



# Performer HCJ-Series Scroll Compressors R-410A



### Danfoss EnVisioneering<sup>™</sup>: Innovative design for unique value in light commercial and commercial air conditioning

Danfoss reinvents the scroll compressor for light commercial and commercial air conditioning. With new patented features that assure the lightest, most compact scroll in its capacity range. We cut weight and size to save you shipping and manufacturing costs; and we made the compressor stronger and more reliable to reduce warranty costs.

#### Features:

- Patented hybrid scroll wrap: allows more capacity in less space
- Patented carbon main bearing
- Patented press fit full-round crankcase eliminates plug welds to the housing
- · Patented press fit lower bearing ring
- Oil pan integral with baseplate
- More efficient oil pumping mechanism
- One-piece lower shell



Lower bearing ring

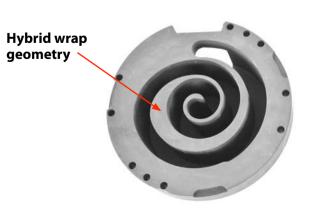


Carbon main bearing



### **Hybrid Wrap Design**

The patented Hybrid wrap design facilitates higher displacement in a smaller frame, allowing Danfoss to stretch up to 10TR in a smaller, lighter platform. To strengthen the scroll profiles, HCJ series scrolls are produced using ductile iron. Also, the scrolls have radial compliance which gives the HCJ series much better liquid handling capability.







## **Technical Specifications**

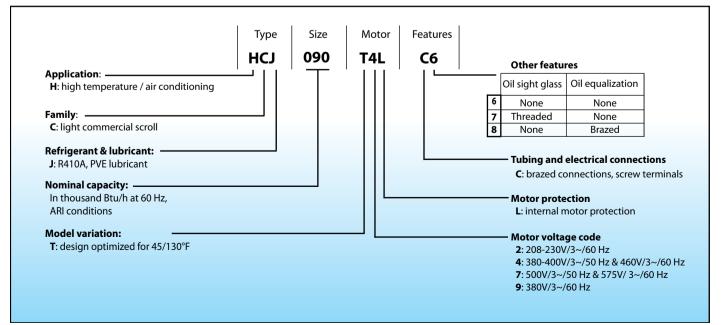
Parameters	Model HCJ090T4	Model HCJ105T4	Model HCJ120T4
Nominal capacity (TR) @ 60 HZ	7.5	9.0	10.0
Cooling capacity (Btuh)	91,500	106,400	121,600
EER	10.8	10.9	10.9
Power input	8.47 kW	9.75 kW	11.15 kW
MCC	19 A	25 A	27 A
Displacement	644.1 cfh	753.5 cfh	862.8 cfh
Suction connection	1 1/8 in.	1 1/8 in.	1 1/8 in.
Discharge connection	7/8 in.	7/8 in.	7/8 in.
Shell diameter	7.2 in.	7.2 in.	7.2 in.
Maximum height	20.9 in.	20.9 in.	20.9 in.
Footprint	7.5 x 7.5 in.	7.5 x 7.5 in.	7.5 x 7.5 in.
Net weight	99.6 lbs	99.6 lbs	99.6 lbs
Compressors per pallet	16	16	16
Tandem version	Available	Available	Available
Motor voltage codes available*	2, 4, 7, 9	2, 4, 7, 9	2, 4, 7, 9

\*Motor voltage code 9 to be released in Q3 2009. Please contact Danfoss for detailed datasheets.

#### **Rating Conditions**

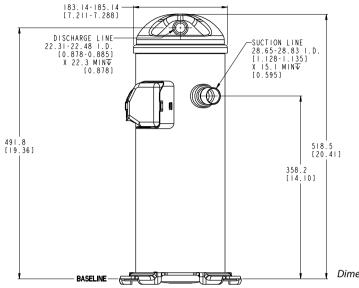
Evaporating temperature:45°FCondensing temperature:130°FSuperheat:20°FSubcooling:15°FVoltage:460V / 3ph / 60Hz

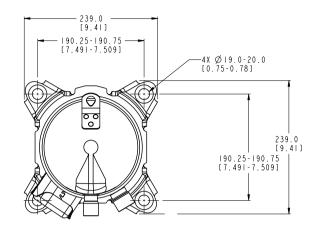
### **HCJ Nomenclature**





# Dimensions





Dimensions in mm/in.

# **Ordering Codes**

Madal	Model Motor _	Code 2	Code 4	Code 7	
Description	Feature		208-230/3/60 Hz	460/3/60 Hz 380-400/3/50 Hz	575/3/60 Hz
HCJ090LC6	Internal	standard	120U2304	120U2299	120U2309
HCJ090LC7		with sight glass	120U2539	120U2531	120U2507
HCJ090LC8		with oil equalizer port	120U2543	120U2535	120U2511
HCJ105LC6		standard	120U2324	120U2319	120U2329
HCJ105LC7		with sight glass	120U2547	120U2571	120U2515
HCJ105LC8		with oil equalizer port	120U2551	120U2575	120U2519
HCJ120LC6		standard	120U2344	120U2339	120U2349
HCJ120LC7		with sight glass	120U2563	120U2555	120U2523
HCJ120LC8		with oil equalizer port	120U2567	120U2559	120U2527

Motor Code 9 - 380/3/60Hz to be available from Q3-2009. Above codes are for I-Pak with mounting kits. For other packing options, please contact Danfoss.

# **Performer H-Series Scroll Family**



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