

Invotech Selection Software

REFRIGERANT R404A

Operation Conditions

Evaporating Temperature(ℓ):	-10,0
Condensing Temperature(ℓ):	45,0
Liquid subcooling:	0,0
Suction Superheat:	30,0

Required Capacity(Kw):

Compressor Selected: YF72E1G-Q100

PERFORMANCE AT SPECIFIED OPERATING POINT

Capacity (KW)	17,7
Power Input (KW)	7,79
COP	2,27
Current (A)	14,9

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width/Height (mm)	239/239/505.7
Weight (kg)	54
Stub Suction (inch)	1 1/8
Stub Discharge (inch)	7/8
Base mounting (hole dia)	190X190(8.5)
Oil type	POE
Initial charge of oil quantity (L)	3
Recharge of oil quantity (L)	2.8
High Side PS Max., (MPa)	3.2
Low Side PS Max., (MPa)	2.0
Displacement(m ³ /h)	29.1

COMPRESSOR ELECTRICAL DATA

Electricity	380V/50Hz/3P
Standard Conditions	-31.6/40.6/36/0
Normal Power (HP)	10
Normal Capacity (ℓ)	7621
Normal Power input(ℓ)	5862
Normal COP(ℓ/ℓ)	1.3
Normal Current(ℓ)	11
Locked Rotor Current(ℓ)	117
Maximum operating current(ℓ)	22.7

Model: YF72E1G-Q100

Refrigerant: R404A

Suction Superheat: 30,0

Liquid subcooling: 0,0

Capacity(KW)

Tc\Te	-40	-35	-30	-25	-20	-15	-10	-5	0	
25	6,68	8,35	10,4	12,86	15,74	19,08	22,89	27,19	32	
30	6,37	7,97	9,93	12,27	15,02	18,19	21,8	25,88	30,45	
35	5,99	7,51	9,36	11,57	14,16	17,15	20,55	24,4	28,71	
40	5,57	7	8,73	10,79	13,21	16	19,18	22,77	26,81	
45	5,16	6,47	8,06	9,96	12,19	14,76	17,7	21,03	24,77	
50	4,76	5,95	7,39	9,11	11,13	13,47	16,16	19,21	22,64	
55	4,43	5,47	6,74	8,26	10,07	12,16	14,57	17,32	20,43	
60					9,02	10,86	12,98	15,42	18,19	

Power Input(KW)

Tc\Te	-40	-35	-30	-25	-20	-15	-10	-5	0	
25	4,04	4,28	4,53	4,79	5,06	5,34	5,63	5,94	6,26	
30	4,41	4,68	4,95	5,24	5,53	5,84	6,16	6,49	6,84	
35	4,78	5,07	5,37	5,68	6	6,33	6,67	7,02	7,39	
40	5,2	5,51	5,83	6,15	6,49	6,84	7,2	7,57	7,95	
45	5,7	6,02	6,36	6,7	7,05	7,42	7,79	8,17	8,57	
50	6,32	6,65	7	7,36	7,72	8,09	8,48	8,88	9,29	
55	7,09	7,44	7,8	8,16	8,53	8,92	9,31	9,71	10,13	
60					9,53	9,92	10,32	10,72	11,14	

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Liquid subcooling: 0,0

Current(A)

Tc\Te	-40	-35	-30	-25	-20	-15	-10	-5	0
25	10,47	10,69	10,94	11,21	11,51	11,82	12,16	12,53	12,91
30	10,84	11,11	11,41	11,73	12,07	12,43	12,82	13,23	13,67
35	11,21	11,53	11,87	12,23	12,61	13,02	13,45	13,91	14,38
40	11,65	12	12,38	12,78	13,21	13,65	14,12	14,61	15,13
45	12,21	12,6	13,02	13,45	13,91	14,39	14,9	15,42	15,97
50	12,97	13,39	13,83	14,3	14,79	15,3	15,84	16,4	16,98
55	13,98	14,43	14,9	15,4	15,92	16,46	17,02	17,6	18,21
60					17,35	17,91	18,5	19,11	19,74

Mass Flow(Kg/h)

Tc\Te	-40	-35	-30	-25	-20	-15	-10	-5	0
25	152,46	193,24	241,33	298,26	365,56	444,76	537,39	644,98	769,06
30	152,95	193,55	241,54	298,47	365,86	445,23	538,13	646,07	770,59
35	152,27	192,48	240,17	296,87	364,13	443,46	536,4	644,47	769,21
40	151,03	190,61	237,78	294,05	360,95	440,02	532,78	640,77	765,52
45	149,79	188,55	234,96	290,57	356,91	435,5	527,87	635,55	760,08
50	149,15	186,86	232,31	287,04	352,59	430,48	522,24	629,4	753,49
55	149,7	186,12	230,39	284,03	348,57	425,54	516,47	622,89	746,34
60					345,45	421,28	511,16	616,62	739,19