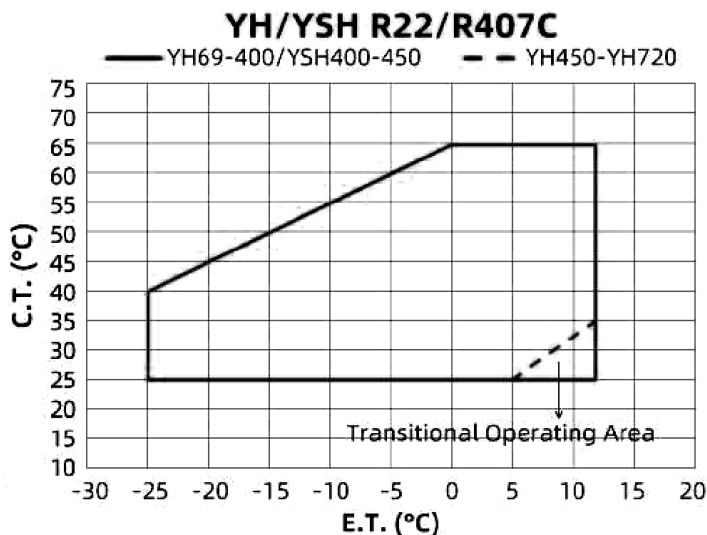


Basic Specification	
Model	YH307T1-100
Type	Scroll Compressor
Application	Air conditioning
Normal Power (HP)	10 HP
Capacity (BTU/Hr)	122674
Refrigerant	R407C
Displacement (M ³ /H)	34.9
Evaporating Temperature (°F)	45.0
Condensing Temperature (°F)	129.9
Liquid subcooling (°F)	14.9
Suction Superheat (°F)	20.0
Power Input (W)	10738
COP	11.31
Current (A)	16.07

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)	3.0
Low Side PS Max., (MPa)	2.0

Electrical Data	
Electricity	460V/60Hz/3P
Standard Conditions	7.2/54.4/11.1/8.3
Normal Power (HP)	10
Normal Capacity (W)	35364
Normal Power input(W)	10692
Normal COP (W/W)	3.31
Normal Current(A)	15.6
Locked Rotor Current(A)	121
Maximum operating current(A)	22.5

Compressor Operating Envelope



Suction Superheat: 20.0

Liquid subcooling: 14.9

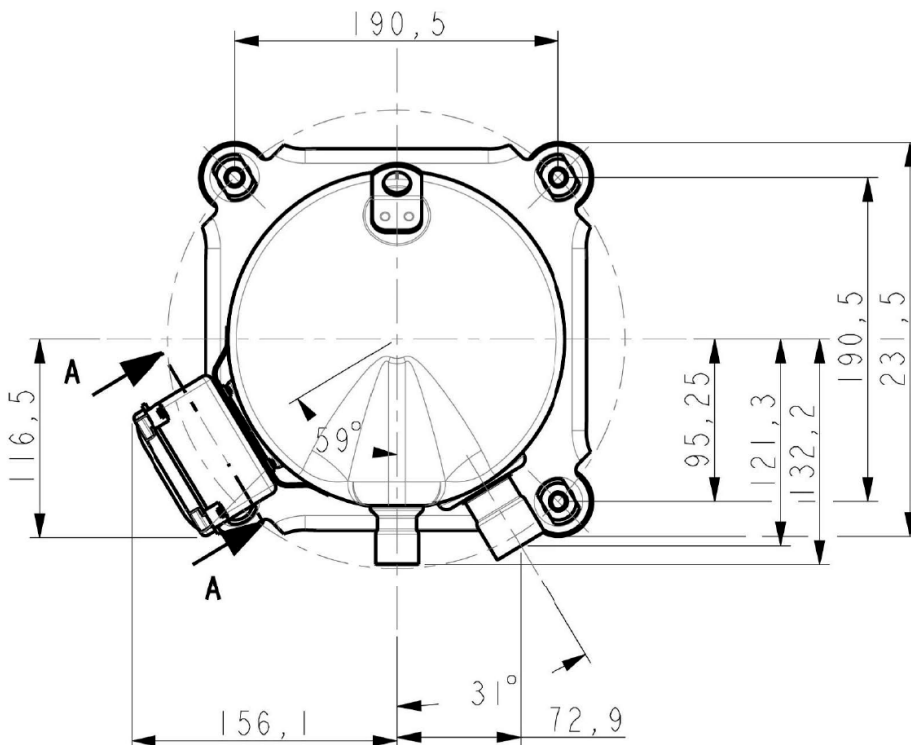
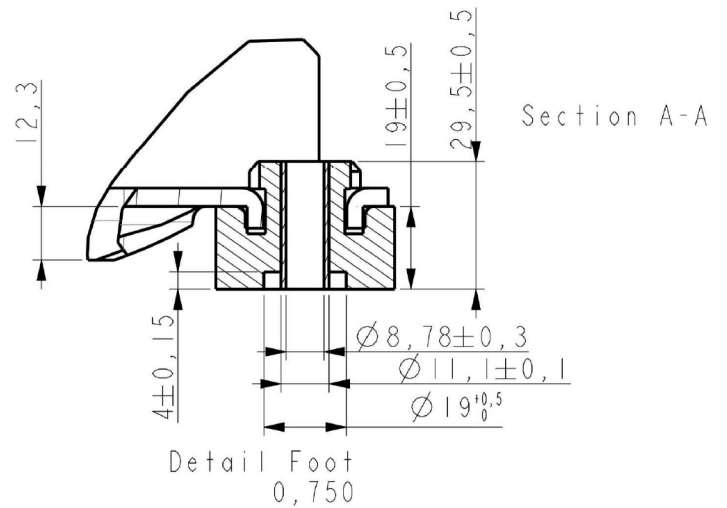
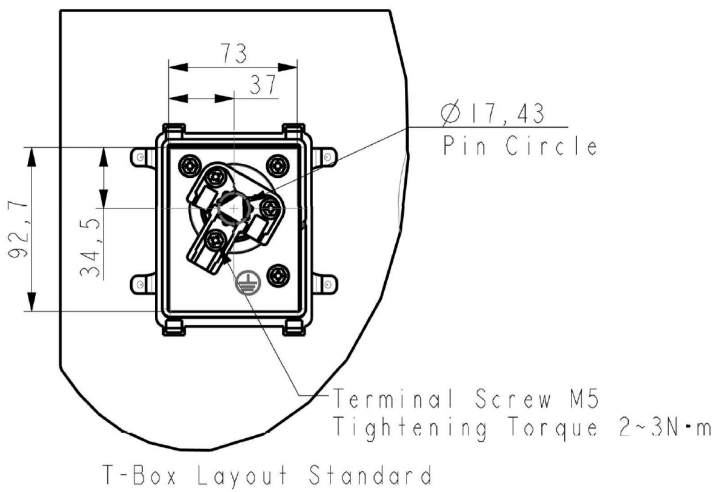
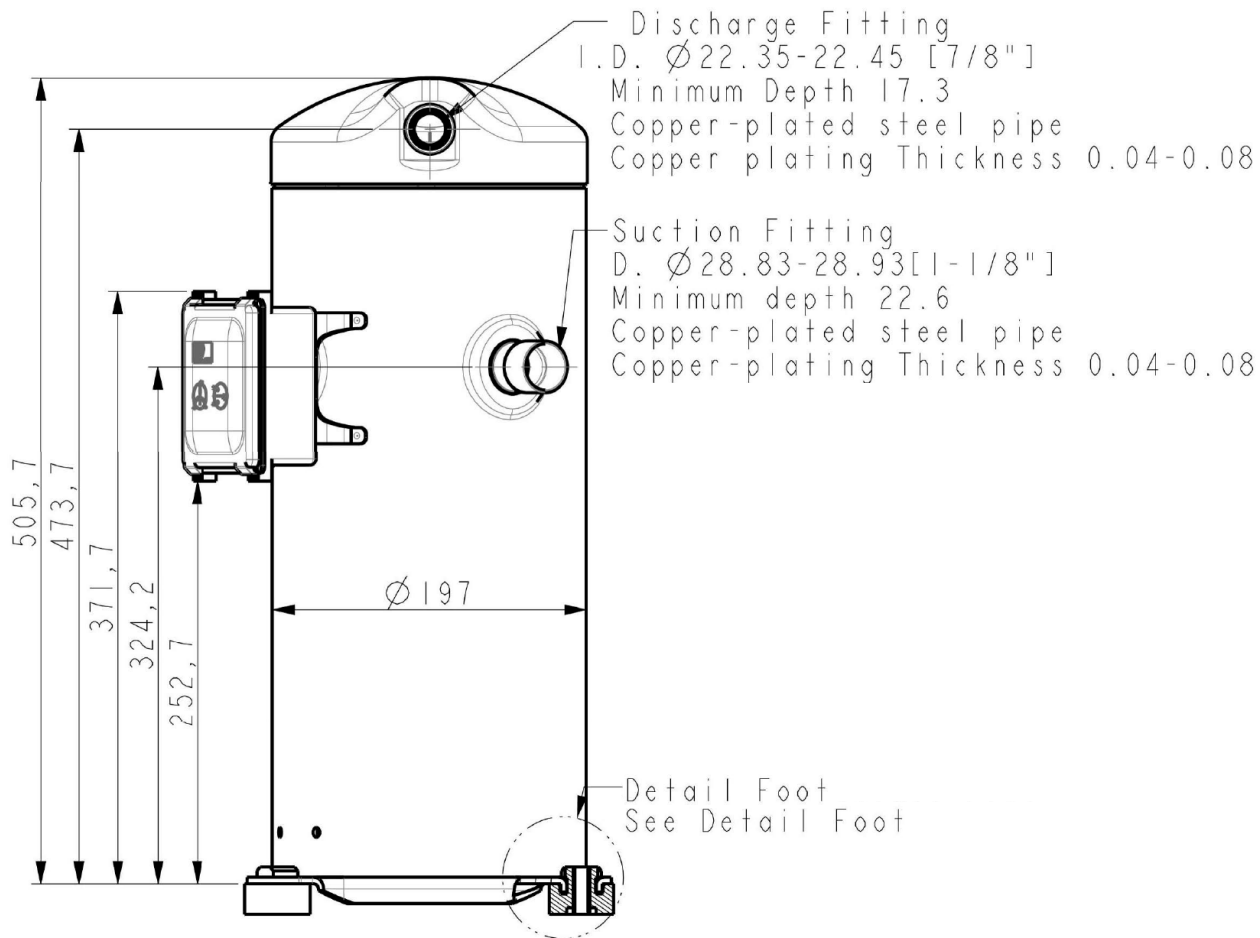
Tc/Te	Capacity (BTU/h)							
	-13	0	10	20	30	40	50	54
100	37430	53789	68816	86267	106485	129743	156415	168061
110		50476	64888	81657	101089	123493	149243	160513
120			60824	76807	95420	116902	141662	152488
130				71753	89478	109969	133636	144052
140					83228	102660	125200	135139
149						95762	117243	126703
77	43578	61166	77320	96103	117824	142754	171305	183771
80	42758	60210	76261	94874	116423	141184	169495	181858
90	40094	57033	72607	90673	111608	135617	163143	175199

Tc/Te	Power Input (W)							
	-13	0	10	20	30	40	50	54
100	6928	7237	7387	7488	7566	7647	7756	7814
110		8175	8310	8397	8461	8530	8627	8679
120			9380	9448	9495	9546	9628	9674
130				10668	10694	10724	10786	10825
140					12092	12098	12136	12165
149						13524	13537	13556
77	5138	5476	5646	5766	5860	5955	6077	6138
80	5347	5684	5852	5971	6064	6159	6280	6341
90	6090	6415	6577	6688	6777	6866	6983	7043

Tc/Te	Current (A)							
	-13	0	10	20	30	40	50	54
100	11.27	11.85	12.15	12.35	12.47	12.55	12.61	12.64
110		12.83	13.14	13.34	13.46	13.52	13.56	13.58
120			14.34	14.53	14.64	14.68	14.7	14.7
130				15.98	16.07	16.09	16.07	16.05
140					17.79	17.77	17.71	17.68
149						19.57	19.47	19.42
77	9.69	10.2	10.46	10.63	10.74	10.83	10.92	10.96
80	9.86	10.38	10.65	10.82	10.94	11.03	11.11	11.16
90	10.49	11.05	11.34	11.53	11.65	11.74	11.81	11.85

Tc/Te	Mass Flow (Kg/h)							
	-13	0	10	20	30	40	50	54
100	219.82	326.72	419.58	523.8	641.89	775.58	927.51	993.68
110		320.1	412.87	516.98	634.96	768.53	920.32	986.44
120			405.11	508.81	626.36	759.49	910.83	976.77
130				499.12	615.93	748.31	898.9	964.53
140					603.45	734.77	884.29	949.49
149						720.43	868.72	933.42
77	234.63	340.25	432.15	535.42	652.59	785.38	936.42	1002.25
80	232.65	338.56	430.68	534.17	651.55	784.55	935.8	1001.71
90	226.21	332.81	425.46	529.47	647.37	780.87	932.61	998.72

Drawings
Outline Drawing



ALL TOLERANCES UNLESS OTHERWISE SPECIFIED: ± 2

TUBE ENDS MUST BE PLUGGED

Application
» See Details in the YH serial air-condition scroll compressor application manual