Subtype MIRA HYBRID LINK R32

Certificate Holder	Ariston Thermo Group
Address	Viale Aristide Merloni 45
ZIP	I-60044
City	Fabriano (AN)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	MIRA HYBRID LINK R32
Registration number	ICIM-PDC-000196
Heat Pump Type	Hybrid Air/Water
Refrigerant	R32
Mass of Refrigerant	1 kg
Certification Date	02.05.2023
Testing laboratory	Politecnico di Milano, IT ReLAB - Renewable Heating and Cooling Lab

Model MIRA HYBRID LINK R32	
Model name	MIRA HYBRID LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
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

Hybrid 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	3.50 kW	2.95 kW
El input	0.69 kW	1.09 kW
COP	5.10	2.70

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.03 kW	
Cooling capacity	3.50	
EER	3.40	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
ηs	194 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.94	3.43

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.980	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.10 kW	3.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	1.10 kW	0.80 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2188 kWh	2780 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
ηs	172 %	134 %
Prated	7.75 kW	7.43 kW
SCOP	4.40	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW

COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW
COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4355 kWh	5337 kWh
Pdh Tj = -15°C (if TOL		
COP Tj = -15°C (if TOL		
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
ηs	240 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW

COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.00	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.84 kW	2.35 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.00	2.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	3.5 kW	
SEER	4.87	
Pdc Tj = 35°C	3.5 kW	
EER Tj = 35°C	3	
Pdc Tj = 30°C	2.58 kW	
EER Tj = 30°C	4.33	
Cdc Tj = 30 °C	0.98	
Pdc Tj = 25°C	1.72 kW	
EER Tj = 25°C	5.86	
Cdc Tj = 25 °C	0.95	
Pdc Tj = 20°C	1.79 kW	
EER Tj = 20°C	7.24	
Cdc Tj = 20 °C	0.94	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	628 kWh	