

## Subtype WPL 17 I(K)CS classic

Certificate Holder	STIEBEL ELTRON GmbH & Co KG
Address	Dr. Stiebel Straße 33
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	WPL 17 I(K)CS classic
Registration number	011-1W0224
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.6 kg
Certification Date	04.09.2019
Testing basis	HP KEYMARK certification scheme rules rev. no. 5

## Model WPL 17 IKCS classic

Model name	WPL 17 IKCS classic
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	No

## Outdoor Air/Water

### EN 14511-4 | Heating

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

### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.22 kW	3.75 kW
EI input	0.92 kW	1.49 kW
COP	4.60	2.51

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	161 %	126 %
Prated	9.20 kW	7.10 kW
SCOP	4.11	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.93 kW	6.28 kW
COP Tj = -7°C	2.61	2.13
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.16 kW	4.73 kW
COP Tj = +2°C	4.03	3.04
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.20 kW	4.20 kW

COP Tj = +7°C	5.25	4.44
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.14 kW
COP Tj = 12°C	8.03	6.21
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.93 kW	6.28 kW
COP Tj = Tbiv	2.61	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.91 kW	4.43 kW
Annual energy consumption Qhe	4621 kWh	4564 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	126 %	105 %
Prated	13.20 kW	12.70 kW
SCOP	3.23	2.69
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.96 kW	7.69 kW
COP Tj = -7°C	2.73	2.26
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.29 kW	4.89 kW
COP Tj = +2°C	4.24	3.49
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.19 kW	4.21 kW
COP Tj = +7°C	5.45	4.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.39 kW	3.23 kW
COP Tj = 12°C	8.03	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.96 kW	7.69 kW

COP Tj = Tbiv	2.73	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.13 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.27	1.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.20 kW	12.70 kW
Annual energy consumption Qhe	10074 kWh	11651 kWh
Pdh Tj = -15°C (if TOL	6.21	6.18
COP Tj = -15°C (if TOL	2.43	1.48
Cdh Tj = -15 °C	0.900	0.900

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	207 %	142 %
Prated	4.95 kW	4.30 kW
SCOP	5.24	3.63
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.95 kW	4.34 kW
COP Tj = +2°C	3.70	2.21
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.21 kW	3.96 kW
COP Tj = +7°C	4.90	3.21
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.31 kW	2.98 kW
COP Tj = 12°C	7.35	5.30
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.95 kW	4.34 kW
COP Tj = Tbiv	3.70	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.95 kW	4.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	2.21

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1262 kWh	1584 kWh

## Model WPL 17 ICS classic

Model name	WPL 17 ICS classic
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	No

## Outdoor Air/Water

### EN 14511-4 | Heating

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

### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.27 kW	3.81 kW
El input	0.90 kW	1.48 kW
COP	4.74	2.58

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	167 %	129 %
Prated	9.00 kW	7.20 kW
SCOP	4.24	3.30
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.98 kW	6.39 kW
COP Tj = -7°C	2.65	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.25 kW	4.81 kW
COP Tj = +2°C	4.19	3.14
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.26 kW	4.25 kW

COP Tj = +7°C	5.44	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.43 kW	3.18 kW
COP Tj = 12°C	8.21	6.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.98 kW	6.39 kW
COP Tj = Tbiv	2.65	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.35 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.65 kW	4.43 kW
Annual energy consumption Qhe	4387 kWh	4506 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	130 %	112 %
Prated	13.40 kW	13.00 kW
SCOP	3.33	2.86
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.13 kW	7.84 kW
COP Tj = -7°C	2.81	2.31
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.39 kW	4.96 kW
COP Tj = +2°C	4.42	3.61
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.26 kW	4.27 kW
COP Tj = +7°C	5.65	4.98
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.43 kW	3.26 kW
COP Tj = 12°C	8.21	6.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.13 kW	7.84 kW

COP Tj = Tbiv	2.81	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.24 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.40 kW	13.00 kW
Annual energy consumption Qhe	9919 kWh	11197 kWh
Pdh Tj = -15°C (if TOL	6.29	6.24
COP Tj = -15°C (if TOL	2.47	2.32
Cdh Tj = -15 °C	0.900	0.900

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	212 %	145 %
Prated	5.02 kW	4.40 kW
SCOP	5.38	3.69
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.02 kW	4.42 kW
COP Tj = +2°C	3.83	2.27
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.27 kW	4.02 kW
COP Tj = +7°C	5.06	3.30
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.35 kW	3.01 kW
COP Tj = 12°C	7.50	5.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.02 kW	4.42 kW
COP Tj = Tbiv	3.83	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.83	2.27



Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1247 kWh	1592 kWh

## Model WPL 17 ICS classic + SBB 300-1 Plus "Profile XL"

Model name	WPL 17 ICS classic + SBB 300-1 Plus "Profile XL"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	107 %
COP	2.55
Heating up time	3:51 h:min
Standby power input	63.2 W
Reference hot water temperature	55.9 °C
Mixed water at 40°C	485 l

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.27 kW	3.81 kW
El input	0.90 kW	1.48 kW
COP	4.74	2.58

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	167 %	129 %
Prated	9.00 kW	7.20 kW

SCOP	4.24	3.30
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.98 kW	6.39 kW
COP Tj = -7°C	2.65	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.25 kW	4.81 kW
COP Tj = +2°C	4.19	3.14
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.26 kW	4.25 kW
COP Tj = +7°C	5.44	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.43 kW	3.18 kW
COP Tj = 12°C	8.21	6.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.98 kW	6.39 kW
COP Tj = Tbiv	2.65	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.35 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.65 kW	4.43 kW
Annual energy consumption Qhe	4387 kWh	4506 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	130 %	112 %
Prated	13.40 kW	13.00 kW
SCOP	3.33	2.86
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.13 kW	7.84 kW
COP Tj = -7°C	2.81	2.31
Cdh Tj = -7 °C	0.900	0.900

Pdh Tj = +2°C	5.39 kW	4.96 kW
COP Tj = +2°C	4.42	3.61
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.26 kW	4.27 kW
COP Tj = +7°C	5.65	4.98
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.43 kW	3.26 kW
COP Tj = 12°C	8.21	6.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.13 kW	7.84 kW
COP Tj = Tbiv	2.81	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.24 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.40 kW	13.00 kW
Annual energy consumption Qhe	9919 kWh	11197 kWh
Pdh Tj = -15°C (if TOL	6.29	6.24
COP Tj = -15°C (if TOL	2.47	2.32
Cdh Tj = -15 °C	0.900	0.900

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	212 %	145 %
Prated	5.02 kW	4.40 kW
SCOP	5.38	3.69
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.02 kW	4.42 kW
COP Tj = +2°C	3.83	2.27
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.27 kW	4.02 kW
COP Tj = +7°C	5.06	3.30
Cdh Tj = +7 °C	0.90	0.90

Pdh Tj = 12°C	3.35 kW	3.01 kW
COP Tj = 12°C	7.50	5.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.02 kW	4.42 kW
COP Tj = Tbiv	3.83	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.83	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1247 kWh	1592 kWh

## Model WPL 17 IKCS classic + SBB 300-1 Plus "Profile XL"

Model name	WPL 17 IKCS classic + SBB 300-1 Plus "Profile XL"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	107 %
COP	2.55
Heating up time	3:51 h:min
Standby power input	63.2 W
Reference hot water temperature	55.9 °C
Mixed water at 40°C	485 l

## EN 16147 | Colder Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	134 %
COP	3.21
Heating up time	5:16 h:min
Standby power input	47.6 W
Reference hot water temperature	48.2 °C
Mixed water at 40°C	386 l

## EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	134 %
COP	3.21
Heating up time	5:16 h:min
Standby power input	47.6 W
Reference hot water temperature	48.2 °C
Mixed water at 40°C	386 l

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

#### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.22 kW	3.75 kW
El input	0.92 kW	1.49 kW
COP	4.60	2.51

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	161 %	126 %
Prated	9.20 kW	7.10 kW
SCOP	4.11	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.93 kW	6.28 kW
COP Tj = -7°C	2.61	2.13
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.16 kW	4.73 kW
COP Tj = +2°C	4.03	3.04
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.20 kW	4.20 kW
COP Tj = +7°C	5.25	4.44
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.14 kW
COP Tj = 12°C	8.03	6.21
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.93 kW	6.28 kW
COP Tj = Tbiv	2.61	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.91 kW	4.43 kW
Annual energy consumption Q <sub>he</sub>	4621 kWh	4564 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	126 %	105 %
Prated	13.20 kW	12.70 kW
SCOP	3.23	2.69
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.96 kW	7.69 kW
COP T <sub>j</sub> = -7°C	2.73	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.29 kW	4.89 kW
COP T <sub>j</sub> = +2°C	4.24	3.49
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.19 kW	4.21 kW
COP T <sub>j</sub> = +7°C	5.45	4.82
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.39 kW	3.23 kW
COP T <sub>j</sub> = 12°C	8.03	6.75
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	7.96 kW	7.69 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.73	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.13 kW	5.24 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.27	1.00
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.900	0.900
WTOL	60 °C	60 °C
P <sub>off</sub>	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.20 kW	12.70 kW
Annual energy consumption Q <sub>he</sub>	10074 kWh	11651 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL	6.21	6.18
COP T <sub>j</sub> = -15°C (if TOL	2.43	1.48



Cdh Tj = -15 °C	0.900	0.900
-----------------	-------	-------

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	207 %	142 %
Prated	4.95 kW	4.30 kW
SCOP	5.24	3.63
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.95 kW	4.34 kW
COP Tj = +2°C	3.70	2.21
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.21 kW	3.96 kW
COP Tj = +7°C	4.90	3.21
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.31 kW	2.98 kW
COP Tj = 12°C	7.35	5.30
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.95 kW	4.34 kW
COP Tj = Tbiv	3.70	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.95 kW	4.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	2.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1262 kWh	1584 kWh

## Model WPL 17 ICS classic + SBB 300-1 Plus "Profile M"

Model name	WPL 17 ICS classic + SBB 300-1 Plus "Profile M"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	n/a
Off-peak product	n/a

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	M
Efficiency $\eta_{DHW}$	86 %
COP	1.88
Heating up time	2:56 h:min
Standby power input	69.4 W
Reference hot water temperature	53.7 °C
Mixed water at 40°C	479 l

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.27 kW	3.81 kW
El input	0.90 kW	1.48 kW
COP	4.74	2.58

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	167 %	129 %
Prated	9.00 kW	7.20 kW

SCOP	4.24	3.30
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.98 kW	6.39 kW
COP Tj = -7°C	2.65	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.25 kW	4.81 kW
COP Tj = +2°C	4.19	3.14
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.26 kW	4.25 kW
COP Tj = +7°C	5.44	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.43 kW	3.18 kW
COP Tj = 12°C	8.21	6.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.98 kW	6.39 kW
COP Tj = Tbiv	2.65	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.35 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.65 kW	4.43 kW
Annual energy consumption Qhe	4387 kWh	4506 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	130 %	112 %
Prated	13.40 kW	13.00 kW
SCOP	3.33	2.86
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.13 kW	7.84 kW
COP Tj = -7°C	2.81	2.31
Cdh Tj = -7 °C	0.900	0.900

Pdh Tj = +2°C	5.39 kW	4.96 kW
COP Tj = +2°C	4.42	3.61
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.26 kW	4.27 kW
COP Tj = +7°C	5.65	4.98
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.43 kW	3.26 kW
COP Tj = 12°C	8.21	6.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.13 kW	7.84 kW
COP Tj = Tbiv	2.81	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.24 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.40 kW	13.00 kW
Annual energy consumption Qhe	9919 kWh	11197 kWh
Pdh Tj = -15°C (if TOL	6.29	6.24
COP Tj = -15°C (if TOL	2.47	2.32
Cdh Tj = -15 °C	0.900	0.900

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	212 %	145 %
Prated	5.02 kW	4.40 kW
SCOP	5.38	3.69
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.02 kW	4.42 kW
COP Tj = +2°C	3.83	2.27
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.27 kW	4.02 kW
COP Tj = +7°C	5.06	3.30
Cdh Tj = +7 °C	0.90	0.90

Pdh Tj = 12°C	3.35 kW	3.01 kW
COP Tj = 12°C	7.50	5.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.02 kW	4.42 kW
COP Tj = Tbiv	3.83	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.83	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1247 kWh	1592 kWh

## Model WPL 17 IKCS classic + SBB 300-1 Plus "Profile M"

Model name	WPL 17 IKCS classic + SBB 300-1 Plus "Profile M"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 50Hz
Off-peak product	n/a

### Outdoor Air/Water

#### EN 16147 | Average Climate

Declared load profile	M
Efficiency $\eta_{DHW}$	86 %
COP	1.88
Heating up time	2:56 h:min
Standby power input	69.4 W
Reference hot water temperature	53.7 °C
Mixed water at 40°C	479 l

#### EN 16147 | Colder Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	134 %
COP	3.21
Heating up time	5:16 h:min
Standby power input	47.6 W
Reference hot water temperature	48.2 °C
Mixed water at 40°C	386 l

#### EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	134 %
COP	3.21
Heating up time	5:16 h:min
Standby power input	47.6 W
Reference hot water temperature	48.2 °C
Mixed water at 40°C	386 l

### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

Defrost test	passed
Starting and operating test	passed

#### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.22 kW	3.75 kW
El input	0.92 kW	1.49 kW
COP	4.60	2.51

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	161 %	126 %
Prated	9.20 kW	7.10 kW
SCOP	4.11	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.93 kW	6.28 kW
COP Tj = -7°C	2.61	2.13
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.16 kW	4.73 kW
COP Tj = +2°C	4.03	3.04
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.20 kW	4.20 kW
COP Tj = +7°C	5.25	4.44
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.14 kW
COP Tj = 12°C	8.03	6.21
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.93 kW	6.28 kW
COP Tj = Tbiv	2.61	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	2.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.91 kW	4.43 kW
Annual energy consumption Q <sub>he</sub>	4621 kWh	4564 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	48 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	126 %	105 %
Prated	13.20 kW	12.70 kW
SCOP	3.23	2.69
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.96 kW	7.69 kW
COP T <sub>j</sub> = -7°C	2.73	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.29 kW	4.89 kW
COP T <sub>j</sub> = +2°C	4.24	3.49
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.19 kW	4.21 kW
COP T <sub>j</sub> = +7°C	5.45	4.82
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.39 kW	3.23 kW
COP T <sub>j</sub> = 12°C	8.03	6.75
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.900	0.900
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	7.96 kW	7.69 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.73	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.13 kW	5.24 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.27	1.00
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.900	0.900
WTOL	60 °C	60 °C
P <sub>off</sub>	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	13.20 kW	12.70 kW
Annual energy consumption Q <sub>he</sub>	10074 kWh	11651 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL	6.21	6.18
COP T <sub>j</sub> = -15°C (if TOL	2.43	1.48



Cdh Tj = -15 °C	0.900	0.900
-----------------	-------	-------

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	44 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	207 %	142 %
Prated	4.95 kW	4.30 kW
SCOP	5.24	3.63
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.95 kW	4.34 kW
COP Tj = +2°C	3.70	2.21
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.21 kW	3.96 kW
COP Tj = +7°C	4.90	3.21
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.31 kW	2.98 kW
COP Tj = 12°C	7.35	5.30
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.95 kW	4.34 kW
COP Tj = Tbiv	3.70	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.95 kW	4.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	2.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1262 kWh	1584 kWh