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This information was generated by the HP KEYMARK database on 23 Jun 2022

Login

Summary of	Riello NXHM 8 10 kW	Reg. No.	041-K019-02	
Certificate Holder				
Name	Riello S.p.A.			
Address	Via Ing. Pilade Riello 7	Zip	37045	
City	Legnago (VR)	Country	Italy	
Certification Body	BRE Global Limited			
Subtype title	Riello NXHM 8 10 kW			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R32			
Mass of Refrigerant	1.65 kg			
Certification Date	05.11.2021			
Testing basis	Heat Pump Keymark Scheme Rules Rev 08			



Model: NXHM 008

Configure model		
Model name	NXHM 008	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	8.40 kW	7.50 kW	
El input	1.63 kW	2.36 kW	
СОР	5.15	3.18	

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Warmer Climate





EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	273 %	177 %
Prated	8.12 kW	8.37 kW
SCOP	6.99	4.50
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.57 kW	7.55 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.22 kW	5.38 kW
COP Tj = +7°C	6.26	4.01
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.45 kW	2.32 kW
COP Tj = 12°C	9.02	5.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.22 kW	5.38 kW

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COP Tj = Tbiv	6.26	4.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.55 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.98	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.82 kW
Annual energy consumption Qhe	1569 kWh	2485 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	59 dB(A)	59 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	170 %	112 %





	, 	NK database on 25 jun 202
Prated	6.98 kW	5.78 kW
SCOP	4.32	2.88
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7° C	4.46 kW	3.86 kW
$COPTj = -7^{\circ}C$	3.66	2.48
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2$ °C	2.70 kW	2.21 kW
COP Tj = +2°C	5.20	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	1.66 kW	1.44 kW
$COPTj = +7^{\circ}C$	6.53	4.11
Cdh Tj = $+7$ °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.47 kW
COP Tj = 12°C	7.96	5.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.69 kW	4.71 kW
COP Tj = Tbiv	2.83	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.95	1.22
WTOL	65 °C	65 °C
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Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.99 kW
Annual energy consumption Qhe	3978 kWh	4950 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.69	4.71
COP Tj = -15°C (if TOL $<$ -20°C)	2.83	1.90
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
Low temperature	Medium temperature	
205 %	132 %	
8.12 kW	6.60 kW	
5.21	3.36	
	Low temperature 205 % 8.12 kW	





This information was gene	rated by the HP KETMA	ARK database on 23 Jun 202.
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.19 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.65 kW	3.76 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7$ °C	2.90 kW	2.43 kW
$COP Tj = +7^{\circ}C$	6.82	4.34
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.63 kW	1.40 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.19 kW	5.84 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.45 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
WTOL	65 °C	65 °C
Poff	14 W	14 W
РТО	24 W	24 W



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PSB	14 W	14 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Qhe	3223 kWh	4056 kWh



Model: NXHM 010

Configure model		
Model name	NXHM 010	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

COP

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	10.00 kW	9.50 kW	
El input	2.02 kW	3.06 kW	

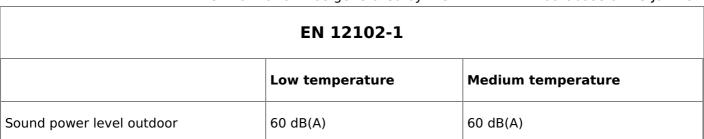
3.10

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate

4.95

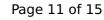




CEN heat pump

EN 14825				
Low temperature Medium temperat				
η_{s}	279 %	180 %		
Prated	8.58 kW	8.63 kW		
SCOP	7.12	4.58		
Tbiv	7 °C	7 °C		
TOL	2 °C	2 °C		
Pdh Tj = +2°C	8.44 kW	8.06 kW		
COP Tj = +2°C	3.84	2.59		
Cdh Tj = +2 °C	0.90	0.90		
Pdh Tj = +7°C	5.52 kW	5.55 kW		
COP Tj = +7°C	6.18	4.10		
Cdh Tj = +7 °C	0.90	0.90		
Pdh Tj = 12°C	2.62 kW	2.53 kW		
COP Tj = 12°C	9.04	5.82		
Cdh Tj = +12 °C	0.90	0.90		
Pdh Tj = Tbiv	5.52 kW	5.55 kW		

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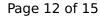


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COP Tj = Tbiv	6.18	4.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.44 kW	8.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.61
WTOL	65 °C	65 °C
Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.48 kW
Annual energy consumption Qhe	1628 kWh	2516 kWh

Colder Climate

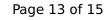
EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
Low temperature	Medium temperature	
170 %	116 %	
7.75 kW	6.71 kW	
	Low temperature	





SCOP	4.32	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.83 kW	4.27 kW
COP Tj = -7°C	3.60	2.54
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.94 kW	2.57 kW
COP Tj = +2°C	5.26	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.92 kW	1.66 kW
$COP Tj = +7^{\circ}C$	7.08	4.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.48 kW
COP Tj = 12°C	7.96	5.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.32 kW	5.48 kW
COP Tj = Tbiv	2.64	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.63 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W



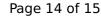


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24 W	24 W
14 W	14 W
o w	o w
Electricity	Electricity
3.13 kW	3.91 kW
4424 kWh	5540 kWh
6.32	5.48
2.64	2.00
0.90	0.90
	14 W 0 W Electricity 3.13 kW 4424 kWh 6.32 2.64

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	205 %	137 %	
Prated	9.17 kW	7.67 kW	
SCOP	5.19	3.49	
Tbiv	-7 °C	-7 °C	





-10 °C 6.78 kW 2.24 0.90 4.29 kW 3.42 0.90 2.77 kW 4.52 0.90
2.24 0.90 V 4.29 kW 3.42 0.90 V 2.77 kW 4.52
0.90 V 4.29 kW 3.42 0.90 V 2.77 kW 4.52
4.29 kW 3.42 0.90 2.77 kW 4.52
3.42 0.90 V 2.77 kW 4.52
0.90 V 2.77 kW 4.52
2.77 kW 4.52
4.52
0.90
0.50
1.58 kW
5.68
0.90
6.78 kW
2.24
5.39 kW
1.83
65 °C
14 W
24 W



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PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Qhe	3647 kWh	4539 kWh