

Subtype BI-BLOC R290 HWP-40-80x

Certificate Holder	Viessmann Climate Solutions GmbH & Co. KG
Address	Viessmannstr. 1
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Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	BI-BLOC R290 HWP-40-80x
Registration number	011-1W1015
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.2 kg
Certification Date	30.04.2025
Testing basis	HP KEYMARK certification scheme rules rev. 14

Model BI-BLOC R290 HWP-40-XWHT8-H

Model name	BI-BLOC R290 HWP-40-XWHT8-H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

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	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	4.08 kW	3.77 kW
η _s	176 %	127 %
P _{rated}	4.08 kW	3.77 kW
SCOP	4.48	3.25
T _{biv}	-8 °C	-8 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	3.45 kW	3.22 kW
COP T _j = -7°C	3.12	2.15
C _{dh} T _j = -7 °C	0.993	0.995
P _{dh} T _j = +2°C	2.52 kW	2.04 kW

COP Tj = +2°C	4.33	3.11
Cdh Tj = +2 °C	0.987	0.988
Pdh Tj = +7°C	2.56 kW	2.57 kW
COP Tj = +7°C	5.62	4.13
Cdh Tj = +7 °C	0.984	0.988
Pdh Tj = 12°C	2.36 kW	2.20 kW
COP Tj = 12°C	7.16	6.03
Cdh Tj = +12 °C	0.978	0.980
Pdh Tj = Tbiv	3.65 kW	3.38 kW
COP Tj = Tbiv	3.00	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.42 kW	3.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.995
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.68 kW	0.67 kW
Annual energy consumption Qhe	1883 kWh	2395 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	5.62 kW	5.36 kW
ηs	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW
COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	2.35 kW	1.90 kW
ηs	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	573 kWh	680 kWh

Model BI-BLOC R290 HWP-60-XWHT8-H

Model name	BI-BLOC R290 HWP-60-XWHT8-H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

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	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	5.46 kW	5.14 kW
η _s	180 %	141 %
P _{rated}	5.46 kW	5.14 kW
SCOP	4.58	3.61
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	4.80 kW	4.60 kW
COP T _j = -7°C	3.00	2.30
C _{dh} T _j = -7 °C	1.000	1.000
P _{dh} T _j = +2°C	2.90 kW	2.80 kW

COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.30 kW	2.50 kW
COP Tj = +7°C	5.50	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.60	5.60
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	6.51 kW	6.71 kW
ηs	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW
COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	663 kWh	817 kWh

Model BI-BLOC R290 HWP-80-XWHT8-H

Model name	BI-BLOC R290 HWP-80-XWHT8-H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

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	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	6.47 kW	6.20 kW
η _s	175 %	137 %
P _{rated}	6.47 kW	6.20 kW
SCOP	4.44	3.51
T _{biv}	-6 °C	-6 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.30 kW	5.10 kW
COP T _j = -7°C	3.00	2.30
C _{dh} T _j = -7 °C	0.900	1.000
P _{dh} T _j = +2°C	3.50 kW	3.50 kW

COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.40 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	7.68 kW	7.45 kW
ηs	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20

Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW
COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.83 kW	3.66 kW
ηs	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	849 kWh	1159 kWh

Model BI-BLOC R290 HWP-40-FST8-H

Model name	BI-BLOC R290 HWP-40-FST8-H
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	110 %
COP	2.66
Heating up time	02:10 h:min
Standby power input	46.9 W
Reference hot water temperature	53.7 °C
Mixed water at 40°C	260 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	99 %
COP	2.35
Heating up time	02:42 h:min
Standby power input	73.8 W
Reference hot water temperature	53.7 °C
Mixed water at 40°C	260 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	138 %
COP	3.25
Heating up time	02:16 h:min
Standby power input	61.2 W
Reference hot water temperature	55.6 °C
Mixed water at 40°C	260 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	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	4.08 kW	3.77 kW
η _s	176 %	127 %
P _{rated}	4.08 kW	3.77 kW
SCOP	4.48	3.25
T _{biv}	-8 °C	-8 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	3.45 kW	3.22 kW
COP T _j = -7°C	3.12	2.15
C _{dh} T _j = -7 °C	0.993	0.995
P _{dh} T _j = +2°C	2.52 kW	2.04 kW
COP T _j = +2°C	4.33	3.11
C _{dh} T _j = +2 °C	0.987	0.988
P _{dh} T _j = +7°C	2.56 kW	2.57 kW
COP T _j = +7°C	5.62	4.13
C _{dh} T _j = +7 °C	0.984	0.988
P _{dh} T _j = 12°C	2.36 kW	2.20 kW
COP T _j = 12°C	7.16	6.03
C _{dh} T _j = +12 °C	0.978	0.980
P _{dh} T _j = T _{biv}	3.65 kW	3.38 kW
COP T _j = T _{biv}	3.00	2.09
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	3.42 kW	3.09 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.79	1.90
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.994	0.995
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W

PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.68 kW	0.67 kW
Annual energy consumption Q _{he}	1883 kWh	2395 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
P _{designh}	5.62 kW	5.36 kW
η _s	148 %	122 %
P _{rated}	5.62 kW	5.36 kW
SCOP	3.78	3.13
T _{biv}	-9 °C	-9 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	3.40 kW	3.30 kW
COP T _j = -7°C	3.40	2.80
C _{dh} T _j = -7 °C	1.000	1.000
P _{dh} T _j = +2°C	2.10 kW	2.00 kW
COP T _j = +2°C	5.00	4.00
C _{dh} T _j = +2 °C	1.000	1.000
P _{dh} T _j = +7°C	2.60 kW	2.60 kW
COP T _j = +7°C	6.30	5.10
C _{dh} T _j = +7 °C	1.000	1.000
P _{dh} T _j = 12°C	2.30 kW	2.50 kW
COP T _j = 12°C	7.60	6.80
C _{dh} T _j = +12 °C	1.000	1.000
P _{dh} T _j = T _{biv}	3.70 kW	3.50 kW
COP T _j = T _{biv}	3.20	2.60
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	2.60 kW	2.30 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.30	1.70
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.000	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Q _{he}	3662 kWh	4217 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P _{designh}	2.35 kW	1.90 kW
η _s	216 %	146 %
P _{rated}	2.35 kW	1.90 kW
SCOP	5.47	3.73
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	2.30 kW	1.90 kW
COP T _j = +2°C	4.20	2.50
C _{dh} T _j = +2 °C	1.000	1.000
P _{dh} T _j = +7°C	2.60 kW	2.30 kW
COP T _j = +7°C	5.40	3.50
C _{dh} T _j = +7 °C	1.000	1.000
P _{dh} T _j = 12°C	2.50 kW	2.40 kW
COP T _j = 12°C	7.70	5.50
C _{dh} T _j = +12 °C	1.000	1.000
P _{dh} T _j = T _{biv}	2.30 kW	1.90 kW
COP T _j = T _{biv}	4.20	2.50
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	2.30 kW	1.90 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.20	2.50
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.000	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	573 kWh	680 kWh

Model BI-BLOC R290 HWP-60-FST8-H

Model name	BI-BLOC R290 HWP-60-FST8-H
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	110 %
COP	2.67
Heating up time	02:10 h:min
Standby power input	45.4 W
Reference hot water temperature	53.5 °C
Mixed water at 40°C	260 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	99 %
COP	2.35
Heating up time	02:26 h:min
Standby power input	74.5 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	144 %
COP	3.41
Heating up time	02:10 h:min
Standby power input	53.2 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 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	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	5.46 kW	5.14 kW
η _s	180 %	141 %
P _{rated}	5.46 kW	5.14 kW
SCOP	4.58	3.61
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	4.80 kW	4.60 kW
COP T _j = -7°C	3.00	2.30
C _{dh} T _j = -7 °C	1.000	1.000
P _{dh} T _j = +2°C	2.90 kW	2.80 kW
COP T _j = +2°C	4.60	3.60
C _{dh} T _j = +2 °C	1.000	1.000
P _{dh} T _j = +7°C	2.30 kW	2.50 kW
COP T _j = +7°C	5.50	4.70
C _{dh} T _j = +7 °C	1.000	1.000
P _{dh} T _j = 12°C	2.30 kW	2.40 kW
COP T _j = 12°C	7.60	5.60
C _{dh} T _j = +12 °C	1.000	1.000
P _{dh} T _j = T _{biv}	4.80 kW	4.60 kW
COP T _j = T _{biv}	3.00	2.30
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	4.40 kW	4.10 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.70	2.10
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.000	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W

PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Q _{he}	2461 kWh	2947 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
P _{designh}	6.51 kW	6.71 kW
η _s	149 %	119 %
P _{rated}	6.51 kW	6.71 kW
SCOP	3.80	3.04
T _{biv}	-10 °C	-9 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	4.10 kW	4.00 kW
COP T _j = -7°C	3.30	2.70
C _{dh} T _j = -7 °C	1.000	1.000
P _{dh} T _j = +2°C	2.50 kW	2.40 kW
COP T _j = +2°C	5.00	4.00
C _{dh} T _j = +2 °C	1.000	1.000
P _{dh} T _j = +7°C	2.60 kW	2.60 kW
COP T _j = +7°C	6.30	5.20
C _{dh} T _j = +7 °C	1.000	1.000
P _{dh} T _j = 12°C	2.30 kW	2.50 kW
COP T _j = 12°C	7.60	6.90
C _{dh} T _j = +12 °C	1.000	1.000
P _{dh} T _j = T _{biv}	4.50 kW	4.40 kW
COP T _j = T _{biv}	2.90	2.50
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	3.30 kW	2.90 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.20	1.70
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.000	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Q _{he}	4229 kWh	5435 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P _{designh}	2.77 kW	2.38 kW
η _s	220 %	153 %
P _{rated}	2.77 kW	2.38 kW
SCOP	5.58	3.89
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	2.80 kW	2.40 kW
COP T _j = +2°C	4.10	2.60
C _{dh} T _j = +2 °C	1.000	1.000
P _{dh} T _j = +7°C	2.60 kW	2.30 kW
COP T _j = +7°C	5.30	3.50
C _{dh} T _j = +7 °C	1.000	1.000
P _{dh} T _j = 12°C	2.40 kW	2.40 kW
COP T _j = 12°C	7.70	5.60
C _{dh} T _j = +12 °C	1.000	1.000
P _{dh} T _j = T _{biv}	2.80 kW	2.40 kW
COP T _j = T _{biv}	4.10	2.60
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	2.80 kW	2.40 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.10	2.60
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.000	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	663 kWh	817 kWh

Model BI-BLOC R290 HWP-80-FST8-H

Model name	BI-BLOC R290 HWP-80-FST8-H
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	110 %
COP	2.67
Heating up time	02:10 h:min
Standby power input	45.4 W
Reference hot water temperature	53.5 °C
Mixed water at 40°C	260 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	99 %
COP	2.35
Heating up time	02:26 h:min
Standby power input	74.5 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	144 %
COP	3.41
Heating up time	02:10 h:min
Standby power input	53.2 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 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	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
P _{designh}	6.47 kW	6.20 kW
η _s	175 %	137 %
P _{rated}	6.47 kW	6.20 kW
SCOP	4.44	3.51
T _{biv}	-6 °C	-6 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.30 kW	5.10 kW
COP T _j = -7°C	3.00	2.30
C _{dh} T _j = -7 °C	0.900	1.000
P _{dh} T _j = +2°C	3.50 kW	3.50 kW
COP T _j = +2°C	4.20	3.40
C _{dh} T _j = +2 °C	0.900	1.000
P _{dh} T _j = +7°C	2.60 kW	2.50 kW
COP T _j = +7°C	6.20	4.50
C _{dh} T _j = +7 °C	0.900	1.000
P _{dh} T _j = 12°C	2.20 kW	2.40 kW
COP T _j = 12°C	7.60	6.60
C _{dh} T _j = +12 °C	0.900	1.000
P _{dh} T _j = T _{biv}	5.50 kW	5.20 kW
COP T _j = T _{biv}	3.10	2.40
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	4.90 kW	4.50 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.70	2.00
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.900	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W

PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Q _{he}	3012 kWh	3648 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
P _{designh}	7.68 kW	7.45 kW
η _s	143 %	121 %
P _{rated}	7.68 kW	7.45 kW
SCOP	3.66	3.11
T _{biv}	-9 °C	-9 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	4.70 kW	4.50 kW
COP T _j = -7°C	3.20	2.60
C _{dh} T _j = -7 °C	0.900	1.000
P _{dh} T _j = +2°C	2.90 kW	2.90 kW
COP T _j = +2°C	4.70	4.00
C _{dh} T _j = +2 °C	0.900	1.000
P _{dh} T _j = +7°C	3.10 kW	2.60 kW
COP T _j = +7°C	6.40	5.20
C _{dh} T _j = +7 °C	0.900	1.000
P _{dh} T _j = 12°C	2.90 kW	2.50 kW
COP T _j = 12°C	7.80	7.10
C _{dh} T _j = +12 °C	0.900	1.000
P _{dh} T _j = T _{biv}	5.10 kW	4.90 kW
COP T _j = T _{biv}	3.00	2.40
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	3.60 kW	3.30 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.20	1.70
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.900	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Q _{he}	5174 kWh	5903 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P _{designh}	3.83 kW	3.66 kW
η _s	238 %	166 %
P _{rated}	3.83 kW	3.66 kW
SCOP	6.02	4.22
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.80 kW	3.70 kW
COP T _j = +2°C	3.80	2.70
C _{dh} T _j = +2 °C	0.900	1.000
P _{dh} T _j = +7°C	2.60 kW	2.30 kW
COP T _j = +7°C	5.60	3.60
C _{dh} T _j = +7 °C	0.900	1.000
P _{dh} T _j = 12°C	2.40 kW	2.40 kW
COP T _j = 12°C	7.90	5.80
C _{dh} T _j = +12 °C	0.900	1.000
P _{dh} T _j = T _{biv}	3.80 kW	3.70 kW
COP T _j = T _{biv}	3.80	2.70
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	3.80 kW	3.70 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.80	2.70
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.900	1.000
WTOL	70 °C	70 °C
P _{off}	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	849 kWh	1159 kWh