



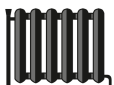
ENERG

енергия · ενεργεια



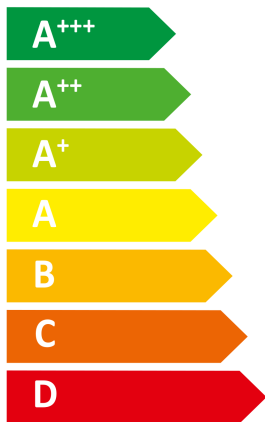
-weishaupt-

WWP LI 16-A R



55 °C

35 °C



50 dB

53 dB

■ 5	■ 5
■ 10	■ 10
■ 11	■ 8
kW	kW

2019

811/2013

Produktdaten

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

Produkt: **Wärmeerzeuger** **WWP LI 16-A R**

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 12102:2017, EN 14511-1:2017, EN 14511-2:2018, EN 14511-3:2018,
 EN 14511-4:2018, EN 14825:2018

	Temperaturanwendung		
	35°C	55°C	
Wärmeerzeuger	WWP LI 16-A R		
Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz (A+++ - D)	A+++	A++	
Wärmenennleistung bei durchschnittlichen Klimaverhältnissen	10	10	kW
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	188	145	%
Jährlicher Energieverbrauch als Endenergie für Raumheizung bei durchschnittlichen Klimaverhältnissen	4529	5317	kWh
Schallleistungspegel im Gebäude, LWA	50		dB(A)
Besondere Vorkehrungen bei der Installation	siehe manual		
Wärmenennleistung bei kälteren Klimaverhältnissen	5	5	kW
Wärmenennleistung bei wärmeren Klimaverhältnissen	8	11	kW
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen	155	118	%
Jahreszeitbedingte Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen	224	168	%
Jährlicher Energieverbrauch für Raumheizung als Endenergie bei kälteren Klimaverhältnissen	2905	3783	kWh
Jährlicher Energieverbrauch für Raumheizung als Endenergie bei wärmeren Klimaverhältnissen	2557	3320	kWh
Schallleistungspegel im Freien, LWA	53		dB(A)

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH
Model:	WWP LI 16-A R
	Air-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
Rated heat output (*)	Prated	10	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	Pdh	9,2	kW
T _j = +2°C	Pdh	6,2	kW
T _j = +7°C	Pdh	7,4	kW
T _j = +12°C	Pdh	8,5	kW
T _j = bivalent temperature	Pdh	9,9	kW
T _j = operation limit temperature	Pdh	9,9	kW
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	T _{biv}	-10	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	188	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	COPd	3,30	
T _j = +2°C	COPd	4,71	
T _j = +7°C	COPd	5,92	
T _j = +12°C	COPd	7,01	
T _j = bivalent temperature	COPd	2,91	
T _j = operation limit temperature	COPd	2,91	
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	Cdh	
T _j = -7°C	Cdh	0,90
T _j = +2°C	Cdh	0,90
T _j = +7°C	Cdh	0,90
T _j = +12°C	Cdh	0,90
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Cdh	

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	4.529	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) 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 LI 16-A R
	Air-to-water heat pump
Low-temperature heat pump:	Nein
Equipped with a supplementary heater:	Nein
Heat pump combination heater:	
Application:	medium
Climate:	average

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	P _{dh}	9,0	kW
T _j = +2°C	P _{dh}	5,9	kW
T _j = +7°C	P _{dh}	6,9	kW
T _j = +12°C	P _{dh}	8,0	kW
T _j = bivalent temperature	P _{dh}	9,6	kW
T _j = operation limit temperature	P _{dh}	9,6	kW
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	P _{dh}		kW
Bivalent temperature	T _{biv}	-10	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	145	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	COP _d	2,42	
T _j = +2°C	COP _d	3,68	
T _j = +7°C	COP _d	4,67	
T _j = +12°C	COP _d	5,84	
T _j = bivalent temperature	COP _d	2,17	
T _j = operation limit temperature	COP _d	2,17	
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COP _d		
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	C _{dh}	
T _j = -7°C	C _{dh}	0,90
T _j = +2°C	C _{dh}	0,90
T _j = +7°C	C _{dh}	0,90
T _j = +12°C	C _{dh}	0,90
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	C _{dh}	

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	5.317	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.

Technical parameters

- weishaupt -

Manufacturer:	Max Weishaupt GmbH
Model:	WWP LI 16-A R
	Air-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
Rated heat output (*)	Prated	5	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	Pdh	6,1	kW
T _j = +2°C	Pdh	6,3	kW
T _j = +7°C	Pdh	7,3	kW
T _j = +12°C	Pdh	8,2	kW
T _j = bivalent temperature	Pdh	4,3	kW
T _j = operation limit temperature	Pdh	4,3	kW
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	T _{biv}	-22	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	155	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	COPd	3,48	
T _j = +2°C	COPd	4,75	
T _j = +7°C	COPd	5,90	
T _j = +12°C	COPd	6,63	
T _j = bivalent temperature	COPd	2,24	
T _j = operation limit temperature	COPd	2,24	
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	Cdh	
T _j = -7°C	Cdh	0,90
T _j = +2°C	Cdh	0,90
T _j = +7°C	Cdh	0,90
T _j = +12°C	Cdh	0,90
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Cdh	0,90

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	2.905	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) 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 LI 16-A R
	Air-to-water heat pump
Low-temperature heat pump:	Nein
Equipped with a supplementary heater:	Nein
Heat pump combination heater:	
Application:	medium
Climate:	colder

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	Pdh	5,8	kW
T _j = +2°C	Pdh	5,8	kW
T _j = +7°C	Pdh	7,0	kW
T _j = +12°C	Pdh	8,1	kW
T _j = bivalent temperature	Pdh	4,5	kW
T _j = operation limit temperature	Pdh	4,5	kW
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	T _{biv}	-22	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	118	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	COPd	2,60	
T _j = +2°C	COPd	3,58	
T _j = +7°C	COPd	4,69	
T _j = +12°C	COPd	5,81	
T _j = bivalent temperature	COPd	1,96	
T _j = operation limit temperature	COPd	1,96	
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	Cdh	
T _j = -7°C	Cdh	0,90
T _j = +2°C	Cdh	0,90
T _j = +7°C	Cdh	0,90
T _j = +12°C	Cdh	0,90
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	Cdh	0,90

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	3.783	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) 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 LI 16-A R
	Air-to-water heat pump
Low-temperature heat pump:	Nein
Equipped with a supplementary heater:	Nein
Heat pump combination heater:	
Application:	low
Climate:	warmer

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh		kW
Tj = +2°C	Pdh	8,0	kW
Tj = +7°C	Pdh	7,1	kW
Tj = +12°C	Pdh	8,2	kW
Tj = bivalent temperature	Pdh	8,0	kW
Tj = operation limit temperature	Pdh	8,0	kW
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	Tbiv	2	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	224	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	COPd		
Tj = +2°C	COPd	3,94	
Tj = +7°C	COPd	5,50	
Tj = +12°C	COPd	6,60	
Tj = bivalent temperature	COPd	3,94	
Tj = operation limit temperature	COPd	3,94	
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	Cdh	
Tj = -7°C	Cdh	
Tj = +2°C	Cdh	0,90
Tj = +7°C	Cdh	0,90
Tj = +12°C	Cdh	0,90
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Cdh	

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	2.557	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) 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 LI 16-A R
	Air-to-water heat pump
Low-temperature heat pump:	Nein
Equipped with a supplementary heater:	Nein
Heat pump combination heater:	
Application:	medium
Climate:	warmer

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	P _{dh}		kW
T _j = +2°C	P _{dh}	10,7	kW
T _j = +7°C	P _{dh}	7,2	kW
T _j = +12°C	P _{dh}	8,0	kW
T _j = bivalent temperature	P _{dh}	10,7	kW
T _j = operation limit temperature	P _{dh}	10,7	kW
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	P _{dh}		kW
Bivalent temperature	T _{biv}	2	°C

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	168	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T _j			
T _j = -7°C	COP _d		
T _j = +2°C	COP _d	2,49	
T _j = +7°C	COP _d	3,84	
T _j = +12°C	COP _d	5,30	
T _j = bivalent temperature	COP _d	2,49	
T _j = operation limit temperature	COP _d	2,49	
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	COP _d		
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Heating water operating limit temperature	WTOL	60	°C

Item	Symbol	Value
Degradation co-efficient (**)	C _{dh}	
T _j = -7°C	C _{dh}	
T _j = +2°C	C _{dh}	0,90
T _j = +7°C	C _{dh}	0,90
T _j = +12°C	C _{dh}	0,90
For air-to-water heat pumps: T _j = -15°C (if TOL < -20°C)	C _{dh}	

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,026	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,025	kW
Crankcase heater mode	P _{CK}	0,000	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	50 / 53	dB
Annual energy consumption	Q _{HE}	3.320	kWh

For heat combination heater:

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

Supplementary heater

Rated heat output (*)	P _{sup}	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--	3.800	m ³ /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--		m ³ /h

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(Tj).

(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.