35°C) - average	Heizleistung / Heat. cap. [kW]	8.1	3.6	6.6	5.9	3.7	2.9	3.4	6.6	-10 / 35	1.42	4.91	62.3	41.9	
							El. Leistung / Input power [kW]	1.8	0.9	2.4	1.9	0.8	0.5	0.4	2.4						
							COP [-]	4.5	4.2	2.8	3.1	4.8	6.3	8.7	2.8						

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	low (35°C) - average										Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A7 / W35 - 30 (87% r. H.)	A2 / W35 (84% r. H.)	A-10 / W35 (-)	A-7 / W34 (74% r. H.)	A2 / W30 (84% r. H.)	A7 / W27 (87% r. H.)	A12 / W24 (89% r. H.)	Abiv / W _— ()	Heizleistung / Heat. cap. [kW]	El. Leistung / Input power [kW]					
Waterkotte GmbH Gewerkenstrasse 15 D - 44628 Herne	Basic Line 5011.5 - 230V	348-18-18	c,d	R410A	2.7		Heizleistung / Heat. cap. [kW]	9.3	6.9	7.9	7.1	4.3	5.2	6.1	7.9	-10 / 35	1.64	4.21	63.4	41.9	
							El. Leistung / Input power [kW]	2.0	2.0	3.0	2.3	1.1	1.0	0.8	3.0						
							COP [-]	4.7	3.5	2.6	3.0	4.0	5.3	7.2	2.6						
	Basic Line 5011.5 - 400V	347-18-17	c,d	R410A	2.3			Heizleistung / Heat. cap. [kW]	9.5	8.6	9.1	8.2	5.1	5.1	5.9	9.1	-10 / 35	1.66	4.94	60.4	41.9
								El. Leistung / Input power [kW]	1.9	2.2	3.2	2.6	1.0	0.8	0.7	3.2					
								COP [-]	5.1	3.9	2.9	3.2	4.9	6.3	8.0	2.9					
Zehnder Group Produktion Gränichen AG Oberfeldstrasse 1 CH - 5722 Gränichen	ComfoBox CB-AW-MO14	226-14-13	b,d	R410A	4.0			Heizleistung / Heat. cap. [kW]	8.6	9.1	14.2	13.8	9.5	11.8	13.8	14.2	-10 / 35	1.50	3.71	65.8	n.a.
								El. Leistung / Input power [kW]	1.8	2.7	5.9	5.5	2.5	2.1	2.0	5.9					
								COP [-]	4.7	3.4	2.4	2.5	3.8	5.6	6.9	2.4					

Bauart / Type of construction

- a Kompaktwärmepumpe für Innenaufstellung / Compact heat pump for indoor installation
- b Kompaktwärmepumpe für Aussenaufstellung / Compact heat pump for outdoor installation
- c Splitwärmepumpe / Split heat pump
- d Leistungsgeregelte Wärmepumpe mit Frequenzumformer / Output-modulated heat pump with frequency converter

Abkürzungen / Abbreviations

- A Lufttemperatur / Air temperature
- W Wassertemperatur / Water temperature
- r. H. relative Luftfeuchtigkeit / relative humidity
- V_{xy} Durchflussrate / Volume flow rate

Schalleistungspegel aussen / Sound power level outdoor:

bezieht sich auf das Geräusch draussen (wird vom Nachbar wahrgenommen) / it relates to the outside noise (is perceived by the neighbor)

Schalleistungspegel innen / Sound power level indoor:

bezieht sich auf das Geräusch drinnen (z.B. im Aufstellungsraum) / it relates to the indoor noise (e.g. in the installation room)

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	medium (55°C) - average								Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A7 / W55-47 (87% r. H.)	A-10 / W55 (-)	A-7 / W52 (74% r. H.)	A2 / W42 (84% r. H.)	A7 / W36 (87% r. H.)	A12 / W30 (89% r. H.)	Abiv / W_						
Arkteos Site de kerquessaud F - 44350 Guérande	Zuran 4 120W	270-16-24	c,d	R410A	5.5	Heizleistung / Heat. cap. [kW]	12.1	15.3	15.7	11.3	-	-	15.7	-7 / 52	1.32	-	67.7	-	
						El. Leistung / Input power [kW]	4.5	8.6	8.1	4.0	-	-	8.1						
						COP [-]	2.7	1.8	2.0	2.8	-	-	2.0						
	De Dietrich Thermique 57 rue de la Gare F - 67580 Mertzwiller	AJPAC 245W tri	278-17-05	c,d,e	R410A	7.5	Heizleistung / Heat. cap. [kW]	25.8	20.9	22.0	22.4	-	-	22.0	-7 / 52	2.77	-	65.2	56.1
					R134A	1.3	El. Leistung / Input power [kW]	9.3	10.4	10.6	8.6	-	-	10.6					
					COP [-]	2.8	2.0	2.1	2.6	-	-	2.1							
Erset S.a.r.l 67 rue de Morat F - 68000 Colmar		Alezio S4.5 MREM V200	327-17-54	c,d	R410A	1.3	Heizleistung / Heat. cap. [kW]	3.2	3.0	2.5	2.6	3.2	2.5	3.0	-10 / 55	0.35	3.01	55.1	36.9
							El. Leistung / Input power [kW]	1.4	2.2	1.5	0.8	0.8	0.4	2.2					
							COP [-]	2.4	1.4	1.7	3.2	4.2	6.0	1.4					
	Alezio S16 TRIH V200	326-17-53	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	14.3	8.8	7.6	6.5	6.1	5.8	8.8	-10 / 55	1.55	3.02	69.0	52.7	
						El. Leistung / Input power [kW]	5.3	6.4	4.6	2.2	1.4	0.9	6.4						
						COP [-]	2.7	1.4	1.6	3.0	4.4	6.3	1.4						
	BLW Split 6C	337-18-07	c,d	R410A	1.4	Heizleistung / Heat. cap. [kW]	5.5	3.9	3.3	2.1	2.0	2.7	3.9	-10 / 55	0.60	3.08	62.2	42.9	
						El. Leistung / Input power [kW]	2.2	2.6	1.9	0.7	0.5	0.4	2.6						
						COP [-]	2.5	1.5	1.7	3.1	4.5	6.9	1.5						
	BLW Split 16C	338-18-08	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	14.2	9.4	7.6	6.4	5.8	7.3	9.4	-10 / 55	1.53	3.09	68.9	37.3	
						El. Leistung / Input power [kW]	5.2	6.5	4.5	2.1	1.3	1.1	6.5						
						COP [-]	2.7	1.5	1.7	3.1	4.5	6.5	1.5						
Mistral Compact 11	298-17-25	a,d	R410A	2.3	Heizleistung / Heat. cap. [kW]	8.2	8.1	9.1	5.7	5.5	6.6	9.1	-7 / 52	0.89	3.03	59.7	57.2		
					El. Leistung / Input power [kW]	2.9	4.3	4.4	2.0	1.4	1.3	4.4							
					COP [-]	2.8	1.9	2.1	2.9	4.0	5.2	2.1							
Hoval Aktiengesellschaft Austrasse 70 FL - 9490 Vaduz	Belaria twin I (20)	232-15-04	a,d	R407C	8.5	Heizleistung / Heat. cap. [kW]	22.2	-	14.9	17.4	-	-	14.9	-7 / 52	2.41	-	-	-	
						El. Leistung / Input power [kW]	7.8	-	6.7	5.7	-	-	6.7						
						COP [-]	2.8	-	2.2	3.0	-	-	2.2						
	Belaria twin IR (20)	228-14-15	a,d	R407C	13.0	Heizleistung / Heat. cap. [kW]	22.5	-	15.0	17.3	-	-	15.0	-7 / 52	2.39	-	-	-	
						El. Leistung / Input power [kW]	7.8	-	6.8	5.8	-	-	6.8						
						COP [-]	2.9	-	2.2	3.0	-	-	2.2						
	Belaria dual AR (60)	287-17-14	b,e	R410A	14.8	Heizleistung / Heat. cap. [kW]	65.8	43.0	46.6	50.8	-	-	46.6	-7 / 52	7.10	-	72.9	-	
				R410A	14.8	El. Leistung / Input power [kW]	21.7	20.7	20.1	16.8	-	-	20.1						
				COP [-]	3.0	2.1	2.3	3.0	-	-	2.3								

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions								Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
						medium (55°C) - average												
						A7 / W55-47 (87% r. H.)	A-10 / W55 (-)	A-7 / W52 (74% r. H.)	A2 / W42 (84% r. H.)	A7 / W36 (87% r. H.)	A12 / W30 (89% r. H.)	Abiv / W_— ()						
F. Zaugg AG Kälte / Klima / Wärmepumpen Biergutstrasse 22 CH - 3608 Thun	WP ECP-M-14-A	231-15-03	c,d	R410A	5.5	Heizleistung / Heat. cap. [kW]	13.6	-	10.9	12.4	-	-	10.9	-7 / 52	1.45	-	66.9	n.a.
						El. Leistung / Input power [kW]	6.3	-	5.4	4.6	-	-	5.4					
						COP [-]	2.2	-	2.0	2.7	-	-	2.0					
iDM Energiesysteme GmbH Seblas 16-18 A - 9971 Matri in Osttirol	AERO ILM 2-8 230V	314-17-41	a,d	R410A	3.2	Heizleistung / Heat. cap. [kW]	4.0	4.4	4.0	2.4	2.5	1.6	4.4	-10 / 55	0.43	3.32	50.9	43.9
						El. Leistung / Input power [kW]	1.3	2.4	1.7	0.7	0.6	0.3	2.4					
						COP [-]	3.0	1.8	2.3	3.5	4.5	5.1	1.8					
Ochsner Wärmepumpen GmbH Krackowizerstrasse 4 A - 4020 Linz	Eagle 717	243-15-15	c,d	R410A	7.6	Heizleistung / Heat. cap. [kW]	11.0	14.1	13.6	9.3	6.4	7.3	10.7	-2 / 46	1.20	3.63	63.4	n.a.
						El. Leistung / Input power [kW]	3.3	6.1	5.7	2.5	1.4	1.3	3.6					
						COP [-]	3.3	2.3	2.4	3.8	4.6	5.8	3.0					
Sapac AG Mühlweg 2 CH - 1734 Tentlingen	Mistral Compact 11	298-17-25	a,d	R410A	2.3	Heizleistung / Heat. cap. [kW]	8.2	8.1	9.1	5.7	5.5	6.6	9.1	-7 / 52	0.89	3.03	59.7	57.2
						El. Leistung / Input power [kW]	2.9	4.3	4.4	2.0	1.4	1.3	4.4					
						COP [-]	2.8	1.9	2.1	2.9	4.0	5.2	2.1					
Templari s.r.l. Via Pitagora 20/A I - 35030 Rubano	KITA L Split (3 Phase)	246-15-18	c,d	R410A	13.0	Heizleistung / Heat. cap. [kW]	14.0	18.4	19.5	12.0	10.0	10.8	19.5	-7 / 52	1.52	3.74	63.9	n.a.
						El. Leistung / Input power [kW]	4.5	8.9	8.8	3.2	1.9	1.6	8.8					
						COP [-]	3.1	2.1	2.2	3.8	5.1	6.9	2.2					
Walter Meier (Klima Schweiz) AG Bahnstrasse 24 CH - 8603 Schwerzenbach	LSI 80 SHW-AA	310-17-37	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	4.3	8.9	8.6	6.7	5.2	5.9	8.6	-7 / 52	0.74	3.42	56.9	38.6
						El. Leistung / Input power [kW]	1.5	4.2	3.7	2.0	1.1	1.0	3.7					
						COP [-]	2.8	2.1	2.4	3.3	4.8	6.1	2.4					
	LSI 112 SHW-AA	311-17-38	c,d	R410A	4.6	Heizleistung / Heat. cap. [kW]	5.7	12.6	10.7	7.4	6.6	6.2	10.7	-7 / 52	0.63	3.34	58.7	38.6
						El. Leistung / Input power [kW]	1.9	6.6	5.1	2.3	1.4	0.9	5.1					
						COP [-]	3.0	1.9	2.1	3.2	4.8	6.8	2.1					
	LSI 140 SHW-SG	304-17-31	c,d	R410A	5.5	Heizleistung / Heat. cap. [kW]	7.1	15.6	15.9	10.2	8.1	4.7	15.9	-7 / 52	0.77	3.07	-	-
						El. Leistung / Input power [kW]	2.5	8.3	8.5	3.4	1.7	0.7	8.5					
						COP [-]	2.8	1.9	1.9	3.0	4.7	6.7	1.9					
	LSI 230 SHW-SG	305-17-32	c,d	R410A	7.7	Heizleistung / Heat. cap. [kW]	14.4	22.1	22.0	14.8	10.6	12.8	22.0	-7 / 52	1.55	2.74	-	-
						El. Leistung / Input power [kW]	5.5	13.5	13.6	5.6	2.4	2.4	13.6					
						COP [-]	2.6	1.6	1.6	2.6	4.3	5.4	1.6					
Waterkotte GmbH Gewerkenstrasse 15 D - 44628 Herne	Basic Line 5008.5 - 230V	346-18-16	c,d	R410A	2.1	Heizleistung / Heat. cap. [kW]	5.7	5.9	5.3	3.3	-	-	5.9	-10 / 55	0.63	-	62.3	41.9
						El. Leistung / Input power [kW]	1.9	3.1	2.4	1.0	-	-	3.1					
						COP [-]	2.9	1.9	2.2	3.4	-	-	1.9					

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2013 / EN 14511:2018 und EN 14825:2013 / EN 14825:2016

Test results of air to water heat pumps based on EN 14511:2013 / EN 14511:2018 and EN 14825:2013 / EN 14825:2016

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	medium (55°C) - average							Bivalentpunkt [°] Bivalent point	Volumenstrom [m³/h] Volume flow	SCOP	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A7 / W55-47 (87% r. H.)	A-10 / W55 (-)	A-7 / W52 (74% r. H.)	A2 / W42 (84% r. H.)	A7 / W36 (87% r. H.)	A12 / W30 (89% r. H.)	Abiv / W _{xy} ()					
Waterkotte GmbH Gewerkenstrasse 15 D - 44628 Herne	Basic Line 5011.5 - 230V	348-18-18	c,d	R410A	2.7	Heizleistung / Heat. cap. [kW]	8.0	6.6	6.0	3.6	-	-	6.6	-10 / 55	0.88	-	63.4	41.9
						El. Leistung / Input power [kW]	3.1	4.3	3.3	1.3	-	-	4.3					
						COP [-]	2.6	1.5	1.8	2.8	-	-	1.5					
	Basic Line 5011.5 - 400V	347-18-17	c,d	R410A	2.3	Heizleistung / Heat. cap. [kW]	7.7	7.6	6.8	4.2	-	-	7.6	-10 / 55	0.84	-	60.4	41.9
						El. Leistung / Input power [kW]	2.8	4.2	3.3	1.3	-	-	4.2					
						COP [-]	2.8	1.8	2.1	3.2	-	-	1.8					
Zehnder Group Produktion Gränichen AG Oberfeldstrasse 1 CH - 5722 Gränichen	ComfoBox CB-AW-MO14	226-14-13	b,d	R410A	4.0	Heizleistung / Heat. cap. [kW]	11.6	12.6	12.8	-	-	-	12.6	-10 / 55	1.25	-	65.8	n.a.
						El. Leistung / Input power [kW]	4.4	7.2	6.4	-	-	-	7.2					
						COP [-]	2.6	1.7	2.0	-	-	-	1.7					

Bauart / Type of construction

- a Kompaktwärmepumpe für Innenaufstellung / Compact heat pump for indoor installation
- b Kompaktwärmepumpe für Aussenaufstellung / Compact heat pump for outdoor installation
- c Splitwärmepumpe / Split heat pump
- d Leistungsgeregelte Wärmepumpe mit Frequenzumformer / Output-modulated heat pump with frequency converter

Abkürzungen / Abbreviations

- A Lufttemperatur / Air temperature
- W Wassertemperatur / Water temperature
- r. H. relative Luftfeuchtigkeit / relative humidity
- V_{xy} Durchflussrate / Volume flow rate

Schalleistungspegel aussen / Sound power level outdoor:

bezieht sich auf das Geräusch draussen (wird vom Nachbar wahrgenommen) / it relates to the outside noise (is perceived by the neighbor)

Schalleistungspegel innen / Sound power level indoor:

bezieht sich auf das Geräusch drinnen (z.B. im Aufstellungsraum) / it relates to the indoor noise (e.g. in the installation room)

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2011 und EN 14511:2013

Test results of air to water heat pumps based on EN 14511:2011

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions										Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							VolumenstromEinstellung Volume flow adjustment												
							A10 / W35 (80% r. H.)	A7 / W35 - 30 (89% r. H.)	A2 / W35 (84% r. H.)	A-7 / W35 (75% r. H.)	A-15 / W35 (-)	A7 / W45 - 40 (89% r. H.)	A7 / W55 - 47 (89% r. H.)	A-7 / W55 (75% r. H.)	V ₃₅	V ₄₅			
CTC Giersch AG Bahnhofstrasse 60 CH - 8112 Otelfingen	MLW 12	197-12-14	a	S	R407C	5.9	Heizleistung / Heat. cap. [kW]	15.7	13.1	9.7	9.2	7.6	12.4	12.5	9.2	2.51	77	66	
							El. Leistung / Input power [kW]	3.8	3.6	3.1	3.2	3.6	4.2	4.8	4.7	2.41			
							COP [-]	4.1	3.6	3.2	2.9	2.1	3.0	2.6	1.9	1.44			
Daikin Europe N.V. Zandvoordestraat 300 B - 8400 Oostende	ERLQ006CAV3 & EHBH08C	207-13-10	c,d	S	R410A	1.6	Heizleistung / Heat. cap. [kW]	6.3	6.1	4.7	5.4	5.7	5.7	5.4	2.8	1.07	59	-	
							El. Leistung / Input power [kW]	1.2	1.3	1.2	1.9	2.6	1.6	1.8	2.1	0.99			
							COP [-]	5.2	4.8	3.8	2.9	2.2	3.6	2.9	1.3	0.59			
	ERLQ016CAW1 & EHVX16S	208-13-11	c,d	S	R410A	3.4	Heizleistung / Heat. cap. [kW]	17.5	16.6	11.7	12.1	9.4	15.6	15.0	12.7	2.86	65	-	
							El. Leistung / Input power [kW]	3.9	3.9	3.4	4.6	4.5	4.6	5.4	6.8	2.72			
							COP [-]	4.5	4.3	3.4	2.6	2.1	3.4	2.8	1.9	1.66			
De Dietrich Thermique 57 rue de la Gare F - 67580 Mertzwiller	HPI 14TR	205-13-08	c,d	S	R410A	5.0	Heizleistung / Heat. cap. [kW]	14.7	13.8	9.6	9.8	7.1	13.3	8.6	-	2.39	66	-	
							El. Leistung / Input power [kW]	3.4	3.4	3.0	4.2	4.2	4.3	3.7	-	2.34			
							COP [-]	4.3	4.1	3.2	2.3	1.7	3.1	2.3	-	0.93			
	HPI 22TR	206-13-09	c,d	S	R410A	7.1	Heizleistung / Heat. cap. [kW]	20.9	19.9	12.1	12.1	8.7	19.7	-	-	3.45	72	-	
							El. Leistung / Input power [kW]	5.3	5.3	3.9	5.3	5.2	6.8	-	-	3.42			
							COP [-]	4.0	3.7	3.1	2.3	1.7	2.9	-	-	-			
Elcotherm AG Sarganserstrasse 100 CH - 7324 Vilters	Aerotop S07M-CR	214-14-01	a,d	S	R410A	4.7	Heizleistung / Heat. cap. [kW]	6.0	5.7	5.7	7.1	6.8	5.3	6.5	7.0	0.98	54	46	
							El. Leistung / Input power [kW]	1.2	1.2	1.4	2.4	3.0	1.5	2.3	3.7	0.91			
							COP [-]	5.1	4.8	4.0	3.0	2.3	3.5	2.8	1.9	0.70			
	Aerotop S15M-HT	213-13-16	a,d	S	R410A	4.9	Heizleistung / Heat. cap. [kW]	11.0	9.2	9.0	13.9	13.5	11.2	10.5	13.7	1.59	58	48	
							El. Leistung / Input power [kW]	2.3	2.0	2.3	4.8	5.8	3.2	3.7	6.4	1.89			
							COP [-]	4.8	4.6	3.9	2.9	2.3	3.5	2.8	2.1	1.14			
Energy Panel S.L. Carretera Estepa-Guadix PK 45 E - 14900 Lucena (Córdoba)	Green e-pack GTEP01 (4 evaporator panels)	227-14-14	d	S	R134a	1.0	Heizleistung / Heat. cap. [kW]	1.5	1.4	1.2	0.8	-	-	-	-	0.24	-	-	
							El. Leistung / Input power [kW]	0.4	0.4	0.4	0.3	-	-	-	-	-			
							COP [-]	3.9	3.7	3.2	2.2	-	-	-	-	-			
Erset S.a.r.l 67 rue de Morat F - 68000 Colmar	Sirocco 13	211-13-14	d	S	R407C	10.4	Siehe / see Sapac SA, Sirocco 13												
	Sirocco 18	217-14-04	d	S	R407C	13.4	Siehe / see Sapac SA, Sirocco 18												
Friap AG Ey 9 CH - 3063 Ittigen	FLWsp 1-15	195-12-12	c	S	R407C	9.4	Heizleistung / Heat. cap. [kW]	16.1	15.2	13.9	11.4	9.5	15.9	16.1	11.2	2.85	71	48	
							El. Leistung / Input power [kW]	4.1	4.1	4.1	4.0	3.9	5.0	6.0	5.9	3.06			
							COP [-]	3.9	3.7	3.4	2.9	2.4	3.2	2.7	1.9	1.91			

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2011 und EN 14511:2013

Test results of air to water heat pumps based on EN 14511:2011

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions											Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							VolumenstromEinstellung Volume flow adjustment													
							A10 / W35 (80% r. H.)	A7 / W35 - 30 (89% r. H.)	A2 / W35 (84% r. H.)	A-7 / W35 (75% r. H.)	A-15 / W35 (-)	A7 / W45 - 40 (89% r. H.)	A7 / W55 - 47 (89% r. H.)	A-7 / W55 (75% r. H.)	V ₃₅	V ₄₅	V ₅₅			
Hoval Aktiengesellschaft Austrasse 70 FL - 9490 Vaduz	Belaria SRM (6)	207-13-10	c,d	S	R410A	1.6	Siehe / see Daikin Europe N.V., ERLQ006CAV3 & EHBH08C													
	Belaria SRM (16)	208-13-11	c,d	S	R410A	3.4	Siehe / see Daikin Europe N.V., ERLQ016CAV3/W1 & EHVX16S													
Kermi GmbH Bankofen-Bahnhof 1 D - 94447 Plattling	x-change WPL 12	196-12-13	a,d	S	R410A	7.2	Heizleistung / Heat. cap. [kW]	10.9	10.2	9.7	8.8	8.0	9.5	8.7	9.6	1.77				
							El. Leistung / Input power [kW]	2.0	2.1	2.4	3.4	4.1	2.5	3.0	5.0	1.61	55	-		
							COP [-]	5.3	5.0	4.1	2.6	2.0	3.8	2.9	1.9	0.95	A7 / W63			
Krüger + Co. AG Winterhaldenstrasse 11 CH - 9113 Degersheim	HWS-804HE	222-14-09	c,d	S	R410A	1.8	Heizleistung / Heat. cap. [kW]	9.2	8.2	6.5	5.4	4.0	7.8	8.1	-	1.41				
							El. Leistung / Input power [kW]	2.2	2.0	2.1	2.3	2.0	2.4	3.0	-	1.34	65	-		
							COP [-]	4.1	4.2	3.1	2.4	2.0	3.2	2.7	-	0.89	A7 / W55			
	HWS-1604H8R-E	221-14-08	c,d	S	R410A	2.7	Heizleistung / Heat. cap. [kW]	17.9	14.4	11.7	9.4	8.3	14.7	15.5	-	2.60				
							El. Leistung / Input power [kW]	4.1	3.6	3.6	3.5	3.5	4.3	5.3	-	2.56	65	-		
							COP [-]	4.4	4.0	3.2	2.7	2.3	3.5	2.9	-	1.71	A7 / W55			
Multi Energie AG Wiesentalstrasse 20 CH - 8355 Aadorf	RLW 16.3	197-12-14	a	S	R407C	5.9	Siehe / see CTC Giersch AG, MLW 12													
Ochsner Wärmepumpen GmbH Ochsner-Strasse 1 A - 3350 Haag	GMLW 5 plus (VHS-M5)	212-13-15	c	S	R407C	4.7	Heizleistung / Heat. cap. [kW]	6.8	6.3	5.4	4.1	3.0	5.9	5.6	3.7	1.09				
							El. Leistung / Input power [kW]	1.3	1.3	1.3	1.3	1.2	1.6	1.9	1.8	1.03	51	42		
							COP [-]	5.1	4.8	4.1	3.2	2.4	3.7	3.0	2.0	0.61	A7 / W55			
Sapac SA Mühleweg 2 CH - 1734 Tentlingen	Sirocco 13	211-13-14	c	S	R407C	10.4	Heizleistung / Heat. cap. [kW]	15.1	13.0	10.7	9.9	8.1	13.2	15.0	10.6	2.46				
							El. Leistung / Input power [kW]	3.4	3.2	3.0	3.1	3.0	3.9	4.9	4.5	2.45	59	-		
							COP [-]	4.4	4.0	3.5	3.2	2.7	3.4	3.1	2.4	1.62	A7 / W55			
	Sirocco 18	217-14-04	c	S	R407C	13.4	Heizleistung / Heat. cap. [kW]	22.1	20.9	13.2	14.6	11.8	21.4	21.8	15.7	3.55				
							El. Leistung / Input power [kW]	4.4	4.4	3.8	4.2	4.1	5.5	6.8	6.6	3.62	60	-		
							COP [-]	5.0	4.8	3.5	3.5	2.9	3.9	3.2	2.4	2.36	A7 / W55			
Striega-Therm AG Breitenstrasse 10 CH - 4852 Rothrist	AWS 8	198-13-01	c	S	R407C	3.0	Heizleistung / Heat. cap. [kW]	8.0	7.6	6.0	4.9	3.8	7.3	7.0	4.2	1.33				
							El. Leistung / Input power [kW]	1.8	1.7	1.6	1.7	1.5	2.1	2.3	2.1	1.27	56	45		
							COP [-]	4.6	4.4	3.6	2.9	2.5	3.6	3.0	2.0	0.76	A7 / W55			
	AWS 16	199-13-02	c	S	R407C	3.0	Heizleistung / Heat. cap. [kW]	13.9	12.4	10.6	9.2	7.3	12.6	13.0	8.8	2.33				
							El. Leistung / Input power [kW]	3.3	3.2	3.1	3.1	2.9	4.0	4.6	4.0	2.27	55	48		
							COP [-]	4.2	3.9	3.4	3.0	2.5	3.2	2.8	2.2	1.42	A7 / W55			

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2011 und EN 14511:2013

Test results of air to water heat pumps based on EN 14511:2011

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions												Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							VolumenstromEinstellung Volume flow adjustment														
							V ₃₅			V ₄₅			V ₅₅								
A10 / W35 (80% r. H.)	A7 / W35 - 30 (89% r. H.)	A2 / W35 (84% r. H.)	A-7 / W35 (75% r. H.)	A-15 / W35 (-)	A7 / W45 - 40 (89% r. H.)	A7 / W55 - 47 (89% r. H.)	A-7 / W55 (75% r. H.)														
Thermolink AG Wittenwilerstrasse 31a CH - 8355 Aadorf	LWi 1-6	225-14-12	a	S	R407C	6.5	Heizleistung / Heat. cap. [kW]	9.9	9.0	7.5	6.1	4.6	9.3	9.3	-	1.62	57	54			
							El. Leistung / Input power [kW]	2.3	2.3	2.2	2.1	2.1	2.9	3.4	-	1.62					
							COP [-]	4.3	4.0	3.4	2.9	2.3	3.3	2.7	-	1.01					
Toshiba Carrier (UK) Ltd. Porsham Close Roborough, Plymouth UK - Devon PL6 7DB	HWS-804HE	222-14-09	c,d	S	R410A	1.8	Heizleistung / Heat. cap. [kW]	9.2	8.2	6.5	5.4	4.0	7.8	8.1	-	1.41	65	-			
							El. Leistung / Input power [kW]	2.2	2.0	2.1	2.3	2.0	2.4	3.0	-	1.34					
							COP [-]	4.1	4.2	3.1	2.4	2.0	3.2	2.7	-	0.89					
	HWS-1604H8R-E	221-14-08	c,d	S	R410A	2.7	Heizleistung / Heat. cap. [kW]	17.9	14.4	11.7	9.4	8.3	14.7	15.5	-	2.60	65	-			
							El. Leistung / Input power [kW]	4.1	3.6	3.6	3.5	3.5	4.3	5.3	-	2.56					
							COP [-]	4.4	4.0	3.2	2.7	2.3	3.5	2.9	-	1.71					
	HWS-P804HR-E HWS-P804XWHM3-E	233-15-05	c,d	S	R410A	2.7	Heizleistung / Heat. cap. [kW]	18.6	7.9	11.8	10.5	9.3	7.1	11.7	7.9	1.34	62	-			
							El. Leistung / Input power [kW]	4.1	1.7	3.6	3.6	3.8	1.9	4.0	4.2	1.23					
							COP [-]	4.5	4.7	3.3	2.9	2.5	3.7	2.9	1.9	1.28					
	HWS-P1104HR-E HWS-P1104XWHM3-E	234-15-06	c,d	S	R410A	2.7	Heizleistung / Heat. cap. [kW]	18.9	11.3	12.1	11.0	10.5	10.9	12.4	7.9	2.00	63	-			
							El. Leistung / Input power [kW]	4.1	2.3	3.6	4.0	4.2	2.9	4.1	4.0	1.85					
							COP [-]	4.6	4.9	3.4	2.8	2.5	3.8	3.0	2.0	1.37					
Walter Bösch GmbH & Co KG Industrie Nord A - 6890 Lustenau	HPI 14TR	205-13-08	c,d	S	R410A	5.0	Siehe / see De Dietrich Thermique, HPI 14TR														
	HPI 22TR	206-13-09	c,d	S	R410A	7.1	Siehe / see De Dietrich Thermique, HPI 22TR														
Walter Meier (Klima Schweiz) AG Bahnstrasse 24 CH - 8603 Schwerzenbach	LSI 140 SHW	200-13-03	c,d	S	R410A	5.0	Heizleistung / Heat. cap. [kW]	14.9	15.1	13.0	13.6	13.7	14.5	13.7	14.6	2.60	69	-			
							El. Leistung / Input power [kW]	3.3	3.6	4.1	5.7	6.9	4.6	5.1	8.2	2.51					
							COP [-]	4.5	4.2	3.2	2.4	2.0	3.1	2.7	1.8	1.50					
	LSP 50 SW	204-13-07	c,d	S	R410A	2.1	Heizleistung / Heat. cap. [kW]	6.5	6.1	3.2	4.6	3.6	6.5	6.1	4.7	1.13	62	-			
							El. Leistung / Input power [kW]	1.6	1.7	1.0	1.9	1.7	2.1	2.3	2.7	1.08					
							COP [-]	4.1	3.7	3.2	2.4	2.1	3.1	2.6	1.7	0.66					
	LSP 200 SW	203-13-06	c,d	S	R410A	5.1	Heizleistung / Heat. cap. [kW]	13.4	12.6	11.6	15.3	10.9	11.4	9.0	-	2.15	72	-			
							El. Leistung / Input power [kW]	2.8	2.9	3.6	6.4	5.9	3.5	4.2	-	1.98					
							COP [-]	4.7	4.3	3.2	2.4	1.8	3.3	2.2	-	0.97					
Weider Wärmepumpen GmbH Oberer Achdamm 4 A - 6971 Hard bei Bregenz	LW140	201-13-04	c	S	R407C	7.0	Heizleistung / Heat. cap. [kW]	16.5	16.0	14.0	10.9	9.0	15.8	11.4	11.1	2.73	67	-			
							El. Leistung / Input power [kW]	3.2	3.2	3.2	3.0	3.0	3.8	4.0	4.2	2.69					
							COP [-]	5.1	5.0	4.4	3.6	3.0	4.1	2.8	2.6	1.40					

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2011 und EN 14511:2013

Test results of air to water heat pumps based on EN 14511:2011

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions										Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							VolumenstromEinstellung Volume flow adjustment												
							A10 / W35 (80% r. H.)	A7 / W35 - 30 (89% r. H.)	A2 / W35 (84% r. H.)	A-7 / W35 (75% r. H.)	A-15 / W35 (-)	A7 / W45 - 40 (89% r. H.)	A7 / W55 - 47 (89% r. H.)	A-7 / W55 (75% r. H.)	V ₃₅	V ₄₅			
Zehnder Group Produktion Gränichen AG Oberfeldstrasse 1 CH - 5722 Gränichen	ComfoBox A/W-B-8	202-13-05	c,d	S	R410A	2.4	Heizleistung / Heat. cap. [kW]	9.0	4.5	6.2	7.8	6.1	8.1	8.0	5.2	0.78	56	-	
							El. Leistung / Input power [kW]	2.1	1.1	1.7	2.8	2.6	2.6	2.9	2.6	1.40			
							COP [-]	4.3	4.2	3.7	2.8	2.4	3.2	2.7	2.0	0.87			
	CB-AW-MO11	219-14-06	b,d	S	R410A	4.0	Heizleistung / Heat. cap. [kW]	9.9	6.8	8.0	11.6	9.8	9.3	9.3	11.0	1.15	65	-	
							El. Leistung / Input power [kW]	1.9	1.5	2.3	4.3	4.3	2.7	3.5	5.6	1.59			
							COP [-]	5.1	4.7	3.6	2.7	2.3	3.5	2.7	2.0	1.02			

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2004 und EN 14511:2007

Test results of air to water heat pumps based on EN 14511:2004 and EN 14511:2007

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	A10 / W35	A7 / W35 - 30	A2 / W35	A-7 / W35	A-15 / W35	A7 / W45	A20 / W55	A7 / W55	A-7 / W65	Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
								(80% r. H.)	(89% r. H.)	(84% r. H.)	(75% r. H.)	(-)	(89% r. H.)	(50% r. H.)	(89% r. H.)	(75% r. H.)			
Alpha-InnoTec GmbH Industriestrasse 3 D - 95359 Kasendorf	LWC 80	128-09-01	a	S	R407C	3.2	Heizleistung / Heat. cap. [kW]	-	8.8	8.0	6.0	4.6	8.5	11.5	8.5	5.7	1.7	53	-
							El. Leistung / Input power [kW]	-	2.1	2.3	2.2	2.1	2.5	3.6	3.1	3.1			
							COP [-]	-	4.1	3.5	2.7	2.2	3.4	3.2	2.7	1.9			
BARTL Wärmepumpen Wörthstrasse 13/1 D - 89077 Ulm	ECO 5LCI	146-10-06	a	S	R404A	2.8	Heizleistung / Heat. cap. [kW]	13.1	10.8	9.1	7.5	6.0	11.6	13.5	10.8	6.8	2.1	74	59
							El. Leistung / Input power [kW]	3.0	2.8	2.8	2.9	3.0	3.7	4.5	4.5	4.5			
							COP [-]	4.4	3.9	3.3	2.6	2.0	3.2	3.0	2.4	1.5			
	ECO 6 LS/HG	160-10-20	c	S	R404A	5.6	Heizleistung / Heat. cap. [kW]	16.5	15.7	10.8	8.6	8.6	14.7	16.8	13.9	9.5	2.7	69	51
							El. Leistung / Input power [kW]	3.8	3.8	3.4	3.3	3.5	4.6	5.6	5.6	5.3			
							COP [-]	4.3	4.1	3.2	2.6	2.4	3.2	3.0	2.5	1.8			
CTC Giersch AG Bahnhofstrasse 60 CH - 8112 Otelfingen	MLW 8	119-07-09	a	S	R407C	8.0	Heizleistung / Heat. cap. [kW]	11.5	10.0	8.5	6.7	5.3	9.6	12.8	9.5	6.5	1.8	60	59
							El. Leistung / Input power [kW]	3.0	2.9	2.8	2.8	2.7	3.4	4.3	4.1	3.9			
							COP [-]	3.9	3.4	3.0	2.4	1.9	2.8	3.0	2.3	1.7			
	MLW 12	120-08-01	a	S	R407C	8.5	Heizleistung / Heat. cap. [kW]	13.8	11.9	10.5	8.2	6.5	11.1	17.0	10.7	7.8	2.4	67	59
							El. Leistung / Input power [kW]	3.6	3.5	3.4	3.3	3.2	4.1	5.5	4.9	4.6			
							COP [-]	3.8	3.4	3.0	2.5	2.1	2.7	3.1	2.2	1.7			
Elcotherm AG Sarganserstrasse 100 CH - 7324 Vilters	AEROTOP G10	164-11-03	b	S	R407C	4.0	Heizleistung / Heat. cap. [kW]	14.1	12.5	9.2	7.6	6.4	12.6	15.5	12.0	7.3	2.1	59	-
							El. Leistung / Input power [kW]	2.7	2.7	2.5	2.5	2.4	3.3	4.1	4.0	3.5			
							COP [-]	5.2	4.7	3.7	3.1	2.7	3.8	3.7	3.0	2.1			
	AEROTOP G07-14M	185-12-02	b,d	S	R407C	4.6	Heizleistung / Heat. cap. [kW]	5.2	11.0	10.0	10.7	10.3	10.4	6.0	9.5	9.2	1.9	55	-
							El. Leistung / Input power [kW]	1.0	2.2	2.6	3.6	4.2	2.7	1.6	3.3	4.6			
							COP [-]	5.0	5.0	3.8	2.9	2.4	3.9	3.6	2.9	2.0			
Friap AG Ey 9 CH - 3036 Ittigen	FLWi 1-6	132-09-05	a	S	R407C	4.0	Heizleistung / Heat. cap. [kW]	-	8.2	6.2	5.2	3.9	7.8	9.5	7.5	5.1	1.4	53	52
							El. Leistung / Input power [kW]	-	2.1	1.9	1.9	1.8	2.5	2.9	2.9	2.6			
							COP [-]	-	4.0	3.2	2.8	2.2	3.2	3.2	2.6	1.9			
	FLWi 1-12	107-06-04	a	S	R407C	7.2	Siehe / see Sapac SA, Sirocco [kW]	16.7	15.4	12.7	11.0	8.7	15.5	19.6	16.0	10.1	2.9	67	59
							Siehe / see Sapac SA, Sirocco [kW]	4.4	4.4	4.2	4.1	4.0	5.2	6.5	6.3	5.7			
							COP [-]	3.8	3.5	3.0	2.7	2.2	3.0	3.0	2.5	1.8			
	LWsp 1-8	135-09-08	c	S	R407C	6.0	Heizleistung / Heat. cap. [kW]	11.8	10.9	8.7	6.5	4.9	10.7	13.5	10.2	6.7	1.9	59	47
							El. Leistung / Input power [kW]	2.8	2.8	2.6	2.5	2.4	3.3	4.2	4.0	3.6			
							COP [-]	4.2	3.9	3.3	2.6	2.1	3.2	3.2	2.6	1.9			

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2004 und EN 14511:2007

Test results of air to water heat pumps based on EN 14511:2004 and EN 14511:2007

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions	A10 / W35	A7 / W35 - 30	A2 / W35	A-7 / W35	A-15 / W35	A7 / W45	A20 / W55	A7 / W55	A-7 / W65	Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor		
								(80% r. H.)	(89% r. H.)	(84% r. H.)	(75% r. H.)	(-)	(89% r. H.)	(50% r. H.)	(89% r. H.)	(75% r. H.)					
Friap AG Ey 9 CH - 3036 Ittigen	LWsp 1-12	136-09-09	c	S	R407C	6.8	Heizleistung / Heat. cap. [kW]	16.9	14.9	12.3	9.2	7.1	14.5	18.9	14.5	9.3	2.7	62	49		
							El. Leistung / Input power [kW]	3.9	3.8	3.7	3.5	3.3	4.5	5.8	5.5	5.0					
							COP [-]	4.3	3.9	3.4	2.6	2.2	3.2	3.3	2.6	1.9					
Green Terra AG Wiesenstrasse 1a CH - 8865 Bilten	AW 13 EVI	189-12-06	c	S	R407C	10.1	Siehe / see Wamak s.r.o, AW 13 EVI														
Harreither GmbH Oberland 71 A - 3334 Gaflenz	Klima Star Air 10	130-09-03	b	S	R407C	7.9	Heizleistung / Heat. cap. [kW]	-	11.1	9.5	7.1	5.5	11.2	16.5	11.2	7.4	2.3	67	-		
							El. Leistung / Input power [kW]	-	3.2	3.0	2.9	2.8	3.8	5.0	4.6	4.1					
							COP [-]	-	3.5	3.1	2.4	2.0	3.0	3.3	2.4	1.8					
HAUTEC GmbH An der Molkerei 9 D - 47551 Bedburg-Hau	HWL-A 43	113-07-03	b	S	R404A	2.7	Heizleistung / Heat. cap. [kW]	10.9	8.8	7.5	5.7	4.4	8.7	10.9	7.9	4.4	1.8	62	-		
							El. Leistung / Input power [kW]	2.6	2.4	2.3	2.0	1.8	2.7	3.4	3.0	2.2					
							COP [-]	4.2	3.7	3.3	2.8	2.5	3.2	3.2	2.7	2.0					
Heim AG Wittenwilerstrasse 31 CH - 8355 Aadorf	HLWi 1-12	107-06-04	a	S	R407C	7.2	Heizleistung / Heat. cap. [kW]	16.7	15.4	12.7	11.0	8.7	15.5	19.6	16.0	10.1	2.9	67	59		
							El. Leistung / Input power [kW]	4.4	4.4	4.2	4.1	4.0	5.2	6.5	6.3	5.7					
							COP [-]	3.8	3.5	3.0	2.7	2.2	3.0	3.0	2.5	1.8					
Heliotherm Wärmepumpentechnik GmbH Sportplatz 18 A - 6336 Langkampfen	HP10L-K-BC	159-10-19	c	S	R410A	8.3	Heizleistung / Heat. cap. [kW]	13.1	12.3	10.1	8.0	6.1	11.6	13.6	10.7	5.8	2.1	66	51		
							El. Leistung / Input power [kW]	2.4	2.4	2.4	2.4	2.3	3.0	3.6	3.7	3.5					
							COP [-]	5.4	5.1	4.2	3.3	2.6	3.8	3.7	2.9	1.7					
	HP10L-WEB	141-10-01	c	S	R410A	13.9	Heizleistung / Heat. cap. [kW]	13.4	12.5	10.0	8.0	6.4	11.7	14.8	10.8	-	2.2	63	45		
							El. Leistung / Input power [kW]	2.4	2.4	2.4	2.3	2.3	3.0	3.7	3.7	-					
							COP [-]	5.5	5.2	4.2	3.4	2.8	3.9	4.0	2.9	-					
H2Q Systems GmbH Welzheimer Strasse 53 D - 71554 Weissach im Tal	H2Q-1200	140-09-13	c,d	S	R410A	3.8	Heizleistung / Heat. cap. [kW]	12.4	11.8	9.1	7.6	4.4	9.8	13.3	10.6	5.5	2.2	64	-		
							El. Leistung / Input power [kW]	2.9	2.9	2.8	2.8	2.4	3.4	4.3	4.1	3.2					
							COP [-]	4.3	4.0	3.3	2.7	1.8	2.9	3.1	2.5	1.7					
KNV Energietechnik GmbH Gahbergasse 11 A - 4861 Schörfing	LWSE - 10	131-09-04	c	S	R407C	7.0	Heizleistung / Heat. cap. [kW]	13.2	12.2	9.3	7.9	6.3	11.8	14.2	11.2	7.5	2.1	65	50		
							El. Leistung / Input power [kW]	3.0	2.9	2.8	2.7	2.6	3.5	4.4	4.2	3.9					
							COP [-]	4.5	4.2	3.4	2.9	2.4	3.3	3.2	2.6	1.9					
Multi Energie AG Wiesentalstrasse 20 CH - 8355 Aadorf	RLW 12.3	119-07-09	a	S	R407C	8.0	Siehe / see CTC Giersch AG, MLW 8														
	RLW 16.3	120-08-01	a	S	R407C	8.5	Siehe / see CTC Giersch AG, MLW 12														

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2004 und EN 14511:2007

Test results of air to water heat pumps based on EN 14511:2004 and EN 14511:2007

Auftraggeber Customer	Gerät Type	Prüfnummer Test number	Bauart Type of construction	Produktart Product type	Kältemittel Refrigerant	Kältemittelmenge [kg] Capacity of refrigerant	Prüfbedingungen Test conditions											Volumenstrom [m³/h] Volume flow	Schalleistungspegel aussen [dB(A)] Sound power level outdoor	Schalleistungspegel innen [dB(A)] Sound power level indoor
							A10 / W35 (80% r. H.)	A7 / W35 - 30 (89% r. H.)	A2 / W35 (84% r. H.)	A-7 / W35 (75% r. H.)	A-15 / W35 (-)	A7 / W45 (89% r. H.)	A20 / W55 (50% r. H.)	A7 / W55 (89% r. H.)	A-7 / W65 (75% r. H.)	Heizleistung / Heat. cap. [kW]	El. Leistung / Input power [kW]			
Ochsner Wärmepumpen GmbH Ochsner-Strasse 1 A - 3350 Haag	GMLW 5 (VHS)	147-11-05	c	S	R407C	4.7	Heizleistung / Heat. cap. [kW]	6.8	6.3	5.3	4.0	3.1	5.9	7.4	5.5	3.6	1.1	54	41	
							El. Leistung / Input power [kW]	1.4	1.4	1.3	1.3	1.2	1.6	2.0	1.9	1.7				
							COP [-]	5.0	4.7	3.9	3.1	2.6	3.6	3.7	2.9	2.1				
	GMLW 9 plus (VHS) GMLW 9 plus (VHS/M)	191-12-08	c	S	R407C	11.5	Heizleistung / Heat. cap. [kW]	11.0	10.2	8.8	6.8	5.4	10.0	12.6	10.2	7.0	1.8	64	51	
							El. Leistung / Input power [kW]	2.2	2.2	2.2	2.0	2.0	2.6	3.2	3.2	3.0				
							COP [-]	4.9	4.5	4.0	3.3	2.7	3.9	3.9	3.2	2.3				
		GMLW 14 plus (VHS) GMLW 14 plus (VHS/M)	171-11-11	c	S	R407C	11.6	Heizleistung / Heat. cap. [kW]	16.0	15.1	13.2	10.6	8.2	15.0	18.5	15.2	11.1	2.6	55	48
								El. Leistung / Input power [kW]	3.0	3.0	3.0	3.0	2.9	3.7	4.6	4.6	4.4			
								COP [-]	5.3	5.0	4.4	3.6	2.8	4.1	4.0	3.3	2.5			
PZP Heating a.s. Dobre 149 CZ - 51793 Dobre	HP3AWX 08	190-12-07	b	S	R410A	2.7	Heizleistung / Heat. cap. [kW]	11.6	11.1	8.8	7.1	5.7	10.5	12.6	10.0	7.0	1.9	66	-	
							El. Leistung / Input power [kW]	2.3	2.4	2.3	2.3	2.3	2.9	3.5	3.5	3.4				
							COP [-]	5.0	4.7	3.8	3.1	2.5	3.6	3.5	2.9	2.0				
Swisstherm AG Hardstrasse 21 CH - 5103 Wildegg	AWX 08	149-10-09	b	S	R404A	3.8	Heizleistung / Heat. cap. [kW]	9.3	8.7	6.6	5.1	3.9	8.1	9.4	7.4	4.4	1.5	66	-	
							El. Leistung / Input power [kW]	2.3	2.3	2.1	2.0	1.9	2.6	3.2	3.0	2.6				
							COP [-]	4.0	3.8	3.1	2.5	2.0	3.2	3.0	2.5	1.7				
	AWX 08	190-12-07	b	S	R410A	2.7	Siehe / see PZP Heating a.s., HP3AWX 08													
Technibel S.A.S ZI Reyrieux - BP 131 F - 01601 Trevoux Cedex	PHRIE 157 F	183-11-23	b,d	S	R410A	3.5	Heizleistung / Heat. cap. [kW]	17.2	16.4	11.3	9.9	7.7	15.9	13.5	13.0	7.0	2.8	70	-	
							El. Leistung / Input power [kW]	3.6	3.7	3.2	3.3	3.2	4.4	3.9	4.6	3.8				
							COP [-]	4.7	4.5	3.5	3.0	2.4	3.6	3.5	2.8	1.9				
Voß Wärmepumpen GmbH Lange Gasse 20 D - 93468 Furth im Wald	LW 12 - basic	134-09-07	c	S	R407C	17.0	Heizleistung / Heat. cap. [kW]	12.6	11.8	9.7	7.7	6.1	11.3	14.1	11.1	7.4	2.0	63	50	
							El. Leistung / Input power [kW]	2.6	2.6	2.6	2.6	2.5	3.2	3.9	3.9	3.8				
							COP [-]	4.8	4.5	3.7	3.0	2.4	3.6	3.7	2.9	1.9				
Wamak s.r.o. Hodrusa - Harmre 1118 SK - 96661 Hodrusa-Hamre	AW 13 EVI	189-12-06	c	S	R407C	10.1	Heizleistung / Heat. cap. [kW]	14.9	12.9	11.0	9.5	7.9	13.0	17.3	13.3	9.7	2.4	64	-	
							El. Leistung / Input power [kW]	3.1	3.0	2.9	2.9	2.9	3.6	4.6	4.5	4.2				
							COP [-]	4.8	4.3	3.8	3.2	2.7	3.6	3.6	3.0	2.3				
Wolf GmbH Industriestrasse D - 84048 Mainburg	BWL-1-10	150-10-10	b	S	R407C	4.4	Heizleistung / Heat. cap. [kW]	10.6	9.4	9.4	8.5	6.7	12.2	14.5	11.8	8.1	2.1	56	-	
							El. Leistung / Input power [kW]	2.3	2.1	2.6	2.7	2.6	3.4	4.1	4.1	3.9				
							COP [-]	4.6	4.4	3.7	3.2	2.5	3.6	3.5	2.9	2.1				

Prüfresultate Luft/Wasser-Wärmepumpen basierend auf der EN 14511:2004 und EN 14511:2007

Test results of air to water heat pumps based on EN 14511:2004 and EN 14511:2007

Auftraggeber Customer	Gerät Type	Prüfbedingungen Test conditions
	Prüfnummer Test number Bauart Type of construction Produktart Product type Kältemittel Refrigerant Kältemittelmenge [kg] Capacity of refrigerant	A10 / W35 (80% r. H.) A7 / W35 - 30 (89% r. H.) A2 / W35 (84% r. H.) A-7 / W35 (75% r. H.) A-15 / W35 (-) A7 / W45 (89% r. H.) A20 / W55 (50% r. H.) A7 / W55 (89% r. H.) A-7 / W55 (75% r. H.) Volumenstrom [m³/h] Volume flow Schalleistungspegel aussen [dB(A)] Sound power level outdoor Schalleistungspegel innen [dB(A)] Sound power level indoor

Bauart / Type of construction

- a Kompaktwärmepumpe für Innenaufstellung / Compact heat pump for indoor installation
- b Kompaktwärmepumpe für Aussenaufstellung / Compact heat pump for outdoor installation
- c Splitwärmepumpe / Split heat pump
- d Leistungsgeregelte Wärmepumpe mit Frequenzumformer / Output-modulated heat pump with frequency converter

Produktart / Product typ

- S Serienprodukt / Standard product
- P Prototyp / Prototype
- E Einzelanfertigung / Single-unit production

Abkürzungen / Abbreviations

- A Lufttemperatur / Air temperature
- W Wassertemperatur / Water temperature
- r. H. relative Luftfeuchtigkeit / relative humidity

Schalleistungspegel aussen / Sound power level outdoor:

bezieht sich auf das Geräusch draussen (wird vom Nachbar wahrgenommen) / relates to the noise outside (is perceived by the neighbor)

Schalleistungspegel innen / Sound power level indoor:

bezieht sich auf das Geräusch drinnen (z.B. im Aufstellungsraum) / it relates to the indoor noise (e.g. in the installation room)