

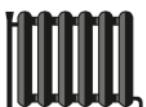


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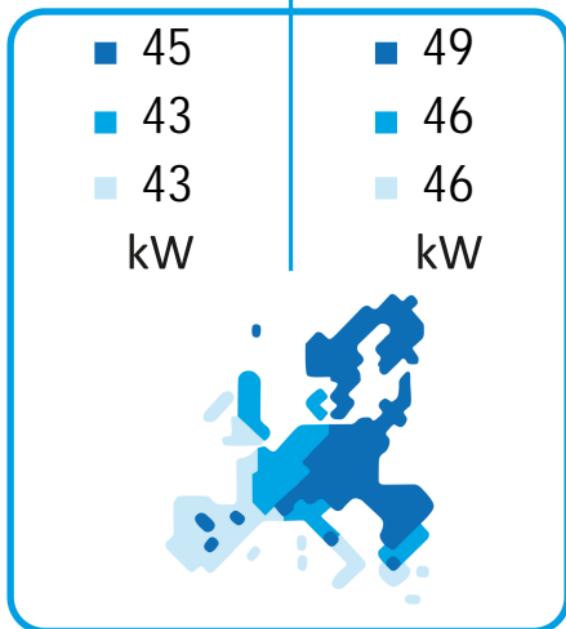
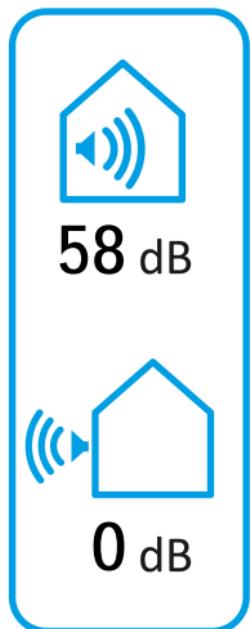
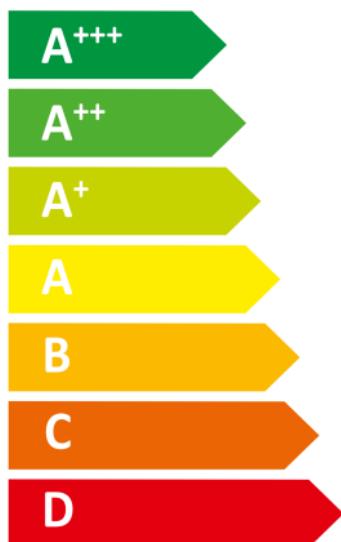
-weishaupt-

WWP W 45 ID



55 °C

35 °C



2019

811/2013

Produktdaten

Anbieter: **Max Weishaupt GmbH**
Max-Weishaupt-Straße
D-88475 Schwendi

Produkt: **Wärmeerzeuger** **WWP W 45 ID**

Die EU-Konformitätserklärung und die Anleitung (manual) liegen dem Produkt bei.

Nachstehende Produktdaten wurden auf Basis folgender Prüfgrundlagen ermittelt:
811/2013/EU, 813/2013/EU, EN 12102:2008, EN 14511-1:2011, EN 14511-2:2011, EN 14511-3:2011,
EN 14511-4:2011, EN 14825:2013

	Temperaturanwendung		
	35°C	55°C	
Wärmeerzeuger		WWP W 45 ID	
Klasse für die Jahreszeitbedingte Raumheizungs-Energieeffizienz (A+++ - D)	A+++	A+++	
Wärmennennleistung bei durchschnittlichen Klimaverhältnissen	46	43	kW
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	243	172	%
Jährlicher Energieverbrauch als Endenergie für Raumheizung bei durchschnittlichen Klimaverhältnissen	15220	19459	kWh
Schallleistungspegel im Gebäude, LWA	58		dB(A)
Besondere Vorkehrungen bei der Installation	siehe manual		
Wärmennennleistung bei kälteren Klimaverhältnissen	49	45	kW
Wärmennennleistung bei wärmeren Klimaverhältnissen	46	43	kW
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen	250	177	%
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen	245	173	%
Jährlicher Energieverbrauch für Raumheizung als Endenergie bei kälteren Klimaverhältnissen	18.692	24.051	kWh
Jährlicher Energieverbrauch für Raumheizung als Endenergie bei wärmeren Klimaverhältnissen	9754	12.524	kWh
Schallleistungspegel im Freien, LWA	0		dB(A)

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
Water-to-water heat pump			
Low-temperature heat pump:	Nein		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	low		
Climate:	average		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value
Rated heat output (*)	Prated	46	kW	Seasonal space heating energy efficiency	ηs	243	%	Degradation co-efficient (**)	Cdh	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j										
T _j = -7°C	Pdh	46,3	kW	T _j = -7°C	COPd	5,86		T _j = -7°C	Cdh	1,00
T _j = +2°C	Pdh	46,7	kW	T _j = +2°C	COPd	6,22		T _j = +2°C	Cdh	1,00
T _j = +7°C	Pdh	47,1	kW	T _j = +7°C	COPd	6,58		T _j = +7°C	Cdh	1,00
T _j = +12°C	Pdh	47,4	kW	T _j = +12°C	COPd	6,97		T _j = +12°C	Cdh	1,00
T _j = bivalent temperature	Pdh	46,2	kW	T _j = bivalent temperature	COPd	5,80		For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)		
T _j = operation limit temperature	Pdh	46,2	kW	T _j = operation limit temperature	COPd	5,80				
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh		kW	For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd			For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)		
Bivalent temperature	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C			
				Heating water operating limit temperature	WTOL	62	°C			

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,015	kW
Thermostat-off mode	P _{TO}	0,020	kW
Standby mode	P _{SB}	0,015	kW
Crankcase heater mode	P _{CK}	0,000	kW

Supplementary heater

Rated heat output (*)	Psup	0,00	kW
Type of energy input	electricity		

Other items

Capacity control		fixed	
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB
Annual energy consumption	Q _{HE}	15.220	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	10,00	m ³ /h

For heat combination heater:

Declared load profile		
Daily electricity consumption	Q _{elec}	kWh

Water heating energy efficiency	η _{wh}		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt GmbH, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(*) 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(T_j).

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

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
Low-temperature heat pump:	Water-to-water heat pump		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	medium		
Climate:	average		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value
Rated heat output (*)	Prated	43	kW	Seasonal space heating energy efficiency	ηs	172	%	Degradation co-efficient (**)	Cdh	
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j										
T _j = -7°C	Pdh	42,9	kW	T _j = -7°C	COPd	3,85		T _j = -7°C	Cdh	1,00
T _j = +2°C	Pdh	44,2	kW	T _j = +2°C	COPd	4,46		T _j = +2°C	Cdh	1,00
T _j = +7°C	Pdh	45,0	kW	T _j = +7°C	COPd	4,91		T _j = +7°C	Cdh	1,00
T _j = +12°C	Pdh	45,8	kW	T _j = +12°C	COPd	5,45		T _j = +12°C	Cdh	1,00
T _j = bivalent temperature	Pdh	42,5	kW	T _j = bivalent temperature	COPd	3,70		For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)		
T _j = operation limit temperature	Pdh	42,5	kW	T _j = operation limit temperature	COPd	3,70				
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh		kW	For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd			Cdh		
Bivalent temperature	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C			
				Heating water operating limit temperature	WTOL	62	°C			

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,015	kW
Thermostat-off mode	P _{TO}	0,020	kW
Standby mode	P _{SB}	0,015	kW
Crankcase heater mode	P _{CK}	0,000	kW

Supplementary heater

Rated heat output (*)	Psup	0,00	kW
Type of energy input	electricity		

Other items

Capacity control		fixed	
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB
Annual energy consumption	Q _{HE}	19.459	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	10,00	m ³ /h

For heat combination heater:

Declared load profile		
Daily electricity consumption	Q _{elec}	kWh

Water heating energy efficiency	η _{wh}		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt GmbH, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(*) 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(T_j).

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

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
	Water-to-water heat pump		
Low-temperature heat pump:	Nein		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	low		
Climate:	colder		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value		
Rated heat output (*)	Prated	49	kW	Seasonal space heating energy efficiency	ηs	250	%	Degradation co-efficient (**)	Cdh			
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j												
T _j = -7°C	Pdh	46,8	kW	T _j = -7°C	COPd	6,31		T _j = -7°C	Cdh	1,00		
T _j = +2°C	Pdh	47,1	kW	T _j = +2°C	COPd	6,62		T _j = +2°C	Cdh	1,00		
T _j = +7°C	Pdh	47,3	kW	T _j = +7°C	COPd	6,87		T _j = +7°C	Cdh	1,00		
T _j = +12°C	Pdh	47,4	kW	T _j = +12°C	COPd	6,93		T _j = +12°C	Cdh	1,00		
T _j = bivalent temperature	Pdh	46,4	kW	T _j = bivalent temperature	COPd	5,93		For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)				
T _j = operation limit temperature	Pdh	46,2	kW	T _j = operation limit temperature	COPd	5,80						
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh	46,6	kW	For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd	6,16						
Bivalent temperature	Tbiv	-20	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Cdh	1,00		
Heating water operating limit temperature												
Power consumption in modes other than active mode												
Off mode	P _{OFF}	0,015	kW	Rated heat output (*)	Psup	2,73	kW					
Thermostat-off mode	P _{TO}	0,020	kW	Type of energy input		electricity						
Standby mode	P _{SB}	0,015	kW									
Crankcase heater mode	P _{CK}	0,000	kW									
Other items												
Capacity control		fixed										
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB									
Annual energy consumption	Q _{HE}	18.692	kWh									
For heat combination heater:												
Declared load profile												
Daily electricity consumption	Q _{elec}		kWh	Water heating energy efficiency	ηwh		%					

Contact details Max Weishaupt GmbH, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(*) 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(T_j).

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

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
Low-temperature heat pump:	Water-to-water heat pump		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	medium		
Climate:	colder		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value		
Rated heat output (*)	Prated	45	kW	Seasonal space heating energy efficiency	ηs	177	%	Degradation co-efficient (**)	Cdh			
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j												
T _j = -7°C	Pdh	44,0	kW	T _j = -7°C	COPd	4,35		T _j = -7°C	Cdh	1,00		
T _j = +2°C	Pdh	44,8	kW	T _j = +2°C	COPd	4,85		T _j = +2°C	Cdh	1,00		
T _j = +7°C	Pdh	45,5	kW	T _j = +7°C	COPd	5,30		T _j = +7°C	Cdh	1,00		
T _j = +12°C	Pdh	46,1	kW	T _j = +12°C	COPd	5,68		T _j = +12°C	Cdh	1,00		
T _j = bivalent temperature	Pdh	42,8	kW	T _j = bivalent temperature	COPd	3,83		For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)				
T _j = operation limit temperature	Pdh	42,5	kW	T _j = operation limit temperature	COPd	3,70						
For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	Pdh	43,4	kW	For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	COPd	4,07						
Bivalent temperature	Tbiv	-20	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	Cdh	1,00		
Heating water operating limit temperature												
Power consumption in modes other than active mode												
Off mode	P _{OFF}	0,015	kW	Rated heat output (*)	Psup	2,70	kW					
Thermostat-off mode	P _{TO}	0,020	kW	Type of energy input		electricity						
Standby mode	P _{SB}	0,015	kW									
Crankcase heater mode	P _{CK}	0,000	kW									
Other items												
Capacity control		fixed										
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB									
Annual energy consumption	Q _{HE}	24.051	kWh									
For heat combination heater:												
Declared load profile					Water heating energy efficiency	ηwh		Degradation co-efficient (**)	Cdh			
	Daily electricity consumption	Q _{elec}		kWh								

Contact details Max Weishaupt GmbH, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(*) 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(T_j).

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

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
Low-temperature heat pump:	Water-to-water heat pump		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	low		
Climate:	warmer		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value			
Rated heat output (*)	Prated	46	kW	Seasonal space heating energy efficiency	ηs	245	%	Degradation co-efficient (**)	Cdh				
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j													
T _j = -7°C	Pdh		kW	T _j = -7°C	COPd			T _j = -7°C	Cdh				
T _j = +2°C	Pdh	46,2	kW	T _j = +2°C	COPd	5,80		T _j = +2°C	Cdh	1,00			
T _j = +7°C	Pdh	46,6	kW	T _j = +7°C	COPd	6,14		T _j = +7°C	Cdh	1,00			
T _j = +12°C	Pdh	47,2	kW	T _j = +12°C	COPd	6,71		T _j = +12°C	Cdh	1,00			
T _j = bivalent temperature	Pdh	46,2	kW	T _j = bivalent temperature	COPd	5,80		For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)					
T _j = operation limit temperature	Pdh	46,2	kW	T _j = operation limit temperature	COPd	5,80							
For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	Pdh		kW	For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	COPd			Cdh					
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C						
Heating water operating limit temperature													
Supplementary heater													
Off mode	P _{OFF}	0,015	kW	Rated heat output (*)	Psup	0,00	kW						
Thermostat-off mode	P _{TO}	0,020	kW	Type of energy input			electricity						
Standby mode	P _{SB}	0,015	kW										
Crankcase heater mode	P _{CK}	0,000	kW										

Other items

Capacity control		fixed					m ³ /h
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB				
Annual energy consumption	Q _{HE}	9.754	kWh				

For heat combination heater:

Declared load profile				Water heating energy efficiency	ηwh		%
Daily electricity consumption	Q _{elec}		kWh	Annual electricity consumption	AEC		kWh

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

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH		
Model:	WWP W 45 ID		
Low-temperature heat pump:	Water-to-water heat pump		
Equipped with a supplementary heater:	Nein		
Heat pump combination heater:			
Application:	medium		
Climate:	warmer		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value			
Rated heat output (*)	Prated	43	kW	Seasonal space heating energy efficiency	ηs	173	%	Degradation co-efficient (**)	Cdh				
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j													
T _j = -7°C	Pdh		kW	T _j = -7°C	COPd			T _j = -7°C	Cdh				
T _j = +2°C	Pdh	42,5	kW	T _j = +2°C	COPd	3,70		T _j = +2°C	Cdh	1,00			
T _j = +7°C	Pdh	43,6	kW	T _j = +7°C	COPd	4,17		T _j = +7°C	Cdh	1,00			
T _j = +12°C	Pdh	45,2	kW	T _j = +12°C	COPd	5,09		T _j = +12°C	Cdh	1,00			
T _j = bivalent temperature	Pdh	42,5	kW	T _j = bivalent temperature	COPd	3,70		For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)					
T _j = operation limit temperature	Pdh	42,5	kW	T _j = operation limit temperature	COPd	3,70							
For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	Pdh		kW	For air-to-water heat pumps: T _j = -15°C (if TOL < 20°C)	COPd			Cdh					
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C						
Heating water operating limit temperature													
WTOL													

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,015	kW
Thermostat-off mode	P _{TO}	0,020	kW
Standby mode	P _{SB}	0,015	kW
Crankcase heater mode	P _{CK}	0,000	kW

Supplementary heater

Rated heat output (*)	Psup	0,00	kW
Type of energy input	electricity		

Other items

Capacity control		fixed	
Sound power level, indoors/outdoors	L _{WA}	58 / 0	dB
Annual energy consumption	Q _{HE}	12.524	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	10,00	m ³ /h

For heat combination heater:

Declared load profile		
Daily electricity consumption	Q _{elec}	kWh

Water heating energy efficiency	η _{wh}		%
Annual electricity consumption	AEC		kWh

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(*) 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(T_j).

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