



LT-S-H(A) Series

## LT-S-H(A) Compound Two-stage Heat Pump



## **LT-S-H (A) Series Semi-hermetic High Pressure Screw Heat Pump Compressor**

### **Product Description**

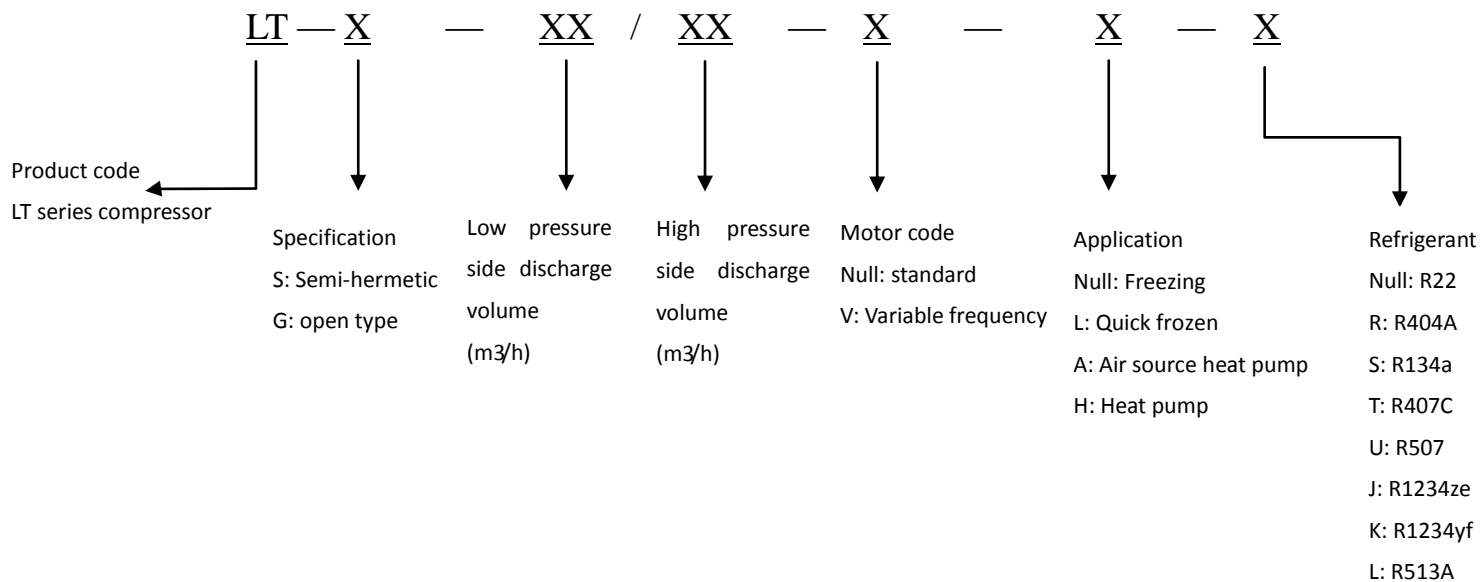
Conventional single-stage screw heat pump compressor is only applicable to the ambient temperature above  $-15^{\circ}\text{C}$ , and the maximum outlet temperature is  $60^{\circ}\text{C}$ . In order to break through this application limit, we need to use parallel connection or cascade system. At the same time, the condition of high pressure ratio brings the problems of excessive leakage and high exhaust temperature to the traditional single-stage compressor in the process of compression, which leads to the low efficiency and reliability of the single-stage compressor operating under this bad condition.

The two-stage compressor has solved the above problems very well. Compared with the parallel connection or cascade system, two-stage compressor has obvious advantages such as small size and simple control. Compared with single-stage compressor, it has remarkable advantages such as high efficiency and reliability.

LT two-stage high-temperature compressor can be used in water-ground source heat pump with the highest water temperature up to  $90^{\circ}\text{C}$ , which can meet the requirement of heating supply and industrial use. The limit of ambient temperature for air-source heat pump can reach  $-50^{\circ}\text{C}$ , which greatly broadens the application of traditional air-source heat pump. Its high energy efficiency at low ambient temperature supplies the solution for air pollution and boiler substitution.

In summary, Hanbell launched LT series high temperature compressor which is mainly designed for requirement of high efficiency and reliability under high pressure difference and high pressure ratio. During design the rich technical accumulation and application experience of Shanghai Hanbell in the field of screw compressor have been combined, so this excellent product can be widely used in high temperature hot water, central heating and other area.

## Nomenclature



Product code	Application
LT-S-XX/XX-A	R22 / Low ambient temp air source heat pump
LT-S-XX/XX-A-R&U	R404A&R507 / Low ambient temp air source heat pump
LT-S-XX/XX-A-S	R134 / Low ambient temp air source heat pump
LT-S-XX/XX-H-S	R134a / High temp heat pump

## Features

### Low load start-up design

Its start-up load is equivalent to common single-stage compressor, which can avoid great impact on the power grid.

### Excellent motor cooling channel

Because of the excellent motor cooling channel design, it can realize the reliable motor cooling under high operation efficiency, so that the compressor can operate in very wide range.

### Integrated Design

Medium pressure check valve, stop valve and economizer filter are pre-installed to ensure the reliable protection of the compressor and the simplification of system configuration.

### Motor temperature visualization

Optional temperature sensor PT100/PT1000/NTC can be pre-installed in the motor to monitor temperature.

### Capacity regulation system

LT series screw compressors are equipped with  $\frac{3}{4}$  capacity regulation system or continuous (stepless) capacity regulation system

### Frostless terminal box

The terminal box is installed in the middle temperature area, so there will be no frosting even if the compressors run at - 65 °C for a long term.

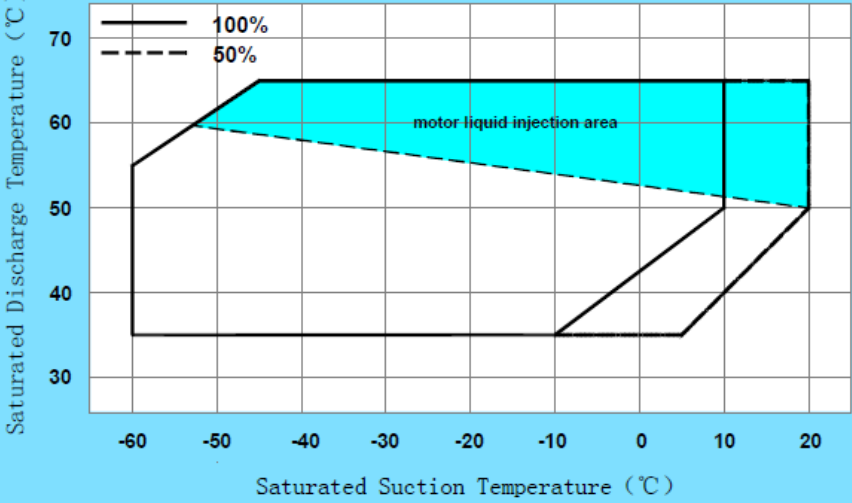
### Easy-control system

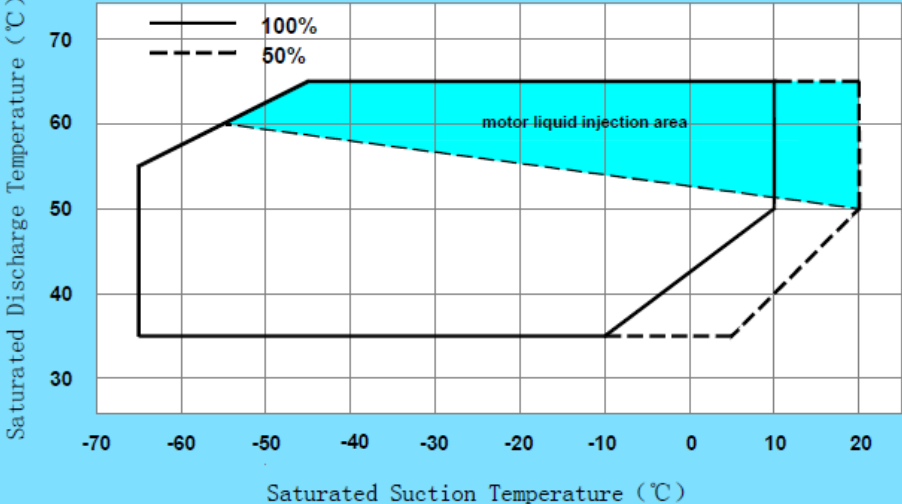
Compared with the parallel connection system, its logical control is simpler and the control cost can be reduced.

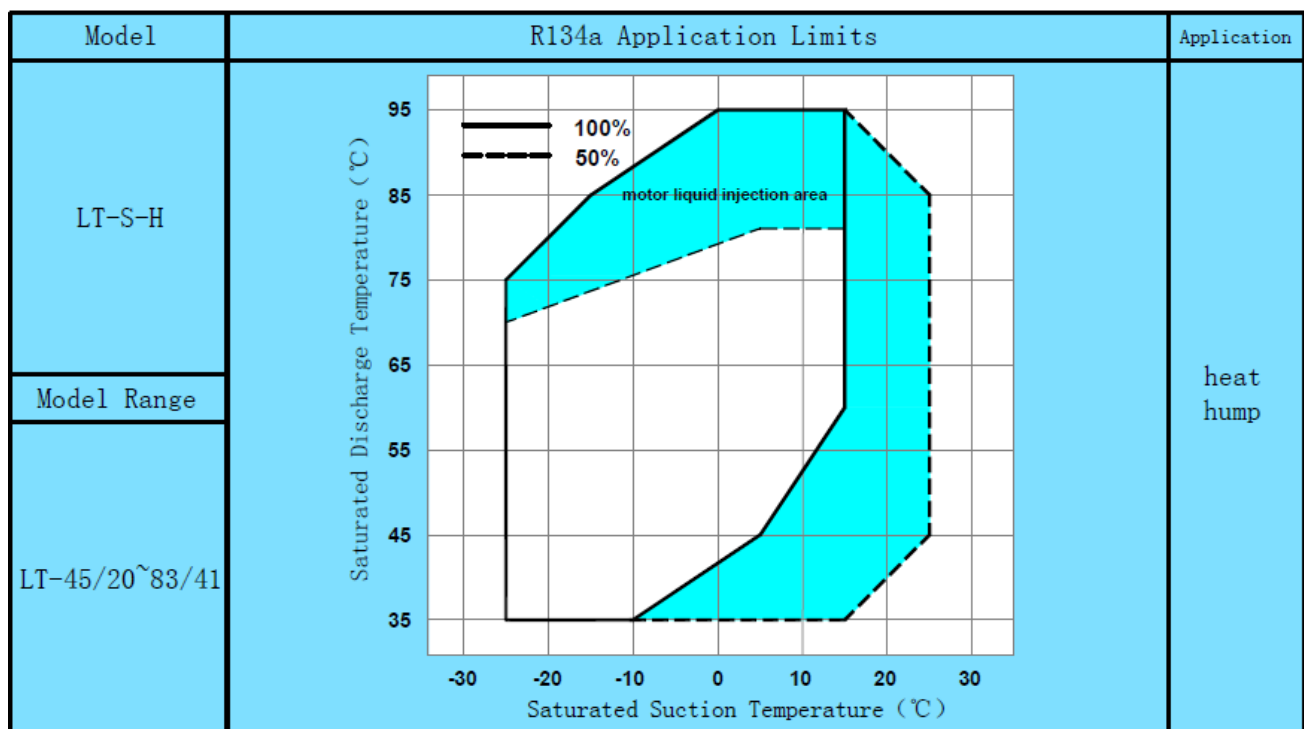
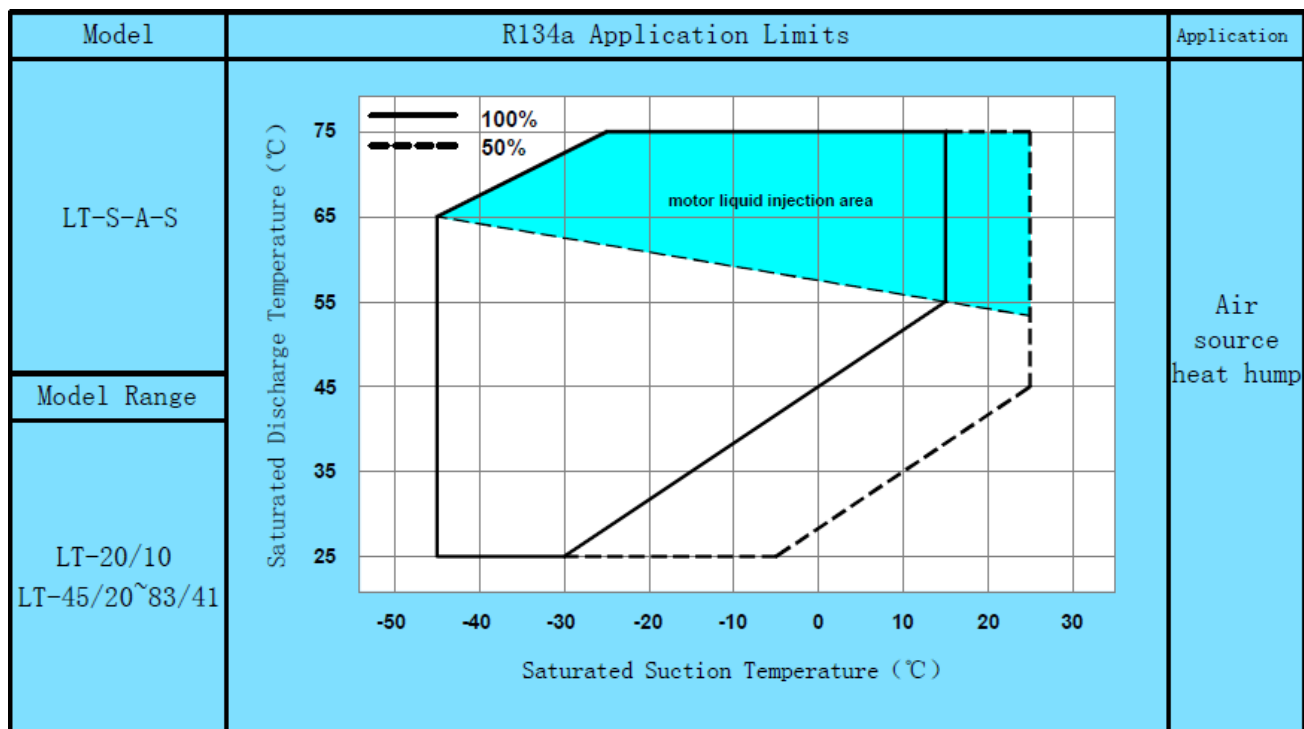
## Specification

Model	Compressor								
	Low stage	High stage	Rotation 50Hz r/min	Capacity regulation		Lubrication type	Noise		
	Discharge volume	Discharge volume					LT-S-A	LT-S-H	
	50Hz	50Hz		dB					
	m³/h	m³/h		Step	Stepless				
LT-20/10	224	99	2950	10%/50% 100%	10% ~ 100%	Pressure differential	81	/	
LT-45/20	450	207					83	84	
LT-55/25	551	257		84			85		
LT-65/32	651	313		86			88		
LT-83/41	840	396		87			89		
Model	Weight		Motor					Strength test	
			Type	Start type	Voltage (V) 50Hz	Insulation	Protection		
	Kg							bar	
	LT-S-A	LT-S-H						LT-S-A	LT-S-H
LT-20/10	620	/	3 phase,2 pole, squirrel cage induction motor	Y-△	380	Level F	PTC+ PT100 (NTC optional)	40	/
LT-45/20	1200								45
LT-55/25	1230								
LT-65/32	1450								
LT-83/41	1490								

## Operation range

Model	R22 Application Limits	Application
LT-S-A		Air source heat pump
Model Range		
LT-45/20~83/41		

Model	R404A&R507 Application Limits	Application
LT-S-A-R&U		Air source heat pump
Model Range		
LT-45/20~83/41		



## Performance

LT-S-45/20-H R134a (With ECO) 380V 50HZ						
Saturated discharge temp℃	Saturated suction temp℃	-25	-15	-5	5	15
45	Heating capacity(kW)	179.4	245.1	325.1	-	-
	Power (kW)	62.9	69.6	79.0	-	-
	COP(H)	2.85	3.52	4.12	-	-
50	Heating capacity(kW)	182.6	246.9	325.1	418.6	-
	Power (kW)	69.7	77.0	86.6	95.2	-
	COP(H)	2.62	3.21	3.75	4.40	-
55	Heating capacity(kW)	185.9	248.5	325.0	416.5	527.8
	Power (kW)	76.5	84.4	94.5	103.5	107.9
	COP(H)	2.43	2.94	3.44	4.02	4.89
60	Heating capacity(kW)	189.2	250.1	324.8	414.2	523.1
	Power (kW)	83.3	91.8	102.6	112.3	117.4
	COP(H)	2.27	2.72	3.17	3.69	4.46
65	Heating capacity(kW)	192.4	251.6	324.3	411.6	518.1
	Power (kW)	89.9	99.1	110.6	121.2	127.3
	COP(H)	2.14	2.54	2.93	3.40	4.07
70	Heating capacity(kW)	195.6	253.0	323.7	408.9	512.6
	Power (kW)	96.7	106.4	118.6	130.2	137.4
	COP(H)	2.02	2.38	2.73	3.14	3.73
75	Heating capacity(kW)	198.4	254.0	322.8	405.6	506.7
	Power (kW)	103.6	113.6	126.5	139.0	147.6
	COP(H)	1.92	2.24	2.55	2.92	3.43
80	Heating capacity(kW)	-	254.7	321.5	401.9	500.2
	Power (kW)	-	121.1	134.4	147.8	157.7
	COP(H)	-	2.10	2.39	2.72	3.17
85	Heating capacity(kW)	-	-	319.4	397.2	492.4
	Power (kW)	-	-	142.5	156.5	167.6
	COP(H)	-	-	2.24	2.54	2.94
90	Heating capacity(kW)	-	-	315.8	390.5	482.1
	Power (kW)	-	-	150.9	165.3	177.5
	COP(H)	-	-	2.09	2.36	2.72
95	Heating capacity(kW)	-	-	-	379.5	465.9
	Power (kW)	-	-	-	174.4	187.4
	COP(H)	-	-	-	2.18	2.49



## Performance

LT-S-55/25-H R134a (With ECO) 380V 50HZ						
Saturated discharge temp℃	Saturated suction temp℃	-25	-15	-5	5	15
45	Heating capacity(kW)	204.6	274.1	365.8	-	-
	Power (kW)	70.6	77.5	90.3	-	-
	COP(H)	2.90	3.54	4.05	-	-
50	Heating capacity(kW)	208.0	276.9	366.5	479.6	-
	Power (kW)	77.5	85.8	98.4	117.2	-
	COP(H)	2.68	3.23	3.72	4.09	-
55	Heating capacity(kW)	211.5	279.5	367.1	477.1	609.8
	Power (kW)	84.3	94.2	107.2	125.6	134.2
	COP(H)	2.51	2.97	3.42	3.80	4.54
60	Heating capacity(kW)	214.7	282.1	367.4	474.4	603.8
	Power (kW)	90.8	102.5	116.2	134.9	143.9
	COP(H)	2.36	2.75	3.16	3.52	4.20
65	Heating capacity(kW)	217.8	284.5	367.6	471.4	597.1
	Power (kW)	97.1	110.6	125.2	144.6	154.5
	COP(H)	2.24	2.57	2.94	3.26	3.86
70	Heating capacity(kW)	220.8	286.8	367.6	468.1	590.1
	Power (kW)	103.7	118.6	134.1	154.3	165.7
	COP(H)	2.13	2.42	2.74	3.03	3.56
75	Heating capacity(kW)	223.5	288.8	367.2	464.3	582.4
	Power (kW)	110.8	126.7	142.7	163.8	177.0
	COP(H)	2.02	2.28	2.57	2.83	3.29
80	Heating capacity(kW)	-	290.3	366.3	459.9	573.9
	Power (kW)	-	135.1	151.3	173.1	188.1
	COP(H)	-	2.15	2.42	2.66	3.05
85	Heating capacity(kW)	-	-	364.6	454.5	564.1
	Power (kW)	-	-	160.3	182.3	199.0
	COP(H)	-	-	2.27	2.49	2.83
90	Heating capacity(kW)	-	-	361.1	446.9	551.5
	Power (kW)	-	-	169.9	191.7	209.7
	COP(H)	-	-	2.13	2.33	2.63
95	Heating capacity(kW)	-	-	-	434.6	532.5
	Power (kW)	-	-	-	201.7	220.4
	COP(H)	-	-	-	2.15	2.42

## Performance

LT-S-65/32-H R134a (With ECO) 380V 50HZ						
Saturated discharge temp℃	Saturated suction temp℃	-25	-15	-5	5	15
45	Heating capacity(kW)	249.0	337.9	455.2	-	-
	Power (kW)	87.4	98.2	109.5	-	-
	COP(H)	2.85	3.44	4.16	-	-
50	Heating capacity(kW)	257.1	344.1	458.5	603.6	-
	Power (kW)	99.4	110.4	121.8	132.7	-
	COP(H)	2.59	3.12	3.76	4.55	-
55	Heating capacity(kW)	264.8	349.8	461.7	603.1	773.8
	Power (kW)	111.3	122.5	134.2	145.5	155.0
	COP(H)	2.38	2.86	3.44	4.15	4.99
60	Heating capacity(kW)	272.3	355.4	464.6	602.4	768.3
	Power (kW)	123.3	134.7	146.6	158.3	168.6
	COP(H)	2.21	2.64	3.17	3.81	4.56
65	Heating capacity(kW)	279.4	360.7	467.1	601.3	762.6
	Power (kW)	135.2	146.8	158.9	171.1	182.3
	COP(H)	2.07	2.46	2.94	3.51	4.18
70	Heating capacity(kW)	286.4	365.6	469.4	599.8	756.3
	Power (kW)	147.2	158.9	171.3	183.9	196.0
	COP(H)	1.95	2.30	2.74	3.26	3.86
75	Heating capacity(kW)	293.1	370.3	471.0	597.6	749.1
	Power (kW)	159.1	171.1	183.6	196.7	209.6
	COP(H)	1.84	2.16	2.57	3.04	3.57
80	Heating capacity(kW)	-	374.4	472.1	594.7	741.0
	Power (kW)	-	183.2	196.0	209.5	223.3
	COP(H)	-	2.04	2.41	2.84	3.32
85	Heating capacity(kW)	-	-	472.2	590.3	731.1
	Power (kW)	-	-	208.4	222.4	237.0
	COP(H)	-	-	2.27	2.65	3.08
90	Heating capacity(kW)	-	-	469.7	582.7	716.9
	Power (kW)	-	-	220.7	235.2	250.6
	COP(H)	-	-	2.13	2.48	2.86
95	Heating capacity(kW)	-	-	-	567.9	693.5
	Power (kW)	-	-	-	248.0	264.3
	COP(H)	-	-	-	2.29	2.62

## Performance

LT-S-83/41-H R134a (With ECO) 380V 50HZ						
Saturated discharge temp℃	Saturated suction temp℃	-25	-15	-5	5	15
45	Heating capacity(kW)	298.4	404.7	549.3	-	-
	Power (kW)	104.4	115.9	131.1	-	-
	COP(H)	2.86	3.49	4.19	-	-
50	Heating capacity(kW)	309.3	412.8	553.5	734.4	-
	Power (kW)	118.9	130.4	145.7	164.4	-
	COP(H)	2.60	3.17	3.80	4.47	-
55	Heating capacity(kW)	319.1	420.1	556.9	732.5	943.2
	Power (kW)	133.5	145.0	160.3	179.2	200.0
	COP(H)	2.39	2.90	3.47	4.09	4.72
60	Heating capacity(kW)	328.2	426.6	559.8	730.4	934.4
	Power (kW)	148.0	159.5	174.9	194.1	215.5
	COP(H)	2.22	2.67	3.20	3.76	4.34
65	Heating capacity(kW)	336.8	432.7	562.3	728.0	925.6
	Power (kW)	162.5	174.0	189.4	208.9	230.9
	COP(H)	2.07	2.49	2.97	3.48	4.01
70	Heating capacity(kW)	345.2	438.5	564.7	725.7	917.0
	Power (kW)	177.0	188.5	204.0	223.8	246.4
	COP(H)	1.95	2.33	2.77	3.24	3.72
75	Heating capacity(kW)	353.5	444.1	566.7	722.8	908.0
	Power (kW)	191.6	203.0	218.6	238.6	261.8
	COP(H)	1.84	2.19	2.59	3.03	3.47
80	Heating capacity(kW)	-	449.2	568.1	719.5	898.4
	Power (kW)	-	217.5	233.2	253.5	277.3
	COP(H)	-	2.07	2.44	2.84	3.24
85	Heating capacity(kW)	-	-	568.2	714.4	887.0
	Power (kW)	-	-	247.8	268.3	292.7
	COP(H)	-	-	2.29	2.66	3.03
90	Heating capacity(kW)	-	-	565.0	705.3	870.7
	Power (kW)	-	-	262.3	283.2	308.2
	COP(H)	-	-	2.15	2.49	2.83
95	Heating capacity(kW)	-	-	-	687.1	842.8
	功率(kW)	-	-	-	298.0	323.6
	COP(H)	-	-	-	2.31	2.60

## Performance

LT-S-20/10-A R134a (With ECO) _380V 50HZ								
Saturated discharge temp℃	Saturated suction temp℃	-45	-35	-25	-15	-5	5	15
45	Heating capacity(kW)	47.2	64.9	86.3	114.1	150.6	-	-
	Power (kW)	27.1	29.1	30.8	31.9	32.2	-	-
	COP(H)	1.74	2.23	2.80	3.58	4.68	-	-
50	Heating capacity(kW)	49.5	67.2	88.7	116.6	152.7	198.4	-
	Power (kW)	29.4	32.1	34.5	36.2	37.0	37.1	-
	COP(H)	1.68	2.09	2.57	3.22	4.13	5.35	-
55	Heating capacity(kW)	51.9	69.6	91.2	119	154.7	199.3	253.7
	Power (kW)	32.0	35.3	38.3	40.5	41.8	42.2	42.3
	COP(H)	1.62	1.97	2.38	2.94	3.70	4.72	6.00
60	Heating capacity(kW)	54.5	72	93.6	121.4	156.7	200.4	252.9
	Power (kW)	34.9	38.6	42.1	44.8	46.6	47.4	47.7
	COP(H)	1.56	1.87	2.22	2.71	3.36	4.23	5.30
65	Heating capacity(kW)	57	74.3	96.1	123.8	158.8	201.4	252.1
	Power (kW)	37.8	41.9	45.9	49.1	51.4	52.6	53.2
	COP(H)	1.51	1.77	2.09	2.52	3.09	3.83	4.74
70	Heating capacity(kW)	-	-	98.5	126.2	160.7	202.4	251.3
	Power (kW)	-	-	49.7	53.4	56.1	57.8	58.8
	COP(H)	-	-	1.98	2.36	2.86	3.50	4.27

LT-S-45/20-A R134a (With ECO) _380V 50HZ								
Saturated discharge temp℃	Saturated suction temp℃	-45	-35	-25	-15	-5	5	15
45	Heating capacity(kW)	94.6	134.1	189.3	257.2	338.9	-	-
	Power (kW)	49.8	57.9	64.9	71.3	77.5	-	-
	COP(H)	1.90	2.32	2.92	3.61	4.37	-	-
50	Heating capacity(kW)	100.9	139.3	193.5	259.8	339.6	438.2	-
	Power (kW)	56.1	64.3	72.0	79.0	86.0	93.8	-
	COP(H)	1.80	2.17	2.69	3.29	3.95	4.67	-
55	Heating capacity(kW)	106.5	144.2	197.3	262.2	340.3	436.5	560.7
	Power (kW)	62.3	70.8	79.0	86.7	94.5	103.0	113.3
	COP(H)	1.71	2.04	2.50	3.02	3.60	4.24	4.95
60	Heating capacity(kW)	111.8	148.8	201	264.7	340.9	434.9	556.3
	Power (kW)	68.5	77.3	86.0	94.5	103.0	112.2	123.2
	COP(H)	1.63	1.92	2.34	2.80	3.31	3.88	4.52
65	Heating capacity(kW)	117.1	153.4	204.6	267.1	341.6	433.4	551.9
	Power (kW)	74.8	83.8	93.0	102.2	111.5	121.5	133.0
	COP(H)	1.57	1.83	2.20	2.61	3.06	3.57	4.15
70	Heating capacity(kW)	-	-	208.2	269.4	342.3	431.8	547.4
	Power (kW)	-	-	100.0	109.9	120.0	130.7	142.9
	COP(H)	-	-	2.08	2.45	2.85	3.30	3.83

## Performance

LT-S-55/25-A R134a (With ECO) _380V 50HZ								
Saturated discharge temp℃	Saturated suction temp℃	-45	-35	-25	-15	-5	5	15
45	Heating capacity(kW)	76.1	120.9	184.5	261.4	353.1	-	-
	Power (kW)	44.5	57.0	67.3	76.8	86.4	-	-
	COP(H)	1.71	2.12	2.74	3.40	4.09	-	-
50	Heating capacity(kW)	79.7	123.9	186.9	262.8	352.4	455.7	-
	Power (kW)	49.3	62.5	73.8	84.5	95.3	105.8	-
	COP(H)	1.62	1.98	2.53	3.11	3.70	4.31	-
55	Heating capacity(kW)	82.8	126.8	188.3	263.7	350.6	448.9	556.5
	Power (kW)	54.0	67.9	80.1	92.1	104.0	115.3	124.7
	COP(H)	1.53	1.87	2.35	2.86	3.37	3.89	4.46
60	Heating capacity(kW)	87.6	131.5	192.5	266.5	350.6	443.3	540.6
	Power (kW)	59.2	73.8	86.9	99.9	112.8	124.8	134.2
	COP(H)	1.48	1.78	2.22	2.67	3.11	3.55	4.03
65	Heating capacity(kW)	96.7	141.1	202.4	275.8	357.5	444.5	531.7
	Power (kW)	65.7	80.9	94.9	108.9	122.6	134.9	144.0
	COP(H)	1.47	1.74	2.13	2.53	2.92	3.30	3.69
70	Heating capacity(kW)	-	-	223.7	298.2	378.8	461.5	539.1
	Power (kW)	-	-	105.7	120.6	134.9	147.3	155.5
	COP(H)	-	-	2.12	2.47	2.81	3.13	3.47

LT-S-65/32-A R134a (With ECO) _380V 50HZ								
Saturated discharge temp℃	Saturated suction temp℃	-45	-35	-25	-15	-5	5	15
45	Heating capacity(kW)	134.5	191.7	263.4	355.9	474.8	-	-
	Power (kW)	71.9	80.9	91.1	100.4	107.4	-	-
	COP(H)	1.87	2.37	2.89	3.54	4.42	-	-
50	Heating capacity(kW)	145.5	201.8	272.1	362.8	479.1	625	-
	Power (kW)	82.9	92.7	103.4	113.1	120.5	124.8	-
	COP(H)	1.76	2.18	2.63	3.21	3.98	5.01	-
55	Heating capacity(kW)	155.7	211.2	280.4	369.6	483.4	625.7	798.9
	Power (kW)	93.9	104.4	115.7	125.9	133.7	138.4	139.8
	COP(H)	1.66	2.02	2.42	2.94	3.62	4.52	5.71
60	Heating capacity(kW)	165.6	220.3	288.6	376.2	487.6	626.4	794.9
	Power (kW)	104.9	116.1	128.0	138.6	146.8	151.9	153.9
	COP(H)	1.58	1.90	2.25	2.71	3.32	4.12	5.17
65	Heating capacity(kW)	175.3	229.3	296.7	382.8	492	627.3	790.9
	Power (kW)	116.0	127.8	140.2	151.3	160.0	165.5	168.0
	COP(H)	1.51	1.79	2.12	2.53	3.08	3.79	4.71
70	Heating capacity(kW)	-	-	304.8	389.4	496.2	628	786.7
	Power (kW)	-	-	152.5	164.1	173.1	179.1	182.1
	COP(H)	-	-	2.00	2.37	2.87	3.51	4.32

**Performance**

LT-S-83/41-A R134a (With ECO) _380V 50HZ								
Saturated discharge temp℃	Saturated suction temp℃	-45	-35	-25	-15	-5	5	15
45	Heating capacity(kW)	162.6	230.8	312.7	420.8	563.6	-	-
	Power (kW)	89.0	99.0	108.8	118.7	128.6	-	-
	COP(H)	1.83	2.33	2.87	3.55	4.38	-	-
50	Heating capacity(kW)	177.1	243.2	323.5	429.4	569.2	747.3	-
	Power (kW)	103.3	113.7	123.8	133.9	144.2	154.5	-
	COP(H)	1.71	2.14	2.61	3.21	3.95	4.84	-
55	Heating capacity(kW)	190.6	254.9	333.6	437.7	574.5	747.7	957.6
	Power (kW)	117.6	128.3	138.7	149.1	159.7	170.3	180.7
	COP(H)	1.62	1.99	2.41	2.94	3.60	4.39	5.30
60	Heating capacity(kW)	203.7	266.3	343.6	445.9	579.9	748.3	950.7
	Power (kW)	131.9	142.9	153.6	164.3	175.2	186.1	196.8
	COP(H)	1.54	1.86	2.24	2.71	3.31	4.02	4.83
65	Heating capacity(kW)	216.6	277.5	353.6	454.2	585.2	748.9	944
	Power (kW)	146.2	157.5	168.5	179.5	190.7	201.9	213.0
	COP(H)	1.48	1.76	2.10	2.53	3.07	3.71	4.43
70	Heating capacity(kW)	-	-	363.3	462.2	590.3	749.2	936.7
	Power (kW)	-	-	183.4	194.7	206.2	217.8	229.1
	COP(H)	-	-	1.98	2.37	2.86	3.44	4.09

## Performance

LT-S-45/20-A R22 (With ECO) _380V 50HZ																
Saturated discharge temp℃	Saturated suction temp℃	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	116.7	135.5	151.9	168.4	187.4	210.1	237.5	269.6	306.1	345.7	386.8	-	-	-	-
	Power (kW)	74.3	74.4	74.4	74.4	74.6	74.8	75.1	75.1	74.7	73.2	70.3	-	-	-	-
	COP(H)	1.57	1.82	2.04	2.26	2.51	2.81	3.16	3.59	4.10	4.72	5.50	-	-	-	-
40	Heating capacity(kW)	127.5	146.6	162.5	178.4	196.3	217.8	244	275.2	310.9	350.1	391.2	431.9	-	-	-
	Power (kW)	85.5	86.0	85.7	85.2	84.5	83.8	83.2	82.6	81.8	80.5	78.3	74.7	-	-	-
	COP(H)	1.49	1.70	1.90	2.09	2.32	2.60	2.93	3.33	3.80	4.35	5.00	5.78	-	-	-
45	Heating capacity(kW)	139.1	158.2	173.8	188.8	205.7	226.1	251.1	281.2	316.1	354.8	396	437.4	476.1	-	-
	Power (kW)	97.5	98.2	97.7	96.5	95.0	93.4	91.9	90.6	89.4	88.1	86.6	84.5	81.2	-	-
	COP(H)	1.43	1.61	1.78	1.96	2.17	2.42	2.73	3.10	3.54	4.03	4.57	5.18	5.86	-	-
50	Heating capacity(kW)	151.7	170.8	185.8	200	215.8	235	258.8	287.8	321.9	360.2	401.4	443.5	483.6	518.4	543.9
	Power (kW)	110.5	111.4	110.6	108.7	106.3	103.7	101.3	99.2	97.6	96.4	95.5	94.8	93.8	92.2	89.4
	COP(H)	1.37	1.53	1.68	1.84	2.03	2.27	2.55	2.90	3.30	3.74	4.20	4.68	5.16	5.62	6.08
55	Heating capacity(kW)	165.5	184.5	199	212.2	226.9	244.9	267.5	295.4	328.6	366.5	407.8	450.5	492	529.2	558
	Power (kW)	124.7	125.7	124.6	122.0	118.7	115.1	111.7	108.9	106.8	105.6	105.4	106.0	107.3	109.0	110.7
	COP(H)	1.33	1.47	1.60	1.74	1.91	2.13	2.39	2.71	3.08	3.47	3.87	4.25	4.59	4.86	5.04
60	Heating capacity(kW)	-	-	213.8	226.1	239.6	256.3	277.7	304.5	336.8	374.3	415.6	459	502	541.5	573.6
	Power (kW)	-	-	140.2	136.9	132.6	128.0	123.7	120.1	117.5	116.4	116.8	118.8	122.3	127.3	133.4
	COP(H)	-	-	1.52	1.65	1.81	2.00	2.24	2.54	2.87	3.22	3.56	3.86	4.10	4.25	4.30
65	Heating capacity(kW)	-	-	-	242.3	254.6	270	290.1	315.8	347.3	384.3	425.7	469.8	514.2	556	591.6
	Power (kW)	-	-	-	153.9	148.7	143.1	137.8	133.4	130.4	129.3	130.3	133.7	139.5	147.7	158.3
	COP(H)	-	-	-	1.57	1.71	1.89	2.11	2.37	2.66	2.97	3.27	3.51	3.69	3.76	3.74

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-55/25-A R22 (With ECO) _380V 50HZ																
Saturated discharge temp °C	Saturated suction temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	143.2	167.6	188.5	209.6	233.6	262.4	297.2	338.3	384.9	435.8	488.6	-	-	-	-
	Power (kW)	89.1	89.4	89.4	89.5	89.6	89.9	90.2	90.3	89.7	88.1	84.7	-	-	-	-
	COP(H)	1.61	1.87	2.11	2.34	2.61	2.92	3.29	3.75	4.29	4.95	5.77	-	-	-	-
40	Heating capacity(kW)	156.3	180.7	201.2	221.3	244.2	271.7	305	344.9	390.5	440.8	493.6	545.9	-	-	-
	Power (kW)	102.5	103.2	103.1	102.4	101.6	100.8	100.0	99.3	98.3	96.7	94.1	89.8	-	-	-
	COP(H)	1.52	1.75	1.95	2.16	2.40	2.70	3.05	3.47	3.97	4.56	5.25	6.08	-	-	-
45	Heating capacity(kW)	170.2	194.7	214.6	233.8	255.3	281.5	313.5	352	396.7	446.4	499.1	552.3	602	-	-
	Power (kW)	116.9	118.0	117.5	116.1	114.2	112.3	110.4	108.8	107.3	105.8	103.9	101.4	97.5	-	-
	COP(H)	1.46	1.65	1.83	2.01	2.24	2.51	2.84	3.24	3.70	4.22	4.80	5.45	6.17	-	-
50	Heating capacity(kW)	185.2	209.6	228.9	247.1	267.4	292	322.6	359.9	403.6	452.7	505.5	559.3	610.5	655	687.4
	Power (kW)	132.5	133.8	132.9	130.7	127.8	124.6	121.6	119.1	117.1	115.6	114.5	113.7	112.5	110.6	107.3
	COP(H)	1.40	1.57	1.72	1.89	2.09	2.34	2.65	3.02	3.45	3.92	4.41	4.92	5.43	5.92	6.41
55	Heating capacity(kW)	201.7	226	244.7	261.8	280.6	303.9	333	368.9	411.6	460.2	512.9	567.4	620.2	667.3	703.4
	Power (kW)	149.5	151.0	149.8	146.7	142.6	138.3	134.1	130.6	128.1	126.7	126.4	127.2	128.8	131.0	133.1
	COP(H)	1.35	1.50	1.63	1.78	1.97	2.20	2.48	2.82	3.21	3.63	4.06	4.46	4.82	5.09	5.28
60	Heating capacity(kW)	-	-	262.5	278.4	295.9	317.5	345.1	379.7	421.2	469.2	522	577.2	631.5	681.1	721
	Power (kW)	-	-	168.6	164.6	159.4	153.7	148.4	144.0	140.9	139.6	140.2	142.7	147.1	153.3	160.9
	COP(H)	-	-	1.56	1.69	1.86	2.07	2.33	2.64	2.99	3.36	3.72	4.04	4.29	4.44	4.48
65	Heating capacity(kW)	-	-	-	298	313.9	333.9	359.9	393	433.5	480.8	533.5	589.4	645.3	697.4	741
	Power (kW)	-	-	-	185.1	178.7	171.8	165.3	160.0	156.4	155.2	156.6	160.9	168.2	178.5	191.7
	COP(H)	-	-	-	1.61	1.76	1.94	2.18	2.46	2.77	3.10	3.41	3.66	3.84	3.91	3.87

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2



## Performance

LT-S-65/32-A R22 (With ECO) _380V 50HZ																
Saturated discharge temp℃	Saturated suction temp℃	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	169.9	197	220.6	244.7	272.3	305.6	345.8	393.1	446.8	505.1	565.5	-	-	-	-
	Power (kW)	106.2	106.4	106.4	106.4	106.6	107.0	107.4	107.5	106.8	104.7	100.5	-	-	-	-
	COP(H)	1.60	1.85	2.07	2.30	2.55	2.86	3.22	3.66	4.18	4.82	5.63	-	-	-	-
40	Heating capacity(kW)	185.7	213	236	259	285.1	316.7	355.2	401	453.5	511.2	571.7	631.5	-	-	-
	Power (kW)	122.3	122.9	122.6	121.8	120.8	119.9	119.0	118.2	117.0	115.1	111.9	106.8	-	-	-
	COP(H)	1.52	1.73	1.92	2.13	2.36	2.64	2.98	3.39	3.88	4.44	5.11	5.91	-	-	-
45	Heating capacity(kW)	202.2	229.6	252.1	273.9	298.5	328.4	365.2	409.5	460.8	517.9	578.4	639.3	696.2	-	-
	Power (kW)	139.5	140.4	139.7	138.0	135.8	133.5	131.4	129.5	127.8	126.0	123.8	120.8	116.1	-	-
	COP(H)	1.45	1.64	1.80	1.98	2.20	2.46	2.78	3.16	3.61	4.11	4.67	5.29	6.00	-	-
50	Heating capacity(kW)	219.6	247.3	269.1	289.7	312.9	341.1	376.2	418.8	468.9	525.4	586	647.8	706.8	758	795.6
	Power (kW)	158.0	159.3	158.1	155.4	152.0	148.3	144.8	141.8	139.5	137.8	136.6	135.5	134.1	131.8	127.9
	COP(H)	1.39	1.55	1.70	1.86	2.06	2.30	2.60	2.95	3.36	3.81	4.29	4.78	5.27	5.75	6.22
55	Heating capacity(kW)	238.6	266.4	287.6	307.1	328.7	355.2	388.4	429.6	478.5	534.3	594.9	657.6	718.7	773.2	815.5
	Power (kW)	178.3	179.8	178.1	174.5	169.7	164.6	159.7	155.7	152.7	151.1	150.7	151.6	153.5	155.9	158.3
	COP(H)	1.34	1.48	1.61	1.76	1.94	2.16	2.43	2.76	3.13	3.54	3.95	4.34	4.68	4.96	5.15
60	Heating capacity(kW)	-	-	308.5	326.8	346.8	371.5	403.1	442.6	490.2	545.3	605.9	669.7	732.6	790.4	837.4
	Power (kW)	-	-	200.5	195.8	189.7	183.1	176.9	171.7	168.1	166.5	167.0	169.9	174.9	182.0	190.7
	COP(H)	-	-	1.54	1.67	1.83	2.03	2.28	2.58	2.92	3.28	3.63	3.94	4.19	4.34	4.39
65	Heating capacity(kW)	-	-	-	349.8	368.2	391.3	421	458.9	505.3	559.6	620.4	684.9	750	811	862.7
	Power (kW)	-	-	-	220.1	212.7	204.7	197.1	190.8	186.5	184.9	186.4	191.2	199.5	211.2	226.3
	COP(H)	-	-	-	1.59	1.73	1.91	2.14	2.41	2.71	3.03	3.33	3.58	3.76	3.84	3.81

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-83/41-A R22 (With ECO) _380V 50HZ																
Saturated discharge temp °C	Saturated suction temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	220.9	233.5	260.6	299.1	345.6	397.6	452.3	507.3	560.4	609.8	653.4	-	-	-	-
	Power (kW)	130.6	127.4	127.3	129.1	131.4	133.4	134.2	133.1	129.6	123.5	114.4	-	-	-	-
	COP(H)	1.69	1.83	2.05	2.32	2.63	2.98	3.37	3.81	4.32	4.94	5.71	-	-	-	-
40	Heating capacity(kW)	238.4	252.1	279.3	317.1	362.4	412.7	465.3	518.1	568.9	616	657.6	692.6	-	-	-
	Power (kW)	151.1	148.5	148.2	149.2	150.4	151.1	150.4	148.0	143.5	136.7	127.5	116.3	-	-	-
	COP(H)	1.58	1.70	1.88	2.13	2.41	2.73	3.09	3.50	3.96	4.51	5.16	5.96	-	-	-
45	Heating capacity(kW)	259.6	273.4	300.1	336.6	380.3	428.7	479.1	529.8	578.7	623.9	664.2	698.4	725.2	-	-
	Power (kW)	173.8	171.4	170.7	170.7	170.6	169.8	167.6	163.9	158.4	151.0	142.0	131.7	120.5	-	-
	COP(H)	1.49	1.60	1.76	1.97	2.23	2.52	2.86	3.23	3.65	4.13	4.68	5.30	6.02	-	-
50	Heating capacity(kW)	284.8	297.8	323.1	357.9	399.5	445.7	494	542.7	589.7	633.7	673.2	707.3	734.9	755.3	768.3
	Power (kW)	198.5	195.9	194.4	193.2	191.6	189.2	185.5	180.5	174.0	166.2	157.4	148.2	139.1	131.0	124.9
	COP(H)	1.43	1.52	1.66	1.85	2.09	2.36	2.66	3.01	3.39	3.81	4.28	4.77	5.28	5.77	6.15
55	Heating capacity(kW)	314.5	325.5	348.7	381	420.2	463.8	509.9	556.4	602	645	684.3	719	748.3	771.6	788.7
	Power (kW)	225.5	222.3	219.8	217.1	213.9	209.7	204.4	197.9	190.5	182.3	173.9	166.0	159.3	154.8	153.7
	COP(H)	1.39	1.46	1.59	1.75	1.96	2.21	2.49	2.81	3.16	3.54	3.94	4.33	4.70	4.98	5.13
60	Heating capacity(kW)	-	-	377	406.3	442.4	483.2	526.6	571.1	615.3	657.7	697.3	733.3	765.1	792.2	814.6
	Power (kW)	-	-	247.9	243.5	238.4	232.3	225.2	217.2	208.8	200.3	192.4	185.9	181.8	181.2	185.4
	COP(H)	-	-	1.52	1.67	1.86	2.08	2.34	2.63	2.95	3.28	3.62	3.94	4.21	4.37	4.39
65	Heating capacity(kW)	-	-	-	433.6	465.9	503.4	544.2	586.6	629.4	671.4	711.6	749.6	784.6	816.5	845.2
	Power (kW)	-	-	-	274.1	266.7	258.5	249.5	240.0	230.6	221.8	214.4	209.5	208.1	211.6	221.4
	COP(H)	-	-	-	1.58	1.75	1.95	2.18	2.44	2.73	3.03	3.32	3.58	3.77	3.86	3.82

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-45/20-A R404A (With ECO) _380V 50HZ																	
Saturated discharge temp °C	Saturated suction temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	115.1	139.8	157.7	173.4	189.8	209.3	233.5	263.3	298.8	339.6	384.1	430.7	-	-	-	-
	Power (kW)	85.0	84.9	84.7	84.7	84.9	85.3	85.8	86.2	86.2	85.5	83.5	79.9	-	-	-	-
	COP(H)	1.35	1.65	1.86	2.05	2.24	2.45	2.72	3.05	3.47	3.97	4.60	5.39	-	-	-	-
40	Heating capacity(kW)	126.5	151.8	169.5	184.3	199.5	217.4	239.6	267.4	300.9	339.6	382.6	427.8	472.7	-	-	-
	Power (kW)	96.7	98	98.4	98.3	98	97.5	96.9	96.3	95.5	94.3	92.5	89.8	85.6	-	-	-
	COP(H)	1.31	1.55	1.72	1.87	2.04	2.23	2.47	2.78	3.15	3.60	4.14	4.76	5.52	-	-	-
45	Heating capacity(kW)	138.4	164.2	181.8	195.8	209.8	225.9	246.3	272	303.3	340	381.2	424.9	468.7	509.4	-	-
	Power (kW)	108.7	111.6	112.8	112.7	111.9	110.5	108.9	107.2	105.4	103.6	101.8	99.6	96.8	93.2	-	-
	COP(H)	1.27	1.47	1.61	1.74	1.87	2.04	2.26	2.54	2.88	3.28	3.74	4.27	4.84	5.47	-	-
50	Heating capacity(kW)	150.8	177.2	194.7	208	220.5	235.1	253.4	276.9	306.2	340.8	379.9	422	464.6	504.6	538.4	561.3
	Power (kW)	120.9	125.7	127.8	127.9	126.6	124.4	121.7	118.8	116.1	113.6	111.4	109.6	108	106.5	104.9	102.8
	COP(H)	1.25	1.41	1.52	1.63	1.74	1.89	2.08	2.33	2.64	3.00	3.41	3.85	4.30	4.74	5.13	5.46
55	Heating capacity(kW)	164.2	191.3	208.6	221.2	232.4	245.2	261.5	282.7	309.6	342	379.1	419.3	460.5	499.7	533.2	556.6
	Power (kW)	133.7	140.6	143.8	144.2	142.6	139.6	135.8	131.7	127.8	124.4	121.8	120.1	119.4	119.8	121.1	123.3
	COP(H)	1.23	1.36	1.45	1.53	1.63	1.76	1.93	2.15	2.42	2.75	3.11	3.49	3.86	4.17	4.40	4.51
60	Heating capacity(kW)	-	-	224.3	236.1	245.9	256.9	271	290	314.4	344.3	379.1	417.4	457	495	528.1	551.7
	Power (kW)	-	-	161.2	162.1	160.2	156.5	151.6	146.4	141.3	136.9	133.6	131.9	131.8	133.7	137.7	143.6
	COP(H)	-	-	1.39	1.46	1.53	1.64	1.79	1.98	2.23	2.51	2.84	3.16	3.47	3.70	3.84	3.84
65	Heating capacity(kW)	-	-	-	-	262	271	282.9	299.5	321.2	348.7	381	417.1	454.8	491.5	523.7	547.3
	Power (kW)	-	-	-	-	180.3	175.9	170	163.6	157.2	151.8	147.7	145.7	146.1	149.2	155.4	164.9
	COP(H)	-	-	-	-	1.45	1.54	1.66	1.83	2.04	2.30	2.58	2.86	3.11	3.29	3.37	3.32

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-55/25-A R404A (With ECO) _380V 50HZ																	
Saturated discharge temp °C	Saturated suction temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	136.4	170.5	194.9	215.4	236.5	261.1	291.6	329.3	374.4	426.6	483.9	544.1	-	-	-	-
	Power (kW)	102.6	102.2	101.8	101.7	102	102.5	103.1	103.6	103.6	102.8	100.5	96.3	-	-	-	-
	COP(H)	1.33	1.67	1.91	2.12	2.32	2.55	2.83	3.18	3.61	4.15	4.81	5.65	-	-	-	-
40	Heating capacity(kW)	150.0	184.8	208.9	228.5	247.8	270.4	298.5	333.7	376.4	426.1	481.2	539.5	597.3	-	-	-
	Power (kW)	116.5	117.9	118.3	118.2	117.7	117.2	116.5	115.8	114.8	113.4	111.2	107.9	102.8	-	-	-
	COP(H)	1.29	1.57	1.77	1.93	2.11	2.31	2.56	2.88	3.28	3.76	4.33	5.00	5.81	-	-	-
45	Heating capacity(kW)	164.1	199.4	223.4	242.1	259.9	280.4	306.1	338.8	378.8	425.9	478.8	535	591.5	643.9	-	-
	Power (kW)	130.9	134.2	135.5	135.5	134.4	132.8	130.8	128.8	126.7	124.5	122.2	119.5	116.2	111.8	-	-
	COP(H)	1.25	1.49	1.65	1.79	1.93	2.11	2.34	2.63	2.99	3.42	3.92	4.48	5.09	5.76	-	-
50	Heating capacity(kW)	178.6	214.8	238.6	256.4	272.6	291.1	314.4	344.3	381.7	426.1	476.5	530.6	585.4	636.8	679.6	707.9
	Power (kW)	145.6	151.2	153.6	153.7	152.1	149.5	146.2	142.7	139.4	136.3	133.7	131.4	129.5	127.7	125.8	123.4
	COP(H)	1.23	1.42	1.55	1.67	1.79	1.95	2.15	2.41	2.74	3.13	3.56	4.04	4.52	4.99	5.40	5.74
55	Heating capacity(kW)	194.3	231.3	255.1	271.9	286.5	302.9	323.7	350.9	385.3	426.9	474.6	526.5	579.4	629.4	671.7	700.3
	Power (kW)	161.2	169.2	172.9	173.3	171.2	167.6	163	158.1	153.4	149.3	146.1	144.1	143.3	143.8	145.5	148.3
	COP(H)	1.21	1.37	1.48	1.57	1.67	1.81	1.99	2.22	2.51	2.86	3.25	3.65	4.04	4.38	4.62	4.72
60	Heating capacity(kW)	-	-	273.5	289.3	302.3	316.5	334.7	359	390.4	428.9	473.8	523.1	573.7	622.2	663.6	692.1
	Power (kW)	-	-	194	194.8	192.4	187.9	182	175.6	169.5	164.2	160.3	158.3	158.3	160.8	165.8	173.3
	COP(H)	-	-	1.41	1.49	1.57	1.68	1.84	2.04	2.30	2.61	2.96	3.30	3.62	3.87	4.00	3.99
65	Heating capacity(kW)	-	-	-	-	321.1	333	348.4	369.6	397.8	433.1	474.9	521.2	569.5	616.1	656.2	684.4
	Power (kW)	-	-	-	-	216.7	211.3	204.1	196.3	188.7	182.1	177.4	175.1	175.8	179.9	187.8	199.8
	COP(H)	-	-	-	-	1.48	1.58	1.71	1.88	2.11	2.38	2.68	2.98	3.24	3.42	3.49	3.43

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-65/32-A R404A (With ECO) _380V 50HZ																	
Saturated discharge temp °C	Saturated suction temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	167.3	203.1	229.1	251.9	275.9	304.3	339.7	383.4	435.5	495.3	561	629.5	-	-	-	-
	Power (kW)	121.6	121.3	121.1	121.1	121.5	122	122.7	123.3	123.3	122.2	119.5	114.3	-	-	-	-
	COP(H)	1.38	1.67	1.89	2.08	2.27	2.49	2.77	3.11	3.53	4.05	4.69	5.51	-	-	-	-
40	Heating capacity(kW)	184.0	220.5	246.1	267.6	289.7	315.7	348.3	389	438.3	495.2	558.3	624.8	691	-	-	-
	Power (kW)	138.2	140.1	140.7	140.6	140.1	139.4	138.6	137.7	136.6	134.9	132.3	128.3	122.4	-	-	-
	COP(H)	1.33	1.57	1.75	1.90	2.07	2.26	2.51	2.82	3.21	3.67	4.22	4.87	5.65	-	-	-
45	Heating capacity(kW)	201.0	238.2	263.7	284	304.2	327.8	357.6	395.3	441.4	495.5	555.9	620.3	684.8	744.8	-	-
	Power (kW)	155.4	159.5	161.3	161.2	160	158	155.7	153.2	150.7	148.2	145.5	142.4	138.5	133.3	-	-
	COP(H)	1.29	1.49	1.63	1.76	1.90	2.07	2.30	2.58	2.93	3.34	3.82	4.36	4.94	5.59	-	-
50	Heating capacity(kW)	218.6	256.7	281.9	301	319.4	340.5	367.5	402.1	445.1	496.1	553.8	615.7	678.3	737.2	786.9	820.5
	Power (kW)	172.9	179.8	182.8	182.9	181.1	177.9	174	169.9	166	162.4	159.3	156.7	154.4	152.3	150	147
	COP(H)	1.26	1.43	1.54	1.65	1.76	1.91	2.11	2.37	2.68	3.05	3.48	3.93	4.39	4.84	5.25	5.58
55	Heating capacity(kW)	237.5	276.4	301.4	319.5	336	354.7	378.7	410.1	449.7	497.4	552.1	611.3	671.9	729.5	778.6	812.8
	Power (kW)	191.3	201	205.6	206.2	203.9	199.6	194.2	188.4	182.8	177.9	174.2	171.7	170.8	171.3	173.2	176.3
	COP(H)	1.24	1.38	1.47	1.55	1.65	1.78	1.95	2.18	2.46	2.80	3.17	3.56	3.93	4.26	4.50	4.61
60	Heating capacity(kW)	-	-	323.5	340.4	354.9	371	392	420	456.1	500.4	551.7	608	666.2	722.1	770.3	804.7
	Power (kW)	-	-	230.5	231.7	229.1	223.7	216.8	209.3	202	195.8	191.1	188.5	188.5	191.2	196.8	205.4
	COP(H)	-	-	1.40	1.47	1.55	1.66	1.81	2.01	2.26	2.56	2.89	3.23	3.53	3.78	3.91	3.92
65	Heating capacity(kW)	-	-	-	-	377.8	391.1	409	433.4	465.8	506.3	554.1	607.1	662.6	716.3	763.3	797.4
	Power (kW)	-	-	-	-	257.8	251.5	243.2	233.9	224.9	217	211.3	208.3	208.9	213.4	222.3	235.8
	COP(H)	-	-	-	-	1.47	1.56	1.68	1.85	2.07	2.33	2.62	2.91	3.17	3.36	3.43	3.38

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

## Performance

LT-S-83/41-A R404A (With ECO) _380V 50HZ																	
Saturated discharge temp℃	Saturated suction temp℃	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
35	Heating capacity(kW)	205.6	250.4	283.6	312.9	343.7	380.5	425.8	481.4	547.6	623.1	706	792.5	-	-	-	-
	Power (kW)	148.8	148.3	148	148	148.3	149	149.8	150.4	150.5	149.2	146.1	140.2	-	-	-	-
	COP(H)	1.38	1.69	1.92	2.11	2.32	2.55	2.84	3.20	3.64	4.18	4.83	5.65	-	-	-	-
40	Heating capacity(kW)	227.0	272.7	305.6	333.5	362.1	395.9	437.8	489.7	552	623.9	703.3	786.8	869.8	-	-	-
	Power (kW)	170.5	172.7	173.6	173.6	173	172.2	171.2	170	168.5	166.3	163.1	158.3	151.2	-	-	-
	COP(H)	1.33	1.58	1.76	1.92	2.09	2.30	2.56	2.88	3.28	3.75	4.31	4.97	5.75	-	-	-
45	Heating capacity(kW)	249.5	296.2	328.7	355.2	381.5	412.4	450.8	498.9	557.4	625.6	701.5	782	862.7	937.7	-	-
	Power (kW)	193.0	198.2	200.5	200.6	199.2	197	194.2	191.1	188	184.7	181.2	177.2	172.4	166.2	-	-
	COP(H)	1.29	1.49	1.64	1.77	1.92	2.09	2.32	2.61	2.96	3.39	3.87	4.41	5.00	5.64	-	-
50	Heating capacity(kW)	272.9	320.5	352.5	377.5	401.5	429.2	464.1	508.4	562.8	627.1	699.5	776.9	855.1	928.5	990.2	1032
	Power (kW)	215.9	224.2	228	228.4	226.3	222.6	218	213	208	203.5	199.5	196.1	193.2	190.5	187.9	184.6
	COP(H)	1.26	1.43	1.55	1.65	1.77	1.93	2.13	2.39	2.71	3.08	3.51	3.96	4.43	4.87	5.27	5.59
55	Heating capacity(kW)	298.0	346.3	377.7	401	422.5	446.8	478	518.2	568.5	628.7	697.2	771.4	846.9	918.5	979.5	1021.8
	Power (kW)	239.5	251.2	256.7	257.4	254.7	249.5	243	235.9	229.1	223	218.2	215.1	213.7	214.3	216.7	220.7
	COP(H)	1.24	1.38	1.47	1.56	1.66	1.79	1.97	2.20	2.48	2.82	3.20	3.59	3.96	4.29	4.52	4.63
60	Heating capacity(kW)	-	-	406.1	427.5	446.1	467	494.1	529.9	575.7	631.6	696	766.6	839.2	908.7	968.6	1011.2
	Power (kW)	-	-	288.1	289.3	285.9	279.3	270.8	261.5	252.5	244.8	238.9	235.7	235.5	238.8	245.8	256.6
	COP(H)	-	-	1.41	1.48	1.56	1.67	1.82	2.03	2.28	2.58	2.91	3.25	3.56	3.81	3.94	3.94
65	Heating capacity(kW)	-	-	-	-	475.2	492.3	515	546.2	587.2	638.2	698.3	764.8	834	901.1	959.6	1002
	Power (kW)	-	-	-	-	322.7	314.6	304	292.4	281.1	271.3	264.1	260.4	261	266.6	277.6	294.6
	COP(H)	-	-	-	-	1.47	1.56	1.69	1.87	2.09	2.35	2.64	2.94	3.20	3.38	3.46	3.40

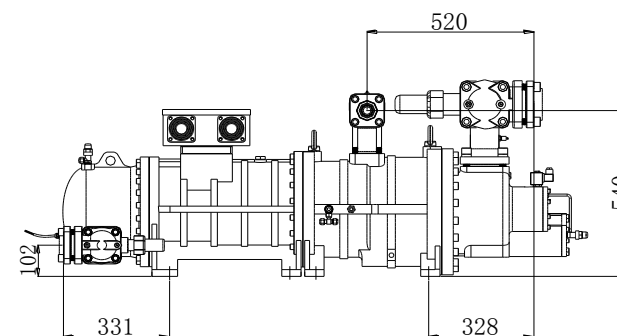
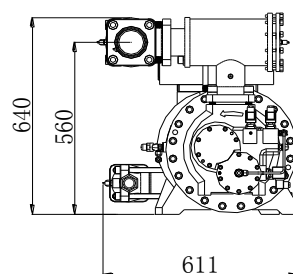
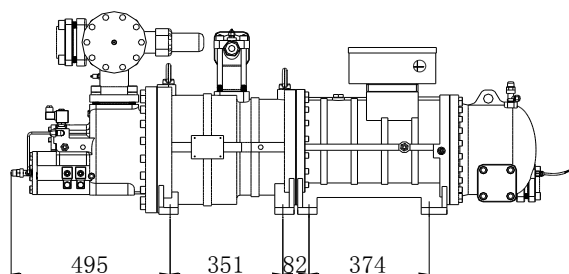
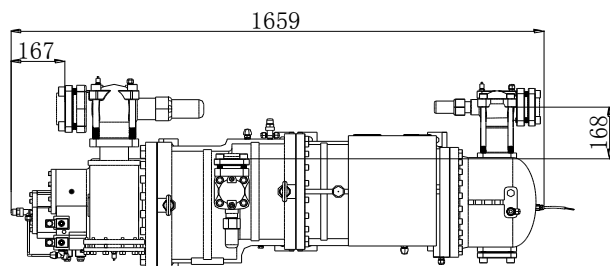
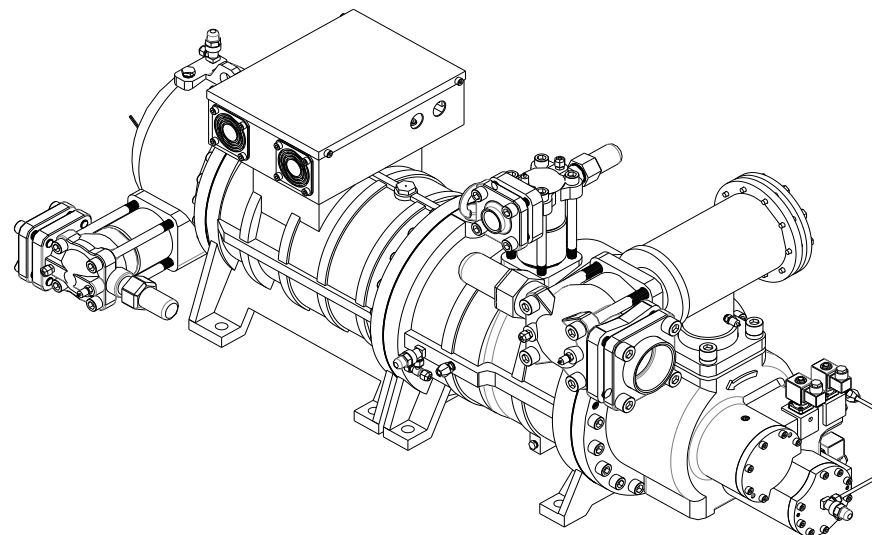
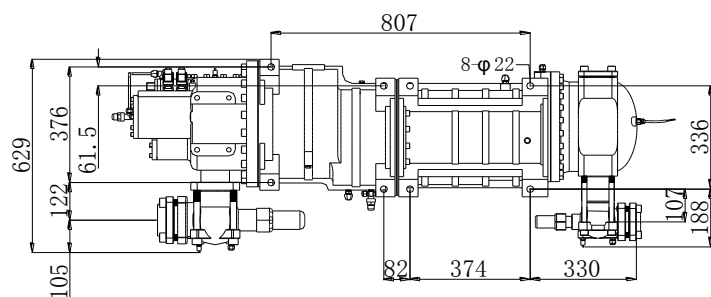
**Remark:** The above performance data are in accordance with the latest selection software of Hanbell. The selection software may be updated without prior notice.

★ Please download HANBELL selection program to select the oil cooling data according to conditions

★ All above data are selected from HANBELL selection program 5.0.3.2

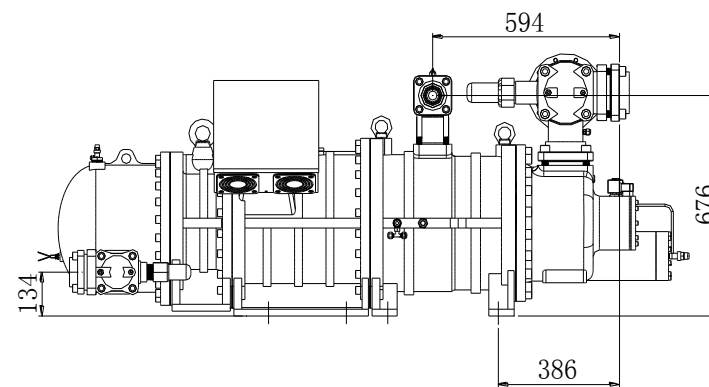
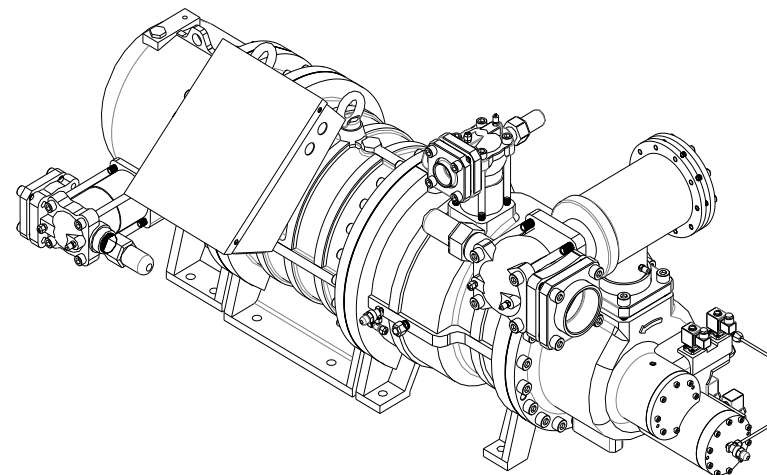
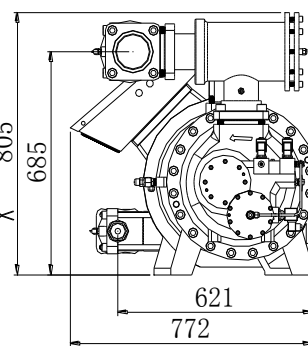
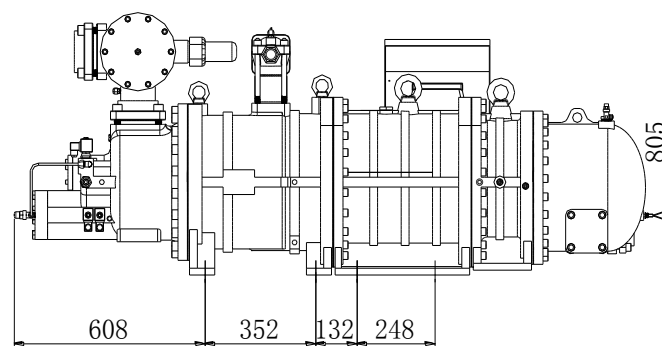
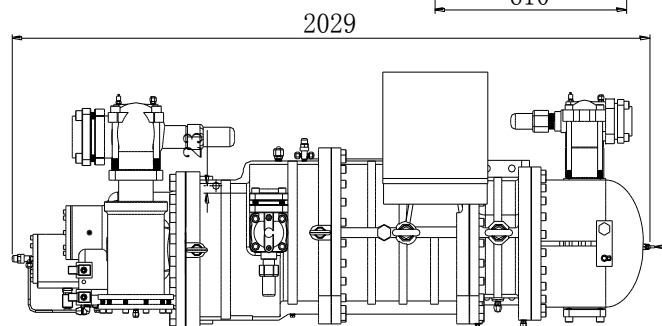
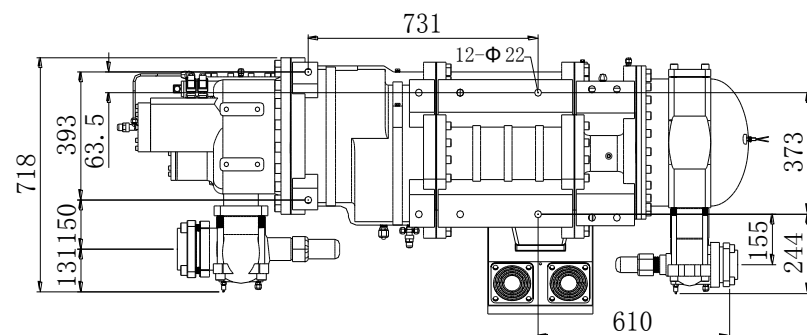
**LT-S-20/10- A Drawing**

LT-S-H(A) Compound Two-stage Heat Pump Compressor



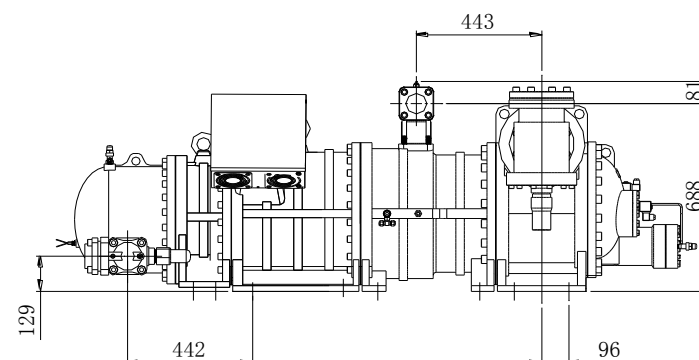
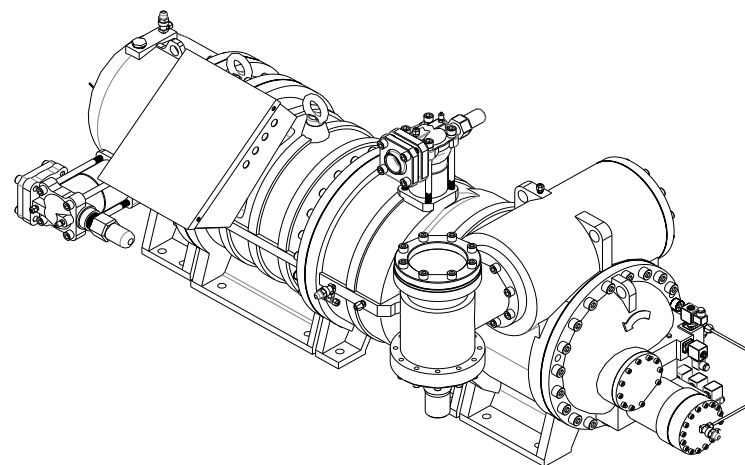
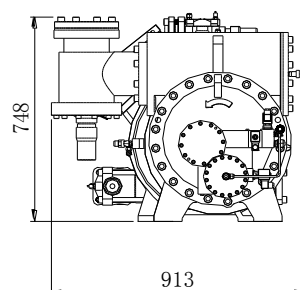
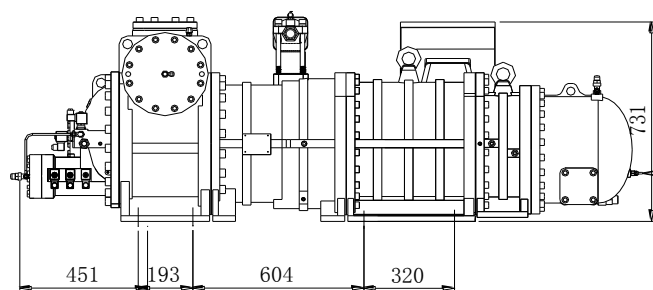
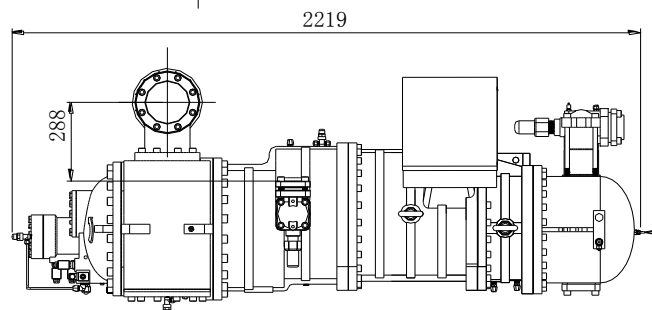
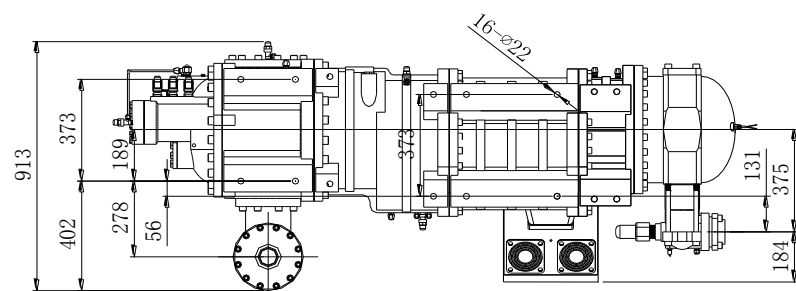
**LT-S-45/20-H(A)& LT-S-55/25-H(A) Drawing**

LT-S-H(A) Compound Two-stage Heat Pump Compressor

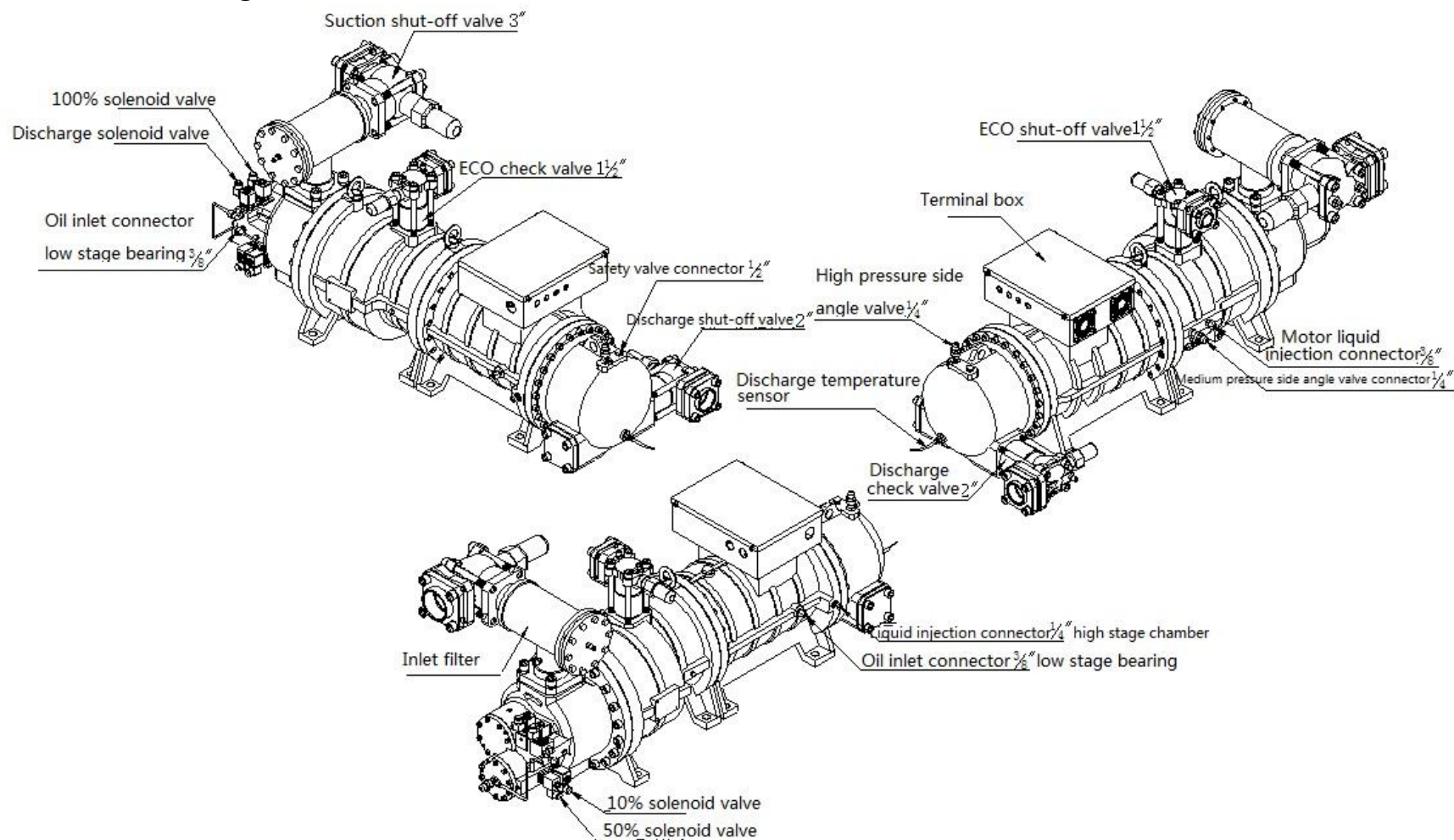




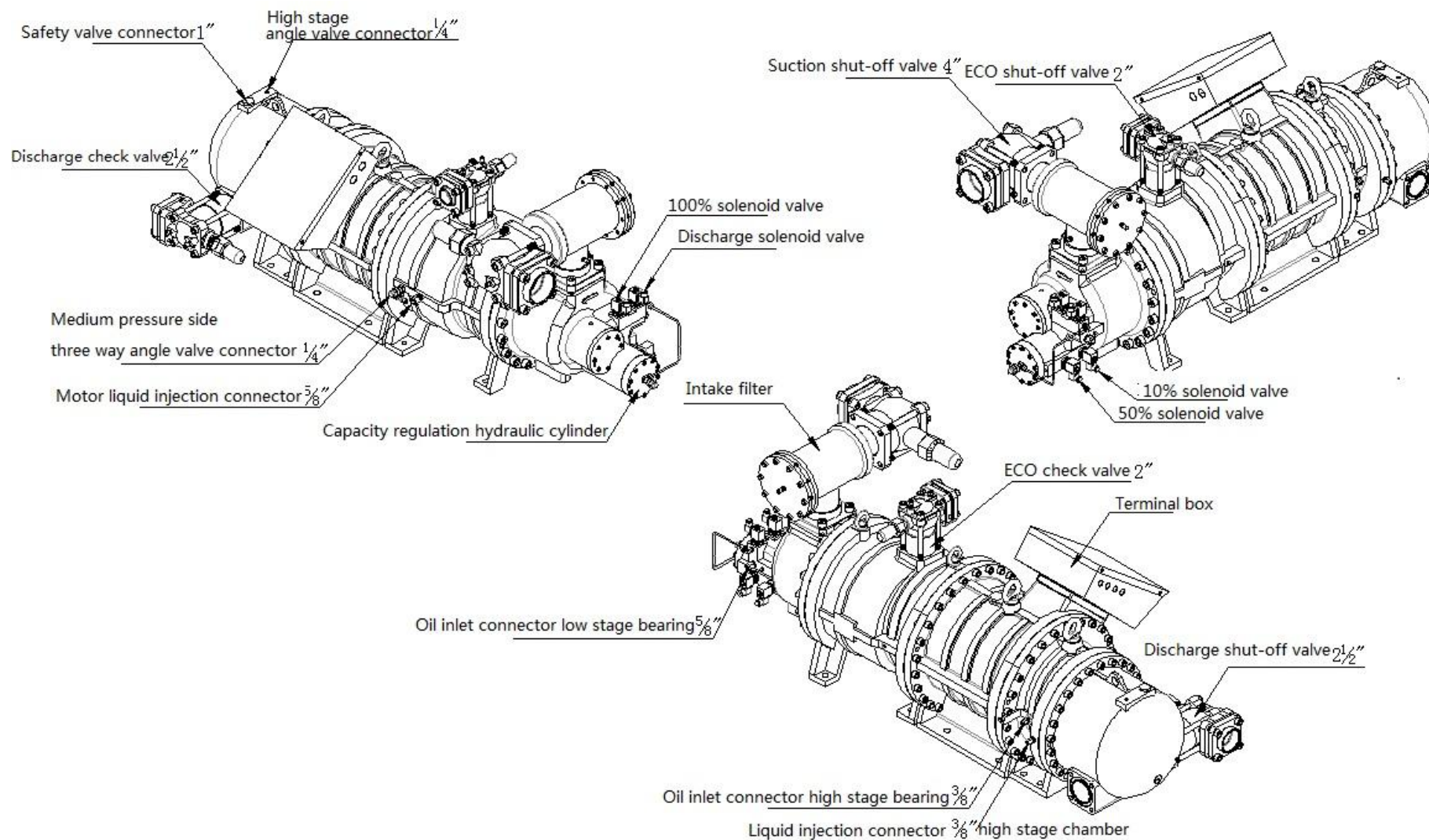
LT-S-65/32-H (A)& LT-S-83/41-H(A) Drawing

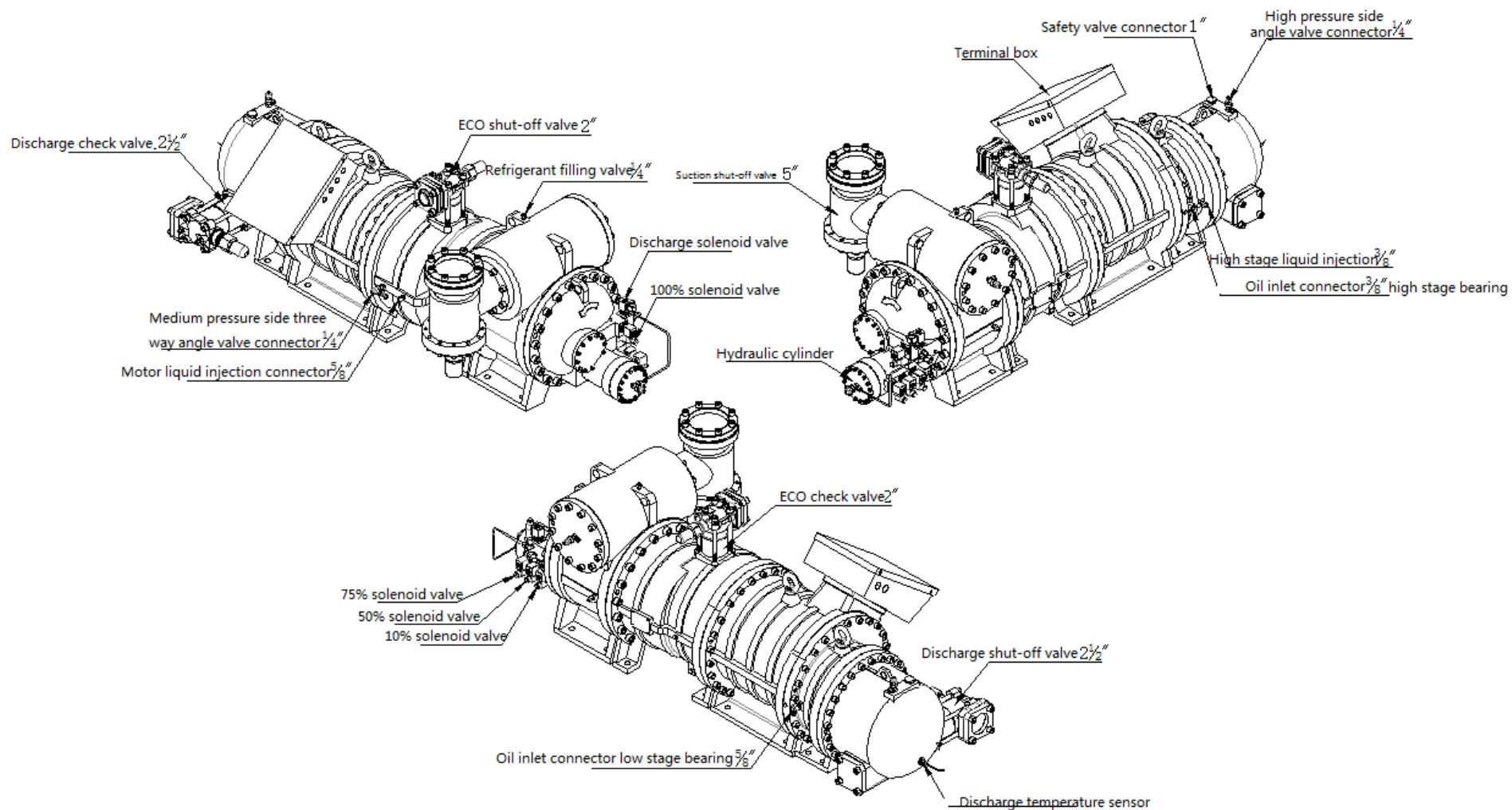


LT-S-20/10-A Drawing

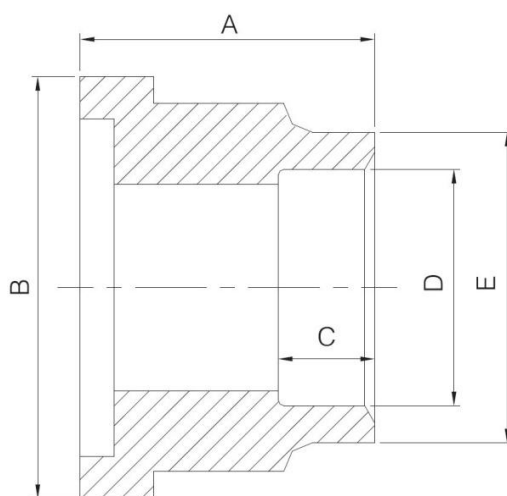


**LT-S-45/20-H (A)& LT-S-55/25-H(A) Drawing**





## LT-S-H Suction/Discharge Bushing Specification

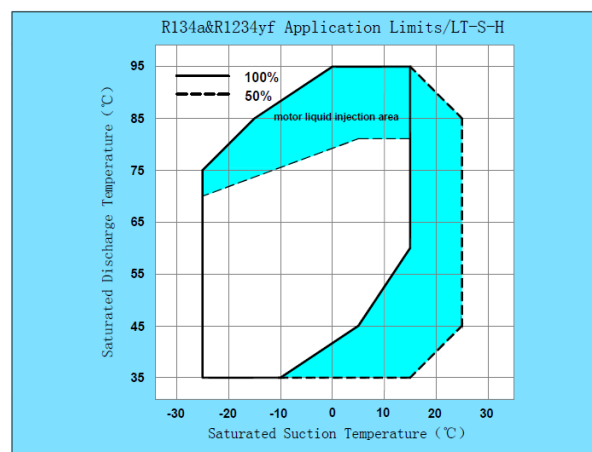
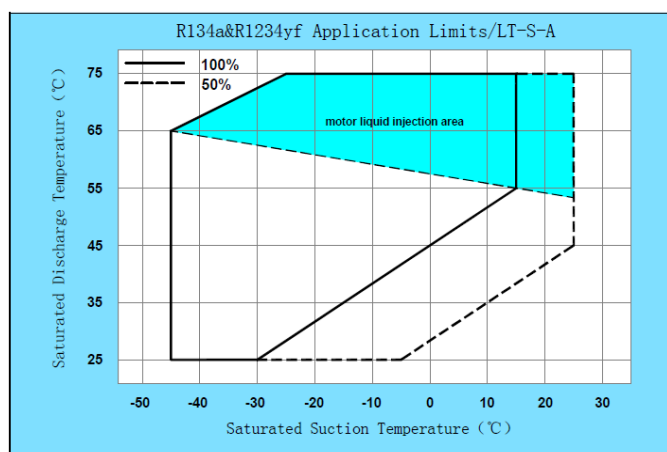


Bushing

Model	Position	Material & Size		Bushing size				
				A	B	C	D	E
LT-20/10	Discharge	Copper	2 1/8"	50	90	30	55	65
		Steel	2"				61.3	74
	Suction	Copper	3 1/8"	66	120	45	80.5	90
		Steel	3"				90.2	103
	ECO	Copper	1 5/8"	52	75	35	42	52
		Steel	1 1/2"				49.3	64
LT-45/20 LT-55/25	Discharge	Copper	2 5/8"	60	110	35	68	77
		Steel	2 1/2"				77	90
	Suction	Copper	3 5/8"	76	145	50	93	103
		Steel	4"				110	128
	ECO	Copper	2 1/8"	50	90	30	55	65
		Steel	2"				61.3	74
LT-83/41 LT-65/32	Discharge	Copper	2 5/8"	60	110	35	68	77
		Steel	2 1/2"				77	90
	Suction	Copper	4 1/8"	80	174	35	106	121
		Steel	5"	75			135	154
	ECO	Copper	2 1/8"	50	90	30	55	65
		Steel	2"				61.3	74



# Application Limits



Official website



Official WeChat



Electronic Brochures



**上海漢鐘精機股份有限公司**  
SHANGHAI HANBELL PRECISE MACHINERY CO., LTD.

No.8289, Tingfeng Road, Fengjing Area, Jinshan District, Shanghai, China

TEL: 021-57350280 FAX: 021-51368588

Service Line: 4007702158

P.C.: 201501

http://www.hanbell.com.cn

SHANGHAI HANBELL PRECISE MACHINERY CO.,LTD.

JINAN BRANCH

No.4 Building, Liando U Valley International Enterprise Port, No. 2222, South Section of Yuqing Road, Changqing District, Jinan, Shandong Prov.

TEL: 0531-85060075 FAX: 0531-85060071

SHANGHAI HANBELL PRECISE MACHINERY CO.,LTD.

NANJING BRANCH

No.95, Gaohu Road, Jiangning District, Nanjing City

TEL: 025-52078091/1/3 FAX: 025-52078090

SHANGHAI HANBELL PRECISE MACHINERY CO.,LTD.

GUANGZHOU BRANCH

No.15 Wenkeng Road Lianwang Industrial Park, Guangzhou, Guangdong Prov.

TEL: 020-34721075 FAX: 020-3472325

SHANGHAI HANBELL PRECISE MACHINERY CO.,LTD.

CHONGQING BRANCH

Building A10, Dongben Industrial Park, No.18, Yu Ma Road, chayuan New District, Chongqing, China

TEL: 023-62611068 FAX: 023-62611069