

# CERTIFICATE OF PLANT DESIGN REGISTRATION

Work Health & Safety Act 2011  
Work Health & Safety Regulation 2011

ABN: 81 913 830 179  
Phone: 13 10 50

Registration No: **PV 6-211684/17**

Issue Date: **4/04/2017**

Registration Holder: DANFOSS A/S

Postal Address: 81 NORBORGVEJ  
NORDBORG 6430  
DENMARK

Plant Type: Pressure Vessel Original

Model Number/ Trade Name: SCROLL COMPRESSOR SHELL NO 2

Technical Standard : EN 14276-1:2006+A1:2011

Engineering Principles: No

Drawing Number Design:

Design Description:

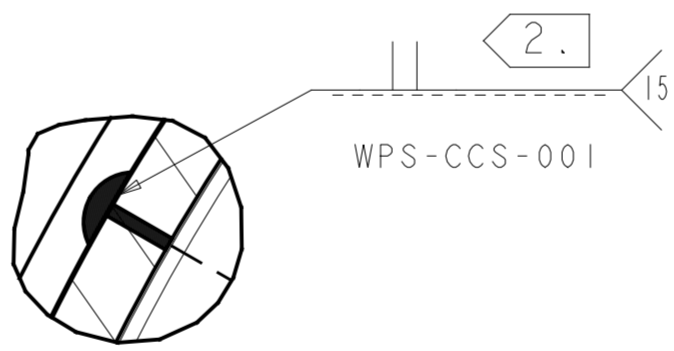
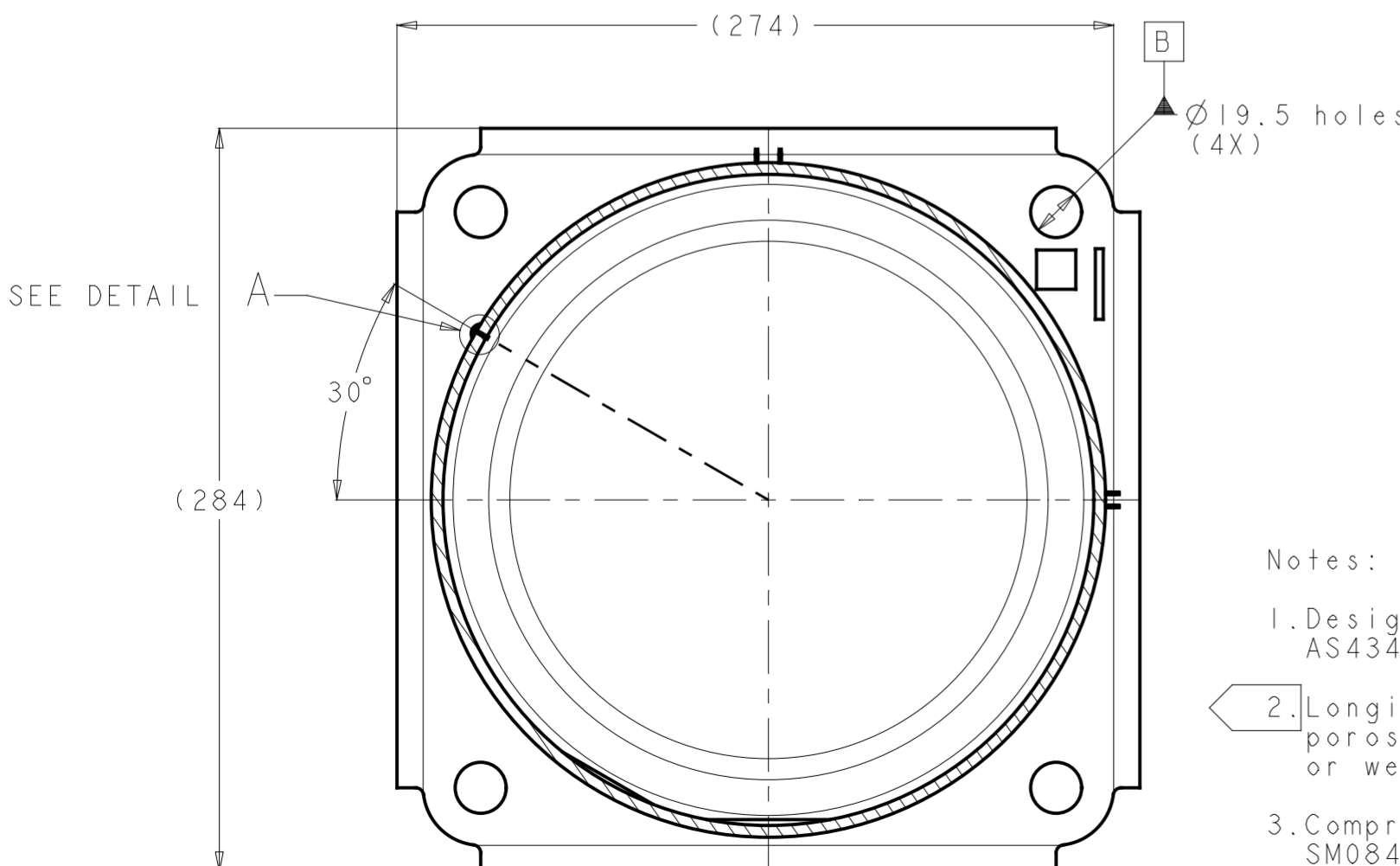
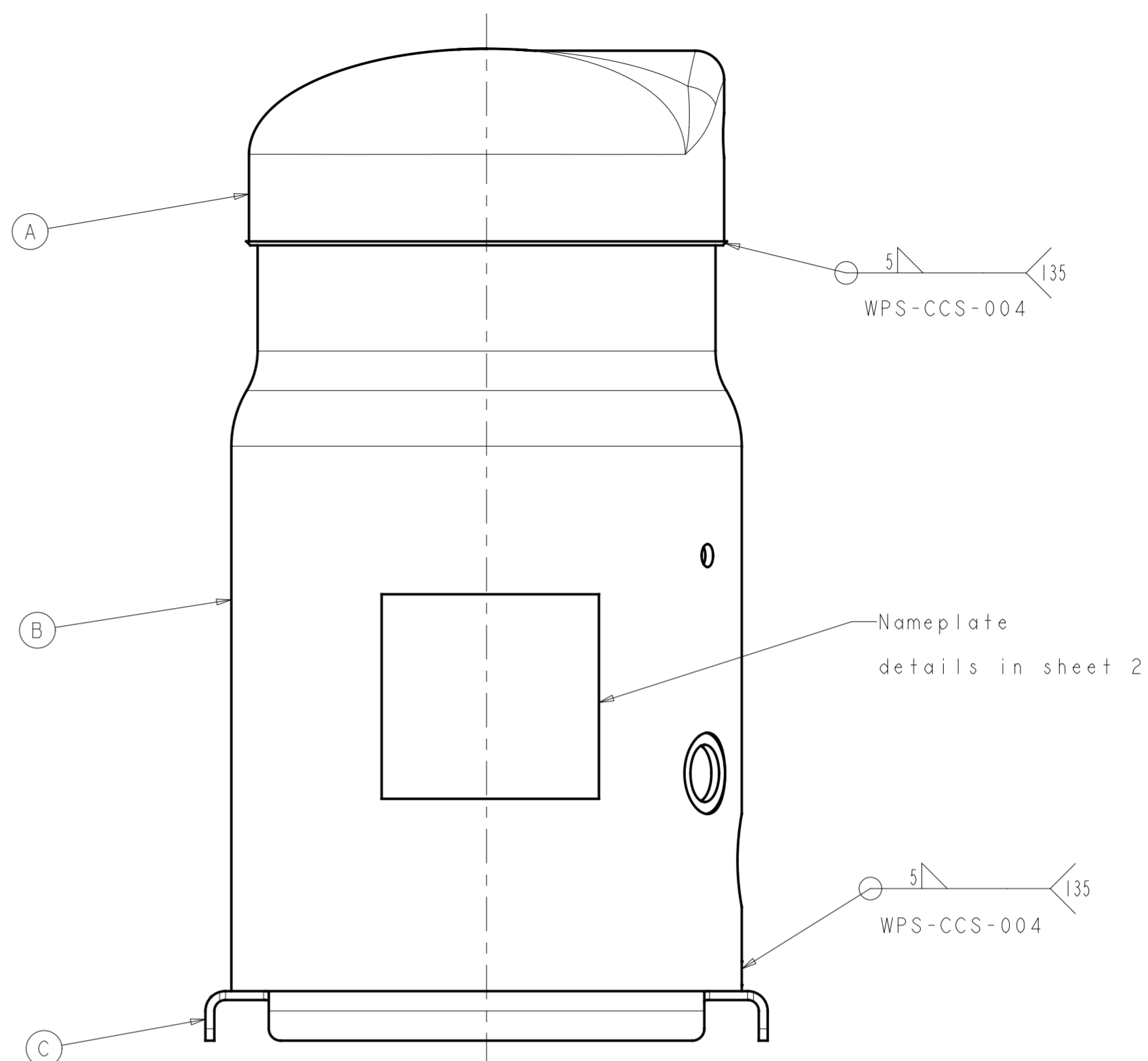
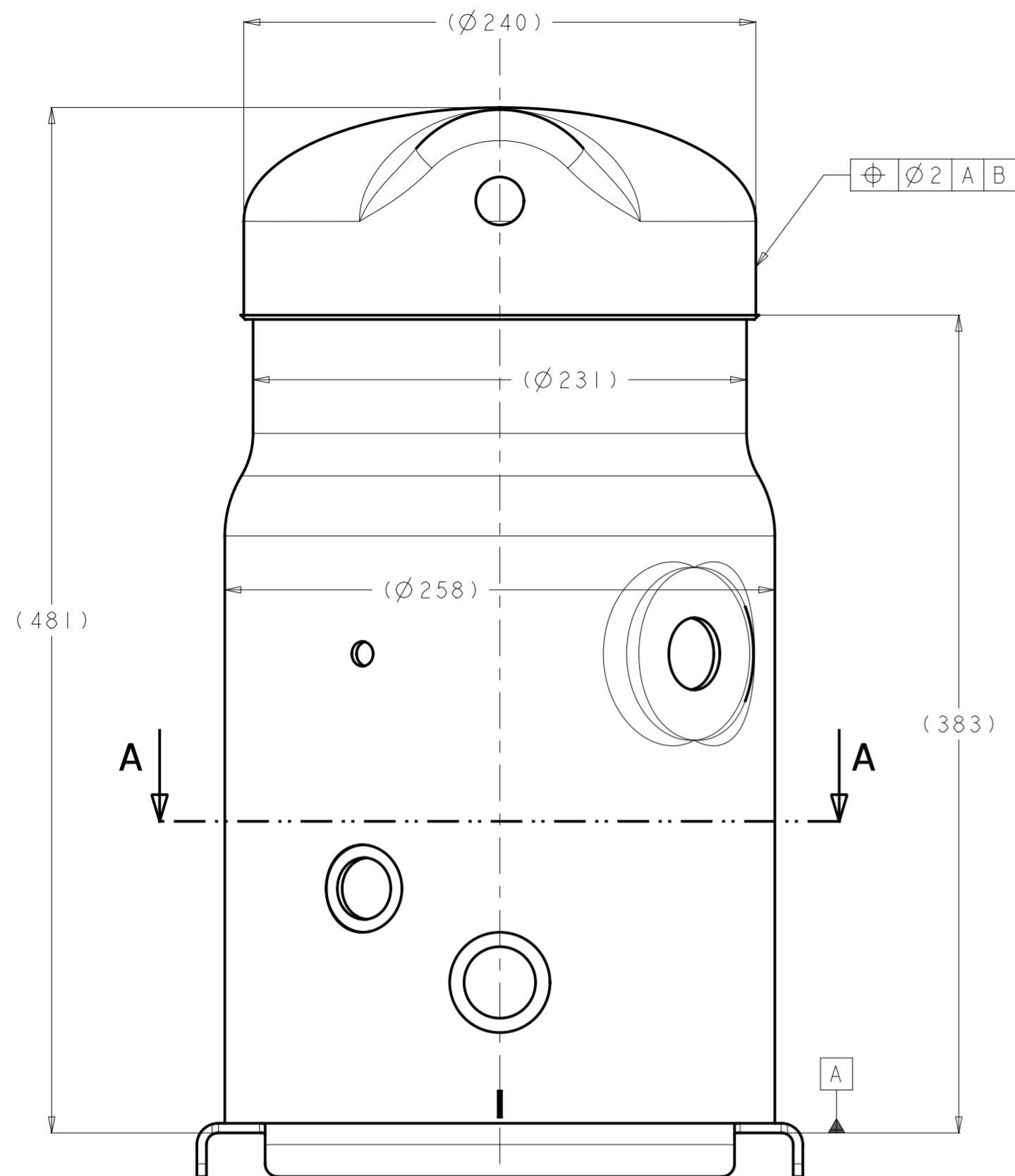
Hazard Level	C
Contents	Harmful
Chamber 1 Volume (l)	13
Chamber 1 Design Pressure (kPa)	0 TO 2500
Chamber 1 Temperature (°C)	-35 TO 54
Chamber 1 Fluid Type	Gas
Drawing Number & Revisions	9850280_800 REV A
Pressure Vessel	Other
Other Type	HERMETIC COMPRESSOR SHELL
Number of Chambers	1

Note: The design of an item of plant registered under the Occupational Health and Safety Regulation immediately before the repeal of that regulation is deemed to have been registered under part 5.3 of the WHS Regulation

Fee Paid: \$ 272.08

Receipt Date: 29/03/2017

Receipt No: 30-1565



DETAIL A  
SCALE 2/1

Notes:

1. Design code: EN13445, EN14276-1, AS4343: Hazard level C.
2. Longitudinal continuous welding, without porosities, with a full penetration or welding with a bead visible inside the shell.
3. Compressor Model: SM084, SZ084, SM090, SZ090, SM100, SZ100

	Pressure (bars)	Volume(L)	TSMX (°C)	TSMI (°C)
Lower Pressure	25	13.0	54	-35
High Pressure	31.9	1.1	150	-35

Model	Part	description	Drawing No.	Thickness MIN.	Material Grade	Material Standard
SZ100	A	upper shell	5312387	3.2mm	SPHC	Q/BQB 302
	B	mid shell	5312378	3.0mm	SPHE	Q/BQB 302
	C	lower shell	5312369	4.0mm	SPHC	Q/BQB 302

General Tolerances Table	Drawing Status : Preliminary			Surface Area (m2) Estimated Mass (Kg) Projection Scale Size 1/5 A2	Key characteristic Critical characteristic According to Danfoss standard 50220024 Material : - Designation Scroll Compressor Shell No.2
	Creation 10-10-2016 Revision ECR Number Date Designer Wu Fang Approval Kong haili				
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SECTION A - A

**Danfoss**  
MADE IN CHINA

**Model no: SZ100S4VC**  


**Serial no: GH2500000001**  


**M** 380-400 V 3 ~ 50 Hz  
460 V 3 ~ 60 Hz UL electrical ratings  
LR 98 A MAX OPER. 18 A  
Thermally protected system  
P.E.D. LP side HP side  
Marking  
PS 25 bar 31.9 bar  
TS max 54 °C 150 °C  
TS min -35 °C -35 °C  
Volume 13.0 L 1.1 L  
Lubricant: P.O.E. 160SZ

2016 Refrigerant: R407C R134a R404A R507  
PROTECTED BY DOMESTIC AND FOREIGN PATENTS




**WARNING**  
Installation and servicing shall be performed by trained personnel only. Failure to observe these safety warnings could result in serious injury or death.  
**ELECTRIC SHOCK HAZARD:** Turn off power before servicing. (Discharge all capacitors.)  
Keep terminal cover in place and securely fastened whenever power is applied to the compressor. Use this equipment on a grounded system only.  
**HIGH PRESSURE:** System contains refrigerant and oil under pressure. Remove pressure from both the high and low side before servicing, wear safety goggles.  
**FIRE HAZARD:** Use tubing cutter to remove compressor. Do not use torch as oil may catch fire.

**CAUTION**  
Use only manufacturer's approved refrigerants, lubricants and electrical components. Unauthorized refrigerant / lubricant / electrical component could cause fires, explosions, electrical shorting.  
For details refer to multi language instructions and technical documentation available on Danfoss website at <http://cc.danfoss.com>

6001115P01

Nameplate

General Tolerances Table	Drawing Status : Preliminary				▽ Key characteristic ⊕ Critical characteristic According to Danfoss standard 50220024 Material : - Designation <b>Scroll Compressor Shell No.2</b>
	Surface Area (m2)	Estimated Mass (Kg)	Projection	Scale	
Roughness (µm)	A	Creation	10-10-2016	Size	
	Revision	ECR Number	Date	1/5	
	Designer	Wu Fang			
	Approval	Kong Haili			
ISO 8015 ISO 1101	Confidential: Property of Danfoss Commercial Compressors. Not to be handed over to copied or used by third party. Two or three dimensional reproduction of contents to be authorized by Danfoss CC.				Sheet 2 of 2 A Dwg N° 9850280 800 <b>A</b>