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Summary of	L12 Split	Reg. No.	012-C700072
Certificate Holder			
Name	ait-deutschland GmbH		
Address	Industriestr. 3	Zip	95359
City	Kasendorf	Country	Germany
Certification Body	RISE CERT		
Subtype title	L12 Split		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.9 kg		
Certification Date	29.04.2020		
Testing basis	HP Keymark Scheme 2018		

Model: alpha innotec L12 Split-HT 12

Configure model	
Model name	alpha innotec L12 Split-HT 12
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.21 kW	4.73 kW
El input	1.09 kW	1.54 kW
COP	4.78	3.07

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	174 %	132 %
Prated	11.50 kW	10.00 kW
SCOP	4.42	3.37
Tbiv	-7 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	8.90 kW
COP Tj = -7°C	2.91	1.99
Pdh Tj = +2°C	6.30 kW	5.50 kW
COP Tj = +2°C	4.34	3.22
Pdh Tj = +7°C	4.10 kW	3.50 kW
COP Tj = +7°C	5.51	4.61
Pdh Tj = 12°C	4.80 kW	5.00 kW
COP Tj = 12°C	6.96	6.25
Pdh Tj = Tbiv	10.20 kW	9.20 kW

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COP $T_j = T_{biv}$	2.89	1.90
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.30 kW	8.10 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.66	1.92
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.97	0.98
WTOL	65 °C	65 °C
P _{off}	2 W	2 W
PTO	20 W	15 W
PSB	15 W	15 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	1.90 kW
Annual energy consumption Q_{he}	5482 kWh	6136 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	98 %
COP	2.32
Heating up time	1:00 h:min
Standby power input	85.0 W
Reference hot water temperature	51.0 °C
Mixed water at 40°C	230 l

Model: NOVELAN L12 Split-CS 12

Configure model	
Model name	NOVELAN L12 Split-CS 12
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.21 kW	4.73 kW
El input	1.09 kW	1.54 kW
COP	4.78	3.07

EN 14511-4	
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Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

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EN 12102-1

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COP	2.32
Heating up time	1:00 h:min
Standby power input	85.0 W
Reference hot water temperature	51.0 °C
Mixed water at 40°C	230 l

Model: alpha innotec L12 Split-HM 12

Configure model	
Model name	alpha innotec L12 Split-HM 12
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.21 kW	4.73 kW
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COP	4.78	3.07

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Defrost test	passed
Starting and operating test	passed

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	1.90 kW
Annual energy consumption Q_{he}	5482 kWh	6136 kWh

Model: NOVELAN L12 Split-HV 12

Configure model	
Model name	NOVELAN L12 Split-HV 12
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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