

TECHNICAL DATASHEET:
IRM10.0HPE7G-100

Basic Specification	
Model	IRM10.0HPE7G-100
Type	Scroll Compressor
Application	Medium Temp. Refrigeration
Normal Power (HP)	10 HP
Capacity (BTU/Hr)	80393
Refrigerant	R404A
Displacement (M³/H)	34.9
Evaporating Temperature (°C)	19.9
Condensing Temperature (°C)	120.0
Liquid subcooling	0.0
Suction Superheat	45.0
Power Input (KW)	10642
COP	7.55
Current (A)	33.34

Mechanical and Physical Data	
Length/Width/Height (mm)	260/244/508
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)	3.0
Recharge of oil quantity (L)	2.8
High Side PS Max., (MPa)	3.2
Low Side PS Max., (MPa)	2.0

Electrical Data	
Electricity	220V/60Hz/3P
Standard Conditions	-6.7/48.9/11.1/0
Normal Power (HP)	10
Normal Capacity (W)	21784
Normal Power input(W)	10517
Normal COP (W/W)	2.07
Normal Current(A)	32.5
Locked Rotor Current(A)	290
Maximum operating current (A)	49.3

Suction Superheat: 45.0 Liquid subcooling: 14.9

Capacity (BTU/h)								
Tc/Te	-22	-10	0	10	20	30	40	50
100	37943	50613	63147	78071	95693	116628	141149	169871
110		46925	58570	72231	88317	107373	129708	155903
120			53584	66015	80530	97708	117858	141559
130				59219	72197	87463	105427	126601
140					63044	76432	92210	110891
149						65708	79540	95932
50	53482	69567	86711	107817				
60	49657	65059	81315	101158	125030			
70	46412	61098	76432	95044	117380	143881		
80	43475	57512	71890	89273	110037	134695	163621	
90	40709	54062	67552	83706	102899	125679	152419	183634

Power Input (W)								
Tc/Te	-22	-10	0	10	20	30	40	50
100	6999	7509	7937	8365	8784	9191	9578	9943
110		8274	8749	9215	9664	10092	10492	10861
120			9653	10162	10646	11102	11520	11899
130				11210	11735	12223	12666	13060
140					12940	13466	13939	14354
149						14692	15196	15636
50	4438	4713	4994	5315				
60	4847	5156	5455	5786	6143			
70	5301	5650	5973	6319	6683	7061		
80	5807	6203	6555	6923	7300	7681	8061	
90	6370	6820	7207	7602	7997	8388	8769	9135

Current (A)								
Tc/Te	-22	-10	0	10	20	30	40	50
100	24.93	26.04	26.99	27.97	28.94	29.9	30.83	31.73
110		27.73	28.83	29.92	30.99	32.03	33.02	33.96
120			30.94	32.16	33.35	34.48	35.55	36.55
130				34.73	36.04	37.29	38.45	39.51
140					39.1	40.47	41.74	42.89
149						43.68	45.06	46.3
50	20.18	20.61	21.11	21.72				
60	20.85	21.38	21.93	22.59	23.32			
70	21.63	22.27	22.91	23.62	24.39	25.21		
80	22.56	23.34	24.06	24.84	25.66	26.51	27.38	
90	23.65	24.58	25.41	26.28	27.17	28.07	28.96	29.84

Mass Flow (Kg/h)								
Tc/Te	-22	-10	0	10	20	30	40	50
100	290.33	391.31	492.98	616.8	767.81	952.08	1174.45	1441.22
110		387.28	488.52	611.77	762.09	945.54	1166.95	1432.64
120			483.04	605.92	755.73	938.55	1159.2	1423.99
130				598.6	748.11	930.48	1150.56	1414.66
140					738.53	920.65	1140.35	1403.94
149						909.76	1129.28	1392.57
50	310.64	416.82	523.53	653.04				
60	304.11	408.79	514.11	642.1	797.8			
70	299.49	402.9	507.03	633.69	787.93	975.82		
80	296.09	398.46	501.58	627.1	780.07	966.56	1191.4	
90	293.26	394.82	497.12	621.7	773.59	958.88	1182.39	1450.44

