


# CERTIFICATE

<b>Certificate holder</b>	<b>Bosch Thermotechnik GmbH</b> <b>Sophienstr. 30-32</b> <b>35576 Wetzlar</b> <b>GERMANY</b>
<b>Production facility</b>	Aveiro, Changwon, Tranas
<b>Product</b>	Air/Water Heat pumps
<b>Type, Model</b>	Bosch Compress 3000 AWS-11, Bosch Compress 3000 AWS-13, Bosch Compress 3000 AWS-15
<b>Testing basis</b>	DIN EN 14511-1; DIN EN 14511-2; DIN EN 14511-3; DIN EN 14511-4:2013-12 DIN EN 14825:2013-12 DIN EN 12102:2013-10 DIN EN 16147:2011-04 European KEYMARK Scheme Heat Pumps Rev. 2 (2017-03)
<b>Mark of conformity</b>	
<b>Registration No.</b>	011-1W0136
<b>Valid until</b>	2027-07-31
<b>Right of use</b>	This certificate entitles the holder to use the mark of conformity shown above in conjunction with the specified registration number.

See annex for further information.

# ANNEX

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**Certificate**

011-1W0136 dated 2017-09-26

**Technical Data**See technical data sheet to the above mentioned registration number  
at [www.dincertco.tuv.com](http://www.dincertco.tuv.com)**Testing laboratory/  
Inspection body**RISE Research  
Institutes of Sweden AB  
PO Box 857  
501 15 Borås  
SWEDEN**Test report(s)**

4P07069-03 dated 2015-05-05



This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Summary of	Bosch Compress 3000 AWS-11/13/15	Reg. No.	011-1W0136
Certificate Holder			
Name	Bosch Thermotechnik GmbH		
Address	Sophienstraße 30-32	Zip	35576
City	Wetzlar	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	RISE Research Institutes of Sweden		
Subtype title	Bosch Compress 3000 AWS-11/13/15		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	HFC-410a		
Mass Of Refrigerant	2.3 kg		
Certification Date	26.09.2017		
Testing basis	n/a		

## Model: Bosch Compress 3000 AWS-13 MS

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.21 kW	8.02 kW
El input	2.09 kW	2.96 kW
COP	4.40	2.70
Indoor water flow rate	1.57 m <sup>3</sup> /h	0.88 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	121 %
Prated	11.00 kW	10.00 kW
SCOP	3.90	3.10
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	9.90 kW	8.40 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.00 kW	6.00 kW
COP Tj = +2 °C	3.72	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	11.20 kW	9.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	11.20 kW	9.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l
Heating up time	3:20 h:min

## Model: Bosch Compress 3000 AWS-13 M

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.21 kW	8.02 kW
El input	2.09 kW	2.96 kW
COP	4.40	2.70
Indoor water flow rate	1.57 m <sup>3</sup> /h	0.88 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate



<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	121 %
Prated	11.00 kW	10.00 kW
SCOP	3.90	3.10
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	9.90 kW	8.40 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.00 kW	6.00 kW
COP Tj = +2 °C	3.72	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	11.20 kW	9.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	11.20 kW	9.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Bosch Compress 3000 AWS-13 B

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.21 kW	8.02 kW
El input	2.09 kW	2.96 kW
COP	4.40	2.70
Indoor water flow rate	1.57 m <sup>3</sup> /h	0.88 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	121 %
Prated	11.00 kW	10.00 kW
SCOP	3.90	3.10
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	9.90 kW	8.40 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.00 kW	6.00 kW
COP Tj = +2 °C	3.72	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	11.20 kW	9.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	11.20 kW	9.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Model: Bosch Compress 3000 AWS-13 E

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.21 kW	8.02 kW
El input	2.09 kW	2.96 kW
COP	4.40	2.70
Indoor water flow rate	1.57 m <sup>3</sup> /h	0.88 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	121 %
Prated	11.00 kW	10.00 kW
SCOP	3.90	3.10
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	9.90 kW	8.40 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.00 kW	6.00 kW
COP Tj = +2 °C	3.72	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01



This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	11.20 kW	9.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	11.20 kW	9.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Model: Bosch Compress 3000 AWS-11 MS

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	8.80 kW	7.50 kW
COP Tj = -7 °C	2.71	2.10
Pdh Tj = +2 °C	5.90 kW	6.00 kW
COP Tj = +2 °C	3.81	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.30
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	10.00 kW	8.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	10.00 kW	8.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Bosch Compress 3000 AWS-11 M

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
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	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
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Pdh Tj = -7 °C	8.80 kW	7.50 kW
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Pdh Tj = +2 °C	5.90 kW	6.00 kW
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Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.30
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

Pdh Tj = Tbiv	10.00 kW	8.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	10.00 kW	8.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Bosch Compress 3000 AWS-11 B

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
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<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
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Pdh Tj = +2 °C	5.90 kW	6.00 kW
COP Tj = +2 °C	3.81	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.30
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

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COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	10.00 kW	8.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh

## Model: Bosch Compress 3000 AWS-11 E

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	8.80 kW	7.50 kW
COP Tj = -7 °C	2.71	2.10
Pdh Tj = +2 °C	5.90 kW	6.00 kW
COP Tj = +2 °C	3.81	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.30
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	10.00 kW	8.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	10.00 kW	8.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh

## Model: Bosch Compress 3000 AWS-15 MS

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate



<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Bosch Compress 3000 AWS-15 M

### General Data

Power supply	3x400V 50Hz
--------------	-------------

### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Bosch Compress 3000 AWS-15 B

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate



<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Model: Bosch Compress 3000 AWS-15 E

### General Data

Power supply	1x230V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh