

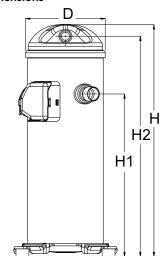




### **General Characteristics**

Model number (on compressor nameplate)		HCJ090T4LC6			
Code number for Singlepack*		120U2302			
Code number for Industrial pack**		120U2299			
Drawing number		0SR7596B			
Suction and discharge connections		Brazed			
Suction connection		1-1/8 " ODF			
Discharge connection		7/8 " ODF			
Oil sight glass		None			
Oil equalisation connection		None			
Oil drain connection		None			
LP gauge port		None			
IPR valve		None			
Swept volume	86.85 cm3/re	ev			
Displacement @ Nominal speed	15.1 m3/h @ 2900 rpm - 18.2	m3/h @ 3500 rpm			
Net weight	45.2 kg				
Oil charge	2.66 litre, PVE				
Maximum system test pressure Low Side / High side	- bar(g) / - ba	r(g)			
Maximum differential test pressure	- bar				
Maximum number of starts per hour	-	-			
Refrigerant charge limit	7.26 kg	·			
Approved refrigerants	R410A				

#### **Dimensions**



### **Electrical Characteristics**

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Rated Load Amps (RLA)	12.2 A
Maximum Continuous Current (MCC)	19.0 A
Locked Rotor Amps (LRA)	110.0 A
Motor protection	Internal overload protector

D=184 mm H=537 mm H1=377 mm H2=510 mm

#### **Recommended Installation torques**

Oil sight glass	0 Nm		
Power connections / Earth connection	3 Nm / 2 Nm		

#### Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Terminal box



Approvals: CE certified, UL certified (file SA11565), -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage





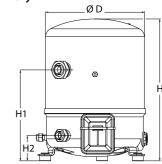
# Karta katalogowa, dane techniczne



### Dane ogólne

Oznaczenie modelu (na tabliczce znamionowej)	MTZ80HP4A MTZ80HP4AVE				
Numer katalogowy (opakowanie indywidualne)*	MTZ80-4I	MTZ80-4VI			
Numer katalogowy (opakowanie przemysłowe)**	MTZ80-4M	MTZ80-4VM			
Rysunek numer	8502014e	8502012g			
Przyłącza ssawne i tłoczne	Rotolock	Rotolock			
Przyłącze ssawne	1-3/4 " Rotolock	1-3/4 " Rotolock			
Przyłącze tłoczne	1-1/4 " Rotolock	1-1/4 " Rotolock			
Przyłącze ssawne z adapterem do lutowania - w zest.	1-1/8 " ODF	1-1/8 " ODF			
Przyłącze tłoczne z adapterem do lutowania - w zest.	3/4 " ODF	3/4 " ODF			
Wziernik poziomu oleju	Nie występuje	Wkręcany			
Króciec wyrównania poziomu oleju	Nie występuje	3/8" króciecSAE			
Króciec spustowy oleju	Nie występuje	Nie występuje			
Przyłącze pomiarowe niskiego ciśnienia	Schrader	Schrader			
Wewnętrzny zawór upustowy	30 bar / 8 bar	30 bar / 8 bar			
llość cylindrów	2	2			
Pojemność	135.78 c	:m3/obr			
Pojemność @ Znamionowa prędkość obrotowa	23.6 m3/h @ 2900 rpm - 28.5 m3/h @ 3500 rpm				
Masa netto	40 kg				
Napełnienie olejem	1.8 dm3, POE - 160PZ				
Maksymalne ciśnienie próbne instalacji LP / HP	25 bar(g) / 30 bar(g)				
Maksymalna różnica ciśnień podczas próby instalacji	30 bar				
Maksymalna ilość załączeń sprężarki w ciągu godziny	1	2			
Limit napełnienia czynnikiem chłodniczym	5 kg				
Przeznaczone do pracy z czynnikami chłodniczymi	R404A - R507A - R134a - R407C				

#### **Wymiary**

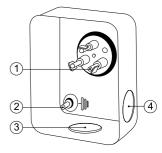


D=288 mm H=413 mm H1=265 mm H2=74 mm

#### Dane elektryczne

Napięcie znamionowe	380-400V/3/50Hz - 460V/3/60Hz
Zakres napięcia zasilania	340-440 V @ 50Hz - 414-506 V @ 60Hz
Oporność uzwojeń (dwóch faz) +/- 7% w temp. 25°C	1.9 Ω
Maksymalny prąd pracy (MCC)	18 A
Prąd rozruchowy (LRA)	80 A
Zabezpieczenie silnika	Wewn, zabezpieczenie nadmiar,- prądowe

#### Puszka zaciskowa



Zalecany moment montażowy

Zalecarry moment montazowy	
Zawór ssawny Rotolock, lub nakrętka adaptera	110 Nm
Zawór tłoczny Rotolock, lub nakrętka adaptera	90 Nm
Wziernik poziomu oleju	50 Nm
Śruby przyłączeń zasilania elektrycznego / Śruba przyłączenia uziemienia	Nm / 2 Nm
Śruby montażowe (tłumików gumowych)	15 Nm

# IP55 (z dławikiem)

- 1: Przyłącze konektorowe 1/4"
- 2: Uziemienie
- 3: Zaślepka Ø 21 mm (0,83")
  - Otwór Ø 21 mm (0,83")

### Elementy wyposażenia sprężarki

Tłumiki gumowe z tulejami, śrubami, nakrętkami i podkładkami

 $Adaptery\ do\ lutowania,\ nakrętki,\ uszczelki-strony\ ssawna\ i\ tłoczna\ (dostarczane\ tylko\ z\ wersją\ R-Rotolock)$ 

Napełnienie startowe olejem

Instrukcja montażu

Zatwierdzenia: Oznaczone znakiem CE, Dopuszczenie UL (SA6873), -

- ${\color{blue} * Opakowania indywidualne: Sprężarki pakowane indywidualnie w opakowania kartonowe} \\$
- \* Opakowania przemysłowe: 6 sprężarek na palecie (bez opakowań indywidualnych)

Danfoss nie ponosi odpowiedzialności za możliwe blędy w katalogach, broszurach i innych materiałach drukowanych. Danfoss zastrzega sobie prawo do wprowadzania zmian w produktach bez uprzedzenia. Zamienniki mogą być dostarczone bez dokonywania jakichkolwiek zmian w specyfikacjach już uzgodnionych.

Wszystkie znaki towarowe w tym materiale są własnością odpowiednich spółek. Danfoss, logotyp Danfoss są znakami towarowymi Danfoss A/S. Wszystkie prawa zastrzeżone.





#### Performer scroll compressor, HCJ090T4 Datasheet, accessories and spare parts Rotolock accessories, suction side Code no. Rotolock accessories, discharge side Code no. Rotolock accessories, sets Code no. Oil / lubricants Code no. PVE lubricant, 320HV (FVC68D), 1 litre can 120Z5034 Crankcase heaters Code no. Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0059 120Z0060 Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 70 W, 230 V, UL 120Z5011 Belt type crankcase heater, 70 W, 460 V, UL 120Z5012 Code no. Miscellaneous accessories Discharge thermostat kit 7750009 Spare parts Code no. Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers 120Z5005



Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, EN 12900 rating conditions

# **R410A**

Cond. temp. in	d. temp. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity in	a W								
30	7 679	9 822	12 172	14 843	17 951	21 610	25 937	31 046	_
35	6 992	9 144	11 444	14 005	16 942	20 369	24 400	29 151	
					1			1	
40	6 222	8 399	10 666	13 135	15 919	19 132	22 887	27 299	
45		7 566	9816	12 209	14 858	17 874	21 371	25 461	-
50	-	-	8 870	11 203	13 731	16 567	19 821	23 606	-
55	-	-	-	10 087	12 508	15 176	18 202	21 694	-
60	-	-	-	-	11 150	13 657	16 460	19 666	-
65	-	-	-	-	-	11 931	14 504	17 415	-
ower input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	-
35	4 703	4 774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
•		•	•	•	•	•	•		
urrent consumpt	ion in A	T		T	T	T	1	, ,	
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	-
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	-
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	-
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	-	-	-	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
Mass flow in kg/h	1.0	1 202	247	1 207	255	42.4	504	T 500 T	
30	161	202	247	297	355	424	504	598	-
35	155	198	244	295	352	419	497	588	-
40	147	193	240	292	349	415	491	579	-
45	-	185	235	288	345	411	485	571	-
50	-	-	227	282	341	406	479	563	-
55	-	-	-	274	334	399	473	555	-
60	-	-	-	-	325	391	465	547	-
65	-	-	-	-	-	381	455	537	-
oefficient of perf	ormance (C.O.P.)	)							
30	1.79	2.26	2.80	3.42	4.13	4.95	5.84	6.79	-
35	1.49	1.92	2.38	2.91	3.53	4.23	5.02	5.88	-
40	1.21	1.60	2.01	2.47	2.99	3.59	4.28	5.04	-
45	-	1.31	1.67	2.07	2.52	3.03	3.62	4.28	-
50	-	-	1.37	1.71	2.09	2.53	3.03	3.59	-
55	-	-	-	1.39	1.72	2.08	2.50	2.98	-
60	-	-	-	-	1.38	1.68	2.03	2.43	-
65	-	-	-	-	-	1.32	1.61	1.94	-
								•	
ominal performa	nce at to = 5 °C,	tc = 50 °C				Pressure switch se	ttings		

rtorimar performance at to = 5 e, te = 5		
Cooling capacity	19 821	W
Power input	6 550	W
Current consumption	12.08	Α
Mass flow	479	kg/h
C.O.P.	3.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions: Superheat = 10 K, Subcooling = 0 K

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%





Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, ARI rating conditions

**R410A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
ooling capacity		10.505	42440	45.000	10.210	22.227	27.054	22.245	
30	8 293	10 596	13 118	15 982	19 310	23 227	27 854	33 315	-
35	7 600	9 927	12 410	15 171	18 334	22 021	26 356	31 461	-
40	6 815	9 188	11 653	14 334	17 352	20 831	24 895	29 665	-
45	-	8 355	10 823	13 444	16 339	19 632	23 445	27 902	-
50	-	-	9 896	12 478	15 271	18 398	21 983	26 148	-
55	-	-	-	11 411	14 123	17 106	20 483	24 378	-
60	-	-	-	-	12 871	15 732	18 923	22 567	-
65	-	-	-	-	-	14 250	17 276	20 692	-
ower input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	_
35	4 703	4774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
		1	L	L		1			
Current consump	tion in A								
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	-
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	-
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	_
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	_	-	_	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
		1	I	1	1	1			
Mass flow in kg/h	ı								
30	160	201	245	295	353	421	500	594	-
35	154	197	243	293	350	416	493	583	-
40	146	192	239	290	347	412	487	575	-
45	-	184	233	286	343	408	482	567	-
50	-	-	226	280	338	403	476	559	-
55	-	-	-	272	332	397	469	551	-
60	-	-	-	-	323	389	462	543	-
65	-	-	-	-	-	378	452	533	-
•		•		1	•	1	•		
Coefficient of per 30	formance (C.O.P.) 1.93	2.44	3.02	3.68	4.45	5.32	6.27	7.29	_
35	1.62	2.08	2.58	3.16	3.82	4.57	5.42	6.34	
40	1.32	1.75	2.36	2.69	3.26	3.91	4.65	5.48	
	-		1						
45 50		1.44	1.85	2.28	2.77	3.33	3.97	4.69	-
วบ	-	-	1.53	1.91	2.33	2.81	3.36	3.98	-
		-	-	1.57	1.94	2.35	2.82	3.35	-
55	-				1.50	1 0 4	224	2 72	
	-	-	-	-	1.59	1.94 1.58	2.34 1.92	2.79 2.30	-

Normal performance at to = 7.2 C, te = 54.4 C							
Cooling capacity	22 321	W					
Power input	7 182	W					
Current consumption	13.36	Α					
Mass flow	505	kg/h					
C.O.P.	3.11						

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

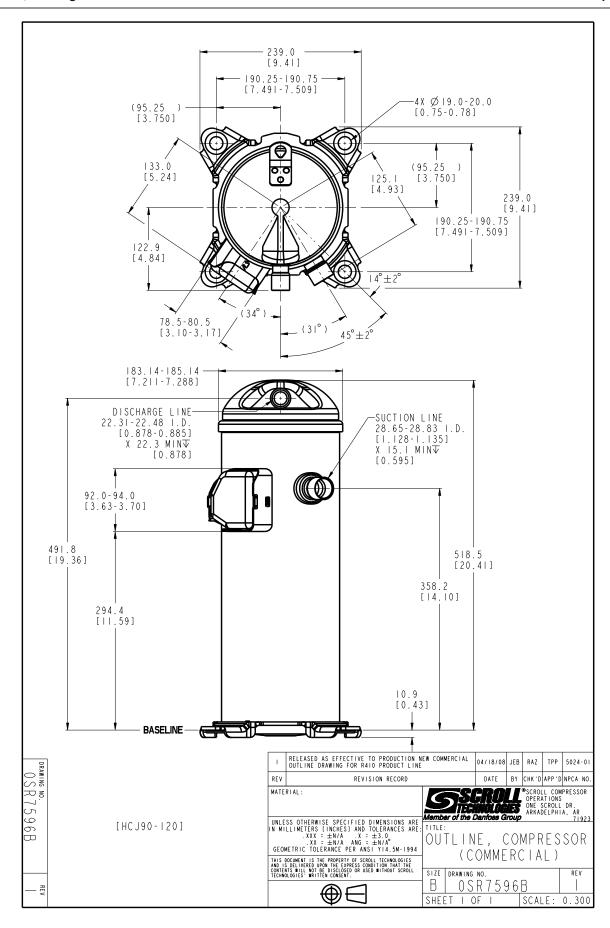
Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%











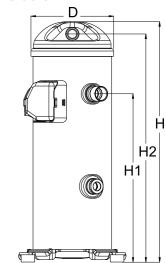




### **General Characteristics**

Model number (on compressor nameplate)		HCJ090T4LC7	
Code number for Singlepack*		120U2534	
Code number for Industrial pack**		120U2531	
Drawing number		0SR7509B	
Suction and discharge connections		Brazed	
Suction connection		1-1/8 " ODF	
Discharge connection		7/8 " ODF	
Oil sight glass		Threaded	
Oil equalisation connection		None	
Oil drain connection		None	
LP gauge port		None	
IPR valve		None	
Swept volume	86.85 cm3/rev		
Displacement @ Nominal speed	15.1 m3/h @ 2900 rpm - 18.2 m3/h @ 3500 rpm		
Net weight	45.2	2 kg	
Oil charge	2.66 litre	e, PVE	
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)	
Maximum differential test pressure	- bar		
Maximum number of starts per hour	-		
Refrigerant charge limit	7.26	5 kg	
Approved refrigerants	R41	10A	

#### **Dimensions**



**Electrical Characteristics** D=184 mm Nominal voltage 380-400V/3/50Hz - 460V/3/60Hz 340-440 V @ 50Hz - 414-506 V @ 60Hz Voltage range Rated Load Amps (RLA)

12.2 A 19.0 A 110.0 A Internal overload protector H=537 mm  $H1 = 377 \, mm$ H2=510 mm

Recommended Installation torques

Maximum Continuous Current (MCC)

Locked Rotor Amps (LRA)

Motor protection

Recommended histaliation torques			
Oil sight glass	0 Nm		
Power connections / Farth connection	3 Nm / 2 Nm		

# **Terminal box**



Parts shipped with compressor Mounting kit with grommets and sleeves

Initial oil charge

Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

Power cable passage 3:



#### Performer scroll compressor, HCJ090T4 Datasheet, accessories and spare parts Rotolock accessories, suction side Code no. Rotolock accessories, discharge side Code no. Rotolock accessories, sets Code no. Oil / lubricants Code no. PVE lubricant, 320HV (FVC68D), 1 litre can 120Z5034 Crankcase heaters Code no. Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0059 120Z0060 Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 70 W, 230 V, UL 120Z5011 Belt type crankcase heater, 70 W, 460 V, UL 120Z5012 Code no. Miscellaneous accessories Discharge thermostat kit 7750009 Spare parts Code no. Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers 120Z5005



Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, EN 12900 rating conditions

# **R410A**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity in	a W								
30	7 679	9 822	12 172	14 843	17 951	21 610	25 937	31 046	_
35	6 992	9 144	11 444	14 005	16 942	20 369	24 400	29 151	
					1			1	
40	6 222	8 399	10 666	13 135	15 919	19 132	22 887	27 299	
45		7 566	9816	12 209	14 858	17 874	21 371	25 461	-
50	-	-	8 870	11 203	13 731	16 567	19 821	23 606	-
55	-	-	-	10 087	12 508	15 176	18 202	21 694	-
60	-	-	-	-	11 150	13 657	16 460	19 666	-
65	-	-	-	-	-	11 931	14 504	17 415	-
ower input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	-
35	4 703	4 774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
•		•	•	•		•	•		
urrent consumpt	ion in A	T		T	T	T	1	, ,	
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	-
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	-
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	-
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	-	-	-	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
Mass flow in kg/h	1.0	1 202	247	1 207	255	42.4	504	T 500 T	
30	161	202	247	297	355	424	504	598	-
35	155	198	244	295	352	419	497	588	-
40	147	193	240	292	349	415	491	579	-
45	-	185	235	288	345	411	485	571	-
50	-	-	227	282	341	406	479	563	-
55	-	-	-	274	334	399	473	555	-
60	-	-	-	-	325	391	465	547	-
65	-	-	-	-	-	381	455	537	-
oefficient of perf	ormance (C.O.P.)	)							
30	1.79	2.26	2.80	3.42	4.13	4.95	5.84	6.79	-
35	1.49	1.92	2.38	2.91	3.53	4.23	5.02	5.88	-
40	1.21	1.60	2.01	2.47	2.99	3.59	4.28	5.04	-
45	-	1.31	1.67	2.07	2.52	3.03	3.62	4.28	-
50	-	-	1.37	1.71	2.09	2.53	3.03	3.59	-
55	-	-	-	1.39	1.72	2.08	2.50	2.98	-
60	-	-	-	-	1.38	1.68	2.03	2.43	-
65	-	-	-	-	-	1.32	1.61	1.94	-
								•	
ominal performa	nce at to = 5 °C,	tc = 50 °C				Pressure switch se	ttings		

rtorimar performance at to = 5 e, te = 5		
Cooling capacity	19 821	W
Power input	6 550	W
Current consumption	12.08	Α
Mass flow	479	kg/h
C.O.P.	3.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions: Superheat = 10 K, Subcooling = 0 K

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%





Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, ARI rating conditions

**R410A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
ooling capacity		10.505	42440	45.000	10.210	22.227	27.054	22.245	
30	8 293	10 596	13 118	15 982	19 310	23 227	27 854	33 315	-
35	7 600	9 927	12 410	15 171	18 334	22 021	26 356	31 461	-
40	6 815	9 188	11 653	14 334	17 352	20 831	24 895	29 665	-
45	-	8 355	10 823	13 444	16 339	19 632	23 445	27 902	-
50	-	-	9 896	12 478	15 271	18 398	21 983	26 148	-
55	-	-	-	11 411	14 123	17 106	20 483	24 378	-
60	-	-	-	-	12 871	15 732	18 923	22 567	-
65	-	-	-	-	-	14 250	17 276	20 692	-
ower input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	_
35	4 703	4774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
		1	L	L		1			
Current consump	tion in A								
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	-
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	-
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	_
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	_	-	_	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
		1	I	1	1	1			
Mass flow in kg/h	ı								
30	160	201	245	295	353	421	500	594	-
35	154	197	243	293	350	416	493	583	-
40	146	192	239	290	347	412	487	575	-
45	-	184	233	286	343	408	482	567	-
50	-	-	226	280	338	403	476	559	-
55	-	-	-	272	332	397	469	551	-
60	-	-	-	-	323	389	462	543	-
65	-	-	-	-	-	378	452	533	-
•		•		1	•	1	•		
Coefficient of per 30	formance (C.O.P.) 1.93	2.44	3.02	3.68	4.45	5.32	6.27	7.29	_
35	1.62	2.08	2.58	3.16	3.82	4.57	5.42	6.34	
40	1.32	1.75	2.36	2.69	3.26	3.91	4.65	5.48	
	-		1						
45 50		1.44	1.85	2.28	2.77	3.33	3.97	4.69	-
วบ	-	-	1.53	1.91	2.33	2.81	3.36	3.98	-
		-	-	1.57	1.94	2.35	2.82	3.35	-
55	-				1.50	1 0 4	224	2 72	
	-	-	-	-	1.59	1.94 1.58	2.34 1.92	2.79 2.30	-

Nonlina performance at to = 7.2 c, te = 54.4 c				
Cooling capacity	22 321	W		
Power input	7 182	W		
Current consumption	13.36	Α		
Mass flow	505	kg/h		
C.O.P.	3.11			

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

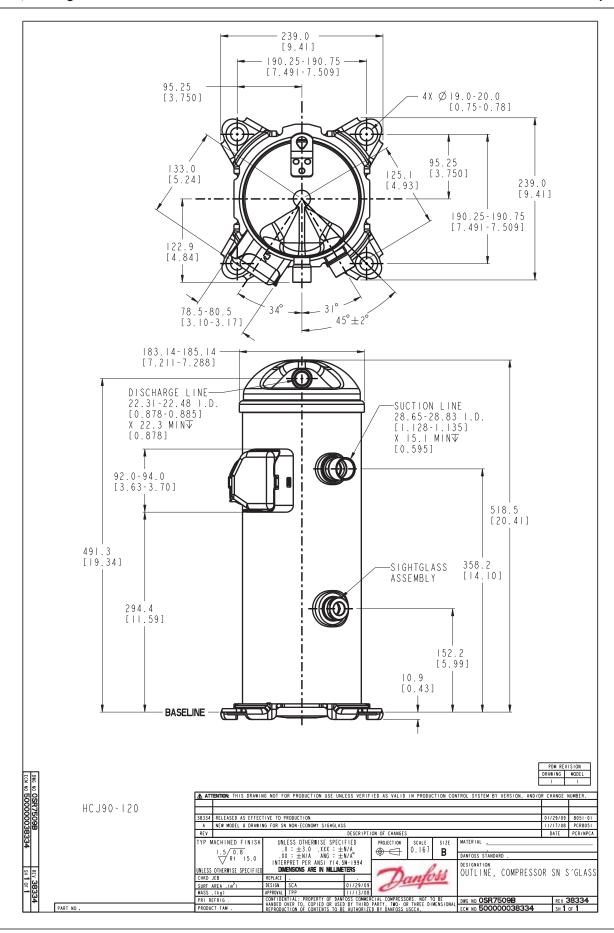
Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%

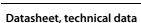














### **General Characteristics**

Model number (on compressor nameplate)		HCJ090T4LC8	
Code number for Singlepack*		120U2538	
Code number for Industrial pack**		120U2535	
Drawing number		0SR7508B	
Suction and discharge connections		Brazed	
Suction connection		1-1/8 " ODF	
Discharge connection		7/8 " ODF	
Oil sight glass		None	
Oil equalisation connection		1/2"	
Oil drain connection		None	
LP gauge port		None	
IPR valve		None	
Swept volume	86.85 cm3/rev		
Displacement @ Nominal speed	15.1 m3/h @ 2900 rpm - 18.2 m3/h @ 3500 rpm		
Net weight	45.2	2 kg	
Oil charge	2.66 litre	e, PVE	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)		
Maximum differential test pressure	- bar		
Maximum number of starts per hour	-		
Refrigerant charge limit	7.26 kg		
Approved refrigerants	R41	10A	

## **Electrical Characteristics**

Electrical characteristics	
Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Rated Load Amps (RLA)	12.2 A
Maximum Continuous Current (MCC)	19.0 A
Locked Rotor Amps (LRA)	110.0 A
Motor protection	Internal overload protector

**Recommended Installation torques** 

Oil sight glass	0 Nm
Power connections / Earth connection	3 Nm / 2 Nm

#### Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

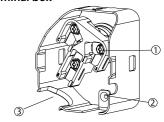
\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

#### **Dimensions**

D=184 mm H=537 mm H1=377 mm H2=510 mm

#### **Terminal box**



IP22

2:

1: Screw connectors 10-32 UNF x 9.5

Earth connection

: Power cable passage





#### Performer scroll compressor, HCJ090T4 Datasheet, accessories and spare parts Rotolock accessories, suction side Code no. Rotolock accessories, discharge side Code no. Rotolock accessories, sets Code no. Oil / lubricants Code no. PVE lubricant, 320HV (FVC68D), 1 litre can 120Z5034 Crankcase heaters Code no. Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0059 120Z0060 Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 70 W, 230 V, UL 120Z5011 Belt type crankcase heater, 70 W, 460 V, UL 120Z5012 Code no. Miscellaneous accessories Discharge thermostat kit 7750009 Spare parts Code no. Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers 120Z5005



Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, EN 12900 rating conditions

# **R410A**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity is	n W								
30	7 679	9 822	12 172	14 843	17 951	21 610	25 937	31 046	_
35	6 992	9 144	11 444	14 005	16 942	20 369	24 400	29 151	
					1			1	
40	6 222	8 399	10 666	13 135	15 919	19 132	22 887	27 299	
45		7 566	9816	12 209	14 858	17 874	21 371	25 461	-
50	-	-	8 870	11 203	13 731	16 567	19 821	23 606	-
55	-	-	-	10 087	12 508	15 176	18 202	21 694	-
60	-	-	-	-	11 150	13 657	16 460	19 666	-
65	-	-	-	-	-	11 931	14 504	17 415	-
Power input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	-
35	4 703	4 774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
		•	•	•		•	•		
Current consumpt	tion in A	Т		Т	1		T		
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	-
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	-
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	-
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	-	-	-	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
Mass flow in kg/h	4.4	1 202	247	1 207	255	42.4	504	T 500 T	
30	161	202	247	297	355	424	504	598	-
35	155	198	244	295	352	419	497	588	-
40	147	193	240	292	349	415	491	579	-
45	-	185	235	288	345	411	485	571	-
50	-	-	227	282	341	406	479	563	-
55	-	-	-	274	334	399	473	555	-
60	•	-	-	-	325	391	465	547	-
65	-	-	-	-	-	381	455	537	-
oefficient of perf	ormance (C.O.P.)	)							
30	1.79	2.26	2.80	3.42	4.13	4.95	5.84	6.79	-
35	1.49	1.92	2.38	2.91	3.53	4.23	5.02	5.88	-
40	1.21	1.60	2.01	2.47	2.99	3.59	4.28	5.04	-
45	-	1.31	1.67	2.07	2.52	3.03	3.62	4.28	-
50	-	-	1.37	1.71	2.09	2.53	3.03	3.59	-
55	-	-	-	1.39	1.72	2.08	2.50	2.98	-
60	-	-	-	-	1.38	1.68	2.03	2.43	-
65	-	-	-	-	-	1.32	1.61	1.94	-
		•		•		1	1		
ominal performa	ance at to = $5$ °C,	tc = 50 °C				Pressure switch se	ttings		

rtorimar performance at to = 5 e, te = 5		
Cooling capacity	19 821	W
Power input	6 550	W
Current consumption	12.08	Α
Mass flow	479	kg/h
C.O.P.	3.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions: Superheat = 10 K, Subcooling = 0 K

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%





Performer scroll compressor. HCJ090T4

# Performance data at 50 Hz, ARI rating conditions

**R410A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
ooling capacity		10.505	42440	45.000	10.210	22.227	27.054	22.245	
30	8 293	10 596	13 118	15 982	19 310	23 227	27 854	33 315	-
35	7 600	9 927	12 410	15 171	18 334	22 021	26 356	31 461	-
40	6 815	9 188	11 653	14 334	17 352	20 831	24 895	29 665	-
45	-	8 355	10 823	13 444	16 339	19 632	23 445	27 902	-
50	-	-	9 896	12 478	15 271	18 398	21 983	26 148	-
55	-	-	-	11 411	14 123	17 106	20 483	24 378	-
60	-	-	-	-	12 871	15 732	18 923	22 567	-
65	-	-	-	-	-	14 250	17 276	20 692	-
ower input in W									
30	4 295	4 337	4 346	4 342	4 344	4 370	4 440	4 573	-
35	4 703	4774	4 802	4 806	4 804	4 816	4 862	4 959	-
40	5 150	5 255	5 306	5 322	5 322	5 324	5 350	5 416	-
45	-	5 787	5 866	5 898	5 903	5 901	5 910	5 950	-
50	-	-	6 486	6 540	6 555	6 552	6 550	6 567	-
55	-	-	-	7 254	7 284	7 285	7 275	7 275	-
60	-	-	-	-	8 096	8 105	8 093	8 079	-
65	-	-	-	-	-	9 020	9 009	8 986	-
		1	L	L		1			
Current consump	tion in A								
30	8.13	8.10	8.04	7.97	7.86	7.72	7.55	7.32	_
35	9.12	9.06	8.98	8.90	8.79	8.66	8.51	8.31	-
40	10.26	10.15	10.05	9.94	9.83	9.70	9.56	9.39	_
45	-	11.41	11.27	11.14	11.01	10.87	10.73	10.58	-
50	-	-	12.70	12.53	12.37	12.22	12.08	11.93	-
55	-	-	-	14.15	13.96	13.78	13.63	13.48	-
60	-	_	-	_	15.80	15.60	15.42	15.26	-
65	-	-	-	-	-	17.70	17.49	17.31	-
		1	I	1	1	1			
Mass flow in kg/h									
30	160	201	245	295	353	421	500	594	-
35	154	197	243	293	350	416	493	583	-
40	146	192	239	290	347	412	487	575	-
45	-	184	233	286	343	408	482	567	-
50	-	-	226	280	338	403	476	559	-
55	-	-	-	272	332	397	469	551	-
60	-	-	-	-	323	389	462	543	-
65	-	-	-	-	-	378	452	533	-
•		•		1	•	1	•		
Coefficient of per 30	formance (C.O.P.) 1.93	2.44	3.02	3.68	4.45	5.32	6.27	7.29	_
35	1.62	2.08	2.58	3.16	3.82	4.57	5.42	6.34	
40	1.32	1.75	2.36	2.69	3.26	3.91	4.65	5.48	
	-		1						
45 50		1.44	1.85	2.28	2.77	3.33	3.97	4.69	-
	-	-	1.53	1.91	2.33	2.81	3.36	3.98	-
		-	-	1.57	1.94	2.35	2.82	3.35	-
55	-				1.50	1 0 4	224	2 72	
	-	-	-	-	1.59	1.94 1.58	2.34 1.92	2.79 2.30	-

Nominal performance at to = 7.2 C/te = 54.4 C				
Cooling capacity	22 321	W		
Power input	7 182	W		
Current consumption	13.36	Α		
Mass flow	505	kg/h		
C.O.P.	3.11			

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	72	dB(A)	
With accoustic hood	67	dB(A)	

All performance data +/- 5%







