



# SIAM COMPRESSOR INDUSTRY

Classification : Specification for Compressor		Written By		Atith Chaimanee	
		Approved By		Dumrongsak Sompradit	
Subject : NN37YCAMT		Issued Date		2015-01-27	
		Document No.		SPC06O853.02	
				Revised K	
1.Compressor data					
Type		Rotary			
Displacement		cm <sup>3</sup> /rev.		37.4	
		in <sup>3</sup> /rev.		2.3	
2.Motor data					
Motor type		Three phase induction motor			
Motor protection		Internal			
Nominal output		W		2500	
Nominal revolution		rpm		2900/3400	
LRA		A		51/53 (at 400/460V)	
Insulation class		E			
Motor resistance (20 °C)		Ohm		3.59	
3.Refrigerant					
Type		R-410A			
4.Oil					
Type		FV50S			
Charge amount		L (in <sup>3</sup> )		1.30 (79.3)	
5.Mass (include.oil)		kg (lbs)		31.3 (69.0)	
6.Compressor power source					
Rated voltage		V		380-415/460 (within ±10%)	
Rated frequency		Hz		50/60 (±2%)	
Phase		Ø		3	
7.Performance					
Refrigerating capacity (±5%)		W		9600      12100	
		BTU/hr		32755      41285	
Motor input (±5%)		W		3050      3800	
COP		W/W		3.15      3.18	
EER		BTU/hr.W		10.74      10.86	
Current		A		5.4      5.7	
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)		46.0 (114.8)      46.0 (114.8)	
Power source		V/Hz		400/50      460/60	
Cooling performance curve		PCS170A			
8.Lowest starting voltage		V		Drop 304 (at 16.7 kg/cm <sup>2</sup> G balancing pressure)	

Please follow to the general specification for NN (VNOK-CF0429)



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Outline drawing	SC01D739	
Wiring diagram	SC01D319	
Phase protector	CS01D350H03 / SC73C243H01	
Terminal parts accessories		
Terminal parts assy	SC01D024	
Terminal cover	CR25C138H03	1 pce.
Packing	CR34D377H01	1 pce.
Rubber washer	CR34D115H01	1 pce.
Flange nut	SC12D378H01	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.



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<b>Pressure</b>		
Condensing	0.20 ~ 4.15 MPaG [29.0 ~ 602 psiG]	
Evaporating	0.20 ~ 1.60 MPaG [29.0 ~ 232.1 psiG]	
Compression ratio	9.0 or less	
Abnormal rise in pressure	5.88 MPaG [852.8 psiG] or less	
<b>Temperature</b>		
Condensing	-27 ~ 65 °C	
Evaporating temperature	-27 ~ 26 °C	
Discharge gas (max)	120 °C (In case of Heat pump or De-humidifier, this limit is 115 °C)	
Suction gas superheat	Must be more than 0 °C - No liquid-back	
Discharge gas superheat	20 °C or more	
Outdoor ambient temp.	Air Con.: 20 ~ 43 °C -Heat pump.: -10 ~ 43 °C	
<b>Electrical</b>		
Reverse phase (rotation)	Not possible	
<b>ON / OFF</b>		
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 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)	
<b>Refrigerant circuit</b>		
Maximum refrigerant charge	See details in general specification No. VNOK-CF0429 (2/7)	
Piping vibration	Maximum 0.8 mm.	
Inclination of compressor	Within 5°	