Subtype i-290 0250	
Certificate Holder	Advantix S.p.A.
Address	Via San Giuseppe Lavoratore, 24
ZIP	37040
City	Arcole Verona
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	i-290 0250
Registration number	ICIM-PDC-000237
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.5 kg
Certification Date	31.08.2023
Testing basis	V12

Model i-290 0250	
Model name	i-290 0250
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	50.00 kW	47.90 kW
El input	11.90 kW	16.50 kW
COP	4.20	2.90

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	11.00 kW	
Cooling capacity	34.10	
EER	3.10	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	165 %	131 %
Prated	43.00 kW	44.00 kW
SCOP	4.20	3.34
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.20 kW	39.10 kW

COP Tj = -7°C	2.53	1.94
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	23.50 kW	23.80 kW
COP Tj = +2°C	3.88	3.15
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	20.30 kW	19.40 kW
COP Tj = +7°C	6.30	4.84
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	23.20 kW	22.40 kW
COP Tj = 12°C	7.31	6.20
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	38.20 kW	39.10 kW
COP Tj = Tbiv	2.53	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.70 kW	34.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.66
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	78 °C	78 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.30 kW	9.30 kW
Annual energy consumption Qhe	21240 kWh	27332 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	34.10 kW	
SEER	4.80	
Pdc Tj = 35°C	34.10 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	24.00 kW	
EER Tj = 30°C	4.12	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	16.10 kW	
EER Tj = 25°C	5.24	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	16.60 kW	
EER Tj = 20°C	6.05	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	4259 kWh

Model i-290 0250-PS	
Model name	i-290 0250-PS
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	50.10 kW	47.90 kW
El input	11.90 kW	16.50 kW
COP	4.21	2.90

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	11.00 kW	
Cooling capacity	34.10	
EER	3.10	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	165 %	132 %
Prated	43.00 kW	44.00 kW
SCOP	4.20	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.00 kW	39.20 kW

COP Tj = -7°C	2.53	1.93
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	25.20 kW	23.90 kW
COP Tj = +2°C	3.90	3.19
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	20.10 kW	19.40 kW
COP Tj = +7°C	6.27	4.87
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	23.10 kW	22.40 kW
COP Tj = 12°C	7.32	6.16
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	38.00 kW	39.20 kW
COP Tj = Tbiv	2.53	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.60 kW	34.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	78 °C	78 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.40 kW	9.30 kW
Annual energy consumption Qhe	21106 kWh	27218 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	34.10 kW	
SEER	4.81	
Pdc Tj = 35°C	34.10 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	23.80 kW	
EER Tj = 30°C	4.10	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	16.20 kW	
EER Tj = 25°C	5.24	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	16.60 kW	
EER Tj = 20°C	6.12	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	4252 kWh

Model i-290 0250-PSEC	
Model name	i-290 0250-PSEC
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	50.10 kW	48.30 kW
El input	12.20 kW	17.10 kW
COP	4.11	2.82

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	11.40 kW	
Cooling capacity	33.70	
EER	2.96	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	152 %	125 %
Prated	43.00 kW	45.00 kW
SCOP	3.89	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.30 kW	39.60 kW

COP Tj = -7°C	2.49	1.90
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	23.30 kW	24.00 kW
COP Tj = +2°C	3.63	3.05
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	20.40 kW	19.80 kW
COP Tj = +7°C	5.40	4.49
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	23.30 kW	22.70 kW
COP Tj = 12°C	6.68	5.59
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	38.30 kW	39.60 kW
COP Tj = Tbiv	2.49	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.80 kW	35.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.15	1.63
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	78 °C	78 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.20 kW	9.90 kW
Annual energy consumption Qhe	23015 kWh	28905 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	33.70 kW	
SEER	4.20	
Pdc Tj = 35°C	33.70 kW	
EER Tj = 35°C	2.96	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	23.70 kW	
EER Tj = 30°C	3.76	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	16.00 kW	
EER Tj = 25°C	4.46	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	16.30 kW	
EER Tj = 20°C	5.04	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	4811 kWh

Model i-290 0250-PSI	
Model name	i-290 0250-PSI
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	50.10 kW	47.90 kW
El input	11.90 kW	16.50 kW
COP	4.21	2.90

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	11.00 kW	
Cooling capacity	34.10	
EER	3.10	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	165 %	132 %
Prated	43.00 kW	44.00 kW
SCOP	4.20	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.00 kW	39.20 kW

COP Tj = -7°C	2.53	1.93
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	25.20 kW	23.90 kW
COP Tj = +2°C	3.90	3.19
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	20.10 kW	19.40 kW
COP Tj = +7°C	6.27	4.87
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	23.10 kW	22.40 kW
COP Tj = 12°C	7.32	6.16
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	38.00 kW	39.20 kW
COP Tj = Tbiv	2.53	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.60 kW	34.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	78 °C	78 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	8.40 kW	9.30 kW
Annual energy consumption Qhe	21106 kWh	27218 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	34.10 kW	
SEER	4.81	
Pdc Tj = 35°C	34.10 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	23.80 kW	
EER Tj = 30°C	4.10	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	16.20 kW	
EER Tj = 25°C	5.24	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	16.60 kW	
EER Tj = 20°C	6.12	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	4252 kWh