



United Technologies

ECODESIGN MANUAL FOR HT PROCESS CHILLER



Air-Cooled Liquid Chillers, Reversible Air-To-Water Heat Pumps

30RBS 039-160



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ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER

Performances according to Regulation (EU) 2016/2281

Model ^[1]			
Outdoor side heat exchanger ^[2]		Air 35°C ^[3]	
Indoor side heat exchanger ^[4]		Water High temperature 12°C / 7°C ^[5]	
Refrigerant Type ^[6]		GWP	
Item ^[7]	Symbol ^[8]	Value ^[9]	Unit ^[10]
Operating Temperature ^[11]	T		°C
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: Fresh Water Concentration: - ^[27]

Contact details ^[28]	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9. ^[29]

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER

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] Water High temperature 12°C / 7°C	[5] Eau Haute température 12°C / 7°C	[5] Wasser Hohe Temperatur 12°C / 7°C	[5] Acqua ad alta temperatura 12°C / 7°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 Volllast und Bezugsumgebungstemperatur, (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] Sonstige Elemente	[22] EER dichiarato
[23] Other items	[23] Autres caractéristiques	[23] Leistungsteuerung	[23] Altri elementi
[24] Capacity control	[24] Régulation de la puissance	[24] Fix / variabel	[24] Controllo della capacità
[25] Fixed/Variable	[25] Fixe/variable	[25] Glykolart und -konzentration	[25] fissa/variabile
[26] Glycol type and concentration	[26] Type de glycol et concentration	[26] Verd.-Flüssigkeitstyp : Frischwasserkonzentration: -	[26] Tipo di glicole e concentrazione
[27] Evap.Fluid Type: Fresh Water Concentration: -	[27] Type de fluide évap. : Concentration eau douce : -	[27] Kontakt	[27] Tipo di fluido evap.: Concentrazione acqua dolce: -
[28] Contact details	[28] Coordonnées de contact	[28] Kontakt	[28] Recapiti
[29] (*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9.	[29] (*) Cc doit être déterminé pour chaque charge partielle, le cas échéant, par mesurage. Sinon, la dégradation par défaut doit être Cc = 0,9.	[29] (*) Cc ist gegebenenfalls für jede Teillast durch Messung zu ermitteln. Andernfalls beträgt der Standardabminderungskoeffizient Cc=0,9.	[29] (*) Pf sarà determinata per ciascun carico parziale, laddove applicabile, tramite misurazioni. In caso contrario, il coefficiente di degradazione predefinito equivale a Pf=0,9.
SVENSKA	ESPAÑOL	NEDERLANDS	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] Vatten Hög temperatur 12°C / 7°C	[5] Temperatura alta del agua 12°C / 7°C	[5] Water Hoge temperatuur 12°C / 7°C	[5] Woda Wysoka temperatura 12°C / 7°C
[6] köldmedietyyp	[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] Enhet	[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] Verliescoëfficiënt voor units met vast getrappt vermogen(*)	[17] Współczynnik strat dla urządzeń o stałej, stopniowanej wydajności(*)
[18] Energieeffektivitetskvot	[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] Glukoltyp och koncentration	[26] Tipo y concentración de glicol	[26] Glycoltype en concentratie	[26] Typ i stężenie glikolu
[27] Avdunstningsvätsketyp : koncentration rent vatten: -	[27] Tipo de fluido evap.: concentración de agua dulce: -	[27] Verd.vloeist.:zoetwaterconcentratie:-	[27] Typ plynu parown.: stężenie czystej wody: -
[28] Kontakt	[28] Datos de contacto	[28] Contactgegevens	[28] Dane kontaktowe
[29] (*) Kyleffekt ska där det är tillämpligt bestämmas för varje delast medelst mätning. Om inte ska standardvärdet för degraderingskoefficienten vara kyleffekt = 0,9.	[29] (*) Se debe determinar la Pf para cada carga parcial mediante una medición (donde sea aplicable). De no ser así, el coeficiente de degradación por defecto será Pf=0,9.	[29] (*) Koelvermogen wordt bepaald voor elke deelbelasting, indien van toepassing, door meting. Indien niet, is de standaard verliescoëfficiënt koelvermogen = 0,9.	[29] (*) Cc ustala się dla każdego częściowego obciążenia, w stosownych przypadkach, wykonując pomiar. Jeśli nie, domyślny współczynnik strat wynosi Cc = 0,9.

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-039C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.27	kWh/kWh
Annual electricity consumption	Q	55781	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	39.6	kW
Rated power input	D-A	13.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.87	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	37.2	kW
Declared power input	D-B	9.92	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.75	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	34.6	kW
Declared power input	D-C	6.99	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.95	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	32.0	kW
Declared power input	D-D	4.92	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.50	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-045C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.31	kWh/kWh
Annual electricity consumption	Q	61395	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	44.0	kW
Rated power input	D-A	16.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.76	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	40.8	kW
Declared power input	D-B	10.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.81	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	37.9	kW
Declared power input	D-C	7.42	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	5.11	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	35.0	kW
Declared power input	D-D	5.46	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.41	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-050C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.26	kWh/kWh
Annual electricity consumption	Q	72066	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	51.2	kW
Rated power input	D-A	19.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.67	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	47.5	kW
Declared power input	D-B	12.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.80	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	44.2	kW
Declared power input	D-C	8.67	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	5.09	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	40.8	kW
Declared power input	D-D	6.49	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.29	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-060C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.09	kWh/kWh
Annual electricity consumption	Q	84522	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	58.1	kW
Rated power input	D-A	21.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.66	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	54.2	kW
Declared power input	D-B	14.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.77	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	50.3	kW
Declared power input	D-C	10.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.92	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	46.5	kW
Declared power input	D-D	7.72	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.03	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-070C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	4.92	kWh/kWh
Annual electricity consumption	Q	101261	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	67.2	kW
Rated power input	D-A	24.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.72	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	62.3	kW
Declared power input	D-B	16.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.73	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	57.9	kW
Declared power input	D-C	12.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.69	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	53.4	kW
Declared power input	D-D	9.18	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	5.82	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-080C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.16	kWh/kWh
Annual electricity consumption	Q	113378	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	78.9	kW
Rated power input	D-A	29.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.70	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	73.6	kW
Declared power input	D-B	20.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.63	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	68.4	kW
Declared power input	D-C	14.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.72	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	63.2	kW
Declared power input	D-D	9.61	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.57	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected



Performances according to Regulation (EU) 2016/2281

Model		30RBS-090C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	4.95	kWh/kWh
Annual electricity consumption	Q	129834	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	86.7	kW
Rated power input	D-A	31.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.73	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	80.5	kW
Declared power input	D-B	20.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.87	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	74.7	kW
Declared power input	D-C	14.7	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	5.07	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	69.0	kW
Declared power input	D-D	12.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	5.40	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-100C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.12	kWh/kWh
Annual electricity consumption	Q	140660	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	97.1	kW
Rated power input	D-A	35.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.73	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	90.9	kW
Declared power input	D-B	23.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.94	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	84.4	kW
Declared power input	D-C	16.4	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	5.16	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	77.9	kW
Declared power input	D-D	13.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	5.71	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected



Performances according to Regulation (EU) 2016/2281

Model		30RBS-120C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.51	kWh/kWh
Annual electricity consumption	Q	153950	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	114	kW
Rated power input	D-A	42.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.67	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	107	kW
Declared power input	D-B	28.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.81	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	99.1	kW
Declared power input	D-C	19.3	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	5.13	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	91.5	kW
Declared power input	D-D	13.1	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.99	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected

ECODESIGN MANUAL FOR HIGH TEMPERATURE PROCESS CHILLER



Performances according to Regulation (EU) 2016/2281

Model		30RBS-140C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	4.90	kWh/kWh
Annual electricity consumption	Q	203860	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	135	kW
Rated power input	D-A	49.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.70	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	126	kW
Declared power input	D-B	34.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.70	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	117	kW
Declared power input	D-C	25.0	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.66	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	108	kW
Declared power input	D-D	18.5	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	5.81	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected



Performances according to Regulation (EU) 2016/2281

Model		30RBS-160C	
Outdoor side heat exchanger		Air 35°C	
Indoor side heat exchanger		Water High temperature 12°C / 7°C	
Refrigerant Type	R410A	GWP	2088 kg CO₂ eq (100 years)
Item	Symbol	Value	Unit
Operating Temperature	T	7	°C
Seasonal Energy Performance Ratio	SEPR	5.32	kWh/kWh
Annual electricity consumption	Q	217010	kWh

Parameters at full load and reference ambient T, point(A)

Rated cooling capacity	P-A	156	kW
Rated power input	D-A	58.8	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-A	-	-
Rated EER	EER-A	2.65	kW/kW

Parameters at rating point B

Declared cooling capacity	P-B	145	kW
Declared power input	D-B	39.9	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-B	-	-
Declared EER	EER-B	3.64	kW/kW

Parameters at rating point C

Declared cooling capacity	P-C	135	kW
Declared power input	D-C	27.6	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-C	-	-
Declared EER	EER-C	4.90	kW/kW

Parameters at rating point D

Declared cooling capacity	P-D	125	kW
Declared power input	D-D	18.2	kW
Degradation coefficient for fixed staged capacity units(*)	Cc-D	-	-
Declared EER	EER-D	6.84	kW/kW

Other items

Capacity control	Variable
Glycol type and concentration	Evap.Fluid Type: Fresh Water Concentration: -

Contact details	CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE
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(*) Cc shall be determined for each part load, where applicable, by measurement. If not, the default degradation coefficient shall be Cc=0.9..

Accessories and Installed Options

No Accessories or Installed Options selected