



Classification : Specification for Compressor		Written By	Buncha Sungklum
		Approved By	Dumrongsak Sompradit
Subject : BN52YEAMT		Issued Date	2011-10-25
		Document No.	SPC05O1283.02
			Revised E
1.Compressor data			
Type			Scroll
Displacement	cm <sup>3</sup> /rev.		52.0
	in <sup>3</sup> /rev.		3.2
2.Motor data			
Motor type			Three phase induction motor
Motor protection			Internal
Nominal output	W		3700
Number of pole			2
Nominal revolution	rpm		2900
LRA	A		67 (at 400V 50Hz)
Insulation class			E
Motor resistance (20 °C)	Ohm		2.12
3.Refrigerant			
Type			R-410A
4.Oil			
Type			MEL56
Charge amount	L (in <sup>3</sup> )		1.35 (82.4)
5.Mass (include.oil)	kg (lbs)		47.4 (104.5)
6.Compressor power source			
Rated voltage	V		380-415 (±10%)
Rated frequency	Hz		50 (±2%)
Phase	∅		3
7.Performance			
Refrigerating capacity (±5%)	W		13900
	BTU/hr		47427
Motor input (±5%)	W		4360
COP	W/W		3.19
EER	BTU/hr.W		10.88
Current	A		7.5
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	V/Hz		400/50
Cooling performance curve			SCI-CPDB006
8.Lowest starting voltage	V		Drop 304

Please follow to the general specification for BN (VHIK-71680(T))



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Outline drawing	SC01F112	
Wiring diagram	SC01D319	
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	0.30 ~ 1.05 MPaG [43.5~152.3 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	-20 ~ 12 °C	
Discharge gas (max)	120 °C	
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 <sup>2</sup> or less at start and stop condition (1.8 kg/mm <sup>2</sup> during operation)	
Refrigerant circuit		
Maximum refrigerant charge	7 kg	
	No accumulator <2 kg	
Piping vibration	Maximum 0.8 mm.	
Inclination of compressor	Within 5°	