

10309

09 - 2019

DYNACIAT LG

Ecoconception (813/2013)

TECHNICAL DATA MANUAL



Ecodesign manual for space heater

Model [1]		Water-to-Water [4]
Heat pump type [2]		Ground Water (10°C) [5]
Outdoor water type [5]		Yes/No [6]
Equipped with supplementary heater [7]		

Heat pump combination heater [8]

Yes/No [8]

Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature T_j [16]			
Temperature Application: [17]		NA	
Climate: [18]		Average / Colder / Warmer [19]	
Bivalent temperature, $^{\circ}\text{C}$ [20]	Tbivalent		
Operating limit temperature, $^{\circ}\text{C}$ [21]	TOL		
Heating water operation limit temperature, $^{\circ}\text{C}$ [22]	WTOL		
T _j , $^{\circ}\text{C}$	Capacity Pdh, kW [23]	COPd	Degradation coef, Cdth [24]

Bivalent temperature [20]

Operating limit temperature [21]

Supplemental heater [30]

Rated heat output, kW [31]

Type of energy input [32]

Other items [34]

Capacity control [35]

Outlet temperature capacity control [36]

Water flow rate capacity control [38]

Contact details [43]

For air-to-water heat pumps [39]

Rated water flow rate outdoor exchanger m^3/h [42]

Accessories and Installed Options

No Accessories or Installed Options selected

Power consumption in modes other than active mode [25]			
Off mode, W [26]	P OFF		
Thermostat-off mode, W [27]	PTO		
Standby mode, W [28]	PSB		
Crankcase heater mode, W [29]	PCK		

Type of energy input [32]		
Psup		Electric [38]

Other items [34]		
Capacity control [35]		
Outlet temperature capacity control [36]		Fixed/Variable [37]
Water flow rate capacity control [38]		Fixed/Variable [37]
Contact details [43]		

Ecodesign manual for space heater

ENGLISH	FRANCAIS	DEUTSCH	ITALIANO
[1] Model [2] Heat pump type [3] Air to Water [4] Water-to-Water [5] Outdoor water type [6] Ground Water ($10^{\circ}\text{C}/\text{-}\text{/Brine}$) to Water Equipped with supplementary heater Yes/No [7] Heat pump combination heater [8] Rated heat output, Kw [9] Annual energy consumption, kWh [10] Seasonal space heating energy efficiency, % kWh [11] Energy Classes [12] Seasonal Coefficient Of Performance, kWh/ kWh [13] Sound power level, dB(A) [14] Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature T_j [15] Temperature Application [16] Climate [17] Average (Strasbourg)/Colder (Helsinki)/ Warmer (Athens) [18] Bivalent temperature Operating limit temperature [19] Heating water operation limit temperature Capacity [20] Degradation coeff [21] Power consumption in modes other than active mode [22] Off mode [23] Thermostat off-mode [24] Standby mode [25] Crankcase heater mode [26] Supplementary heater [27] Rated heat output Type of energy input [28] Other items [29] Capacity control [30] Outlet temperature capacity control [31] Fixed / Variable [32] Water flow rate capacity control For air-to-water heat pumps For Water/brine-to-Water heat pumps Rated Air flow rate, outdoors, m^3/h [33] Electric [34] Other items [35] Capacity control [36] Outlet temperature capacity control [37] Fixed / Variable [38] Water flow rate capacity control For air-to-water heat pumps For Water/brine-to-Water heat pumps Rated Air flow rate, outdoors, m^3/h [39] Contact details [40] Contact details [41] Debit nominal d'air, échangeur thermique extérieur, m^3/h [42] Coordonnées de contact	[1] Modèle [2] Type de pompe à chaleur Pompes à chaleur air-eau: Pompes à chaleur eau-eau: Type d'eau échangeur extérieur Pompes à eau souterraines/ eau glycolée-eau Equipé d'un chauffage supplémentaire Oui/Non Dispositif de chauffage mixte par pompe à chaleur Puissance thermique nominale Consommation annuelle d'énergie L'efficacité énergétique saisonnière Coefficient saisonnier de performance Niveau de puissance acoustique, dB(A) Puissances et coefficient de performances déclarées en chauffage pour une température intérieure de 20°C et pour une température extérieure T_j Température d'application Climat : Moyennes / plus froid/ plus chaud Température bivalente Température maximale (de service...) Température maximale de service de l'eau de chauffage Capacité Coefficient de dégradation Consommation d'électricité dans les modes autres que le mode actif Mode arrêt Mode arrêt par thermostat Mode veille Mode résistance de carter active Dispositif de chauffage d'appoint Puissance thermique nominale Type d'énergie utilisée Électrique Autres caractéristiques Régulation de la puissance Contrôle de la capacité de la température de sortie Fixe/variable Régulation de la puissance du débit nominal d'eau Pour les pompes à chaleur air-eau Pour les pompes à chaleur eau-eau ou eau glycolée-eau: Débit d'air nominal, à l'extérieur Débit nominal d'eau, échangeur thermique extérieur, m^3/h Coordonnées de contact	[1] Modell(e) Wärmepumpe Typ Luft-Wasser-Wärmepumpe Wasser-Wasser-Wärmepumpe Wasserrytter externer Wärmetauscher Grundwasser / Sole-Wasser Mit Zusatzheizergerät: (Ja/Nein) Kombineigerät mit Wärmepumpe: Jahreszeitbedingung Raumheizungs- Energieeffizienz Wärmenelementleistung Jährliche Energieverbrauch Energieeffizienz Energieklassen Jahresarbeitszahl Schalleistungsgesetz, dB(A) Potenze und Leistungskoeffizienten im Heizbetrieb bei einer Innenraumtemperatur von 20°C und einer Außentemperatur T_j Temperaturanwendung Durchschnittliche Klimaverhältnisse/ kälter/ wärmere Bivalentenztemperatur Grenzwert der Betriebstemperatur Grenzwert der Betriebstemperatur des Heizwassers Die Leistung Minderungsfaktor Stromverbrauch in anderen Betriebsarten als dem Betriebszustand Aus-Zustand Thermostat-aus-Zustand Bereitschaftszustand Betriebszustand mit Kurbelgehäuseheizung Zusatzeheizergerät Wärmenelementleistung Art der Energiezuführ. Elektrik Sonstige Elemente Leistungssteuerung Kontrolle der Kapazität der Vorlauftemperatur Fix / variabel Nutzbarer Wasserdurchsatz Für Luft-Wasser-Wärmepumpen Bei Wasser-Glykolwasser-/Wasser-Wasser- Wärmepumpe Nenn-Luftdurchsatz, außen Nenn-Wasservolumenstrom externer Wärmetauscher m^3/h Kontakt	[1] Modelli Pompa di calore/ Tipo Aria aqua Acqua/acqua Tipo d'acqua scambiatore esterno Groundwater/ Sole-Wasser Con riscaldatore supplementare [s/ no] Aparecchio misto a pompa di calore Potenza termica nominale Il consumo energetico annuale Efficienza energetica stagionale del riscaldamento d'ambiente [10] Classe energetiche Coefficiente di Prestazione Stagionale Il livello di potenza sonora, dB(A) Potenze e coefficiente di prestazioni dichiarate in fase riscaldamento per una temperatura interna di 20°C e per una temperatura esterna Tj Temperatura d'applicazione Clima Climatiche medie/ clima più freddo/ clima più caldo Temperatura bivaleente Temperatura limite di esercizio di riscaldamento dell'acqua Capacità Coefficiente di degradazione Consumo energetico in modi diversi dal modo attivo Modo spento Modo termostato spento Modo stand-by Modo riscaldamento del carter Riscaldatore supplementare Potenza termica nominale Tipo di alimentazione energetica Specifiche elettriche Altri elementi Controllo della capacità Controlla della capacità della temperatura di uscita serbatoio Flusso idrico utile Per le pompe di calore aria/ acqua Per PDC acqua/acqua glicolata : Portata d'aria, all'esterno Portata d'acqua nominale scambiatore esterno, m^3/h Recapiti
[43] Coordonnées de contact	[43] Coordonnées de contact	[43] Coordonnées de contact	[43] Coordonnées de contact

SVENSKA

[1] Modell(er)	Modelos
[2] Värmepump/ Typ	Bomba de calor/ Tipo
[3] Luft-til-vatten	aire-agua
[4] Vatten-til-vatten	agua-agua
[5] Utomhusvattentyp	Tipo de agua del intercambiador exterior
[6] Ground Water (10°C-)/Brine to Water	geotérmicas /salmuera-agua
[7] Ground water/ Saltlösning-till-vatten	Equipado con un calefactor complementario
[8] [ja/nej]	Equipoado con una bomba de calor
[9] Pannor med inbyggd tappvarmvattensberedning och med värme pump	Calefactor combinado con bomba de calor
[10] Nominell avgiven värmeeffekt	Potencia calorífica nominal
[11] Den årliga energiförbrukningen	El consumo anual de energía
[12] Säsongsmödelverkningsgrad för rumsupplyrörning	Eficiencia energética estacional de calefacción
[13] Energiklasser	Clases energéticas
[14] Värmefaktor, årsmedel	Coefficiente de rendimiento estacional
[15] Ijudeffektivitetnivå, dB(A)	Nivel de potencia acústica, dB(A)
[16] Deklarerad kapacitet och värmefaktor vid inomhusförhållanden 20 °C och utomhustemperatur Tj	Potencias y coeficiente de rendimiento declarados para una calefacción con una temperatura interior de 20 °C y una temperatura exterior Tj
[17] Bivalenttemperatur	Aplicación de temperatura
[18] Klimat	Clima
[19] Genomsnittliga klimatförhållanden/ kallare klimat/ varmare klimatet/Warmer (Athenes)	condiciones climáticas medias/ clima más frío/ clima más caliente
[20] Bivalenttemperatur	Temperatura bivalente
[21] Gränstemperatur för drift	Temperatura límite de calentamiento de agua
[22] Uppvärmningsvattnets gränstemperatur för drift	Capacidad
[23] Kapacitet	Coeficiente de degradación
[24] Degraderingsskoefficient	Consumo de electricidad en modos distintos del activo/active mode
[25] Effektförbrukning i andra lägen än aktivt läge/active mode	Modo desactivado
[26] Frånläge	Modo desactivado por termostato
[27] Termosifatfrånläge	Modo de espera
[28] Standbyläge	Modo de calentador del cárter
[29] Vevhushvarmläge	Calefactor complementario
[30] Extra värmegenerator	Potencia calorífica nominal
[31] Nominell avgiven värmeeffekt	Tipo de consumo de energía
[32] Typ av tillford energi	Eléctrica
[33] Elektrisk	Otros elementos
[34] Övriga poster	Control de capacidad
[35] Kapacitetsreglering	Comprobación de capacidad de la temperatura de salida
[36] Kapacitetskontroll för utgående temperatur	Fijo/variable
[37] Fasivarierande	caudal de agua útil
[38] Nyttigjort vattenflöde	Para bombas de calor aire-agua - agua
[39] For air-to-water heat pumps	Para bomba de calor agua/glicerina - agua
[40] För värmepumpar med vatten/saltlösning till vatten	Caudal de aire nominal, exterior
[41] Nominellt luftflöde, ute	Caudal de agua nominal, del intercambiador de calor de exterior, m ³ /h
[42] Klassificerat vattenflöde utomhusväxläre, m ³ /h	Datos de contacto
[43] Kontakt	Datos de contacto

NEDERLANDS

[1] Model(en)	Model(en)
[2] warmtepomp/ scourt	Lucht/water water/water
[3] Lucht/water water/water	Type extreme waterwarmtewisselaar
[4] grondwater/ Pekel-water	Grondwater/ grondwater
[5] uitgerust met aanvullend verwarmingstoestel	Uitgerust met aanvullend verwarmingstoestel
[6] [ja/neen]	[ja/neen]
[7] Combinatieverwarmingstoestel met warmtepomp	Combinatieverwarmingstoestel met warmtepomp
[8] [ja/neen]	[ja/neen]
[9] warmtepomp	Minimale warmteafgifte
[10] Het jaarlijkse energieverbruik	Het jaarlijkse energieverbruik
[11] Seizoengebonden energie-efficiëntie van ruimteverwarming	Seizoengebonden energie-efficiëntie van ruimteverwarming
[12] Energieklassen	Energieklassen
[13] Seizoenswarmteproductiecoëfficiënt	Seizoenswarmteproductiecoëfficiënt
[14] geluidsvermogeniveau, dB(A)	geluidsvermogeniveau, dB(A)
[15] Nominale vermogen en warmteproductie bij verhitting voor een buitentemperatuur van 20 °C en een buitentemperatuur Tj	Nominale vermogen en warmteproductie bij verhitting voor een buitentemperatuur van 20 °C en een buitentemperatuur Tj
[16] Temperatuur toepassing	Temperatuur toepassing
[17] Klimaat	Klimaat
[18] warunki klimatu umiarkowanego/ Cieplejszy klimat/ chłodniejszy klimat	warunki klimatu umiarkowanego/ Cieplejszy klimat/ chłodniejszy klimat
[19] temperatuur dwuwartoscowa	temperatuur dwuwartoscowa
[20] Granicza temperatura robocza dla pogryzania wody	Granicza temperatura robocza dla pogryzania wody
[21] Regulacja wydajności / Wydajność	Regulacja wydajności / Wydajność
[22] Współczynnik strat	Współczynnik strat
[23] Popor mocy w trybach innych niż aktywny	Popor mocy w trybach innych niż aktywny
[24] Granicza temperatura robocza dla pogryzania wody	Granicza temperatura robocza dla pogryzania wody
[25] Tryb wyłączenia termostatu	Tryb wyłączenia termostatu
[26] Tryb czuwania	Tryb czuwania
[27] Tryb giralki karteru	Tryb giralki karteru
[28] Ogrzewacz dodatkowy	Ogrzewacz dodatkowy
[29] Uiterste bedrijfstemperatuur van sanitair water	Uiterste bedrijfstemperatuur van sanitair water
[30] Uiterste bedrijfstemperatuur van sanitair water	Uiterste bedrijfstemperatuur van sanitair water
[31] Vermogen	Vermogen
[32] Coeficiente de degradación	Coeficiente de degradación
[33] Elektriciteitsverbruik in andere standen dan de actieve modus/active mode	Elektriciteitsverbruik in andere standen dan de actieve modus/active mode
[34] Uit-stand	Uit-stand
[35] Thermostaat-uit-stand	Thermostaat-uit-stand
[36] Stand-by-stand	Stand-by-stand
[37] Cartervenning-stand	Cartervenning-stand
[38] Aanvullend verwarmingstoestel	Aanvullend verwarmingstoestel
[39] Nominaal warmteafgifte	Nominaal warmteafgifte
[40] Soort energie-input	Soort energie-input
[41] Elektrisch	Elektrisch
[42] Andere kenmerken	Andere kenmerken
[43] Contactgegevens	Contactgegevens

POLSKI

[1] Model(-e)	Model(-e)
[2] Pompa ciepła powietrza/woda	pompa ciepła powietrza/woda
[3] woda/woda	woda/woda
[4] Różaj wody w wymienniku zewnętrzny solanki/woda	Różaj wody w wymienniku zewnętrzny solanki/woda
[5] Wyposażona w dodatkowy ogrzewacz [tak/nie]	Wyposażona w dodatkowy ogrzewacz [tak/nie]
[6] Znamionowa moc cieplna	Wielofunkcyjny ogrzewacz z pompą ciepła
[7] Znamionowa moc grzewcza energii [tak/nie]	Wielofunkcyjny ogrzewacz z pompą ciepła
[8] Znamionowa efektywność energetyczna ogrzewania pomieszczeń AWH	Znamionowa efektywność energetyczna ogrzewania pomieszczeń AWH
[9] Klasifyczne	Klasifyczne
[10] Wskaźnik sezonowej efektywności mocy grzewczej, dB(A)	Wskaźnik sezonowej efektywności mocy grzewczej w przypadku temperatury poniżej 20 °C dla temperatury zewnętrznej TJ
[11] Deklarowana moc grzewcza w trybiku podgrzewaniu wody w trybiku podgrzewaniu wody	Declarowana moc grzewcza w trybiku podgrzewaniu wody w trybiku podgrzewaniu wody
[12] Sezonowa efektywność energetyczna	Sezonowa efektywność energetyczna
[13] Klasy energetyczne	Sezonowa efektywność energetyczna
[14] Wskaźnik wydajności / Wydajność	Wskaźnik wydajności / Wydajność
[15] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[16] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[17] Warunki klimatu umiarkowanego/ Cieplejszy klimat/ chłodniejszy klimat	Warunki klimatu umiarkowanego/ Cieplejszy klimat/ chłodniejszy klimat
[18] temperatura dwuwartościowa	temperatura dwuwartościowa
[19] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[20] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[21] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[22] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[23] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[24] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[25] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[26] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[27] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[28] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[29] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[30] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[31] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[32] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[33] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[34] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[35] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[36] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[37] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[38] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[39] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[40] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[41] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[42] Graniczna temperatura robocza dla pogryzania wody	Graniczna temperatura robocza dla pogryzania wody
[43] Dane kontaktowe	Dane kontaktowe

Ecodesign manual for space heater

Model	DYNACIAT LG 090A	Model	DYNACIAT LG 090A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	34	Rated heat output, kW	Prated
Annual energy consumption, kWh	12892	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	206	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	A++	Energy Classes	205
Seasonal Coefficient Of Performance, kWh/kWh	5.35	Seasonal Coefficient Of Performance, kWh/kWh	A++
Sound power level, dB(A)	67	Sound power level, dB(A)	SCOP
	LwA		5.33
			LwA
			68
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Low (30°C/35°C)		
Bivalent temperature, °C	Average (Strasbourg)		
Tbivalent	-7		
Operating limit temperature, °C	TOL		
TOL	-10		
Heating water operation limit temperature, °C	WTOL		
WTOL	55		
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	29.7	5.61	-
2	29.9	5.89	0.92
7	30.1	6.17	0.91
12	30.3	6.40	0.91
Bivalent temperature	29.7	5.61	-
Operating limit temperature	29.6	5.48	-
Power consumption in modes other than active mode			
Off mode, W	P OFF	0	P OFF
Thermostat-off mode, W	PTO	429	PTO
Standby mode, W	PSB	30	PSB
Crankcase heater mode, W	PCK	0	PCK
Supplementary heater			
Rated heat output, kW	Psup	4.0	Psup
Type of energy input	Electric	4.7	Electric
Other items			
Capacity control	Fixed	Fixed	Fixed
Outlet temperature capacity control	Variable	Variable	Variable
Water flow rate capacity control	Fixed	Fixed	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	7.0	7.0	8.2
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE		
Accessories and Installed Options	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE		
No Accessories or Installed Options selected	No Accessories or Installed Options selected		

Ecodesign manual for space heater

Model	DYNACIAT LG 100A	Model	DYNACIAT LG 120A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	Prated	Rated heat output, kW	Prated
Annual energy consumption, kWh	16855	Annual energy consumption, kWh	50
Seasonal space heating energy efficiency, %	202	Seasonal space heating energy efficiency, %	19516
Energy Classes	A++	Energy Classes	203
Seasonal Coefficient Of Performance, kWh/kWh	5.24	Seasonal Coefficient Of Performance, kWh/kWh	A++
Sound power level, dB(A)	69	Sound power level, dB(A)	5.28
Sound power level, LwA	69	Sound power level, LwA	69
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Low (30°C/35°C)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	Average (Strasbourg)
Operating limit temperature, °C	TOL	Operating limit temperature, °C	-7
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	Tbivalent
Tj, °C	Capacity Pdh, kW	COPd	Tj, °C
-7	38.1	5.56	-7
2	38.3	5.82	2
7	38.6	6.07	7
12	38.9	6.32	12
Bivalent temperature	38.1	5.56	Bivalent temperature
Operating limit temperature	38.0	5.43	Operating limit temperature
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	Electric	Type of energy input	Electric
Other items			
Capacity control	Fixed	Capacity control	Fixed
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	9.0	Rated water flow rate outdoor exchanger m³/h	10.5
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 150A	DYNACIAT LG 150A
Heat pump type	Water-to-Water	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)
Equipped with supplementary heater	No	No
Heat pump combination heater	No	No
Rated heat output, kW	57	Prated
Annual energy consumption, kWh	22464	64
Seasonal space heating energy efficiency, %	201	Qhe 24901
Energy Classes	A++	202
Seasonal Coefficient Of Performance, kW/h/kWh	SCOP	A++
Sound power level, dB(A)	LwA 70	5.26
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj	Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj	
Temperature application	Low (30°C/35°C)	
Climate	Average (Strasbourg)	
Bivalent temperature, °C	Tbivalent -7	Tbivalent -7
Operating limit temperature, °C	TOL -10	TOL -10
Heating water operation limit temperature, °C	WTOL 55	WTOL 55
Tj, °C	Capacity Pdh, kW	COPd
	COPd	Degradation coef, Cdh
-7	50.6	5.55
2	50.9	5.81
7	51.2	6.06
12	51.5	6.32
Bivalent temperature	50.6	5.55
Operating limit temperature	50.5	5.43
Power consumption in modes other than active mode	Power consumption in modes other than active mode	
Off mode, W	P OFF 0	P OFF 0
Thermostat-off mode, W	PTO 810	PTO 900
Standby mode, W	PSB 30	PSB 30
Crankcase heater mode, W	PCK 0	PCK 0
Supplementary heater	Supplementary heater	
Rated heat output, kW	Psup 6.7	Psup 7.6
Type of energy input	Electric	Electric
Other items	Other items	
Capacity control	Fixed	Fixed
Outlet temperature capacity control	Variable	Variable
Water flow rate capacity control	Fixed	Fixed
For air-to-water heat pumps	For air-to-water heat pumps	
Rated water flow rate outdoor exchanger m³/h	11.9	13.3
Contact details	Contact details	
	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	Accessories and Installed Options	
No Accessories or Installed Options selected	No Accessories or Installed Options selected	

Ecodesign manual for space heater

Model	DYNACIAT LG 180A	Model	DYNACIAT LG 200A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	Prated	Rated heat output, kW	Prated
Annual energy consumption, kWh	Qhe	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	ns,h	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	SCOP	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
Sound power level, dB(A)	LwA	Sound power level, dB(A)	LwA
	79		87
	27.401		302.08
	2.30		228
	NA		NA
	5.95		5.90
	72		72
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Average (Strasbourg)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	-7
Operating limit temperature, °C	TOL	Operating limit temperature, °C	-10
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	WTOL
Tj, °C	Capacity Pdh, kW	Tj, °C	Capacity Pdh, kW
-7	5.63	-7	76.8
2	42.7	2	46.8
7	37.6	7	41.9
12	37.9	12	42.2
Bivalent temperature	70.2	Bivalent temperature	76.8
Operating limit temperature	70.0	Operating limit temperature	76.6
	5.49		5.40
	-		-
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Average (Strasbourg)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	-7
Operating limit temperature, °C	TOL	Operating limit temperature, °C	-10
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	WTOL
Tj, °C	Capacity Pdh, kW	Tj, °C	Capacity Pdh, kW
-7	5.63	-7	76.8
2	42.7	2	46.8
7	37.6	7	41.9
12	37.9	12	42.2
Bivalent temperature	70.2	Bivalent temperature	76.8
Operating limit temperature	70.0	Operating limit temperature	76.6
	5.49		5.40
	-		-
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
	0		0
	885		1090
	30		30
	0		0
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	9.3	Type of energy input	10.2
	Electric		Electric
	Variable		Variable
	Variable		Variable
	Fixed		Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	16.6	Rated water flow rate outdoor exchanger m³/h	18.1
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 260A	Model	DYNACIAT LG 260A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	101	Rated heat output, kW	Prated 115
Annual energy consumption, kWh	34928	Annual energy consumption, kWh	Qhe 3921
Seasonal space heating energy efficiency, %	2.29	Seasonal space heating energy efficiency, %	ns,h 232
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	SCOP 5.93	Seasonal Coefficient Of Performance, kWh/kWh	SCOP 6.01
Sound power level, dB(A)	LwA 72	Sound power level, dB(A)	LwA 73
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application Low (30°C/35°C)			
Climate	Average (Strasbourg)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent -7	Bivalent temperature, °C	Tbivalent -7
Operating limit temperature, °C	TOL -10	Operating limit temperature, °C	TOL -10
Heating water operation limit temperature, °C	WTOL 55	Heating water operation limit temperature, °C	WTOL 55
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	89.3	5.60	-7
2	54.3	6.19	2
7	48.7	6.44	7
12	49.3	6.64	12
Bivalent temperature	89.3	5.60	Bivalent temperature
Operating limit temperature	89.0	5.46	Operating limit temperature
Power consumption in modes other than active mode			
Off mode, W	P OFF 0	Off mode, W	P OFF 0
Thermostat-off mode, W	PTO 173	Thermostat-off mode, W	PTO 1384
Standby mode, W	PSB 30	Standby mode, W	PSB 30
Crankcase heater mode, W	PCK 0	Crankcase heater mode, W	PCK 0
Supplementary heater			
Rated heat output, kW	Psup 11.9	Rated heat output, kW	Psup 13.7
Type of energy input	Electric	Type of energy input	Electric
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	21.0	Rated water flow rate outdoor exchanger m³/h	23.9
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 360A	Model	DYNACIAT LG 360A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	129	Rated heat output, kW	Prated
Annual energy consumption, kWh	44128	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	233	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	6.03	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
Sound power level, dB(A)	73	Sound power level, dB(A)	LwA
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj	Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj		
Temperature application	Low (30°C/35°C)		
Climate	Average (Strasbourg)		
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	Tbivalent
Operating limit temperature, °C	TOL	Operating limit temperature, °C	TOL
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	WTOL
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	114.5	5.61	-7
2	69.7	6.29	2
7	63.0	6.58	7
12	63.9	6.80	12
Bivalent temperature	114.5	5.61	Bivalent temperature
Operating limit temperature	114.1	5.47	Operating limit temperature
Power consumption in modes other than active mode	Power consumption in modes other than active mode		
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
Supplementary heater	Supplementary heater		
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	Electric	Type of energy input	Electric
Other items	Other items		
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps	For air-to-water heat pumps		
Rated water flow rate outdoor exchanger m³/h	26.9	Rated water flow rate outdoor exchanger m³/h	32.6
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 390A	Model	DYNACIAT LG 450A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	Prated	Rated heat output, kW	Prated
Annual energy consumption, kWh	177	Annual energy consumption, kWh	196
Seasonal space heating energy efficiency, %	57775	Annual energy consumption, kWh	65118
Energy Classes	2.43	Seasonal space heating energy efficiency, %	239
Seasonal Coefficient Of Performance, kWh/kWh	NA	Energy Classes	NA
Sound power level, dB(A)	SCOP	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
	LwA		LwA
	77		78
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Average (Strasbourg)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	-7
Operating limit temperature, °C	TOL	Operating limit temperature, °C	-10
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	TOL
Tj, °C	Capacity Pdh, kW	Tj, °C	WTOL
-7	156.1	-7	55
2	95.0	2	173.1
7	61.1	7	105.3
12	57.2	12	63.6
Bivalent temperature	156.1	Bivalent temperature	173.1
Operating limit temperature	155.6	Operating limit temperature	172.4
	5.71		5.62
	6.46		6.37
	6.69		6.56
	6.89		6.72
	5.71		5.62
	5.58		5.49
	-		-
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	0
Thermostat-off mode, W	PTO	Thermostat-off mode, W	1795
Standby mode, W	PSB	Standby mode, W	30
Crankcase heater mode, W	PCK	Crankcase heater mode, W	0
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	20.9	Type of energy input	23.3
	Electric		Electric
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	37.0	Rated water flow rate outdoor exchanger m³/h	40.9
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 480A	Model	DYNACIAT LG 520A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	208	Rated heat output, kW	Prated 234
Annual energy consumption, kWh	Qhe 68519	Annual energy consumption, kWh	Qhe 77201
Seasonal space heating energy efficiency, %	ns,h 2.42	Seasonal space heating energy efficiency, %	ns,h 2.41
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	SCOP 6.24	Seasonal Coefficient Of Performance, kWh/kWh	SCOP 6.24
Sound power level, dB(A)	LwA 76	Sound power level, dB(A)	LwA 77
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application Low (30°C/35°C)			
Climate	Average (Strasbourg)	Climate	Low (30°C/35°C)
Bivalent temperature, °C	Tbivalent -7	Bivalent temperature, °C	Tbivalent -7
Operating limit temperature, °C	TOL -10	Operating limit temperature, °C	TOL -10
Heating water operation limit temperature, °C	WTOL 55	Heating water operation limit temperature, °C	WTOL 55
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	184.0	5.79	-7
2	112.0	6.47	2
7	72.0	6.55	7
12	50.7	6.32	12
Bivalent temperature	184.0	5.79	Bivalent temperature
Operating limit temperature	183.3	5.64	Operating limit temperature
Power consumption in modes other than active mode			
Off mode, W	P OFF 0	Off mode, W	P OFF 0
Thermostat-off mode, W	PTO 1857	Thermostat-off mode, W	PTO 2136
Standby mode, W	PSB 30	Standby mode, W	PSB 30
Crankcase heater mode, W	PCK 0	Crankcase heater mode, W	PCK 0
Supplementary heater			
Rated heat output, kW	Psup 24.8	Rated heat output, kW	Psup 27.9
Type of energy input	Electric	Type of energy input	Electric
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	43.5	Rated water flow rate outdoor exchanger m³/h	48.9
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options			
No Accessories or Installed Options selected			

Ecodesign manual for space heater

Model	DYNACIAT LG 600A	Model	DYNACIAT LG 080A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	261	Rated heat output, kW	Prated
Annual energy consumption, kWh	88266	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	235	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	NA	Energy Classes	A++
Seasonal Coefficient Of Performance, kWh/kWh	6.08	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
Sound power level, dB(A)	78	Sound power level, dB(A)	LwA
67		67	
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application			
Climate	Low (30°C/35°C)	Medium (47°C/55°C)	Average (Strasbourg)
Bivalent temperature, °C	-7	-7	-7
Operating limit temperature, °C	TOL	-10	-10
Heating water operation limit temperature, °C	WTOL	55	55
Tj, °C		Tj, °C	
Capacity Pdh, kW	COPd	Capacity Pdh, kW	COPd
-7	231.2	5.70	28.1
2	140.7	6.32	28.5
7	90.5	6.35	28.8
12	63.8	6.10	29.1
Bivalent temperature	231.2	5.70	5.52
Operating limit temperature	230.2	5.56	0.95
Power consumption in modes other than active mode			
Off mode, W	P OFF	0	P OFF
Thermostat-off mode, W	PTO	2716	PTO
Standby mode, W	PSB	30	PSB
Crankcase heater mode, W	PCK	0	PCK
			0
Supplementary heater			
Rated heat output, kW	Psup	31.2	Psup
Type of energy input		Electric	3.8
			Electric
Other items			
Capacity control	Variable	Variable	Fixed
Outlet temperature capacity control	Variable	Variable	Variable
Water flow rate capacity control	Fixed	Fixed	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	54.6		5.8
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Ecodesign manual for space heater

Model	DYNACIAT LG 090A	DYNACIAT LG 100A				
Heat pump type	Water-to-Water	Water-to-Water				
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)				
Equipped with supplementary heater	No	No				
Heat pump combination heater	No	No				
Rated heat output, kW	37	Prated				
Annual energy consumption, kWh	17635	40				
Seasonal space heating energy efficiency, %	164	19250				
Energy Classes	A++	163				
Seasonal Coefficient Of Performance, kW/h/kWh	SCOP	4.29				
Sound power level, dB(A)	LwA	69				
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj						
Temperature application	Medium (47°C/55°C)	Medium (47°C/55°C)				
Climate	Average (Strasbourg)	Average (Strasbourg)				
Bivalent temperature, °C	Tbivalent -7	Tbivalent -7				
Operating limit temperature, °C	TOL -10	TOL -10				
Heating water operation limit temperature, °C	WTOL 55	WTOL 55				
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	32.7	3.86	-	-7	35.4	3.85
2	33.1	4.51	0.96	2	36.2	4.50
7	33.4	4.97	0.95	7	36.6	4.96
12	33.9	5.50	0.95	12	37.1	5.46
Bivalent temperature	32.7	3.86	-	Bivalent temperature	35.4	3.85
Operating limit temperature	32.5	3.61	-	Operating limit temperature	35.1	3.59
Power consumption in modes other than active mode						
Off mode, W	P OFF	0	OFF mode, W	P OFF	0	-
Thermostat-off mode, W	PTO	320	Thermostat-off mode, W	PTO	362	0.95
Standby mode, W	PSB	30	Standby mode, W	PSB	30	0.95
Crankcase heater mode, W	PCK	0	Crankcase heater mode, W	PCK	0	0.95
Supplementary heater						
Rated heat output, kW	Psup	4.4	Rated heat output, kW	Psup	4.9	-
Type of energy input		Electric	Type of energy input		Electric	-
Other items						
Capacity control	Fixed	Fixed	Capacity control	Fixed	Fixed	Fixed
Outlet temperature capacity control	Variable	Variable	Outlet temperature capacity control	Variable	Variable	Variable
Water flow rate capacity control	Fixed	Fixed	Water flow rate capacity control	Fixed	Fixed	Fixed
For air-to-water heat pumps						
Rated water flow rate outdoor exchanger m³/h		6.8	Rated water flow rate outdoor exchanger m³/h		7.3	-
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options						
No Accessories or Installed Options selected						

Ecodesign manual for space heater

Model	DYNACIAT LG 130A	
Heat pump type	Water-to-Water	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)
Equipped with supplementary heater	No	No
Heat pump combination heater	No	No
Rated heat output, kW	47	Prated
Annual energy consumption, kWh	22496	Qhe
Seasonal space heating energy efficiency, %	164	ns,h
Energy Classes	A++	
Seasonal Coefficient Of Performance, kW/h/kWh	SCOP	SCOP
Sound power level, dB(A)	LwA	LwA
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj	Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj	
Temperature application	Medium (47°C/55°C)	
Climate	Average (Strasbourg)	
Bivalent temperature, °C	Tbivalent	-7
Operating limit temperature, °C	TOL	-10
Heating water operation limit temperature, °C	WTOL	55
Tj, °C	Capacity Pdh, kW	COPd
	Degradation coef, Cdh	
-7	41.6	3.84
2	42.4	4.52
7	42.9	4.99
12	43.4	5.51
Bivalent temperature	41.6	3.84
Operating limit temperature	41.3	3.58
Power consumption in modes other than active mode	Power consumption in modes other than active mode	
Off mode, W	P OFF	0
Thermostat-off mode, W	PTO	422
Standby mode, W	PSB	30
Crankcase heater mode, W	PCK	0
Supplementary heater	Supplementary heater	
Rated heat output, kW	Psup	Psup
Type of energy input		7.0
		Electric
Other items	Other items	
Capacity control	Fixed	Fixed
Outlet temperature capacity control	Variable	Variable
Water flow rate capacity control	Fixed	Fixed
For air-to-water heat pumps	For air-to-water heat pumps	
Rated water flow rate outdoor exchanger m³/h	8.6	10.0
Contact details	Contact details	
	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	
Accessories and Installed Options	Accessories and Installed Options	
No Accessories or Installed Options selected	No Accessories or Installed Options selected	
Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	

Model	DYNACIAT LG 180A	DYNACIAT LG 180A
Heat pump type	Water-to-Water	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)
Equipped with supplementary heater	No	No
Heat pump combination heater	No	No
Rated heat output, kW	Prated	Prated
Annual energy consumption, kWh	59	75
Seasonal space heating energy efficiency, %	Qhe ns,h 163	Qhe ns,h 184
Energy Classes	A++	NA
Seasonal Coefficient Of Performance, kW/h/kWh	SCOP LwA 4.28	SCOP LwA 4.79
Sound power level, dB(A)	70	72
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj		
Temperature application	Medium (47°C/55°C)	Medium (47°C/55°C)
Climate	Average (Strasbourg)	Average (Strasbourg)
Bivalent temperature, °C	Tbivalent -7	Tbivalent -7
Operating limit temperature, °C	TOL -10	TOL -10
Heating water operation limit temperature, °C	WTOL 55	WTOL 55
Tj, °C	Capacity Pdh, kW 52.0 3.82 -	Capacity Pdh, kW 66.0 3.81 -
-7	53.3 4.49 0.95	2 40.2 4.91
2	54.1 4.96 0.95	7 35.9 5.56
7	55.0 5.48 0.95	12 36.3 6.18
12	52.0 3.82 -	Bivalent temperature 66.0 3.81 0.91
Bivalent temperature	52.0 3.82 -	Operating limit temperature 65.2 3.55 -
Power consumption in modes other than active mode		
Off mode, W	P OFF 0	P OFF 0
Thermostat-off mode, W	PTO 541	PTO 530
Standby mode, W	PSB 30	PSB 30
Crankcase heater mode, W	PCK 0	PCK 0
Supplementary heater		
Rated heat output, kW	Psup 6.8	Psup 9.3
Type of energy input	Electric	Electric
Other items		
Capacity control	Fixed	Variable
Outlet temperature capacity control	Variable	Variable
Water flow rate capacity control	Fixed	Fixed
For air-to-water heat pumps		
Rated water flow rate outdoor exchanger m³/h	10.9	13.6
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options		
No Accessories or Installed Options selected		

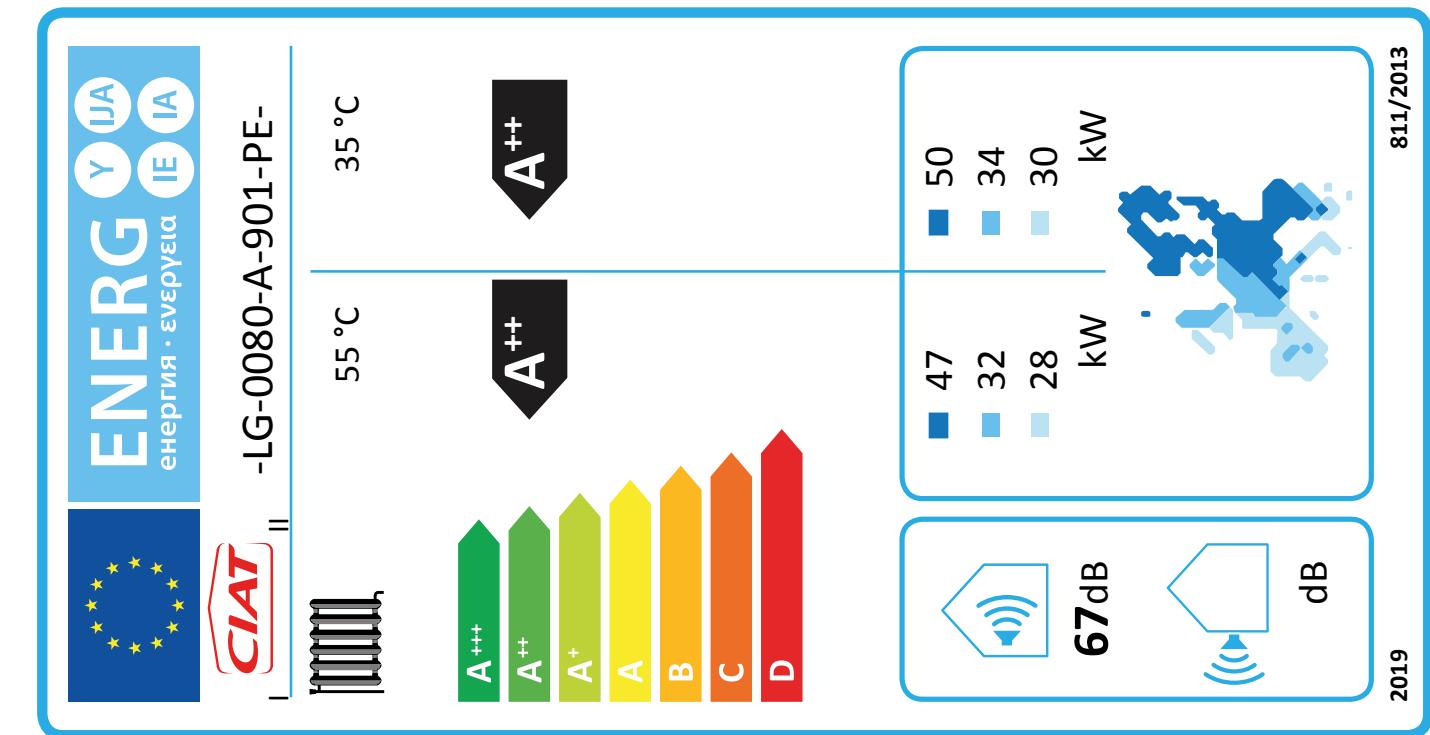
Model	DYNACIAT LG 240A	DYNACIAT LG 240A				
Heat pump type	Water-to-Water	Water-to-Water				
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)				
Equipped with supplementary heater	No	No				
Heat pump combination heater	No	No				
Rated heat output, kW	Prated	Prated				
Annual energy consumption, kWh	33	93				
Seasonal space heating energy efficiency, %	35188	40386				
Energy Classes	185	181				
Seasonal Coefficient Of Performance, kW/h/kWh	NA	NA				
Sound power level, dB(A)	SCOP	SCOP				
	LwA	LwA				
	72	72				
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj						
Temperature application	Medium (47°C/55°C)	Medium (47°C/55°C)				
Climate	Average (Strasbourg)	Average (Strasbourg)				
Bivalent temperature, °C	Tbivalent -7	Tbivalent -7				
Operating limit temperature, °C	TOL -10	TOL -10				
Heating water operation limit temperature, °C	WTOL 55	WTOL 55				
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	73.1	3.84	-	-7	82.1	3.77
2	44.5	4.95	-	2	50.0	4.82
7	39.3	5.67	0.90	7	45.8	5.55
12	40.0	6.26	0.90	12	46.6	6.25
Bivalent temperature	73.1	3.84	-	Bivalent temperature	82.1	3.77
Operating limit temperature	72.8	3.59	-	Operating limit temperature	81.2	3.51
Power consumption in modes other than active mode						
Off mode, W	P OFF	0	OFF mode, W	P OFF	0	-
Thermostat-off mode, W	PTO	676	Thermostat-off mode, W	PTO	683	-
Standby mode, W	PSB	30	Standby mode, W	PSB	30	-
Crankcase heater mode, W	PCK	0	Crankcase heater mode, W	PCK	0	-
Supplementary heater						
Rated heat output, kW	P sup	9.8	Rated heat output, kW	P sup	11.7	-
Type of energy input		Electric	Type of energy input		Electric	-
Other items						
Capacity control	Variable	Variable	Capacity control	Variable	Variable	-
Outlet temperature capacity control	Variable	Variable	Outlet temperature capacity control	Fixed	Fixed	-
Water flow rate capacity control	Fixed	Fixed	Water flow rate capacity control	Fixed	Fixed	-
For air-to-water heat pumps						
Rated water flow rate outdoor exchanger m³/h	15.2	16.8				
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE				
Accessories and Installed Options	No Accessories or Installed Options selected	No Accessories or Installed Options selected				

Model	DYNACIAT LG 200A	Model	DYNACIAT LG 300A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	Prated	Rated heat output, kW	Prated
Annual energy consumption, kWh	106	Annual energy consumption, kWh	118
Seasonal space heating energy efficiency, %	Qhe	Annual energy consumption, kWh	50619
Energy Classes	ns,h	Seasonal space heating energy efficiency, %	ns,h
Seasonal Coefficient Of Performance, kW/h/kWh	1.91	Energy Classes	184
Sound power level, dB(A)	SCOP	Seasonal Coefficient Of Performance, kW/h/kWh	NA
Sound power level, dB(A)	LwA	Sound power level, dB(A)	SCOP
Sound power level, dB(A)	73	Sound power level, dB(A)	4.81
Sound power level, dB(A)		Sound power level, dB(A)	73
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application	Medium (47°C/55°C)	Temperature application	Medium (47°C/55°C)
Climate	Average (Strasbourg)	Climate	Average (Strasbourg)
Bivalent temperature, °C	Tbivalent	Bivalent temperature, °C	Tbivalent
Operating limit temperature, °C	TOL	Operating limit temperature, °C	TOL
Heating water operation limit temperature, °C	WTOL	Heating water operation limit temperature, °C	WTOL
Tj, °C	Capacity Pdh, kW	Tj, °C	Capacity Pdh, kW
-7	3.92	-7	Capacity Pdh, kW
2	57.1	2	COPd
7	52.8	7	Degradation coef, Cdh
12	53.3	12	
Bivalent temperature	6.44	Bivalent temperature	
Operating limit temperature	93.8	Operating limit temperature	
	3.92		
	92.6		
	3.68		
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	13.4	Type of energy input	15.0
	Electric		Electric
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	19.5	Rated water flow rate outdoor exchanger m³/h	21.4
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Model	DYNACIAT LG 390A	Model	DYNACIAT LG 390A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	Prated	Rated heat output, kW	Prated
Annual energy consumption, kWh	Qhe	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	ns,h	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	SCOP	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
Sound power level, dB(A)	LwA	Sound power level, dB(A)	LwA
	76		77
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application	Medium (47°C/55°C)	Temperature application	Medium (47°C/55°C)
Climate	Average (Strasbourg)	Climate	Average (Strasbourg)
Bivalent temperature, °C	Tbivalent -7	Bivalent temperature, °C	Tbivalent -7
Operating limit temperature, °C	TOL -10	Operating limit temperature, °C	TOL -10
Heating water operation limit temperature, °C	WTOL 55	Heating water operation limit temperature, °C	WTOL 55
Tj, °C	Capacity Pdh, kW	COPd	Degradation coef, Cdh
-7	126.6	3.85	-
2	77.1	5.07	-
7	49.5	5.82	-
12	47.8	6.35	0.90
Bivalent temperature	126.6	3.85	-
Operating limit temperature	125.1	3.88	-
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input	Electric	Type of energy input	Electric
	18.0		20.7
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	26.2	Rated water flow rate outdoor exchanger m³/h	29.5
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected

Model	DYNACIAT LG 480A	DYNACIAT LG 480A
Heat pump type	Water-to-Water	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Ground Water (10°C/-)
Equipped with supplementary heater	No	No
Heat pump combination heater	No	No
Rated heat output, kW	Prated	Prated
Annual energy consumption, kWh	178	191
Seasonal space heating energy efficiency, %	Qhe	Qhe
Energy Classes	ns,h	ns,h
Seasonal Coefficient Of Performance, kW/h/kWh	1.92	1.92
Sound power level, dB(A)	NA	NA
SCOP	5.01	5.01
Sound power level, dB(A)	SCOP	SCOP
LwA	78	76
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj		
Temperature application	Medium (47°C/55°C)	Medium (47°C/55°C)
Climate	Average (Strasbourg)	Average (Strasbourg)
Bivalent temperature, °C	Tbivalent	Tbivalent
Operating limit temperature, °C	TOL	TOL
Heating water operation limit temperature, °C	WTOL	WTOL
Tj, °C	COPd	COPd
Capacity Pdh, kW	Degradation coef, Cdh	Degradation coef, Cdh
-7	157.5	157.5
2	95.9	95.9
7	61.6	61.6
12	61.0	61.0
Bivalent temperature	6.39	6.39
Operating limit temperature	0.90	0.90
	-	-
	-	-
	-	-
	-	-
Power consumption in modes other than active mode		
Off mode, W	P OFF	P OFF
Thermostat-off mode, W	PTO	PTO
Standby mode, W	PSB	PSB
Crankcase heater mode, W	PCK	PCK
Supplementary heater		
Rated heat output, kW	Psup	Psup
Type of energy input	2.8	24.1
	Electric	Electric
Other items		
Capacity control	Variable	Variable
Outlet temperature capacity control	Variable	Variable
Water flow rate capacity control	Fixed	Fixed
For air-to-water heat pumps		
Rated water flow rate outdoor exchanger m³/h	32.5	34.7
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	No Accessories or Installed Options selected

Model	DYNACIAT LG 600A	Model	DYNACIAT LG 600A
Heat pump type	Water-to-Water	Heat pump type	Water-to-Water
Outdoor water type	Ground Water (10°C/-)	Outdoor water type	Ground Water (10°C/-)
Equipped with supplementary heater	No	Equipped with supplementary heater	No
Heat pump combination heater	No	Heat pump combination heater	No
Rated heat output, kW	216	Rated heat output, kW	Prated
Annual energy consumption, kWh	86543	Annual energy consumption, kWh	Qhe
Seasonal space heating energy efficiency, %	198	Seasonal space heating energy efficiency, %	ns,h
Energy Classes	NA	Energy Classes	NA
Seasonal Coefficient Of Performance, kWh/kWh	5.14	Seasonal Coefficient Of Performance, kWh/kWh	SCOP
Sound power level, dB(A)	77	Sound power level, dB(A)	LwA
78			
Declared capacity and coefficient of performance for heating at indoor conditions 20°C and outdoor temperature Tj			
Temperature application	Medium (47°C/55°C)	Temperature application	Medium (47°C/55°C)
Climate	Average (Strasbourg)	Climate	Average (Strasbourg)
Bivalent temperature, °C	-7	Bivalent temperature, °C	Tbivalent
Operating limit temperature, °C	-10	Operating limit temperature, °C	TOL
Heating water operation limit temperature, °C	55	Heating water operation limit temperature, °C	WTOL
Tj, °C		Tj, °C	
Capacity Pdh, kW	COPd	Capacity Pdh, kW	COPd
7	191.0	7	211.3
2	116.3	2	128.6
7	74.7	7	82.7
12	54.0	12	60.4
Bivalent temperature	191.0	Bivalent temperature	211.3
Operating limit temperature	188.7	Operating limit temperature	208.6
3.76		3.59	
Power consumption in modes other than active mode			
Off mode, W	P OFF	Off mode, W	P OFF
Thermostat-off mode, W	PTO	Thermostat-off mode, W	PTO
Standby mode, W	PSB	Standby mode, W	PSB
Crankcase heater mode, W	PCK	Crankcase heater mode, W	PCK
Supplementary heater			
Rated heat output, kW	Psup	Rated heat output, kW	Psup
Type of energy input		Type of energy input	
			30.3
			Electric
Other items			
Capacity control	Variable	Capacity control	Variable
Outlet temperature capacity control	Variable	Outlet temperature capacity control	Variable
Water flow rate capacity control	Fixed	Water flow rate capacity control	Fixed
For air-to-water heat pumps			
Rated water flow rate outdoor exchanger m³/h	4.00	Rated water flow rate outdoor exchanger m³/h	43.5
Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE	Contact details	Manufactured in France by: CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
Accessories and Installed Options	No Accessories or Installed Options selected	Accessories and Installed Options	No Accessories or Installed Options selected



Fiche/Ficha/Scheda/Datenblatt



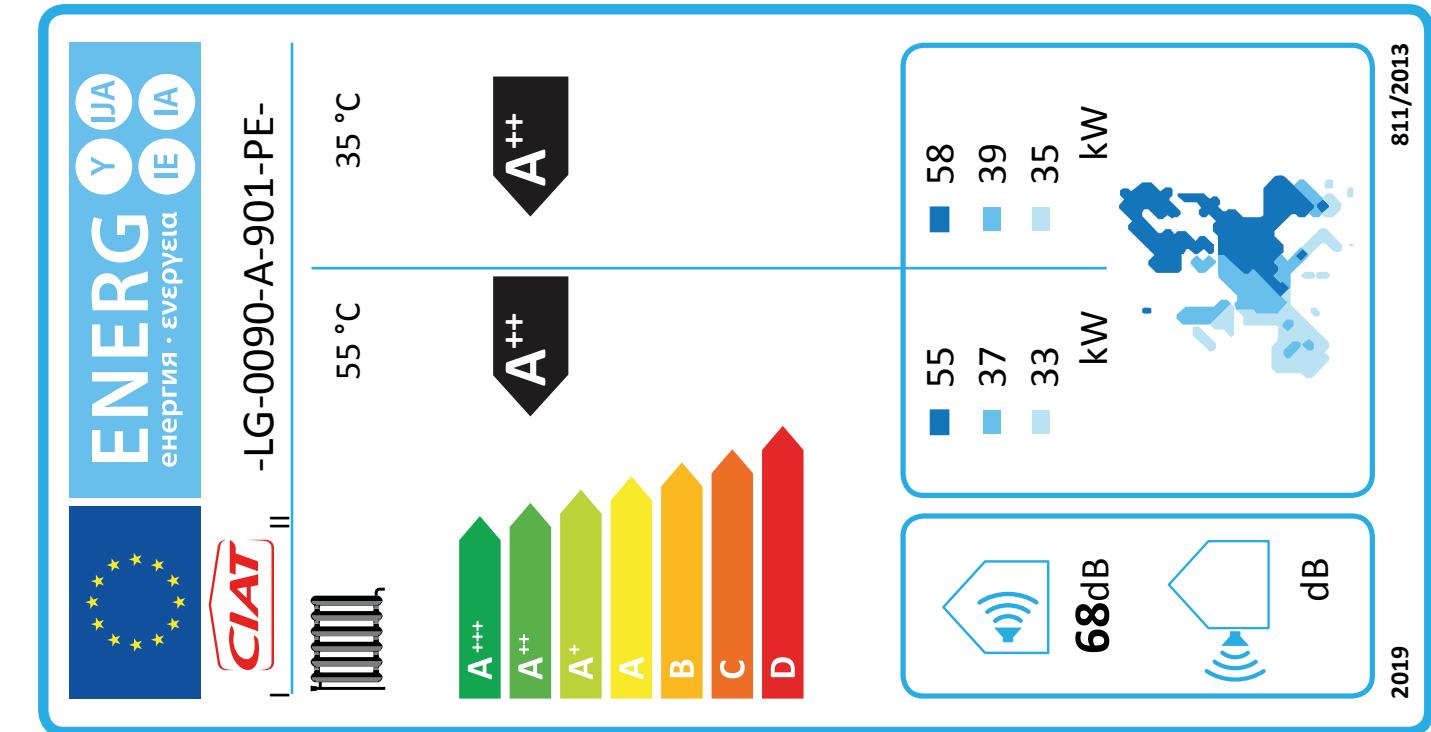
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A⁺⁺



kW	47	32	28
ηs %	162	164	158
kWh/annum	27353	15181	8781
	■	■	■





Fiche/Ficha/Scheda/Datenblatt



-LG-0090-A-901-PE-



kW	55	37	33	
η%	162	164	158	
kWh/annum	31831	17655	10214	
	■	■	■	





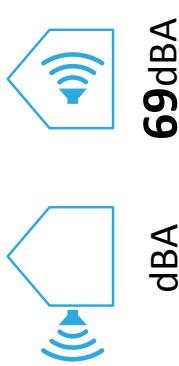
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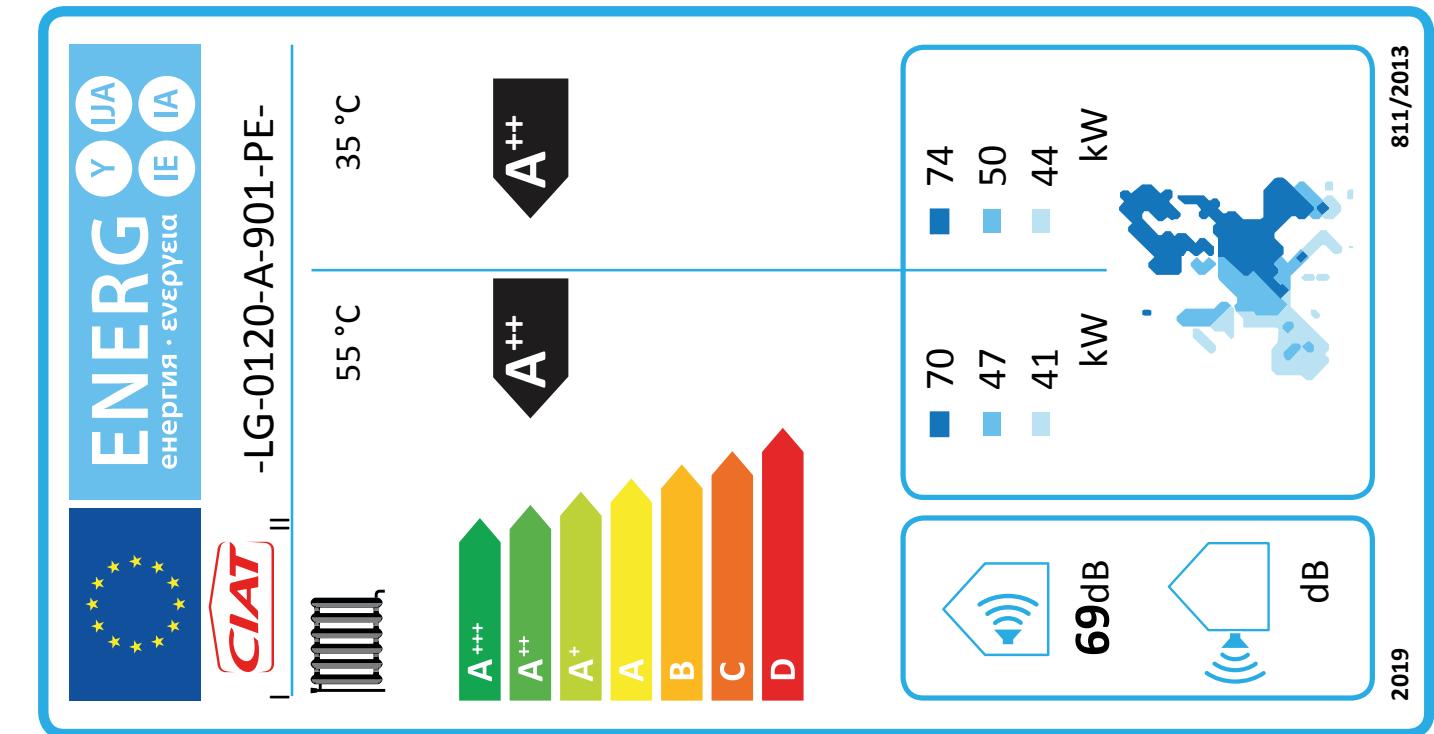
CIAT

-LG-0100-A-901-PE-

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kW	60	40	35	
ηs %	161	163	157	
kWh/annum	34978	19250	11113	
	■	■	■	





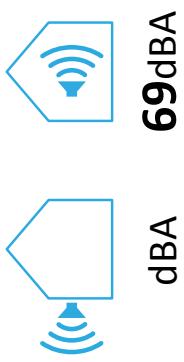
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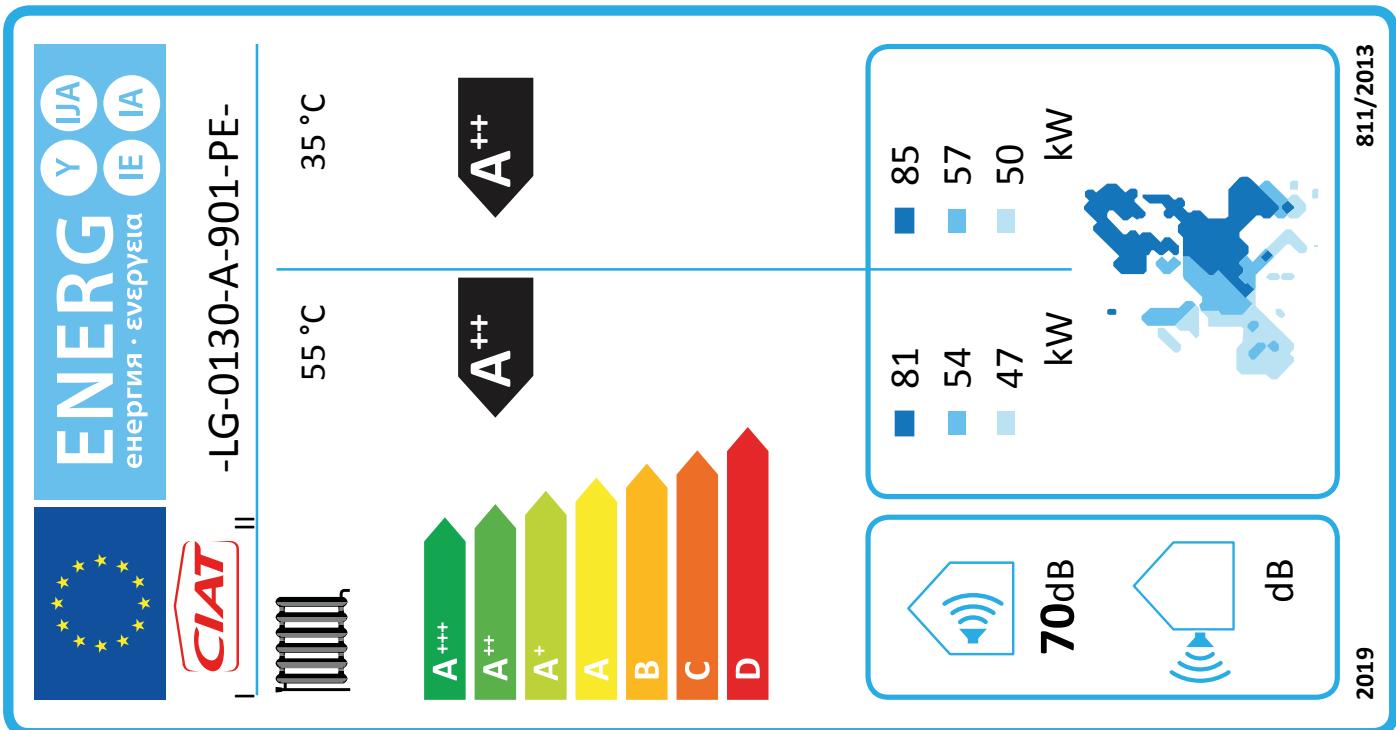


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A⁺⁺

kW	70	47	41	
ηs %	162	164	158	
kWh/annum	40760	22496	12998	





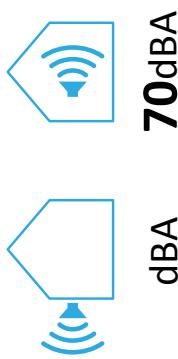
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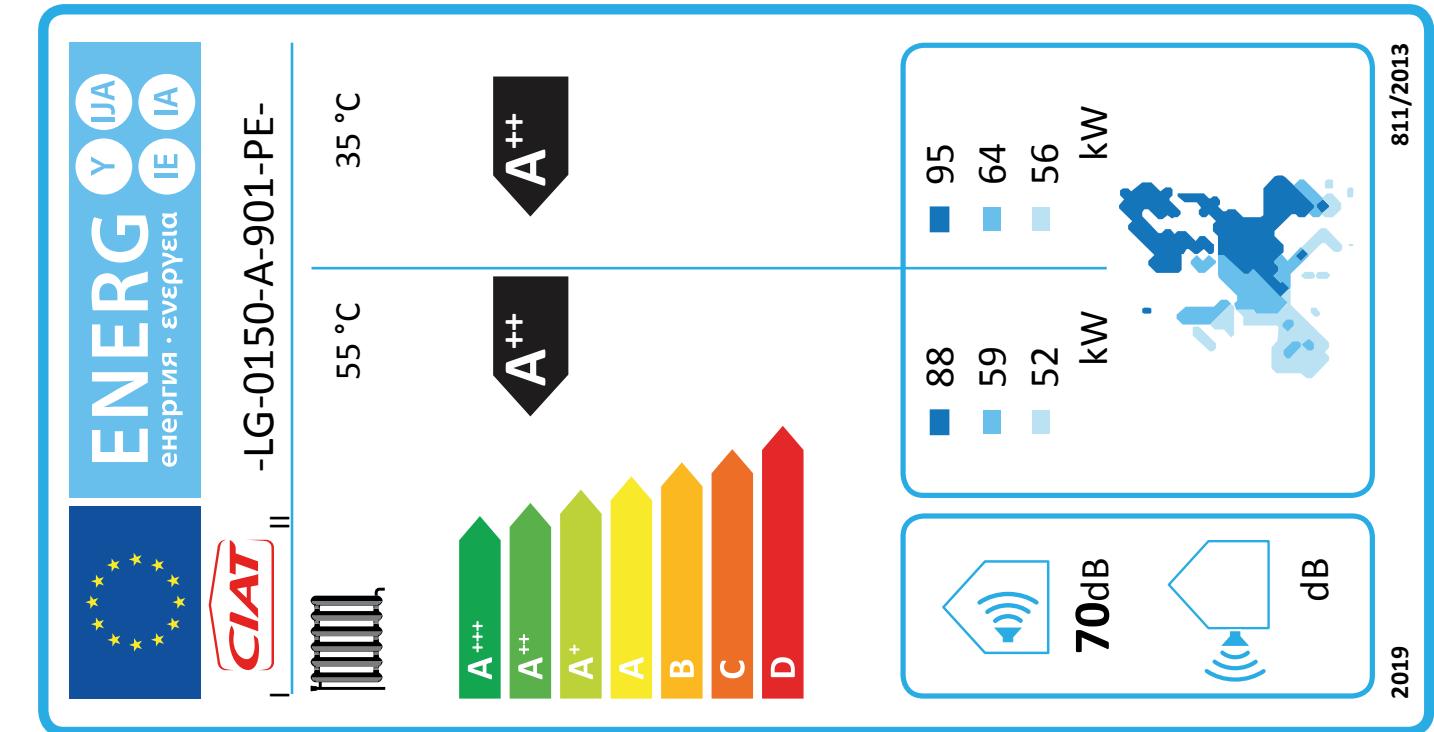


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kW	81	54	47
ηs %	162	165	158
kWh/annum	46857	25873	14862
	■	■	■





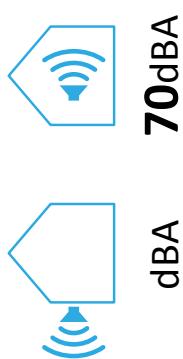
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-LG-0150-A-901-PE-

A⁺⁺

kW	88	59	52
η%	161	163	157
kWh/annum	51530	28316	16457
			■



**Siège social**

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