CEN heat pump
KEYMARK

Registration number 011-1W0630

Subtype BERETTA HYDRO UNIT P 012, HYDRO UNIT P 014, HYDRO UNIT P 012T, HYDRO UNIT P 014T

Certificate Holder	Riello S.p.A.
Address	Via Ing. Pilade Riello 7
ZIP	37045
City	Legnago (VR)
Country	IT
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	BERETTA HYDRO UNIT P 012, HYDRO UNIT P 014, HYDRO UNIT P 012T, HYDRO UNIT P 014T
Registration number	011-1W0630
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.07 kg
Certification Date	26.06.2023
Testing basis	HP KEYMARK Certification Scheme Rules Rev. 14

Model BERETTA HYDRO UNIT P 012	
Model name	BERETTA HYDRO UNIT P 012
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

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

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	11.40 kW	10.95 kW
El input	2.50 kW	3.54 kW
COP	4.55	3.10

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	3.18 kW	
Cooling capacity	9.70	
EER	3.05	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	54 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	176 %	144 %
Prated	10.19 kW	9.73 kW
SCOP	4.48	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	9.01 kW	8.61 kW
COP Tj = -7°C	2.63	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.20 kW	4.93 kW
COP Tj = +2°C	4.47	3.50
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.23 kW	3.09 kW
COP Tj = +7°C	5.76	4.90
Cdh Tj = +7 °C	0.960	0.976
Pdh Tj = 12°C	3.74 kW	3.74 kW
COP Tj = 12°C	7.77	7.04
Cdh Tj = +12 °C	0.952	0.973
Pdh Tj = Tbiv	9.01 kW	8.61 kW
COP Tj = Tbiv	2.63	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.26 kW	8.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.40 kW
Annual energy consumption Qhe	4696 kWh	5486 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.70 kW	
SEER	5.34	
Pdc Tj = 35°C	9.70 kW	
EER Tj = 35°C	3.05	
Cdc Tj = 35 °C	0.900	
Pdc Tj = 30°C	7.15 kW	
EER Tj = 30°C	4.49	
Cdc Tj = 30 °C	0.900	
Pdc Tj = 25°C	4.59 kW	
EER Tj = 25°C	5.96	
Cdc Tj = 25 °C	0.900	
Pdc Tj = 20°C	3.60 kW	
EER Tj = 20°C	8.31	
Cdc Tj = 20 °C	0.900	
Poff	10 W	

PTO	15 W
PSB	10 W
PCK	0 W
Annual energy consumption Qce	5820 kWh

Model BERETTA HYDRO UNIT P 012T		
Model name	BERETTA HYDRO UNIT P 012T	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	
Any additional heat sources	n/a	
General data		
Power supply	3x400V 50Hz	
Off-peak product	n/a	
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	11.40 kW	10.95 kW
El input	2.45 kW	3.48 kW
COP	4.65	3.15
EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	3.13 kW	
Cooling capacity	9.70	
EER	3.10	
EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	54 dB(A)
EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	176 %	144 %
Prated	10.19 kW	9.73 kW
SCOP	4.48	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	9.01 kW	8.61 kW
COP Tj = -7°C	2.63	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.20 kW	4.93 kW
COP Tj = +2°C	4.47	3.50
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.23 kW	3.09 kW
COP Tj = +7°C	5.76	4.90
Cdh Tj = +7 °C	0.960	0.976
Pdh Tj = 12°C	3.74 kW	3.74 kW
COP Tj = 12°C	7.77	7.04
Cdh Tj = +12 °C	0.952	0.973
Pdh Tj = Tbiv	9.01 kW	8.61 kW
COP Tj = Tbiv	2.63	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.26 kW	8.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.40 kW
Annual energy consumption Qhe	4696 kWh	5486 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.70 kW	
SEER	5.34	
Pdc Tj = 35°C	9.70 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	0.900	
Pdc Tj = 30°C	7.15 kW	
EER Tj = 30°C	4.49	
Cdc Tj = 30 °C	0.900	
Pdc Tj = 25°C	4.59 kW	
EER Tj = 25°C	5.96	
Cdc Tj = 25 °C	0.900	
Pdc Tj = 20°C	3.60 kW	
EER Tj = 20°C	8.22	
Cdc Tj = 20 °C	0.900	
Poff	10 W	

PTO	15 W
PSB	10 W
PCK	0 W
Annual energy consumption Qce	5820 kWh

Model BERETTA HYDRO UNIT P 014	
Model name	BERETTA HYDRO UNIT P 014
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

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

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	13.80 kW	13.25 kW
El input	3.21 kW	4.57 kW
COP	4.30	2.90

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	3.63 kW	
Cooling capacity	10.70	
EER	2.95	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	54 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	176 %	144 %
Prated	10.19 kW	9.73 kW
SCOP	4.48	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	9.01 kW	8.61 kW
COP Tj = -7°C	2.63	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.20 kW	4.93 kW
COP Tj = +2°C	4.47	3.50
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.23 kW	3.09 kW
COP Tj = +7°C	5.76	4.90
Cdh Tj = +7 °C	0.960	0.976
Pdh Tj = 12°C	3.74 kW	3.74 kW
COP Tj = 12°C	7.77	7.04
Cdh Tj = +12 °C	0.952	0.973
Pdh Tj = Tbiv	9.01 kW	8.61 kW
COP Tj = Tbiv	2.63	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.26 kW	8.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.40 kW
Annual energy consumption Qhe	4696 kWh	5486 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.70 kW	
SEER	5.15	
Pdc Tj = 35°C	10.70 kW	
EER Tj = 35°C	2.95	
Cdc Tj = 35 °C	0.900	
Pdc Tj = 30°C	7.88 kW	
EER Tj = 30°C	4.07	
Cdc Tj = 30 °C	0.900	
Pdc Tj = 25°C	5.07 kW	
EER Tj = 25°C	5.91	
Cdc Tj = 25 °C	0.900	
Pdc Tj = 20°C	3.63 kW	
EER Tj = 20°C	8.04	
Cdc Tj = 20 °C	0.900	
Poff	10 W	

PTO	15 W
PSB	10 W
PCK	0 W
Annual energy consumption Qce	6420 kWh

Model BERETTA HYDRO UNIT P 014T	
Model name	BERETTA HYDRO UNIT P 014T
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

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	13.80 kW	13.25 kW
El input	3.14 kW	4.49 kW
COP	4.40	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	3.57 kW	
Cooling capacity	10.70	
EER	3.00	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	54 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	176 %	144 %
Prated	10.19 kW	9.73 kW
SCOP	4.48	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	9.01 kW	8.61 kW
COP Tj = -7°C	2.63	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.20 kW	4.93 kW
COP Tj = +2°C	4.47	3.50
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.23 kW	3.09 kW
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	1.40 kW
Annual energy consumption Qhe	4696 kWh	5486 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.70 kW	
SEER	5.15	
Pdc Tj = 35°C	10.70 kW	
EER Tj = 35°C	3.00	
Cdc Tj = 35 °C	0.900	
Pdc Tj = 30°C	7.88 kW	
EER Tj = 30°C	4.07	
Cdc Tj = 30 °C	0.900	
Pdc Tj = 25°C	5.07 kW	
EER Tj = 25°C	5.91	
Cdc Tj = 25 °C	0.900	
Pdc Tj = 20°C	3.63 kW	
EER Tj = 20°C	7.96	
Cdc Tj = 20 °C	0.900	
Poff	10 W	

PTO	15 W
PSB	10 W
PCK	0 W
Annual energy consumption Qce	6420 kWh