

Subtype i-290 0240	
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 0240
Registration number	ICIM-PDC-000236
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.15 kg
Certification Date	31.08.2023
Testing basis	V12

Model i-290 0240		
Model name	i-290 0240	
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	40.10 kW	38.00 kW
El input	9.80 kW	13.10 kW
COP	4.10	2.90
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	9.20 kW	
Cooling capacity	28.90	
EER	3.14	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	160 %	134 %
Prated	39.00 kW	38.00 kW
SCOP	4.09	3.44
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.70 kW	33.60 kW

COP Tj = -7°C	2.53	1.87
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	21.20 kW	20.50 kW
COP Tj = +2°C	3.72	3.23
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	18.30 kW	17.40 kW
COP Tj = +7°C	6.12	5.24
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	21.00 kW	20.60 kW
COP Tj = 12°C	7.54	6.87
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	34.70 kW	33.60 kW
COP Tj = Tbiv	2.53	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.00 kW	28.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.58
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	9.00 kW	9.70 kW
Annual energy consumption Qhe	19828 kWh	22836 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	28.90 kW	
SEER	4.86	
Pdc Tj = 35°C	28.90 kW	
EER Tj = 35°C	3.14	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	21.20 kW	
EER Tj = 30°C	4.14	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	17.80 kW	
EER Tj = 25°C	5.29	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	18.70 kW	
EER Tj = 20°C	6.29	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	3565 kWh

Model i-290 0240-PS		
Model name	i-290 0240-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	40.00 kW	38.10 kW
El input	9.76 kW	13.40 kW
COP	4.10	2.84
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	9.29 kW	
Cooling capacity	28.80	
EER	3.10	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	161 %	131 %
Prated	39.00 kW	38.00 kW
SCOP	4.10	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.60 kW	33.70 kW

COP Tj = -7°C	2.53	1.85
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	21.10 kW	20.60 kW
COP Tj = +2°C	3.74	3.17
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	18.20 kW	17.50 kW
COP Tj = +7°C	6.17	5.03
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	21.00 kW	20.70 kW
COP Tj = 12°C	7.57	6.52
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	34.60 kW	33.70 kW
COP Tj = Tbiv	2.53	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.90 kW	28.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.57
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	9.10 kW	9.60 kW
Annual energy consumption Qhe	19705 kWh	23449 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	28.80 kW	
SEER	4.88	
Pdc Tj = 35°C	28.80 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	20.30 kW	
EER Tj = 30°C	4.22	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	17.80 kW	
EER Tj = 25°C	5.30	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	18.70 kW	
EER Tj = 20°C	6.29	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	3537 kWh

Model i-290 0240-PSEC		
Model name	i-290 0240-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	40.40 kW	38.40 kW
El input	10.20 kW	13.80 kW
COP	3.96	2.78
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	9.73 kW	
Cooling capacity	28.40	
EER	2.92	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	150 %	124 %
Prated	39.00 kW	38.00 kW
SCOP	3.84	3.17
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.90 kW	34.00 kW

COP Tj = -7°C	2.48	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	21.20 kW	20.70 kW
COP Tj = +2°C	3.51	3.02
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	18.60 kW	17.80 kW
COP Tj = +7°C	5.54	4.53
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	21.30 kW	21.10 kW
COP Tj = 12°C	6.64	5.81
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	34.90 kW	34.00 kW
COP Tj = Tbiv	2.48	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.20 kW	28.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.55
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	8.80 kW	9.30 kW
Annual energy consumption Qhe	21252 kWh	25059 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	28.40 kW	
SEER	4.21	
Pdc Tj = 35°C	28.40 kW	
EER Tj = 35°C	2.92	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	20.90 kW	
EER Tj = 30°C	3.69	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	17.40 kW	
EER Tj = 25°C	4.48	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	18.40 kW	
EER Tj = 20°C	5.24	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	4050 kWh

Model i-290 0240-PSI		
Model name	i-290 0240-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	40.00 kW	38.10 kW
El input	9.76 kW	13.40 kW
COP	4.10	2.84
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	9.29 kW	
Cooling capacity	28.80	
EER	3.10	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	161 %	131 %
Prated	39.00 kW	38.00 kW
SCOP	4.10	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.60 kW	33.70 kW

COP Tj = -7°C	2.53	1.85
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	21.10 kW	20.60 kW
COP Tj = +2°C	3.74	3.17
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	18.20 kW	17.50 kW
COP Tj = +7°C	6.17	5.03
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	21.00 kW	20.70 kW
COP Tj = 12°C	7.57	6.52
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	34.60 kW	33.70 kW
COP Tj = Tbiv	2.53	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.90 kW	28.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.57
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	9.10 kW	9.60 kW
Annual energy consumption Qhe	19705 kWh	23449 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	28.80 kW	
SEER	4.88	
Pdc Tj = 35°C	28.80 kW	
EER Tj = 35°C	3.10	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	20.30 kW	
EER Tj = 30°C	4.22	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	17.80 kW	
EER Tj = 25°C	5.30	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	18.70 kW	
EER Tj = 20°C	6.29	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	3537 kWh