Subtype Aquami All in Split 4/6 kW 190L	
Certificate Holder	Rotenso Sp. z o.o.
Address	ul. Szyb Walenty 16
ZIP	41-700
City	Ruda Śląska
Country	PL
Certification Body	BRE Global Limited
Subtype title	Aquami All in Split 4/6 kW 190L
Registration number	041-K078-11
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.5 kg
Certification Date	18.07.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 14
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model AQS40X1o/AQS100T190X1i	
Model name	AQS40X1o/AQS100T190X1i
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

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

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	127 %
COP	3.10
Heating up time	1:47 h:min
Standby power input	22.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	102 %
COP	2.50
Heating up time	1:54 h:min
Standby power input	24.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	157 %
COP	3.80
Heating up time	1:31 h:min
Standby power input	21.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 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	4.25 kW	4.40 kW
El input	0.82 kW	1.49 kW
COP	5.20	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	191 %	130 %
Prated	5.52 kW	4.40 kW
SCOP	4.85	3.31
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.88 kW	3.89 kW
COP Tj = -7°C	3.19	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.06 kW	2.38 kW
COP Tj = +2°C	4.78	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.93 kW	2.95 kW
COP Tj = +7°C	6.13	4.41
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.48 kW	1.32 kW
COP Tj = 12°C	8.05	5.66
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.88 kW	3.89 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.42 kW	3.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	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	1.11 kW	0.98 kW
Annual energy consumption Qhe	2351 kWh	2744 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	159 %	102 %
Prated	4.57 kW	3.37 kW
SCOP	4.06	2.63
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.76 kW	2.14 kW
COP Tj = -7°C	3.49	2.32
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	1.77 kW	1.28 kW
COP Tj = +2°C	4.95	2.99
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.17 kW	1.01 kW
COP Tj = +7°C	5.53	3.86
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.43 kW	1.36 kW
COP Tj = 12°C	7.67	6.28
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.72 kW	2.75 kW
COP Tj = Tbiv	2.57	1.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	1.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.02
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	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	1.76 kW	1.73 kW
Annual energy consumption Qhe	2770 kWh	3159 kWh
Pdh Tj = -15°C (if TOL	3.72	2.75
COP Tj = -15°C (if TOL	2.57	1.74
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	254 %	162 %
Prated	5.54 kW	5.02 kW
SCOP	6.52	4.14
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.35 kW	4.84 kW
COP Tj = +2°C	3.94	2.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.56 kW	3.23 kW
COP Tj = +7°C	5.92	3.68
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.64 kW	1.47 kW
COP Tj = 12°C	7.91	5.15
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.56 kW	3.23 kW
COP Tj = Tbiv	5.92	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.35 kW	4.84 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.94	2.51
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	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	0.19 kW	0.18 kW
Annual energy consumption Qhe	1152 kWh	1621 kWh

Model AQS60X1o/AQS100T190X1i	
Model name	AQS60X1o/AQS100T190X1i
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

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

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	127 %
COP	3.10
Heating up time	1:47 h:min
Standby power input	22.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	102 %
COP	2.50
Heating up time	1:54 h:min
Standby power input	24.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	157 %
COP	3.80
Heating up time	1:31 h:min
Standby power input	21.0 W
Reference hot water temperature	47.0 °C
Mixed water at 40°C	200 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	6.20 kW	6.00 kW
El input	1.24 kW	2.00 kW
COP	5.00	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	195 %	138 %
Prated	6.82 kW	5.70 kW
SCOP	4.95	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.03 kW	5.05 kW
COP Tj = -7°C	3.09	2.17
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.88 kW	3.12 kW
COP Tj = +2°C	4.85	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.40 kW	2.09 kW
COP Tj = +7°C	6.63	4.54
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.39 kW	1.28 kW
COP Tj = 12°C	7.83	5.59
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.03 kW	5.05 kW
COP Tj = Tbiv	3.09	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.36 kW	4.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	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	1.45 kW	1.18 kW
Annual energy consumption Qhe	2846 kWh	3345 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	165 %	111 %
Prated	5.63 kW	4.26 kW
SCOP	4.21	2.85
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.42 kW	2.70 kW
COP Tj = -7°C	3.59	2.46
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.06 kW	1.61 kW
COP Tj = +2°C	5.21	3.36
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.47 kW	1.02 kW
COP Tj = +7°C	6.24	3.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.44 kW	1.37 kW
COP Tj = 12°C	7.66	6.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.60 kW	3.48 kW
COP Tj = Tbiv	2.53	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.48 kW	2.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.96	1.13
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	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	2.15 kW	2.16 kW
Annual energy consumption Qhe	3301 kWh	3681 kWh
Pdh Tj = -15°C (if TOL	4.60	3.48
COP Tj = -15°C (if TOL	2.53	1.86
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	258 %	165 %
Prated	6.12 kW	5.15 kW
SCOP	6.63	4.19
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.94 kW	5.03 kW
COP Tj = +2°C	3.91	2.48
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.93 kW	3.31 kW
COP Tj = +7°C	5.89	3.67
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.80 kW	1.60 kW
COP Tj = 12°C	8.20	5.29
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.93 kW	3.31 kW
COP Tj = Tbiv	5.89	3.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.94 kW	5.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.91	2.48
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	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	0.18 kW	0.12 kW
Annual energy consumption Qhe	1251 kWh	1640 kWh