

PRD N° 004 B





# Certificazione di Prodotto

#### **Product Certification**

Certificato N. Certificate No.

ICIM-PDC-000191

TITOLARE DEL CERTIFICATO / CERTIFICATE HOLDER

#### **Bosch Thermotechnik GmbH (Buderus)**

Sophienstraße 30-32 35576 Wetzlar - Germany

UNITÀ PRODUTTIVE / PRODUCTION SITES

2022101401DB - IT

PRODOTTI / PRODUCT

# POMPE DI CALORE HEAT PUMPS

PRODOTTO-TIPO PRODUCT TYPE

Aria/Acqua
Air/Water

**BRAND** 

Buderus

SOTTO-TIPO SUBTYPE

Logatherm WLW276 16/19/24

MODELLI MODEL(S) WLW276 16; WLW276 16 IP; WLW276 16 P WLW276 16 V; WLW276 19; WLW276 19 IP WLW276 19 P; WLW276 19 V; WLW276 24 WLW276 24 IP; WLW276 24 P; WLW276 24 V

CONFORMEMENTE ALLA NORMA ED AL DOCUMENTO NORMATIVO ICIM IN COMPLIANCE WITH THE STANDARD AND WITH ICIM NORMATIVE DOCUMENT

EN 14511:2018, EN 14825:2018, EN 12102-1:2017, KEYMARK Certification Scheme for Heat Pumps, ICIM 0440CS

Il presente Certificato autorizza il titolare all' utilizzo del marchio di conformità KEYMARK insieme al numero di registrazione specificato. Si veda il database KEYMARK per le informazioni dettagliate - Per verificare la validità del certificato si consulti www.icim.it

This certificate entitles the holder to use the KEYMARK mark of conformity in conjunction with the specified registration number. See HP KEYMARK database for detailed information - To check the validity of this certificate please visit www.icim.it

Vincenzo Delacqua

Rappresentante Direzione / Management Representative

ICIM S.p.A.

PRIMA EMISSIONE FIRST ISSUE EMISSIONE CORRENTE CURRENT ISSUE DATA DI SCADENZA EXPIRING DATE

23/01/2023

23/01/2023

22/01/2033



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#### This information was generated by the HP KEYMARK database on 30 Jan 2023

#### **Login**

Summary of	Buderus Logatherm WLW276 16/19/24	Reg. No.	ICIM-PDC-000191	
Certificate Holder				
Name	Bosch Thermotechnik GmbH (Buderus)	Bosch Thermotechnik GmbH (Buderus)		
Address	Sophienstraße 30-32	Zip	35576	
City	Wetzlar	Country	Germany	
Certification Body	ICIM S.p.A.	·		
Subtype title	Buderus Logatherm WLW276 16/19/24			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R32			
Mass of Refrigerant	7.9 kg			
Certification Date	23.01.2023			
Testing basis	Heat Pump KEYMARK V11			

# **Model: WLW276 16**

Configure model		
Model name	WLW276 16	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

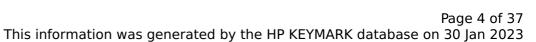
EN 14511-2		
	Low temperature	Medium temperature
Heat output	25.38 kW	23.06 kW
El input	5.81 kW	9.04 kW
СОР	4.37	2.55

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	173 %	127 %
Prated	19.42 kW	16.78 kW
SCOP	4.41	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.18 kW	13.04 kW
COP Tj = -7°C	2.63	1.93
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2$ °C	11.61 kW	9.5 kW
COP Tj = +2°C	4.63	3.25
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = $+7^{\circ}$ C	12.42 kW	11.1 kW
COP Tj = +7°C	5.49	4.4
Cdh Tj = +7 °C	0.98	0.98





succession of the second		Titt database on so jan 202
Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	6.87	6.15
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	17.18 kW	14.2 kW
COP Tj = Tbiv	2.63	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.67 kW	9.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.76 kW	7.63 kW
Annual energy consumption Qhe	9104 kWh	10709 kWh



# Model: WLW276 16 IP

Configure model		
Model name	WLW276 16 IP	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25.38 kW	23.06 kW
El input	5.81 kW	9.04 kW
СОР	4.37	2.55

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	173 %	127 %
Prated	19.42 kW	16.78 kW
SCOP	4.41	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.18 kW	13.04 kW
COP Tj = -7°C	2.63	1.93
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2$ °C	11.61 kW	9.5 kW
COP Tj = +2°C	4.63	3.25
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = $+7^{\circ}$ C	12.42 kW	11.1 kW
COP Tj = +7°C	5.49	4.4
Cdh Tj = +7 °C	0.98	0.98



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Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	6.87	6.15
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	17.18 kW	14.2 kW
COP Tj = Tbiv	2.63	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.67 kW	9.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
РСК	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.76 kW	7.63 kW
Annual energy consumption Qhe	9104 kWh	10709 kWh

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# Model: WLW276 16 P

Configure model		
Model name	WLW276 16 P	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25.38 kW	23.06 kW
El input	5.81 kW	9.04 kW
СОР	4.37	2.55

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	173 %	127 %
Prated	19.42 kW	16.78 kW
SCOP	4.41	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.18 kW	13.04 kW
COP Tj = -7°C	2.63	1.93
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	11.61 kW	9.5 kW
COP Tj = +2°C	4.63	3.25
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.42 kW	11.1 kW
COP Tj = +7°C	5.49	4.4
Cdh Tj = +7 °C	0.98	0.98



	-	
Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	6.87	6.15
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	17.18 kW	14.2 kW
COP Tj = Tbiv	2.63	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.67 kW	9.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.76 kW	7.63 kW
Annual energy consumption Qhe	9104 kWh	10709 kWh



# Model: WLW276 16 V

Configure model		
Model name	WLW276 16 V	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	25.38 kW	23.06 kW		
El input	5.81 kW	9.04 kW		
СОР	4.37	2.55		

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	173 %	127 %
Prated	19.42 kW	16.78 kW
SCOP	4.41	3.24
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.18 kW	13.04 kW
COP Tj = -7°C	2.63	1.93
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	11.61 kW	9.5 kW
COP Tj = +2°C	4.63	3.25
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.42 kW	11.1 kW
COP Tj = +7°C	5.49	4.4
Cdh Tj = +7 °C	0.98	0.98



Pdh Tj = 12°C	14.75 kW	13.45 kW
COP Tj = 12°C	6.87	6.15
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	17.18 kW	14.2 kW
COP Tj = Tbiv	2.63	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.67 kW	9.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.76 kW	7.63 kW
Annual energy consumption Qhe	9104 kWh	10709 kWh



# **Model: WLW276 19**

Configure model		
Model name WLW276 19		
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	30 kW	27.7 kW		
El input	6.88 kW	11.49 kW		
СОР	4.36	2.41		

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	172 %	126 %
Prated	22.5 kW	19.53 kW
SCOP	4.36	3.22
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.9 kW	15.95 kW
COP Tj = -7°C	2.6	1.94
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2^{\circ}$ C	12.43 kW	10.8 kW
COP Tj = +2°C	4.52	3.2
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.42 kW	11.47 kW
COP Tj = +7°C	5.46	4.41
Cdh Tj = +7 °C	0.98	0.98



Pdh Tj = 12°C	14.76 kW	13.8 kW
COP Tj = 12°C	6.85	6.14
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	19.9 kW	16.52 kW
COP Tj = Tbiv	2.6	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.28 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.3
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.21 kW	9.53 kW
Annual energy consumption Qhe	10646 kWh	12512 kWh



# Model: WLW276 19 IP

Configure model		
Model name WLW276 19 IP		
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	30 kW	27.7 kW	
El input	6.88 kW	11.49 kW	
СОР	4.36	2.41	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	0 dB(A)	0 dB(A)	
Sound power level outdoor	78 dB(A)	78 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	172 %	126 %
Prated	22.5 kW	19.53 kW
SCOP	4.36	3.22
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.9 kW	15.95 kW
COP Tj = -7°C	2.6	1.94
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	12.43 kW	10.8 kW
COP Tj = +2°C	4.52	3.2
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.42 kW	11.47 kW
COP Tj = +7°C	5.46	4.41
Cdh Tj = +7 °C	0.98	0.98



Pdh Tj = 12°C	14.76 kW	13.8 kW
COP Tj = 12°C	6.85	6.14
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	19.9 kW	16.52 kW
COP Tj = Tbiv	2.6	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.28 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.3
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.21 kW	9.53 kW
Annual energy consumption Qhe	10646 kWh	12512 kWh





# Model: WLW276 19 P

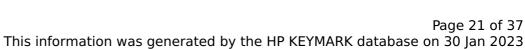
Configure model		
Model name WLW276 19 P		
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	30 kW	27.7 kW	
El input	6.88 kW	11.49 kW	
СОР	4.36	2.41	

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

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EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	172 %	126 %
Prated	22.5 kW	19.53 kW
SCOP	4.36	3.22
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.9 kW	15.95 kW
COP Tj = -7°C	2.6	1.94
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2^{\circ}$ C	12.43 kW	10.8 kW
COP Tj = +2°C	4.52	3.2
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = $+7^{\circ}$ C	12.42 kW	11.47 kW
COP Tj = +7°C	5.46	4.41
Cdh Tj = +7 °C	0.98	0.98



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#### This information was generated by the HP KEYMARK database on 30 Jan 2023

Pdh Tj = 12°C	14.76 kW	13.8 kW
COP Tj = 12°C	6.85	6.14
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	19.9 kW	16.52 kW
COP Tj = Tbiv	2.6	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.28 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.3
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.21 kW	9.53 kW
Annual energy consumption Qhe	10646 kWh	12512 kWh



# Model: WLW276 19 V

Configure model		
Model name	WLW276 19 V	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	30 kW	27.7 kW
El input	6.88 kW	11.49 kW
СОР	4.36	2.41

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

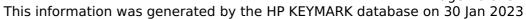
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	172 %	126 %
Prated	22.5 kW	19.53 kW
SCOP	4.36	3.22
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.9 kW	15.95 kW
COP Tj = -7°C	2.6	1.94
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2^{\circ}$ C	12.43 kW	10.8 kW
COP Tj = +2°C	4.52	3.2
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.42 kW	11.47 kW
COP Tj = +7°C	5.46	4.41
Cdh Tj = +7 °C	0.98	0.98



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This information was generated by the HP KEYMARK database on 30 Jan 2023

Pdh Tj = 12°C	14.76 kW	13.8 kW
COP Tj = 12°C	6.85	6.14
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	19.9 kW	16.52 kW
COP Tj = Tbiv	2.6	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.28 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.3
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.21 kW	9.53 kW
Annual energy consumption Qhe	10646 kWh	12512 kWh





# **Model: WLW276 24**

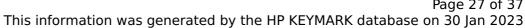
Configure model		
Model name	WLW276 24	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	35.78 kW	32.64 kW
El input	8.75 kW	14.01 kW
СОР	4.09	2.33

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	124 %
Prated	25.5 kW	22.97 kW
SCOP	4.31	3.18
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.6 kW	18.82 kW
COP Tj = -7°C	2.6	1.89
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	13.25 kW	12.44 kW
COP Tj = +2°C	4.41	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.44 kW	11.48 kW
COP Tj = +7°C	5.44	4.4
Cdh Tj = +7 °C	0.98	0.98
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#### This information was generated by the HP KEYMARK database on 30 Jan 2023

Pdh Tj = 12°C	14.77 kW	13.82 kW
COP Tj = 12°C	6.83	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	22.6 kW	19.44 kW
COP Tj = Tbiv	2.6	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.38 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.17 kW	11.97 kW
Annual energy consumption Qhe	12250 kWh	14935 kWh



# Model: WLW276 24 IP

Configure model		
Model name	WLW276 24 IP	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

#### Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	35.78 kW	32.64 kW
El input	8.75 kW	14.01 kW
СОР	4.09	2.33

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



CEN heat pump KEYMARK

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	124 %
Prated	25.5 kW	22.97 kW
SCOP	4.31	3.18
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.6 kW	18.82 kW
COP Tj = -7°C	2.6	1.89
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	13.25 kW	12.44 kW
COP Tj = +2°C	4.41	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.44 kW	11.48 kW
COP Tj = +7°C	5.44	4.4
Cdh Tj = +7 °C	0.98	0.98



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This information was generated by the HP KEYMARK database on 30 Jan 2023

Pdh Tj = 12°C	14.77 kW	13.82 kW
COP Tj = 12°C	6.83	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	22.6 kW	19.44 kW
COP Tj = Tbiv	2.6	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.38 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.17 kW	11.97 kW
Annual energy consumption Qhe	12250 kWh	14935 kWh



# Model: WLW276 24 P

Configure model		
Model name	WLW276 24 P	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	35.78 kW	32.64 kW	
El input	8.75 kW	14.01 kW	
СОР	4.09	2.33	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	124 %
Prated	25.5 kW	22.97 kW
SCOP	4.31	3.18
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.6 kW	18.82 kW
COP Tj = -7°C	2.6	1.89
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	13.25 kW	12.44 kW
COP Tj = +2°C	4.41	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.44 kW	11.48 kW
COP Tj = +7°C	5.44	4.4
Cdh Tj = +7 °C	0.98	0.98



Annual energy consumption Qhe

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This information was generated by the HP KEYMARK database on 30 Ian 2023

14935 kWh

This information was gener	rated by the HP KEYMA	ARK database on 30 Jan 202
Pdh Tj = 12°C	14.77 kW	13.82 kW
COP Tj = 12°C	6.83	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	22.6 kW	19.44 kW
COP Tj = Tbiv	2.6	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.38 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.17 kW	11.97 kW
	+	+

12250 kWh



# Model: WLW276 24 V

Configure model		
Model name WLW276 24 V		
Application	Heating (medium temp)	
Units Outdoor		
Climate Zone n/a		
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply	3x400V 50Hz	

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	35.78 kW	32.64 kW	
El input	8.75 kW	14.01 kW	
СОР	4.09	2.33	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	124 %
Prated	25.5 kW	22.97 kW
SCOP	4.31	3.18
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.6 kW	18.82 kW
COP Tj = -7°C	2.6	1.89
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	13.25 kW	12.44 kW
COP Tj = +2°C	4.41	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.44 kW	11.48 kW
COP Tj = +7°C	5.44	4.4
Cdh Tj = +7 °C	0.98	0.98
	I	



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#### This information was generated by the HP KEYMARK database on 30 Jan 2023

Pdh Tj = 12°C	14.77 kW	13.82 kW
COP Tj = 12°C	6.83	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	22.6 kW	19.44 kW
COP Tj = Tbiv	2.6	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.38 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.6	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	100 W	80 W
PSB	50 W	50 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.17 kW	11.97 kW
Annual energy consumption Qhe	12250 kWh	14935 kWh