



Classification : Specification for Compressor		Written By		Suriwipha Chanlakon	
		Approved By		Dumrongsak Sompradit	
Subject : NH52YDAT		Issued Date		2010-03-16	
		Document No.		SPC99O441.02	
				Revised H	
1.Compressor data					
Type		Rotary			
Displacement		cm <sup>3</sup> /rev.		52.4	
		in <sup>3</sup> /rev.		3.2	
2.Motor data					
Motor type		Three phase induction motor			
Motor protection		External			
Nominal output		W		2500	
Nominal revolution		rpm		2900/3400	
LRA		A		35/32	
Insulation class		E			
Motor resistance (20 °C)		Ohm		3.55	
3.Refrigerant					
Type		R-22			
4.Oil					
Type		NM56EP			
Charge amount		L (in <sup>3</sup> )		1.30 (79.3)	
5.Mass (include.oil)		kg (lbs)		29.3 (64.6)	
6.Compressor power source					
Rated voltage		V		380-415/400-460 (within ±10%)	
Rated frequency		Hz		50/60	
Phase		Ø		3	
7.Performance					
Refrigerating capacity (±5%)		W		9442	
		BTU/hr		11395	
				32216	
				38880	
Motor input (±5%)		W		3160	
COP		W/W		3830	
EER		BTU/hr.W		2.99	
				2.98	
				10.19	
				10.15	
Current		A		5.5	
				6.1	
Note: Conditions		ASRE-T		ASRE-T	
Evaporating temp.		°C (°F)		7.2 (45.0)	
				7.2 (45.0)	
Condensing temp.		°C (°F)		54.4 (129.9)	
				54.4 (129.9)	
Return gas temp.		°C (°F)		35.0 (95.0)	
				35.0 (95.0)	
Ambient temp.		°C (°F)		35.0 (95.0)	
				35.0 (95.0)	
Liquid temp.		°C (°F)		46.1 (115.0)	
				46.1 (115.0)	
Power source		V/Hz		400/50	
				400/60	
Cooling performance curve		PCS893557			
8.Lowest starting voltage		V		Drop 304/320 (at 10.3kg/cm <sup>2</sup> G balancing pressure)	

Please follow to the general specification for NH (NOKS-CF0156)



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Outline drawing	SC01D130	
Wiring diagram	CS01F037	
Phase protector	CS01D350H03 / SC73C243H01	
Thermal switch	SC01D719H02	S101CT1CH05-MW
Terminal parts accessories		
Terminal parts assy	SC01D033	
Terminal cover	CR26C047H01	1 pce.
Holder	SC02D275H01	1 pce.
Mounting accessories (1)		
Mounting parts	SC01D465	
Rubber mount	SC31D009H01	4 pcs.
Mounting accessories (2)		
Mounting parts	CS01D371	
U. rubber	CR31D176H01	4 pcs.
Spring	CR39D181H01	4 pcs.
L. rubber	CR31D175H01	4 pcs.
Optional accessories [Use with (2)]		
Top support parts	SC01D019	
Rubber support	CR31D180H01	1 pce.
Cap	CS01D238H01	1 pce.



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Pressure		
Condensing	1.03 ~ 2.60 MPaG [149.3 ~ 377 psiG]	
Evaporating	0.26 ~ 0.69 MPaG [37.7 ~ 100 psiG]	
Compression ratio	8 or less	
Abnormal rise in pressure	3.92 MPaG [568.5 psiG] or less	
Temperature		
Condensing	28 ~ 65 °C	
Evaporating temperature	-10 ~ 15 °C	
Discharge gas (max)	120 °C (In case of Heat pump or De-humidifier, this limit is 115 °C)	
Suction gas superheat	Must be over 0 °C - No liquid-back	
Discharge gas superheat	20 ° or more	
Outdoor ambient temp.	-Air Cond.: 20 °C ~ 43 °C -Heat pump: -10 ~ 43 °C	
Electrical		
Reverse phase (rotation)	Not possible	
ON / OFF		
ON/OFF frequency	Less than 170,000 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 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	3.0 kg No accumulator <2.0 kg	
Piping vibration	Maximum 0.8 mm.	
Inclination of compressor	Within 5°	