



Classification : Specification for Compressor		Written By	Supranee Matkamme
		Approved By	Dumrongsak Sompradit
Subject : ANB42FCGMT		Issued Date	2010-11-30
		Document No.	SPC05O1281.02
			Revised C
1.Compressor data			
Type			Scroll
Displacement	cm ³ /rev.		42.0
	in ³ /rev.		2.6
2.Motor data			
Motor type			BLDCM
Motor protection			External
Nominal output	W		3000
Number of pole			6
Nominal revolution	rpm		3600 (at 60rps)
Insulation class			E
Motor resistance (20 °C)	Ohm		0.30
3.Refrigerant			
Type			R-410A
4.Oil			
Type			MEL56
Charge amount	L (in ³)		1.70 (103.7)
5.Mass (include.oil)	kg (lbs)		34.2 (75.4)
6.Compressor power source			
Rated voltage	V		78-400
Rated frequency	Hz		180 (60rps)
Running frequency	Hz		60-360 (20-120rps)
Phase	Ø		3
7.Performance			
Refrigerating capacity (±5%)	W		13900
	BTU/hr		47427
Motor input (±5%)	W		4160
COP	W/W		3.34
EER	BTU/hr.W		11.40
Current	A		15.2
Note: Conditions			ARI
Evaporating temp.	°C (°F)		7.2 (45.0)
Condensing temp.	°C (°F)		54.4 (129.9)
Return gas temp.	°C (°F)		18.3 (64.9)
Ambient temp.	°C (°F)		35.0 (95.0)
Liquid temp.	°C (°F)		46.0 (114.8)
Power source	rps/Hz		60/180
Modulation			PWM(Sine wave), carrier frequency 4kHz
Cooling performance curve			SCI-CPDA007
Please follow to the general specification for ANB (VHIK-71676(T))			



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Outline drawing	CS01F569	
Wiring diagram	CS01D584	
Crank case heater		38 W
Terminal parts accessories		
Terminal parts assy	CS01F449	
Terminal cover	SC25C057H01	1 pce.
Mounting accessories		
Mounting parts	CS01F401	
Rubber mount	SC31D032H01	4 pcs.



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Pressure		
Condensing	4.15 MPaG [602 psiG] or less	
Evaporating	0.23 ~ 1.59 MPaG [33.4~230.6 psiG]	
Compression ratio	1.8 ~ 8.0	
Abnormal rise in pressure	5.9 MPaG [855.7 psiG] or less	
Temperature		
Condensing	Under 65 °C	
Evaporating temperature	-25 ~ 26 °C	
Discharge gas (max)	120 °C In case -20°C ~ +12°C and speed limit 20 ~ 120 rps 110 °C In case +12°C ~ +26°C and speed limit 20 ~ 90 rps 110 °C In case -25°C ~ -20°C and speed limit 20 ~ 120 rps	
Suction gas superheat	Must be more than 0 °C - No liquid-back	
Discharge gas superheat	10 °C or more	
Outdoor ambient temp.	Under 43 °C	
Electrical		
Reverse phase (rotation)	Not possible	
ON / OFF		
ON/OFF frequency	Less than 250,000 cycles	
ON/OFF cycle	-The ON/OFF cycle shall be a maximum of 10 times/hour. -OFF time shall be the time until the high side and low side pressure reach to balance pressure (more than 3 minutes)	
Piping stress	3.5 kg/mm ² or less at start and stop condition (1.8 kg/mm ² during operation)	
Refrigerant circuit		
Maximum refrigerant charge	6 kg No accumulator <2 kg	
Piping vibration	Maximum 0.8 mm.	
Inclination of compressor	Within 5°	