

Invotech Selection Software

REFRIGERANT R407C

Operation Conditions

Evaporating Temperature(ℓ): 7,2
 Condensing Temperature(ℓ): 54,4
 Liquid subcooling: 8,3
 Suction Superheat: 11,1

Required Capacity(Kw): 0,01

Compressor Selected: YH610T1-100

PERFORMANCE AT SPECIFIED OPERATING POINT

Capacity (KW)	58,04
Power Input (KW)	17,45
COP	3,33
Current (A)	32,63

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width/Height (mm)	356.3/326.2/671.2
Weight (kg)	100
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)	57.9

COMPRESSOR ELECTRICAL DATA

Electricity	380V/50Hz/3P
Standard Conditions	7.2/54.4/11.1/8.3
Normal Power (HP)	20
Normal Capacity (ℓ)	58033
Normal Power input(ℓ)	17444
Normal COP(ℓ/ℓ)	3.32
Normal Current(ℓ)	31.5
Locked Rotor Current(ℓ)	266
Maximum operating current(ℓ)	40

Model: YH610T1-100

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Liquid subcooling: 8,3

Capacity(KW)

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	20,04	25,5	32,07	39,89	49,16	60,02	72,65			
30	19,24	24,47	30,76	38,28	47,2	57,68	69,91			
35	18,37	23,33	29,31	36,5	45,04	55,13	66,91	80,57	88,16	
40	17,44	22,1	27,75	34,57	42,72	52,36	63,68	76,84	84,16	
45		20,8	26,09	32,51	40,22	49,41	60,23	72,85	79,89	
50			24,33	30,33	37,58	46,27	56,56	68,63	75,37	
55				28,04	34,81	42,98	52,71	64,18	70,62	
60					31,92	39,53	48,68	59,53	65,64	
65						35,96	44,49	54,68	60,46	

Power Input(KW)

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	8,18	8,49	8,7	8,81	8,79	8,65	8,37			
30	9,34	9,67	9,92	10,1	10,19	10,18	10,06			
35	10,52	10,83	11,1	11,32	11,48	11,57	11,58	11,5	11,43	
40	11,81	12,06	12,31	12,54	12,74	12,9	13,01	13,06	13,06	
45		13,44	13,64	13,85	14,05	14,25	14,43	14,58	14,63	
50			15,16	15,32	15,5	15,7	15,91	16,13	16,23	
55				17,03	17,16	17,33	17,55	17,79	17,92	
60					19,1	19,22	19,41	19,66	19,8	
65						21,45	21,58	21,79	21,93	

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Current(A)

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	20,27	20,79	21,16	21,42	21,61	21,77	21,96			
30	21,48	22,01	22,38	22,65	22,84	23,01	23,2			
35	22,89	23,42	23,79	24,05	24,24	24,41	24,59	24,83	24,98	
40	24,57	25,08	25,44	25,69	25,87	26,03	26,19	26,42	26,56	
45		27,07	27,41	27,64	27,8	27,93	28,07	28,27	28,41	
50			29,75	29,95	30,08	30,18	30,3	30,46	30,58	
55				32,7	32,79	32,85	32,92	33,05	33,14	
60					35,99	36	36,02	36,09	36,17	
65						39,69	39,65	39,67	39,71	

Mass Flow(Kg/h)

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	404,18	523,62	655,27	801,81	965,89	1150,16	1357,3			
30	395,43	515,33	647,53	794,7	959,49	1144,57	1352,59			
35	386,88	506,85	639,21	786,62	951,74	1137,24	1345,76	1579,97	1707,54	
40	378,28	497,94	630,07	777,34	942,41	1127,93	1336,56	1570,97	1698,67	
45		488,37	619,89	766,63	931,25	1116,41	1324,77	1558,99	1686,63	
50			608,43	754,25	918,04	1102,45	1310,15	1543,8	1671,18	
55				739,97	902,54	1085,82	1292,47	1525,16	1652,09	
60					884,53	1066,28	1271,5	1502,84	1629,13	
65						1043,62	1247,01	1476,61	1602,07	