

Invotech Selection Software

REFRIGERANT R407C

Operation Conditions :

Evaporating Temperature (°C) : 5,0
 Condensing Temperature (°C) : 50,0
 Liquid subcooling: 0,0
 Suction Superheat: 10,0

Required Capacity(Kw):

Compressor Selected: YH720T1-100

PERFORMANCE AT SPECIFIED OPERATING POINT

Capacity (KW)	61,88
Power Input (KW)	18,74
COP	3,3
Current (A)	35,68

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width/Height (mm)	356.3/326.2/671.2
Weight (kg)	104
Stub Suction (inch)	1 5/8
Stub Discharge (inch)	1 1/8
Base mounting (hole dia)	232X232(11)
Oil type	POE
Initial charge of oil quantity (L)	5.5
Recharge of oil quantity (L)	5.3
High Side PS Max., (MPa)	3
Low Side PS Max., (MPa)	2.0
Displacement(m ³ /h)	68.2

COMPRESSOR ELECTRICAL DATA

Electricity	380V/50Hz/3P
Standard Conditions	7.2/54.4/11.1/8.3
Normal Power (HP)	25
Normal Capacity (W)	68356
Normal Power input (W)	20547
Normal COP (W/W)	3.32
Normal Current (A)	36.7
Locked Rotor Current (A)	266
Maximum operating current (A)	51

Model: YH720T1-100

Refrigerant: R407C

Suction Superheat: 10,0

Liquid subcooling: 0,0

Capacity (KW)

Tc \ Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	21,92	27,9	35,08	43,64	53,77	65,66	79,48			
30	21,05	26,77	33,65	41,87	51,63	63,1	76,48			
35	20,09	25,52	32,07	39,93	49,28	60,31	73,2	88,14	96,44	
40	19,08	24,17	30,36	37,82	46,73	57,28	69,66	84,06	92,06	
45		22,75	28,54	35,56	44	54,05	65,88	79,69	87,4	
50			26,62	33,18	41,11	50,62	61,88	75,07	82,45	
55				30,68	38,08	47,02	57,66	70,21	77,25	
60					34,92	43,25	53,25	65,12	71,81	
65						39,34	48,67	59,82	66,14	

Power Input (KW)

Tc \ Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	9,64	10	10,25	10,37	10,36	10,19	9,86			
30	11	11,39	11,69	11,9	12	11,99	11,85			
35	12,4	12,76	13,07	13,33	13,52	13,63	13,64	13,55	13,46	
40	13,9	14,21	14,5	14,77	15,01	15,19	15,32	15,38	15,38	
45		15,83	16,07	16,31	16,55	16,79	16,99	17,17	17,24	
50			17,86	18,04	18,26	18,5	18,74	18,99	19,11	
55				20,06	20,21	20,42	20,67	20,96	21,11	
60					22,5	22,64	22,86	23,15	23,32	
65						25,26	25,41	25,67	25,83	

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Current (A)

Tc \ Te	-25	-20	-15	-10	-5	0	5	10	12,5
25	23,87	24,49	24,92	25,23	25,45	25,65	25,86		
30	25,3	25,92	26,36	26,68	26,91	27,11	27,33		
35	26,96	27,58	28,02	28,33	28,56	28,75	28,97	29,25	29,43
40	28,93	29,54	29,97	30,26	30,48	30,66	30,85	31,12	31,29
45		31,88	32,29	32,56	32,74	32,9	33,07	33,3	33,46
50			35,05	35,28	35,43	35,55	35,68	35,88	36,02
55				38,52	38,62	38,69	38,78	38,93	39,04
60					42,39	42,4	42,43	42,52	42,6
65						46,75	46,71	46,73	46,77

Mass Flow (Kg/h)

Tc \ Te	-25	-20	-15	-10	-5	0	5	10	12,5
25	476,07	616,76	771,84	944,44	1137,7	1354,7 6	1598,74		
30	465,77	607	762,72	936,07	1130,1 7	1348,1 7	1593,2		
35	455,69	597,01	752,92	926,55	1121,0 5	1339,5 3	1585,15	1861,0 2	2011,2 9
40	445,57	586,52	742,15	915,62	1110,0 5	1328,5 7	1574,31	1850,4 2	2000,8 4
45		575,24	730,16	903	1096,9	1315	1560,42	1836,3 1	1986,6 6
50			716,66	888,42	1081,3 4	1298,5 6	1543,2	1818,4 1	1968,4 6
55				871,6	1063,0 9	1278,9 7	1522,38	1796,4 6	1945,9 7
60					1041,8 7	1255,9 6	1497,68	1770,1 7	1918,9 3
65						1229,2 6	1468,83	1739,2 7	1887,0 5