

10492

09 - 2018

POWERCIAT LX

Ecoconception (2015/1095)

TECHNICAL DATA MANUAL



Performances according to Regulation (EU) 2015/1095

Model ^[1]	Air: 35°C ^[3]	
Chiller type ^[2]	Brine Medium temperature: -2°C / -8°C ^[9]	
Outdoor side heat exchanger ^[2]		
Indoor side heat exchanger ^[4]		
Refrigerant Type ^[6]	R410A	GWP
Item ^[7]	Symbol ^[8]	Value ^[6]
Operating Temperature ^[11]	T	Unit ^[10]
Seasonal Energy Performance Ratio ^[12]	SEPR	kWh/kWh
Annual electricity consumption ^[13]	Q	kWh

Parameters at full load and reference ambient T, point(A) ^[14]

Rated cooling capacity ^[15]	P-A	kW
Rated power input ^[16]	D-A	kW
Degradation coefficient for fixed staged capacity units ^{[17](*)}	Cc-A	-
Rated EER ^[18]	EER-A	kW/kW

Parameters at rating point B ^[19]

Declared cooling capacity ^[20]	P-B	kW
Declared power input ^[21]	D-B	kW
Degradation coefficient for fixed staged capacity units ^{[17](*)}	Cc-B	-
Declared EER ^[22]	EER-B	kW/kW

Parameters at rating point C ^[19]

Declared cooling capacity ^[20]	P-C	kW
Declared power input ^[21]	D-C	kW
Degradation coefficient for fixed staged capacity units ^{[17](*)}	Cc-C	-
Declared EER ^[22]	EER-C	kW/kW

Parameters at rating point D ^[19]

Declared cooling capacity ^[20]	P-D	kW
Declared power input ^[21]	D-D	kW
Degradation coefficient for fixed staged capacity units ^{[17](*)}	Cc-D	-
Declared EER ^[22]	EER-D	kW/kW

Other items ^[23]

Capacity control ^[24]	Fixed/Variable ^[25]
Glycol type and concentration ^[26]	Evap.Fluid Type: Ethylene Glycol Concentration: 30 % ^[27]

Contact details ^[28]

CIAT - Avenue Jean Fatoumier BP 14 - 01350 Culoz - FRANCE

(*) If Cc is not determined by measurement then the default degradation coefficient shall be Cc = 0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

ENGLISH	FRANCAIS	DEUTSCH	ITALIANO
[1] Model	[1] Modèle	[1] Modell(e)	[1] Modelli
[2] Outdoor side heat exchanger	[2] Échangeur côté extérieur	[2] Äußerer Wärmetauscher	[2] Scambiatore di calore lato esterno
[3] Air: 35°C	[3] Air: 35°C	[3] Luft 35°C	[3] Aria 35°C
[4] Indoor side heat exchanger	[4] Échangeur côté intérieur	[4] Innerer Wärmetauscher	[4] Scambiatore di calore lato interno
[5] Brine Medium temperature -2°C / -8°C	[5] Eau glycolée Moyenne température 2°C / -8°C	[5] Sole Medium Temperatur -2°C / -8°C	[5] Salamoia a media temperatura -2°C / -8°C
[6] Refrigerant Type	[6] Type de fluide frigorigène	[6] Kältemitteltyp	[6] Tipo di refrigerante
[7] Item	[7] Élément	[7] Punkt	[7] Elemento
[8] Symbol	[8] Symbole	[8] Symbol	[8] Simbolo
[9] Value	[9] Valeur	[9] Wert	[9] Valore
[10] Unit	[10] Unité	[10] Einheit	[10] Unità
[11] Operating Temperature	[11] Température de fonctionnement	[11] Betriebstemperatur	[11] Temperatura di funzionamento
[12] Seasonal Energy Performance Ratio	[12] Coefficient d'efficacité énergétique saisonnier	[12] Jahresarbeitszahl	[12] Indice di prestazione energetica stagionale
[13] Annual electricity consumption	[13] Consommation annuelle d'électricité	[13] Jährlicher Stromverbrauch	[13] Consumo annuale di elettricità
[14] Parameters at full load and reference ambient T _{point(A)}	[14] Paramètres à pleine charge et à la température ambiante de référence, point (A)	[14] Parameter bei Vollast und Bezugsumgebungs temperatur,(Punkt A)	[14] Parametri a pieno carico e a T ambiente di riferimento, punto (A)
[15] Rated cooling capacity	[15] Puissance frigorifique nominale	[15] Nenn-Kälteleistung	[15] Capacità di raffreddamento nominale
[16] Rated power input	[16] Puissance absorbée nominale	[16] Nenn-Leistungsaufnahme	[16] Potenza assorbita nominale
[17] Degradation coefficient for fixed staged capacity units(*)	[17] Coefficient de dégradation pour les unités à puissance étagée fixe(*)	[17] Abminderungskoeffizient für Geräte mit festen Leistungsstufen(*)	[17] Coefficiente di degradazione delle unità a capacità fissa progressiva (*)
[18] Rated EER	[18] EER nominal	[18] Nenn-EER	[18] EER nominale
[19] Parameters at rating point B	[19] Paramètres au point de référence B	[19] Parameter am Bezugspunkt B	[19] Parametri al punto di valutazione B
[20] Declared cooling capacity	[20] Puissance frigorifique déclarée	[20] Angegebene Kälteleistung	[20] Capacità di raffreddamento dichiarata
[21] Declared power input	[21] Puissance absorbée déclarée	[21] Angegebene Leistungsaufnahme	[21] Potenza assorbita dichiarata
[22] Declared EER	[22] EER déclaré	[22] Jahresarbeitszahl EER	[22] EER dichiarato
[23] Other items	[23] Autres caractéristiques	[23] Sonstige Elemente	[23] Altri elementi
[24] Capacity control	[24] Régulation de la puissance	[24] Leistungssteuerung	[24] Controllo della capacità
[25] Fixed/Variable	[25] Fixe/variable	[25] Fix / variabel	[25] fisso/variabile
[26] Glycol type and concentration	[26] Type de glycol et concentration	[26] Glykollart und -konzentration	[26] Tipo di glicole e concentrazione
[27] Evap.Fluid Type: Ethylene Glycol Concentration: 30 %	[27] Type de fluide évap. : Concentration éthylène glycol : 30 %	[27] Verd.-Flüssigkeitstyp: Ethylenglykol-Konzentration: 30 %	[27] Tipo di fluido evap.: Concentrazione glicole etileno: 30%
[28] Contact details	[28] Coordonnées de contact	[28] Kontakt	[28] Recapiti

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

SVENSKA	ESPAÑOL	NETERLANDS	POLSKI
[1] Modell(er)	[1] Modelos	[1] Model(len)	[1] Model(-e)
[2] Värmeväxlare på utomhussidan	[2] Intercambiador de calor lateral exterior	[2] Externe warmtewisselaar	[2] Wymiennik ciepła po zewnętrznej stronie
[3] Luft 35°C	[3] Aire 35°C	[3] Lucht 35°C	[3] Woda 35°C
[4] Värmeväxlare på inomhussidan	[4] Intercambiador de calor lateral interior	[4] Interne warmtewisselaar	[4] Wymiennik ciepła po wewnętrznej stronie
[5] Brine Medium temperatur -2°C / -8°C	[5] Salmuera Temperatura media -2°C / -8°C	[5] Pekel Gemiddelde temperatuur -2°C / -8°C	[5] Średnia temperatura solanki -2°C / -8°C
[6] köldmedietyp	[6] Tipo di refrigerante	[6] koelmiddel type	[6] Typ czynnika chłodniczego
[7] Funktion	[7] Elemento	[7] Item	[7] Pozycja
[8] Symbol	[8] Símbolo	[8] Symbool	[8] Wartość
[9] Värde	[9] Valor	[9] Waarde	[9] Value
[10] Enhhet	[10] Unidad	[10] Eenheid	[10] Jednostka
[11] Drifttemperatur	[11] Temperatura de funcionamiento	[11] Bedrijfstemperatuur	[11] Temperatura robocza
[12] Årstidsberoende energiprestanda	[12] Índice de eficiencia energética estacional	[12] Seizoensrendement (SEER)	[12] Współczynnik sezonowej sprawności energetycznej
[13] Årlig elförbrukning	[13] Consumo eléctrico anual	[13] Jaarlijks elektrisch verbruik	[13] Roczne zużycie energii elektrycznej
[14] Parametrar vid full belastning och referensomgivnings-T, punkt (A)	[14] Parámetros con carga total y temperatura ambiente de referencia (punto A)	[14] Parameters bij vollast en referentie omgevingstemperatuur T, punt A	[14] Parametry przy pełnym obciążeniu i referencyjnej temperaturze otoczenia T (punkt A)
[15] Angiven kylkapacitet	[15] Potencia frigorífica nominal	[15] Nominaal koelvermogen	[15] Znamionowa wydajność chłodnicza
[16] Nominell tillförd effekt	[16] Potencia absorbida nominal	[16] Nominaal opgenomen vermogen	[16] Znamionowy pobór mocy
[17] Degraderingskoefficient för enheter med fast och stegvis kapacitet(*)	[17] Coeficiente de degradación para equipos de potencia fija y por etapas(*)	[17] Verlescoëfficiënt voor units met vast getrappt vermogen(*)	[17] Współczynnik strat dla urządzeń o stałej, stopniowanej wydajności(*)
[18] Energifektivitetskvot	[18] EER nominal	[18] Nominaal EER	[18] Znamionowy EER
[19] Parametrar vid bedömningspunkt B	[19] Parámetros con punto de clasificación B	[19] Parameters bij meetpunt B	[19] Parametry w punkcie znamionowym B
[20] Deklarerad kylkapacitet	[20] Potencia frigorífica declarada	[20] Opgegeven koelvermogen	[20] Deklarowana wydajność chłodnicza
[21] Deklarerad tillförd effekt	[21] Potencia absorbida declarada	[21] Opgegeven opgenomen vermogen	[21] Deklarowany pobór mocy
[22] Deklarerad EER	[22] EER declarado	[22] Opgegeven EER	[22] Deklarowany EER
[23] Övriga poster	[23] Otros elementos	[23] Andere kenmerken	[23] Pozostałe parametry
[24] Kapacitetsreglering	[24] Control de capacidad de la puissance	[24] Vermogenscontrole	[24] Regulacja wydajności
[25] Fast/varierande	[25] Fijo/variable	[25] Vast/variabel	[25] Stała / zmienna
[26] Glukolyttyp och koncentration	[26] Tipo y concentración de glicol	[26] Glycoltype en concentratie	[26] Typ i stężenie glikolu
[27] Avdunstningsvätsketyp: koncentration etylenglykol: 30 %	[27] Tipo de fluido evap.: concentración de etilenglicol: 30 %	[27] Verd.vloeist. type: ethyleenglycol concentratie: 30 %	[27] Typ płynu parowni: stężenie glikolu etylenowego: 30 %
[28] Kontakt	[28] Datos de contacto	[28] Contactgegevens	[28] Dane kontaktowe

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX ST 0908A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.30	kWh/kWh
Annual electricity consumption	Q	381683	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	170	kW
Rated power input	D-A	77.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.19	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	159	kW
Declared power input	D-B	58.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.74	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	148	kW
Declared power input	D-C	46.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.21	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	136	kW
Declared power input	D-D	37.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.65	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX ST 0908A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.05	kWh/kWh
Annual electricity consumption	Q	346162	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	142	kW
Rated power input	D-A	70.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.02	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	134	kW
Declared power input	D-B	52.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.56	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	124	kW
Declared power input	D-C	41.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	2.99	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	114	kW
Declared power input	D-D	34.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.34	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 1108A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.16 kWh/kWh
Annual electricity consumption	Q	506450 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	216	kW
Rated power input	D-A	100	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.15	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	201	kW
Declared power input	D-B	77.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.61	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	187	kW
Declared power input	D-C	60.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.09	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	173	kW
Declared power input	D-D	49.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.49	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 1008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.45 kWh/kWh
Annual electricity consumption	Q	383001 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	178	kW
Rated power input	D-A	81.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.19	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	167	kW
Declared power input	D-B	59.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.79	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	155	kW
Declared power input	D-C	46.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.31	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	143	kW
Declared power input	D-D	36.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.92	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX ST 1358A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.39	kWh/kWh
Annual electricity consumption	Q	547818	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	250	kW
Rated power input	D-A	114	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.20	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	234	kW
Declared power input	D-B	84.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.76	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	217	kW
Declared power input	D-C	66.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.25	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	200	kW
Declared power input	D-D	52.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.84	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX ST 1528A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.47	kWh/kWh
Annual electricity consumption	Q	619364	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	290	kW
Rated power input	D-A	127	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.29	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	271	kW
Declared power input	D-B	95.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.84	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	252	kW
Declared power input	D-C	76.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.31	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	232	kW
Declared power input	D-D	58.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.96	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 2088A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.64 kWh/kWh
Annual electricity consumption	Q	813653 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	399	kW
Rated power input	D-A	166	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.40	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	373	kW
Declared power input	D-B	126	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.97	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	346	kW
Declared power input	D-C	99.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.47	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	319	kW
Declared power input	D-D	77.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.14	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 1858A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.43 kWh/kWh
Annual electricity consumption	Q	777326 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	360	kW
Rated power input	D-A	159	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.26	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	336	kW
Declared power input	D-B	120	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.80	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	311	kW
Declared power input	D-C	94.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.29	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	287	kW
Declared power input	D-D	73.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.88	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 2158A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-410A	GWP 1430 kg CO ₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.33 kWh/kWh
Annual electricity consumption	Q	930189 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	418	kW
Rated power input	D-A	190	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.20	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	391	kW
Declared power input	D-B	144	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.71	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	363	kW
Declared power input	D-C	113	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.21	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	334	kW
Declared power input	D-D	89.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.76	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 2308A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO ₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.30 kWh/kWh
Annual electricity consumption	Q	1003684 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	447	kW
Rated power input	D-A	203	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.20	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	415	kW
Declared power input	D-B	153	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.71	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	385	kW
Declared power input	D-C	120	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.19	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	355	kW
Declared power input	D-D	96.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.70	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 2628A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	3.31 kWh/kWh
Annual electricity consumption	Q	1121888 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	502	kW
Rated power input	D-A	228	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.20	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	467	kW
Declared power input	D-B	172	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.71	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	433	kW
Declared power input	D-C	135	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.20	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	400	kW
Declared power input	D-D	107	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.72	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 2528A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	3.50 kWh/kWh
Annual electricity consumption	Q	1032183 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	487	kW
Rated power input	D-A	207	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.35	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	455	kW
Declared power input	D-B	159	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.86	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	423	kW
Declared power input	D-C	127	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.34	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	390	kW
Declared power input	D-D	98.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.97	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 3028A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	3.44 kWh/kWh
Annual electricity consumption	Q	1367626 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	636	kW
Rated power input	D-A	296	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.15	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	588	kW
Declared power input	D-B	220	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.68	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	546	kW
Declared power input	D-C	164	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.32	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	504	kW
Declared power input	D-D	127	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.97	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 3028A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	3.29 kWh/kWh
Annual electricity consumption	Q	1255512 kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	557	kW
Rated power input	D-A	250	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.23	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	519	kW
Declared power input	D-B	195	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.67	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	482	kW
Declared power input	D-C	154	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.14	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	445	kW
Declared power input	D-D	119	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.74	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 4008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.72 kWh/kWh
Annual electricity consumption	Q	1520505 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	763	kW
Rated power input	D-A	373	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.05	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	712	kW
Declared power input	D-B	266	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.68	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	661	kW
Declared power input	D-C	181	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.66	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	610	kW
Declared power input	D-D	140	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.36	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX ST 4008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.55 kWh/kWh
Annual electricity consumption	Q	1389331 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	666	kW
Rated power input	D-A	325	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.05	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	622	kW
Declared power input	D-B	230	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.70	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	577	kW
Declared power input	D-C	167	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.46	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	533	kW
Declared power input	D-D	130	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.10	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX HE 0808A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.52	kWh/kWh
Annual electricity consumption	Q	298537	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	142	kW
Rated power input	D-A	68.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.06	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	133	kW
Declared power input	D-B	50.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.65	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	123	kW
Declared power input	D-C	37.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.28	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	114	kW
Declared power input	D-D	26.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.26	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Model		POWERCIAT LX HE 0808A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.70	kWh/kWh
Annual electricity consumption	Q	338033	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	169	kW
Rated power input	D-A	75.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.23	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	158	kW
Declared power input	D-B	56.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.83	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	147	kW
Declared power input	D-C	42.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.47	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	136	kW
Declared power input	D-D	30.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.43	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 1108A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.52 kWh/kWh
Annual electricity consumption	Q	451073 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	214	kW
Rated power input	D-A	98.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.19	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	200	kW
Declared power input	D-B	75.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.66	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	186	kW
Declared power input	D-C	56.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.32	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	172	kW
Declared power input	D-D	40.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.20	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 1008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.78 kWh/kWh
Annual electricity consumption	Q	347655 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	177	kW
Rated power input	D-A	80.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.21	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	166	kW
Declared power input	D-B	57.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.87	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	154	kW
Declared power input	D-C	43.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.56	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	142	kW
Declared power input	D-D	31.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.52	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX HE 1358A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.66	kWh/kWh
Annual electricity consumption	Q	504960	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	249	kW
Rated power input	D-A	112	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.22	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	233	kW
Declared power input	D-B	82.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.82	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	216	kW
Declared power input	D-C	62.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.45	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	199	kW
Declared power input	D-D	46.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.32	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX HE 1528A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.79	kWh/kWh
Annual electricity consumption	Q	563973	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	289	kW
Rated power input	D-A	125	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.32	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	269	kW
Declared power input	D-B	92.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.92	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	250	kW
Declared power input	D-C	70.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.56	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	231	kW
Declared power input	D-D	51.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.51	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 2008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.99 kWh/kWh
Annual electricity consumption	Q	736179 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	397	kW
Rated power input	D-A	163	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.44	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	371	kW
Declared power input	D-B	121	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.07	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	344	kW
Declared power input	D-C	91.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.75	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	318	kW
Declared power input	D-D	66.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.75	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 1858A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.71 kWh/kWh
Annual electricity consumption	Q	716163 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	359	kW
Rated power input	D-A	157	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.29	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	335	kW
Declared power input	D-B	117	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.85	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	310	kW
Declared power input	D-C	88.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.50	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	286	kW
Declared power input	D-D	65.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.40	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE Z158A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.58	kWh/kWh
Annual electricity consumption	Q	861708	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	417	kW
Rated power input	D-A	188	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.22	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	390	kW
Declared power input	D-B	141	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.77	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	362	kW
Declared power input	D-C	106	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.40	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	334	kW
Declared power input	D-D	79.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.20	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE Z308A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.63	kWh/kWh
Annual electricity consumption	Q	907329	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	445	kW
Rated power input	D-A	198	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.25	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	412	kW
Declared power input	D-B	146	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.82	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	383	kW
Declared power input	D-C	111	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.44	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	353	kW
Declared power input	D-D	83.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.25	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 2628A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.60 kWh/kWh
Annual electricity consumption	Q	1026277 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	499	kW
Rated power input	D-A	223	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.24	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	464	kW
Declared power input	D-B	166	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.80	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	431	kW
Declared power input	D-C	125	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.44	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	398	kW
Declared power input	D-D	94.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.20	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 2528A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.81 kWh/kWh
Annual electricity consumption	Q	940137 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	484	kW
Rated power input	D-A	203	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.39	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	453	kW
Declared power input	D-B	153	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.97	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	420	kW
Declared power input	D-C	117	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.59	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	387	kW
Declared power input	D-D	86.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.49	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 3028A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.60	kWh/kWh
Annual electricity consumption	Q	1144027	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	556	kW
Rated power input	D-A	244	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.27	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	518	kW
Declared power input	D-B	188	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.76	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	481	kW
Declared power input	D-C	142	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.38	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	444	kW
Declared power input	D-D	104	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.28	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 3428A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.39	kWh/kWh
Annual electricity consumption	Q	1184106	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	542	kW
Rated power input	D-A	264	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.06	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	502	kW
Declared power input	D-B	194	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.59	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	466	kW
Declared power input	D-C	142	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.29	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	430	kW
Declared power input	D-D	110	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	3.92	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 4008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.56 kWh/kWh
Annual electricity consumption	Q	1361461 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	654	kW
Rated power input	D-A	326	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.01	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	611	kW
Declared power input	D-B	233	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.62	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	567	kW
Declared power input	D-C	169	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.36	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	524	kW
Declared power input	D-D	121	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.31	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 3828A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.67 kWh/kWh
Annual electricity consumption	Q	1276666 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	632	kW
Rated power input	D-A	292	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.16	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	584	kW
Declared power input	D-B	214	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.73	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	542	kW
Declared power input	D-C	154	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.53	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	500	kW
Declared power input	D-D	116	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.32	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 4408A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.62	kWh/kWh
Annual electricity consumption	Q	1558209	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	762	kW
Rated power input	D-A	368	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.07	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	711	kW
Declared power input	D-B	272	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.61	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	660	kW
Declared power input	D-C	199	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.32	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	610	kW
Declared power input	D-D	134	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.55	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX HE 4608A		
Outdoor side heat exchanger	Air 35°C		
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C		
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.47	kWh/kWh
Annual electricity consumption	Q	1725443	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	808	kW
Rated power input	D-A	400	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.02	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	754	kW
Declared power input	D-B	294	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.57	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	700	kW
Declared power input	D-C	215	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.25	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	646	kW
Declared power input	D-D	154	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.21	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 0808A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	171	kW
Rated power input	D-A	74.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.29	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	160	kW
Declared power input	D-B	55.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.90	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	148	kW
Declared power input	D-C	41.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.55	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	137	kW
Declared power input	D-D	29.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.58	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 0808A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	144	kW
Rated power input	D-A	68.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.11	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	134	kW
Declared power input	D-B	49.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.70	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	124	kW
Declared power input	D-C	37.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.33	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	115	kW
Declared power input	D-D	26.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.38	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX XE 1108A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.62	kWh/kWh
Annual electricity consumption	Q	445114	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	217	kW
Rated power input	D-A	97.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.24	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	202	kW
Declared power input	D-B	74.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.71	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	187	kW
Declared power input	D-C	55.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.40	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	173	kW
Declared power input	D-D	39.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.35	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model		POWERCIAT LX XE 1008A	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP	1430 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	-8	°C
Seasonal Energy Performance Ratio	SEPR	3.91	kWh/kWh
Annual electricity consumption	Q	342302	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	180	kW
Rated power input	D-A	79.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.27	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	168	kW
Declared power input	D-B	57.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.95	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	156	kW
Declared power input	D-C	42.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.66	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	144	kW
Declared power input	D-D	30.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.70	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE

(*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 1528A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	289	kW
Rated power input	D-A	122	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.36	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	270	kW
Declared power input	D-B	91.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.96	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	251	kW
Declared power input	D-C	69.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.61	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	231	kW
Declared power input	D-D	50.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.60	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options
 Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 1358A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point}(A)

Rated cooling capacity	P-A	253	kW
Rated power input	D-A	111	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.27	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	235	kW
Declared power input	D-B	81.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.89	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	218	kW
Declared power input	D-C	61.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.55	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	201	kW
Declared power input	D-D	45.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.46	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap. Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options
 Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 2008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	4.12 kWh/kWh
Annual electricity consumption	Q	723229 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	402	kW
Rated power input	D-A	163	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.47	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	375	kW
Declared power input	D-B	120	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.13	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	349	kW
Declared power input	D-C	90.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.87	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	325	kW
Declared power input	D-D	65.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.93	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 1858A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.82 kWh/kWh
Annual electricity consumption	Q	701130 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	362	kW
Rated power input	D-A	154	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.35	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	339	kW
Declared power input	D-B	116	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.92	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	315	kW
Declared power input	D-C	87.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.59	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	290	kW
Declared power input	D-D	63.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.55	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 2308A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.75 kWh/kWh
Annual electricity consumption	Q	889861 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	450	kW
Rated power input	D-A	195	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.31	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	422	kW
Declared power input	D-B	145	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.90	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	391	kW
Declared power input	D-C	110	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.56	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	361	kW
Declared power input	D-D	82.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.40	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 2158A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.69 kWh/kWh
Annual electricity consumption	Q	844572 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	421	kW
Rated power input	D-A	185	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.28	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	395	kW
Declared power input	D-B	139	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.84	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	367	kW
Declared power input	D-C	105	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.49	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	338	kW
Declared power input	D-D	77.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.34	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 2628A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.78 kWh/kWh
Annual electricity consumption	Q	996889 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	508	kW
Rated power input	D-A	218	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.33	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	474	kW
Declared power input	D-B	162	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.92	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	440	kW
Declared power input	D-C	122	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.60	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	407	kW
Declared power input	D-D	92.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.42	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 2528A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Value
Operating Temperature	T	-8 °C
Seasonal Energy Performance Ratio	SEPR	3.88 kWh/kWh
Annual electricity consumption	Q	920173 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	482	kW
Rated power input	D-A	198	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.44	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	447	kW
Declared power input	D-B	149	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.01	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	415	kW
Declared power input	D-C	114	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.65	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	383	kW
Declared power input	D-D	83.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.59	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 3428A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	1159034 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	561	kW
Rated power input	D-A	261	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.15	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	523	kW
Declared power input	D-B	193	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.71	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	486	kW
Declared power input	D-C	140	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.47	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	448	kW
Declared power input	D-D	108	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.16	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 3028A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	1126530 kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	563	kW
Rated power input	D-A	240	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.35	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	525	kW
Declared power input	D-B	185	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.84	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	488	kW
Declared power input	D-C	140	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.47	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	450	kW
Declared power input	D-D	102	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.40	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 4008A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh
		1339633

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	663	kW
Rated power input	D-A	321	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.06	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	617	kW
Declared power input	D-B	230	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.68	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	573	kW
Declared power input	D-C	165	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.47	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	528	kW
Declared power input	D-D	119	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.44	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 3828A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh
		1250336

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	653	kW
Rated power input	D-A	288	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.27	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	610	kW
Declared power input	D-B	213	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.87	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	566	kW
Declared power input	D-C	152	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.72	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	522	kW
Declared power input	D-D	114	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.58	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30 %

Contact details

CIAT - Avenue Jean Falcomier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

ECODESIGN MANUAL FOR MEDIUM TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 4608A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	813	kW
Rated power input	D-A	390	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.08	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	758	kW
Declared power input	D-B	287	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.64	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	704	kW
Declared power input	D-C	211	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.34	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	650	kW
Declared power input	D-D	151	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.32	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: EG Concentration: 30%

Contact details

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 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application

Performances according to Regulation (EU) 2015/1095

Model	POWERCIAT LX XE 4408A	
Outdoor side heat exchanger	Air 35°C	
Indoor side heat exchanger	Brine Medium temperature -2°C/-8°C	
Refrigerant Type	R-134A	GWP 1430 kg CO₂ eq (100 years)
Item	Symbol	Unit
Operating Temperature	T	°C
Seasonal Energy Performance Ratio	SEPR	kWh/kWh
Annual electricity consumption	Q	kWh

Parameters at full load and reference ambient T_{point(A)}

Rated cooling capacity	P-A	796	kW
Rated power input	D-A	362	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.20	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	742	kW
Declared power input	D-B	268	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	2.77	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	689	kW
Declared power input	D-C	195	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	3.53	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	636	kW
Declared power input	D-D	131	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	4.84	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Ethylene Glycol Concentration: 30%

Contact details

CIAT - Avenue Jean Falconnier BP 14 - 01350 Culoz - FRANCE
 (*) If CC is not determined by measurement then the default degradation coefficient shall be Cc=0.9. Where the default Cc value is chosen, then results from cycling tests shall not be required. Otherwise, the cooling cycling test value shall be required.

Accessories and Installed Options

Low temperature Brine Application



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