

## 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: YSH400T1G-100

### PERFORMANCE AT SPECIFIED OPERATING POINT

Capacity (KW)	38,13
Power Input (KW)	11,79
COP	3,23
Current (A)	21,24

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width/Height (mm)	317.85/309.5/544.9
Weight (kg)	90
Stub Suction (inch)	1 3/8
Stub Discharge (inch)	7/8
Base mounting (hole dia)	190X190(8.5)
Oil type	POE
Initial charge of oil quantity (L)	3.2
Recharge of oil quantity (L)	3
High Side PS Max., (MPa)	3.0
Low Side PS Max., (MPa)	2.0
Displacement(m <sup>3</sup> /h)	37.7

### COMPRESSOR ELECTRICAL DATA

Electricity	380V/50Hz/3P
Standard Conditions	7.2/54.4/11.1/8.3
Normal Power (HP)	13
Normal Capacity (ℓ)	37920
Normal Power input(ℓ)	11734
Normal COP(ℓ/ℓ)	3.23
Normal Current(ℓ)	20.4
Locked Rotor Current(ℓ)	148.5
Maximum operating current(ℓ)	27.7

Model: YSH400T1G-100

Refrigerant: R407C

Suction Superheat: 11,1

Liquid subcooling: 8,3

**Capacity(KW)**

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	13,69	17,39	21,65	26,54	32,13	38,5	45,7	53,82	58,24	
30	12,93	16,55	20,7	25,47	30,92	37,12	44,15	52,06	56,38	
35	12,18	15,69	19,72	24,35	29,64	35,67	42,5	50,21	54,41	
40	11,43	14,82	18,72	23,19	28,31	34,15	40,77	48,25	52,33	
45		13,94	17,68	21,99	26,92	32,55	38,94	46,18	50,14	
50			16,62	20,74	25,47	30,87	37,03	44,01	47,82	
55				19,45	23,95	29,12	35,02	41,72	45,4	
60					22,38	27,29	32,92	39,33	42,85	
65						25,38	30,72	36,83	40,19	

**Power Input(KW)**

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5	
25	5,64	5,92	6,12	6,26	6,36	6,45	6,55	6,67	6,75	
30	6,35	6,62	6,81	6,95	7,05	7,14	7,23	7,35	7,43	
35	7,13	7,39	7,58	7,7	7,8	7,88	7,97	8,08	8,15	
40	8,01	8,26	8,43	8,55	8,63	8,7	8,78	8,88	8,95	
45		9,24	9,4	9,5	9,57	9,63	9,69	9,79	9,85	
50			10,5	10,59	10,64	10,68	10,73	10,81	10,87	
55				11,84	11,87	11,89	11,92	11,98	12,03	
60					13,28	13,28	13,29	13,33	13,36	
65						14,87	14,85	14,86	14,89	

Model: YSH400T1G-100

Refrigerant: R407C

Suction Superheat: 11,1

Liquid subcooling: 8,3

**Current(A)**

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5
25	13,19	13,53	13,77	13,94	14,06	14,17	14,29	14,45	14,55
30	13,98	14,32	14,57	14,74	14,87	14,98	15,1	15,26	15,36
35	14,9	15,24	15,48	15,65	15,78	15,89	16	16,16	16,26
40	15,99	16,32	16,56	16,72	16,84	16,94	17,05	17,19	17,29
45		17,62	17,84	17,99	18,09	18,18	18,27	18,4	18,49
50			19,37	19,5	19,58	19,64	19,72	19,83	19,9
55				21,28	21,34	21,38	21,43	21,51	21,57
60					23,42	23,43	23,44	23,49	23,54
65						25,83	25,81	25,82	25,84

**Mass Flow(Kg/h)**

Tc\Te	-25	-20	-15	-10	-5	0	5	10	12,5
25	255,53	331,05	414,29	506,93	610,66	727,17	858,13	1005,2 2	1085,3 4
30	250	325,81	409,39	502,44	606,62	723,63	855,15	1002,8 6	1083,3 1
35	244,6	320,45	404,13	497,33	601,72	719	850,83	998,91	1079,5 6
40	239,16	314,81	398,35	491,46	595,82	713,11	845,02	993,22	1073,9 6
45		308,76	391,91	484,69	588,76	705,83	837,56	985,64	1066,3 4
50			384,67	476,86	580,41	697	828,32	976,04	1056,5 8
55				467,83	570,61	686,49	817,14	964,25	1044,5 1
60					559,23	674,14	803,88	950,14	1029,9 9
65						659,81	788,4	933,56	1012,8 8