



LT-S(-L) Series

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LT-S(-L) Series Screw Compressor



LT-S(-L) Series Semi-closed Screw Refrigeration Compressor

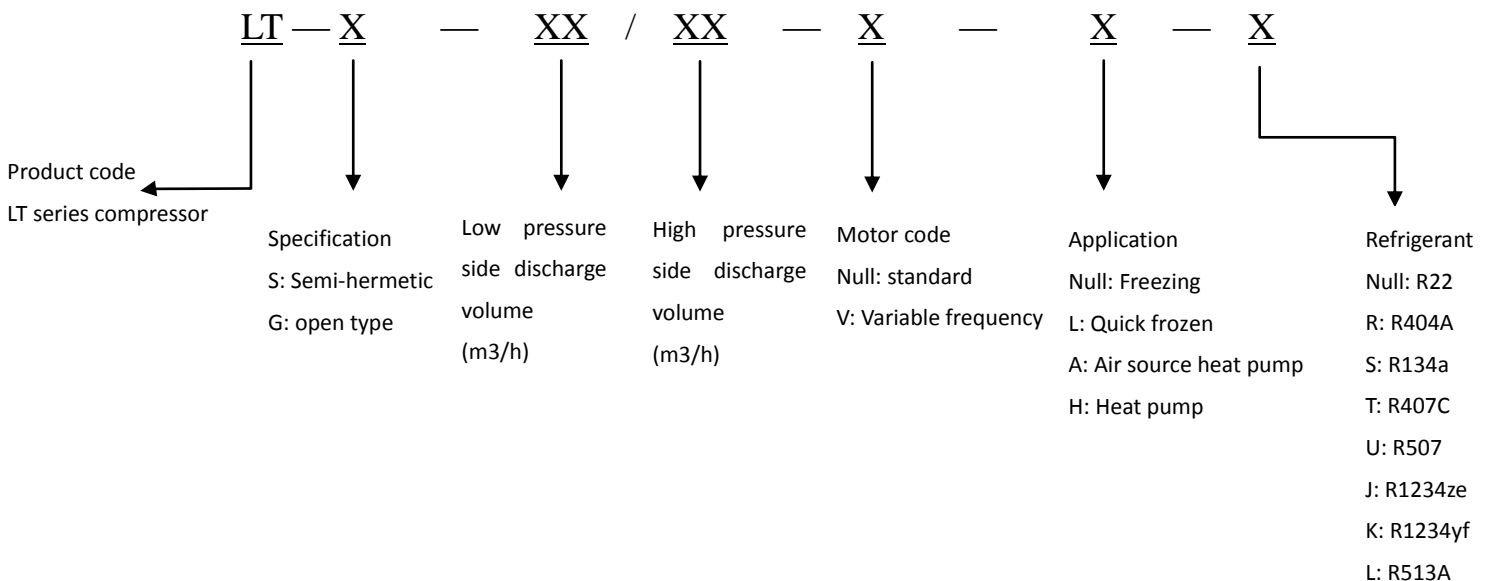
Product Description

Conventional single stage screw compressor The minimum Saturated Suction Temp is -40~-50 °C. If you want to evaporate temperature at -60~-65°C you need two compressor Meanwhile, the high pressure ratio working condition brings problems such as Excessive leakage and high discharge temperature during compression. Thus resulting in low reliability and low efficiency for the single-stage compressor operating in such harsh conditions.

The single-stage two-stage compressor solves the above problems very well. Compared with the two-stage compression system, it has significant advantages such as smaller footprint and simpler control. Compared with single-stage compression systems, it has higher efficiency and higher reliability.

To solve above problems, Hanbell has developed the LT Series compound screw compressor. LT series of products mainly consists of two categories: semi-closed (-S) series and open (-G) series. It can be used for low temperature freezing in different conditions according to the requirements. Its main features is high efficiency and high reliability in large pressure difference and large pressure ratio conditions. It is an elite product which combines the rich technical accumulation and application experience of Hanbell in the field of screw compressors. LT Series can be used in various industries such as process cooling, process cooling, pharmaceutical biochemistry, ship refrigeration, etc. When combined with quick-freezing tunnels and quick-freezing warehouses, it can also be applied to other areas such as quick-frozen/freeze-dried products and biochemical freeze-drying of agricultural products, aquatic products and meat products.

Nomenclature



Features

Starting load

Light starting load design starting load is equivalent to ordinary single-stage compressor, avoiding greater impact on the power grid

Motor cooling channel

The excellent motor cooling flow channel design ensures reliable cooling of the motor and high efficiency of the compressor, so that the compressor can operate in a very wide range and more adaptable.

Motor temperature visualization

Motor embedded temperature sensor, PT100 \ PT1000 \ NTC are optional, can directly read motor temperature for motor temperature control and protection

System component integration design

Equipped with medium pressure check valve, shut-off valve and economizer filter, it makes the protection system of the compressor reliable and simplifies customer system configuration

Junction box never frosts

The junction box of the LT compressor is arranged in the middle temperature zone, even if it is operated at -65 °C for a long time, there will be no frosting.

Simple system control

Logical control is simpler and reduces control costs.

Wider range of applications

Compared to the LT-S Series, the LT-S-L Series have a wider operating range and can meet the needs of unfrozen freezer, quick-freezing tunnels and industrial refrigeration applications.

Specification

Model	Compressor							
	Low pressure	High pressure	Rotation speed 50Hz r/min	Capacity control		Lubrication method	Noise	
	Displacement	Displacement					Low temperature freezing LT-S	Refrigerated + quick frozen LT-S-L
	50Hz	50Hz		Step	Stepless		dB	
m ³ /h	m ³ /h							
LT-20/10	224	99	2950	10%/50% 100%	10% ~ 100%	Pressure differential oil supply	80	81
LT-30/12	316	137					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		75%/100%			87	89

Quality

Motor

Strength test

Kg

Start type

Voltage

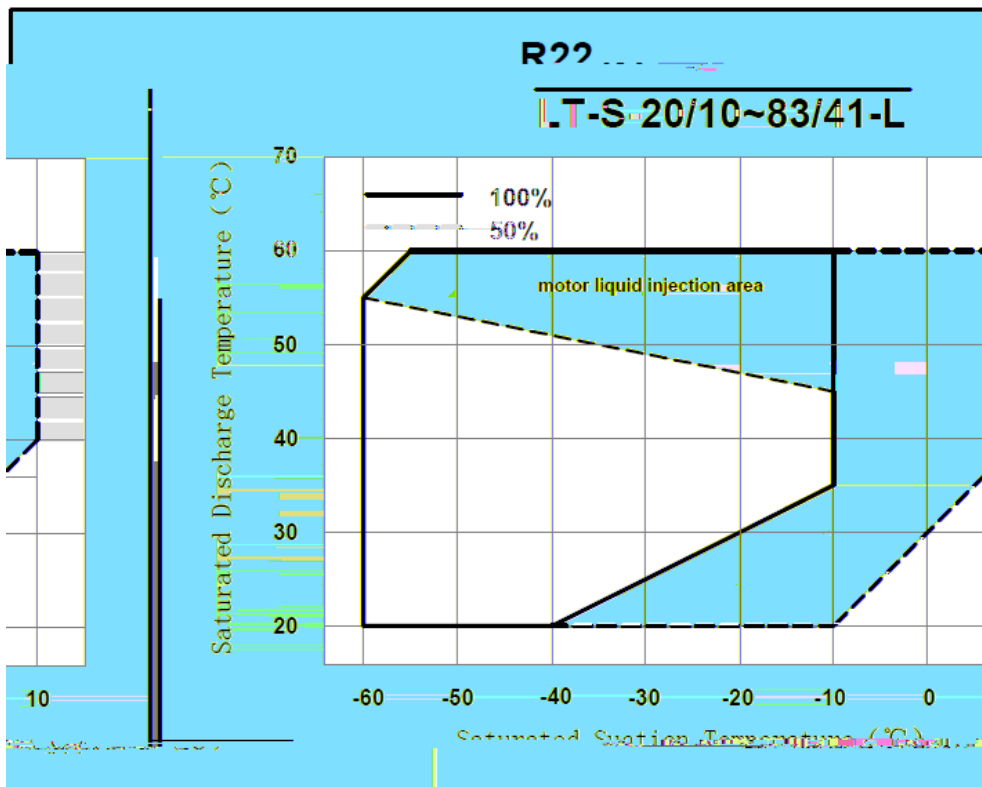
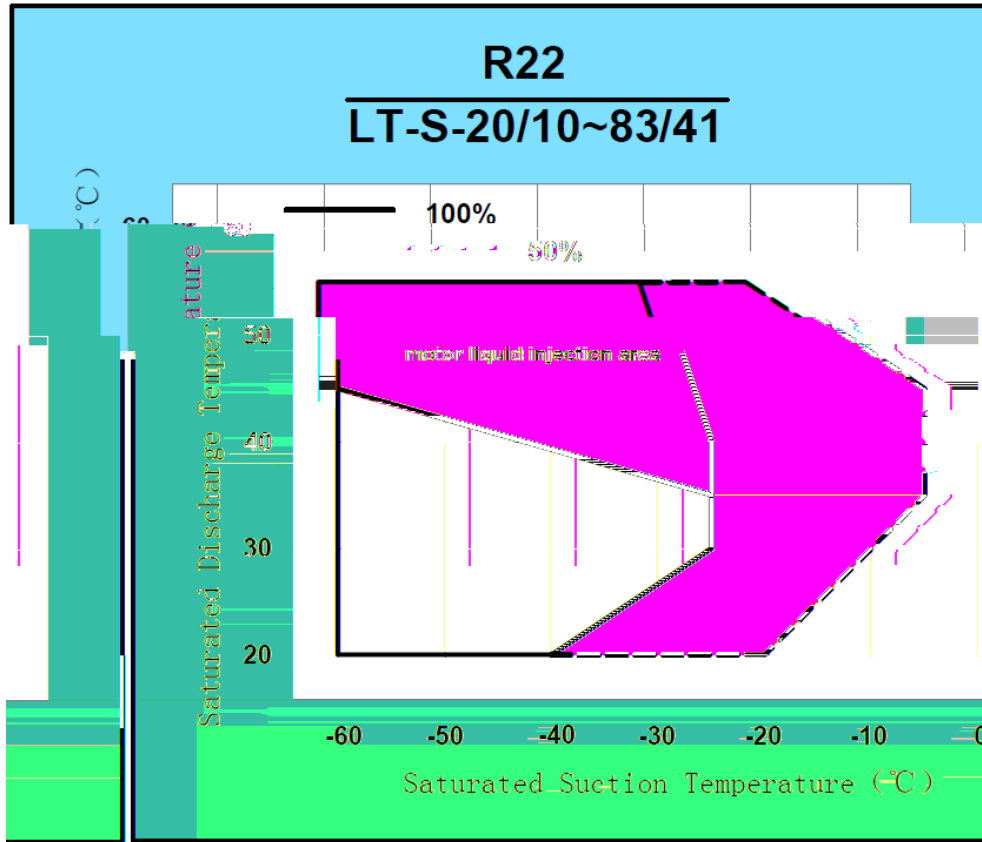
Insulation grade

bar

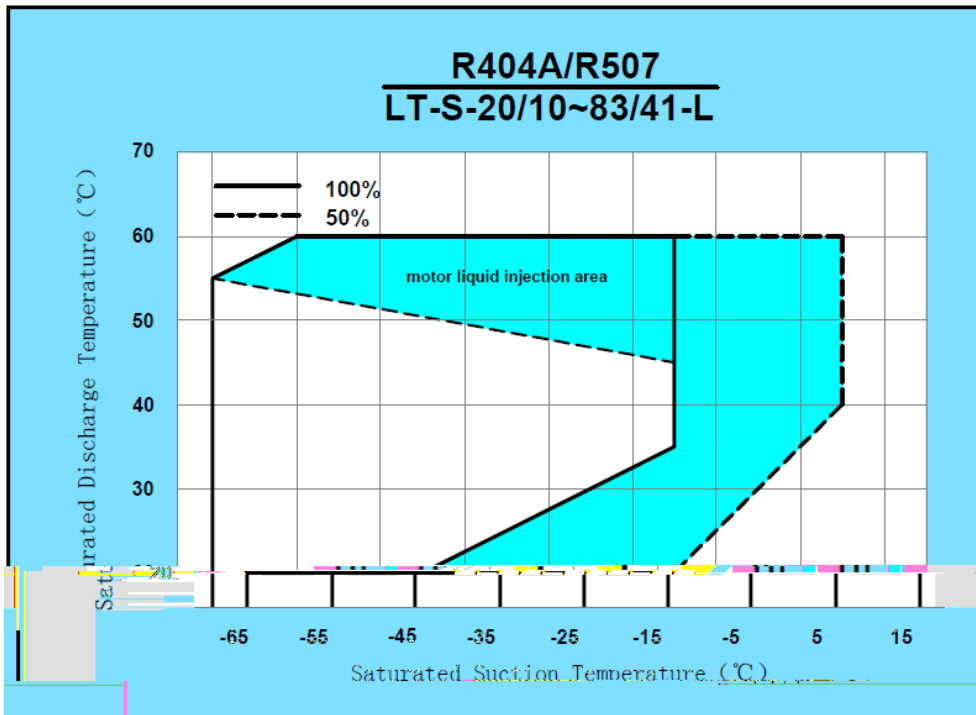
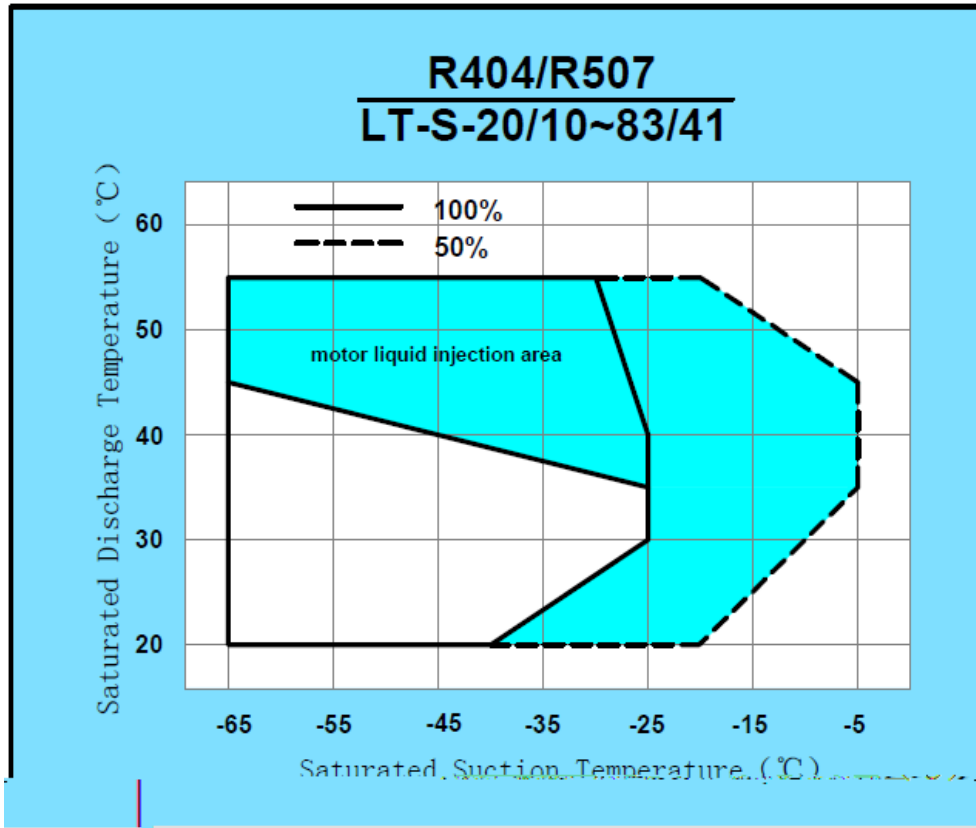
Model

Section

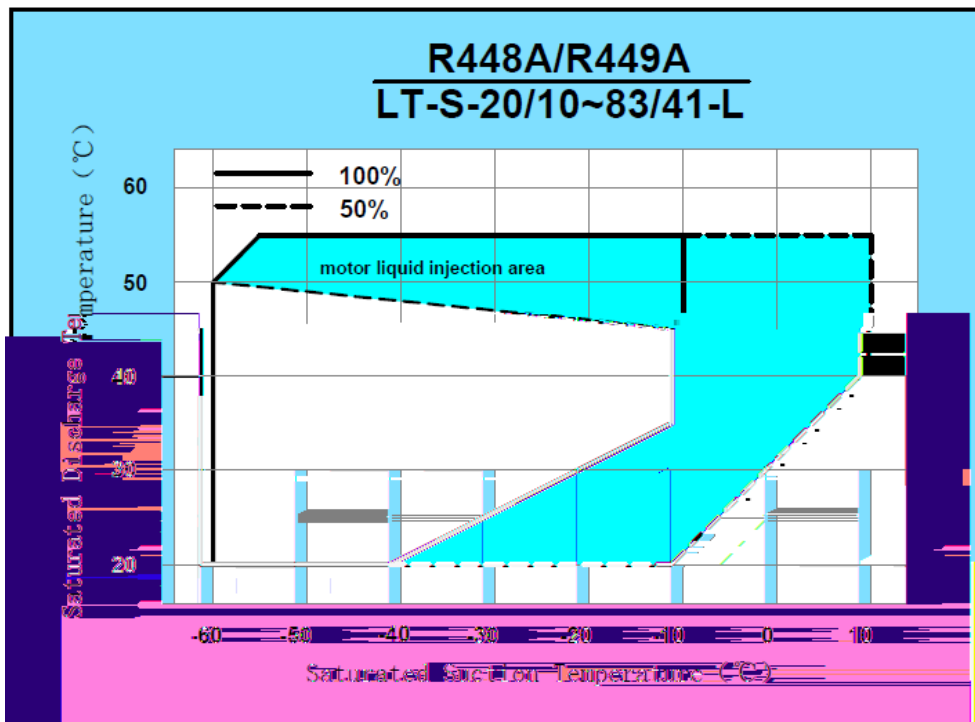
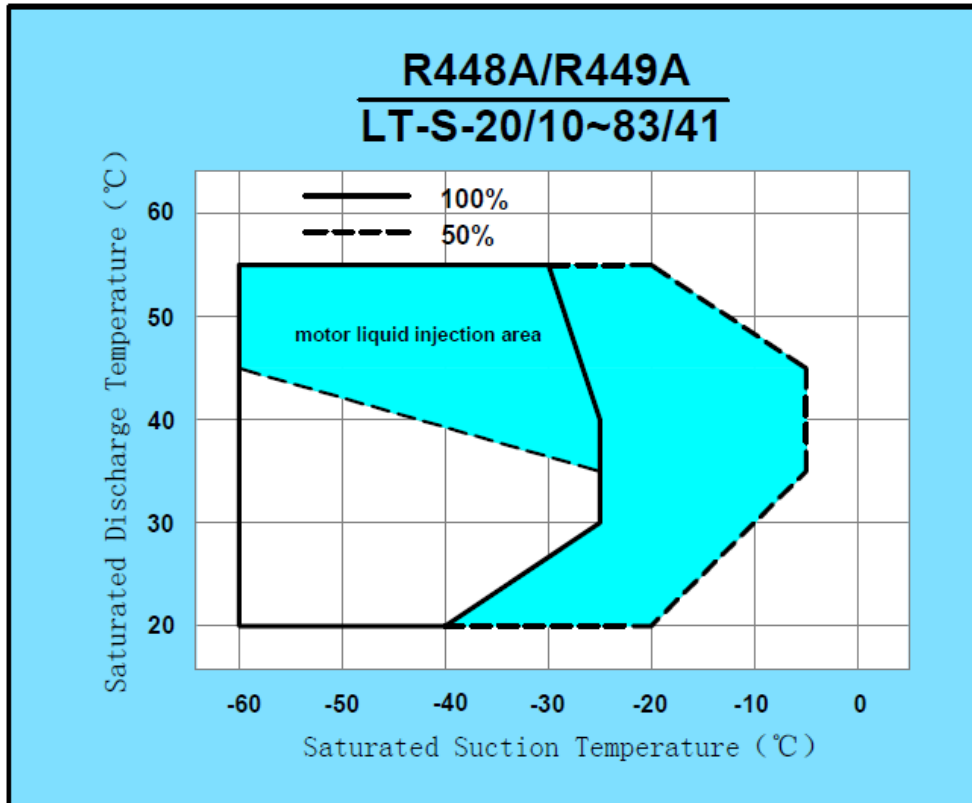
Operating range



R22 Operating range



R404A/R507 Operating range



R448A/R449A Operating range



LT-S L Series Cryogenic Refrigeration Compressor

Performance data sheet LT-S
LT-S-

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Performance Data Sheet LT-S

LT-S-30/12 R22 Performance sheet (including ECO)_380V 50HZ								
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	30.28	38.90	49.25	61.55	78.81	97.97	117.4
	Power(KW)	37.08	38.45	39.81	41.17	42.53	43.88	45.23
	COP	0.82	1.02	1.27	1.51	1.85	2.23	2.60
35	Cooling capacity(kW)	30.00	38.34	48.38	60.25	76.99	95.24	114.4
	Power(KW)	44.09	45.79	47.50	49.20	50.89	52.58	54.26
	COP	0.69	0.85	1.06	1.25	1.51	1.81	2.11
40	Cooling capacity(kW)	29.72	37.78	47.51	58.95	74.96	92.39	111.5
	Power(KW)	51.11	53.15	55.20	57.23	59.26	61.29	63.30
	COP	0.58	0.72	0.89	1.05	1.26	1.51	1.76
45	Cooling capacity(kW)	29.44	37.22	46.64	57.65	72.90	89.29	108.1
	Power(KW)	58.13	60.52	62.90	65.28	67.65	70.01	72.36
	COP	0.51	0.62	0.77	0.90	1.08	1.28	1.49
50	Cooling capacity(kW)	29.16	36.66	45.77	56.35	70.19	85.89	104.5
	Power(KW)	65.15	67.89	70.62	73.34	76.05	78.75	81.44
	COP	0.45	0.55	0.67	0.77	0.92	1.09	1.28
55	Cooling capacity(kW)	28.88	36.09	44.87	54.99	67.83	82.82	101.0
	Power(KW)	72.59	75.28	77.98	80.66	83.32	85.97	88.61
	COP	0.41	0.49	0.59	0.68	0.81	0.96	1.14

LT-S-30/12 R404A Performance sheet (including ECO)_380V 50HZ									
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	20.2	30.5	40.8	50.9	64.0	78.8	96.1	115.
	Power(KW)	36.7	37.9	42.3	44.7	45.7	44.3	43.0	45.6
	COP	0.55	0.81	0.97	1.14	1.40	1.78	2.24	2.54
35	Cooling capacity(kW)	19.7	29.6	39.4	49.4	62.2	76.7		

Performance data sheet LT-S

LT-S-45/20 R22 Performance sheet (including ECO)_380V 50HZ								
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30



Performance data sheet LT-S

LT-S-55/25 R22 Performance sheet (including ECO)_380V 50HZ								
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	46.90	65.09	86.61	105.38	124.95	146.02	180.28
	Power(KW)	55.88	57.78	60.48	62.82	69.02	74.70	80.33
	COP	0.84	1.13	1.43	1.68	1.81	1.95	2.24
35	Cooling capacity(kW)	46.52	64.69	85.93	104.39	123.77	144.71	178.35
	Power(KW)	63.19	65.50	68.27	70.88	76.26	81.63	87.11
	COP	0.74	0.99	1.26	1.47	1.62	1.77	2.05
40	Cooling capacity(kW)	46.14	64.29	85.25	103.40	122.60	143.40	176.41
	Power(KW)	70.50	73.22	76.06	78.95	83.50	88.56	93.88
	COP	0.65	0.88	1.12	1.31	1.47	1.62	1.88
45	Cooling capacity(kW)	45.76	63.89	84.58	102.41	121.42	142.08	174.48
	Power(KW)	77.81	80.95	83.85	87.02	90.75	95.48	100.65
	COP	0.59	0.79	1.01	1.18	1.34	1.49	1.73
50	Cooling capacity(kW)	45.38	63.49	83.09	101.25	120.00	140.22	172.65
	Power(KW)	84.49	88.24	91.87	95.64	99.68	104.40	109.21
	COP	0.54	0.72	0.90	1.06	1.20	1.34	1.58
55	Cooling capacity(kW)	44.62	63.11	81.60	100.09	118.58	138.35	170.82
	Power(KW)	91.18	95.54	99.90	104.26	108.62	113.32	117.77
	COP	0.49	0.66	0.82	0.96	1.09	1.22	1.45

LT-S-55/25 R404A Performance sheet (including ECO)_380V 50HZ									
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	37.04	56.00	74.97	93.35	117.4	144.5	176.3	212.3
	Power(KW)	66.15	68.15	70.42	72.90	75.71	83.19	90.04	96.83
	COP	0.56	0.82	1.06	1.28	1.55	1.74	1.96	2.19
35	Cooling capacity(kW)	36.28	54.33	72.38	90.57	114.0	140.6	171.5	205.7
	Power(KW)	72.56	77.52	80.28	82.29	85.44	91.92	98.39	104.9
	COP	0.50	0.70	0.90	1.10	1.33	1.53	1.74	1.96
40	Cooling capacity(kW)	35.52	52.65	69.79	87.78	110.6	136.8	166.8	199.1
	Power(KW)	82.60	87.00	90.25	91.67	95.17	100.6	106.7	113.1
	COP	0.43	0.61	0.77	0.96	1.16	1.36	1.56	1.76
45	Cooling capacity(kW)	34.75	50.97	67.20	85.00	107.3	132.9	162.1	192.5
	Power(KW)	91.46	96.60	100.3	101.0	104.8	109.3	115.0	121.3
	COP	0.38	0.53	0.67	0.84	1.02	1.22	1.41	1.59
50	Cooling capacity(kW)	33.99	49.30	64.61	82.22	103.9	129.0	157.3	186.0
	Power(KW)	90.84	102.9	107.8	110.7	115.2	120.1	125.8	131.6
	COP	0.37	0.48	0.60	0.74	0.90	1.07	1.25	1.41
55	Cooling capacity(kW)	33.23	47.62	62.02	79.43	100.5	125.2	152.6	179.4
	Power(KW)	97.67	109.9	115.1	120.4	125.6	130.9	136.5	141.9
	COP	0.34	0.43	0.54	0.66	0.80	0.96	1.12	1.26

Performance data sheet LT-S

LT-S-65/32 R22 Performance sheet (including ECO)_380V 50HZ								
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	61.69	85.56	112.59	137.00	162.43	189.83	234.37
	Power(KW)	72.65	75.11	78.63	81.66	89.73	97.12	104.44
	COP	0.85	1.14	1.43	1.68	1.81	1.95	2.24
35	Cooling capacity(kW)	61.55	85.51	111.71	135.71	160.91	188.12	231.85
	Power(KW)	82.15	85.15	88.75	92.15	99.14	106.12	113.24
	COP	0.75	1.00	1.26	1.47	1.62	1.77	2.05
40	Cooling capacity(kW)	61.41	85.46	110.83	134.42	159.38	186.42	229.34
	Power(KW)	91.65	95.19	98.88	102.64	108.56	115.13	122.05
	COP	0.67	0.90	1.12	1.31	1.47	1.62	1.88
45	Cooling capacity(kW)	61.27	85.41	109.95	133.13	157.85	184.71	226.82
	Power(KW)	101.15	105.23	109.00	113.13	117.97	124.13	130.85
	COP	0.61	0.81	1.01	1.18	1.34	1.49	1.73
50	Cooling capacity(kW)	59.64	83.73	108.02	131.63	156.01	182.29	224.45
	Power(KW)	109.84	114.72	119.44	124.34	129.59	135.73	141.98
	COP	0.54	0.73	0.90	1.06	1.20	1.34	1.58
55	Cooling capacity(kW)	58.00	82.04	106.08	130.12	154.16	179.86	222.07
	Power(KW)	118.53	124.20	129.87	135.54	141.21	147.32	153.10
	COP	0.49	0.66	0.82	0.96	1.09	1.22	1.45

LT-S-65/32 R404A Performance sheet (including ECO)_380V 50HZ									
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	43.78	66.19	88.60	110.3	138.7	170.8	208.3	250.9
	Power(KW)	78.96	79.61	82.30	86.15	89.48	98.32	106.4	114.4
	COP	0.55	0.83	1.08	1.28	1.55	1.74	1.96	2.19
35	Cooling capacity(kW)	42.88	64.21	85.54	107.0	134.7	166.2	202.7	243.1
	Power(KW)	85.75	90.02	93.30	97.25	100.9	108.6	116.2	124.0
	COP	0.50	0.71	0.92	1.10	1.33	1.53	1.74	1.96
40	Cooling capacity(kW)	41.97	62.22	82.47	103.7	130.8	161.6	197.1	235.3
	Power(KW)	99.12	100.4	104.3	108.3	112.4	118.9	126.1	133.7
	COP	0.42	0.62	0.79	0.96	1.16	1.36	1.56	1.76
45	Cooling capacity(kW)	41.07	60.24	79.41	100.4	126.8	157.1	191.5	227.6
	Power(KW)	102.6	110.8	115.3	119.4	123.9	129.2	136.0	143.3
	COP	0.40	0.54	0.69	0.84	1.02	1.22	1.41	1.59
50	Cooling capacity(kW)	40.17	58.26	76.35	97.17	122.8	152.5	185.9	219.8
	Power(KW)	118.0	120.3	125.7	130.8	136.2	142.0	148.7	155.5
	COP	0.34	0.48	0.61	0.74	0.90	1.07	1.25	1.41
55	Cooling capacity(kW)	39.27	56.28	73.29	93.88	118.8	148.0	180.3	212.0
	Power(KW)	126.9	129.8	136.0	142.3	148.5	154.7	161.4	167.7
	COP	0.31	0.43	0.54	0.66	0.80	0.96	1.12	1.26

Performance data sheet LT-S

LT-S-83/41 R22 Performance sheet (including ECO)_380V 50HZ								
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	77.55	107.47	142.42	173.99	206.29	241.08	297.64
	Power(KW)	90.81	93.89	98.28	102.08	112.16	121.39	130.54
	COP	0.86	1.16	1.45	1.70	1.84	1.99	2.28
35	Cooling capacity(kW)	76.98	106.81	141.02	172.35	204.35	238.91	294.45
	Power(KW)	94.00	100.00	106.00	112.00	118.00	125.00	132.00
	COP	0.83	1.09	1.34	1.54	1.73	1.91	2.23
40	Cooling capacity(kW)	76.41	106.15	139.62	170.71	202.41	236.75	291.26
	Power(KW)	114.56	118.99	123.59	128.30	135.69	143.91	152.56
	COP	0.68	0.91	1.14	1.33	1.49	1.65	1.91
45	Cooling capacity(kW)	75.84	105.49	138.22	169.08	200.47	234.58	288.06
	Power(KW)	120.00	131.54	136.25	141.41	147.46	155.16	163.56
	COP	0.65	0.82	1.02	1.20	1.36	1.51	1.76
50	Cooling capacity(kW)	75.27	104.83	136.82	167.16	198.13	231.50	285.05
	Power(KW)	137.30	143.39	149.29	155.42	161.99	169.66	177.47
	COP	0.55	0.74	0.92	1.08	1.22	1.36	1.61
55	Cooling capacity(kW)	74.66	104.19	135.42	165.25	195.78	228.42	282.03
	Power(KW)	148.16	155.25	162.34	169.43	176.51	184.15	191.38
	COP	0.50	0.67	0.83	0.98	1.11	1.24	1.47

LT-S-83/41 R404A Performance sheet (including ECO)_380V 50HZ									
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30
30	Cooling capacity(kW)	56.57	85.53	114.4	142.5	179.3	220.7	269.3	324.2
	Power(KW)	97.83	101.2	104.6	109.5	113.8	125.0	135.3	145.5
	COP	0.58	0.84	1.09	1.30	1.58	1.77	1.99	2.23
35	Cooling capacity(kW)	55.41	82.97	110.5	138.3	174.1	214.8	262.0	314.2
	Power(KW)	100.7	104.8	111.5	118.1	124.8	131.5	139.3	147.1
	COP	0.55	0.79	0.99	1.17	1.39	1.63	1.88	2.13
40	Cooling capacity(kW)	54.24	80.41	106.5	134.0	169.0	208.9	254.8	304.1
	Power(KW)	122.8	127.7	132.6	137.8	143.0	151.3	160.4	170.1
	COP	0.44	0.63	0.80	0.97	1.18	1.38	1.59	1.79
45	Cooling capacity(kW)	53.08	77.85	102.6	129.8	163.9	203.0	247.5	294.1
	Power(KW)	129.4	136.5	146.6	151.9	157.6	164.4	173.0	182.3
	COP	0.41	0.57	0.70	0.85	1.04	1.23	1.43	1.61
50	Cooling capacity(kW)	51.91	75.29	98.67	125.5	158.7	197.1	240.3	284.0
	Power(KW)	146.2	153.0	159.8	166.4	173.2	180.6	189.1	197.8
	COP	0.35	0.49	0.62	0.75	0.92	1.09	1.27	1.44
55	Cooling capacity(kW)	50.75	72.73	94.72	121.3	153.6	191.2	233.0	274.0
	Power(KW)	157.3	165.2	173.1	181.0	188.9	196.8	205.3	213.3
	COP	0.32	0.44	0.55	0.67	0.81	0.97	1.14	1.28

Performance data sheet LT-S-L

LT-S-20/10-L R22 Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity KW)	21.79	30.25	40.25	48.97	58.06	67.85	83.77	98.81	119.23		
	Power(KW)	27.24	28.16	29.48	30.62	33.64	36.41	39.16	41.71	44.66		
	COP	0.80	1.07	1.37	1.60	1.73	1.86	2.14	2.37	2.67		
35	Cooling capacity KW)	21.62	30.06	39.93	48.51	57.52	67.24	82.88	97.85	118.00	137.73	160.20
	Power(KW)	30.80	31.93	33.28	34.55	37.17	39.79	42.46	45.05	48.28	51.29	54.30
	COP	0.70	0.94	1.20	1.40	1.55	1.69	1.95	2.17	2.44	2.69	2.95
40	Cooling capacity KW)	21.44	29.87	39.62	48.05	56.97	66.63	81.98	96.90	116.77	135.91	158.70
	Power(KW)	34.37	35.69	37.07	38.49	40.70	43.17	45.76	48.39	51.89	54.90	58.09
	COP	0.62	0.84	1.07	1.25	1.40	1.54	1.79	2.00	2.25	2.48	2.73
45	Cooling capacity KW)	21.26	29.69	39.30	47.59	56.42	66.03	81.08	95.95	115.54	134.09	157.20
	Power(KW)	37.93	39.46	40.87	42.42	44.23	46.54	49.06	51.73	55.51	58.51	61.89
	COP	0.56	0.75	0.96	1.12	1.28	1.42	1.65	1.85	2.08	2.29	2.54
50	Cooling capacity KW)	21.09	29.50	38.61	47.05	55.76	65.16	80.23	95.14	114.27	132.88	155.77
	Power(KW)	41.19	43.01	44.78	46.62	48.59	50.89	53.23	55.73	58.89	61.68	65.27
	COP	0.51	0.69	0.86	1.01	1.15	1.28	1.51	1.71	1.94	2.15	2.39
55	Cooling capacity KW)	20.73	29.33	37.92	46.51	55.11	64.29	79.38	94.34	113.01	131.68	154.33
	Power(KW)	44.44	46.57	48.70	50.82	52.95	55.24	57.41	59.73	62.27	64.85	68.66
	COP	0.47	0.63	0.78	0.92	1.04	1.16	1.38	1.58	1.81	2.03	2.25
60	Cooling capacity KW)			37.23	45.97	54.45	63.42	78.53	93.53	111.74	130.47	152.90
	Power(KW)			52.61	55.02	57.31	59.59	61.58	63.74	65.65	68.02	72.05
	COP			0.71	0.84	0.95	1.06	1.28	1.47	1.70	1.92	2.12

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-20/10-L R404A Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
	Cooling capacity (KW)	15.87	23.99	32.11	39.99	50.30	61.91	75.54	90.96	107.81	125.66	
30	Power(KW)	29.22	30.31	31.31	32.42	33.67	37.00	40.04	EMC /P4	EMC /P4	EMC /P4	EMC /P4

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-45/20-L R22 Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
	Cooling capacity KW)	41.50	57.60	76.64	93.26	25						

30

Performance data sheet LT-S-L

LT-S-45/20-L R404A Performance sheet (including ECO)_380V 50HZ													
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-15	-10	
30	Cooling capacity KW)	30.31	45.82	61.34	76.38	96.08	118.24	144.27	173.72	205.91	--	--	
	Power(KW)	55.22	57.28	59.38	61.27	63.64	69.92	75.68	81.38	86.69	--	--	
	COP	0.55	0.80	1.04	1.25	1.51	1.69	1.91	2.13	2.38	--	--	
35	Cooling capacity KW)	29.68	44.45	59.22	74.10	93.32	115.09	140.39	168.34	199.83	270.83	317.03	
	Power(KW)	62.27	65.16	67.47	69.16	71.81	77.26	82.70	88.25	93.63	108.02	112.85	
	COP	0.48	0.68	0.88	1.07	1.30	1.49	1.70	1.91	2.13	2.51	2.81	
40	Cooling capacity KW)	29.06	43.08	57.10	71.82	90.56	111.93	136.51	162.95	193.75	264.66	308.26	
	Power(KW)	69.32	73.12	75.85	77.05	79.99	84.60	89.72	95.11	100.57	115.27	120.73	
	COP	0.42	0.59	0.75	0.93	1.13	1.32	1.52	1.71	1.93	2.30	2.55	
45	Cooling capacity KW)	28.43	41.71	54.98	69.55	87.80	108.77	132.63	157.57	187.67	258.50	299.49	
	Power(KW)	76.85	81.19	84.33	84.94	88.16	91.93	96.73	101.97	107.52	122.45	128.62	
	COP	0.37	0.51	0.65	0.82	1.00	1.18	1.37	1.55	1.75	2.11	2.33	
50	Cooling capacity KW)	27.81	40.34	52.86	67.27	85.05	105.62	128.75	152.18	181.58	252.33	290.73	
	Power(KW)	82.58	86.53	90.68	93.07	96.89	100.99	105.77	110.64	115.83	128.65	135.66	
	COP	0.34	0.47	0.58	0.72	0.88	1.05	1.22	1.38	1.57	1.96	2.14	
55	Cooling capacity KW)	27.19	38.96	50.74	64.99	82.29	102.46	124.87	146.80	175.50	209.63	246.16	281.96
	Power(KW)	88.79	92.37	96.79	101.21	105.62	110.04	114.80	119.31	124.15	129.42	134.78	142.70

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-55/25-L R22 Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity KW)	46.90	65.09	86.61	105.38	124.95	146.02	180.28	212.63	256.58	--	--
	Power(KW)	55.88	57.78	60.48	62.82	69.02	74.70	80.33	85.57	91.62	--	--
	COP	0.84	1.13	1.43	1.68	1.81	1.95	2.24	2.48	2.80	--	--
35	Cooling capacity KW)	46.52	64.69	85.93	104.39	123.77	144.71	178.35	210.58	253.94	296.40	344.75
	Power(KW)	63.19	65.50	68.27	70.88	76.26	81.63	87.11	92.42	99.04	105.22	111.39
	COP	0.74	0.99	1.26	1.47	1.62	1.77	2.05	2.28	2.56	2.82	3.09
40	Cooling capacity KW)	46.14	64.29	85.25	103.40	122.60	143.40	176.41	208.53	251.29	292.48	341.52
	Power(KW)	70.50	73.22	76.06	78.95	83.50	88.56	93.88	99.28	106.46	112.62	119.18
	COP	0.65	0.88	1.12	1.31	1.47	1.62	1.88	2.10	2.36	2.60	2.87
45	Cooling capacity KW)	45.76	63.89	84.58	102.41	121.42	142.08	174.48	206.48	248.65	288.55	338.29
	Power(KW)	77.81	80.95	83.85	87.02	90.75	95.48	100.65	106.13	113.88	120.03	126.96
	COP	0.59	0.79	1.01	1.18	1.34	1.49	1.73	1.95	2.18	2.40	2.66
50	Cooling capacity KW)	45.38	63.49	83.09	101.25	120.00	140.22	172.65	204.75	245.92	285.96	335.20
	Power(KW)	84.49	88.24	91.87	95.64	99.68	104.40	109.21	114.34	120.82	126.53	133.91
	COP	0.54	0.72	0.90	1.06	1.20	1.34	1.58	1.79	2.04	2.26	2.50
55	Cooling capacity KW)	44.62	63.11	81.60	100.09	118.58	138.35	170.82	203.02	243.18	283.36	332.12
	Power(KW)	91.18	95.54	99.90	104.26	108.62	113.32	117.77	122.55	127.75	133.04	140.86
	COP	0.49	0.66	0.82	0.96	1.09	1.22	1.45	1.66	1.90	2.13	2.36
60	Cooling capacity KW)	--	--	80.11	98.93	117.17	136.49	169.00	201.28	240.45	280.77	329.03
	Power(KW)	--	--	107.93	112.88	117.56	122.24	126.33	130.75	134.68	139.54	147.81
	COP	--	--	0.74	0.88	1.00	1.12	1.34	1.54	1.79	2.01	2.23

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-55/25-L R404A Performance sheet (including ECO)_380V 50HZ													
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity KW)	37.04	56.00	74.97	93.35	117.43	144.52	176.33	212.33	251.67	291.78	--	--
	Power(KW)	66.15	68.15	70.42	72.90	75.71	83.19	90.04	96.83	103.14	110.43	--	--
	COP	0.56	0.82	1.06	1.28	1.55	1.74	1.96	2.19	2.44	2.64	--	--
35	Cooling capacity KW)	36.28	54.33	72.38	90.57	114.06	140.66	171.59	205.74	244.24	284.67	326.63	387.49
	Power(KW)	72.56	77.52	80.28	82.29	85.44	91.92	98.39	104.99	111.40	119.37	126.82	134.26
	COP	0.50	0.70	0.90	1.10	1.33	1.53	1.74	1.96	2.19	2.38	2.58	2.89
40	Cooling capacity KW)	35.52	52.65	69.79	87.78	110.69	136.80	166.84	199.16	236.80	277.55	320.19	376.77
	Power(KW)	82.60	87.00	90.25	91.67	95.17	100.65	106.74	113.16	119.66	128.32	135.75	143.65
	COP	0.43	0.61	0.77	0.96	1.16	1.36	1.56	1.76	1.98	2.16	2.36	2.62
45	Cooling capacity KW)	34.75	50.97	67.20	85.00	107.31	132.94	162.10	192.58	229.37	270.44	313.75	366.05
	Power(KW)	91.46	96.60	100.33	101.06	104.89	109.38	115.09	121.32	127.92	137.27	144.68	153.03
	COP	0.38	0.53	0.67	0.84	1.02	1.22	1.41	1.59	1.79	1.97	2.17	2.39
50	Cooling capacity KW)	33.99	49.30	64.61	82.22	103.94	129.09	157.36	186.00	221.94	263.33	307.30	355.33
	Power(KW)	90.84	102.95	107.89	110.74	115.28	120.15	125.84	131.64	137.82	145.62	152.52	161.41
	COP	0.37	0.48	0.60	0.74	0.90	1.07	1.25	1.41	1.61	1.81	2.01	2.20
55	Cooling capacity KW)	33.23	47.62	62.02	79.43	100.57	125.23	152.62	179.42	214.50	256.22	300.86	344.61
	Power(KW)	97.67	109.90	115.16	120.41	125.67	130.93	136.59	141.95	147.71	153.98	160.36	169.78
	COP	0.34	0.43	0.54	0.66	0.80	0.96	1.12	1.26	1.45	1.66	1.88	2.03
60	Cooling capacity KW)	--	--	59.43	76.65	97.20	121.37	147.88	172.84	207.07	249.11	294.42	333.89
	Power(KW)	--	--	115.84	130.09	136.06	141.70	147.34	152.27	157.60	162.33	168.19	178.16
	COP	--	--	0.51	0.59	0.71	0.86	1.00	1.14	1.31	1.53	1.75	1.87

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-65/32-L R22 Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity KW)	37.04	56.00	74.97	93.35	117.43	144.52	176.33	212.33	251.67	291.78	--
	Power(KW)	66.15	68.15	70.42	72.90	75.71	83.19	90.04	96.83	103.14	110.43	--
	COP	0.56	0.82	1.06	1.28	1.55	1.74	1.96	2.19	2.44	2.64	--
35	Cooling capacity KW)	36.28	54.33	72.38	90.57	114.06	140.66	171.59	205.74	244.24	284.67	326.63
	Power(KW)	72.56	77.52	80.28	82.29	85.44	91.92	98.39	104.99	111.40	119.37	126.82
	COP	0.50	0.70	0.90	1.10	1.33	1.53	1.74	1.96	2.19	2.38	2.58
40	Cooling capacity KW)	35.52	52.65	69.79	87.78	110.69	136.80	166.84	199.16	236.80	277.55	320.19
	Power(KW)	82.60	87.00	90.25	91.67	95.17	100.65	106.74	113.16	119.66	128.32	135.75
	COP	0.43	0.61	0.77	0.96	1.16	1.36	1.56	1.76	1.98	2.16	2.36
45	Cooling capacity KW)	34.75	50.97	67.20	85.00	107.31	132.94	162.10	192.58	229.37	270.44	313.75
	Power(KW)	91.46	96.60	100.33	101.06	104.89	109.38	115.09	121.32	127.92	137.27	144.68
	COP	0.38	0.53	0.67	0.84	1.02	1.22	1.41	1.59	1.79	1.97	2.17
50	Cooling capacity KW)	33.99	49.30	64.61	82.22	103.94	129.09	157.36	186.00	221.94	263.33	307.30
	Power(KW)	90.84	102.95	107.89	110.74	115.28	120.15	125.84	131.64	137.82	145.62	152.52
	COP	0.37	0.48	0.60	0.74	0.90	1.07	1.25	1.41	1.61	1.81	2.01
55	Cooling capacity KW)	33.23	47.62	62.02	79.43	100.57	125.23	152.62	179.42	214.50	256.22	300.86
	Power(KW)	97.67	109.90	115.16	120.41	125.67	130.93	136.59	141.95	147.71	153.98	160.36
	COP	0.34	0.43	0.54	0.66	0.80	0.96	1.12	1.26	1.45	1.66	1.88
60	Cooling capacity KW)	--	--	59.43	76.65	97.20	121.37	147.88	172.84	207.07	249.11	294.42
	Power(KW)	--	--	115.84	130.09	136.06	141.70	147.34	152.27	157.60	162.33	168.19
	COP	--	--	0.51	0.59	0.71	0.86	1.00	1.14	1.31	1.53	1.75

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

Performance data sheet LT-S-L

LT-S-83/41-L R22 Performance sheet (including ECO)_380V 50HZ												
Saturated Discharge Temp °C	Saturated Suction Temp °C	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity (KW)	77.55	107.47	142.42	173.99	206.29	241.08	297.64	351.05	423.62	--	--
	Power(KW)	90.81	93.89	98.28	102.08	112.16	121.39	130.54	139.05	148.88	--	--
	COP	0.86	1.16	1.45	1.70	1.84	1.99	2.28	2.52	2.85	--	--
35	Cooling capacity (KW)	76.98	106.81	141.02	172.35	204.35	238.91	294.45	347.66	419.25	489.36	569.18
	Power(KW)	94.00	100.00	106.00	112.00	118.00	125.00	132.00	141.00	152.00	163.00	175.00
	COP	0.83	1.09	1.34	1.54	1.73	1.91	2.23	2.47	2.76	3.00	3.25
40	Cooling capacity (KW)	76.41	106.15	139.62	170.71	202.41	236.75	291.26	344.28	414.88	482.88	563.85
	Power(KW)	114.56	118.99	123.59	128.30	135.69	143.91	152.56	161.33	173.00	183.01	193.66
	COP	0.68	0.91	1.14	1.33	1.49	1.65	1.91	2.13	2.40	2.64	2.91
45	Cooling capacity (KW)	75.84	105.49	138.22	169.08	200.47	234.58	288.06	340.89	410.51	476.40	558.52
	Power(KW)	120.00	131.54	136.25	141.41	147.46	155.16	163.56	172.46	185.06	195.05	206.31
	COP	0.65	0.82	1.02	1.20	1.36	1.51	1.76	1.98	2.22	2.44	2.71
50	Cooling capacity (KW)	75.27	104.83	136.82	167.16	198.13	231.50	285.05	338.04	406.01	472.12	553.42
	Power(KW)	137.30	143.39	149.29	155.42	161.99	169.66	177.47	185.80	196.33	205.62	217.61
	COP	0.55	0.74	0.92	1.08	1.22	1.36	1.61	1.82	2.07	2.30	2.54
55	Cooling capacity (KW)	74.66	104.19	135.42	165.25	195.78	228.42	282.03	335.18	401.50	467.83	548.32
	Power(KW)	148.16	155.25	162.34	169.43	176.51	184.15	191.38	199.14	207.59	216.19	228.90
	COP	0.50	0.67	0.83	0.98	1.11	1.24	1.47	1.68	1.93	2.16	2.40
60	Cooling capacity (KW)	--	--	134.01	163.34	193.44	225.34	279.01	332.32	396.99	463.54	543.22
	Power(KW)	--	--	175.38	183.43	191.04	198.64	205.28	212.48	218.85	226.76	240.19
	COP	--	--	0.75	0.89	1.01	1.13	1.36	1.56	1.81	2.04	2.26

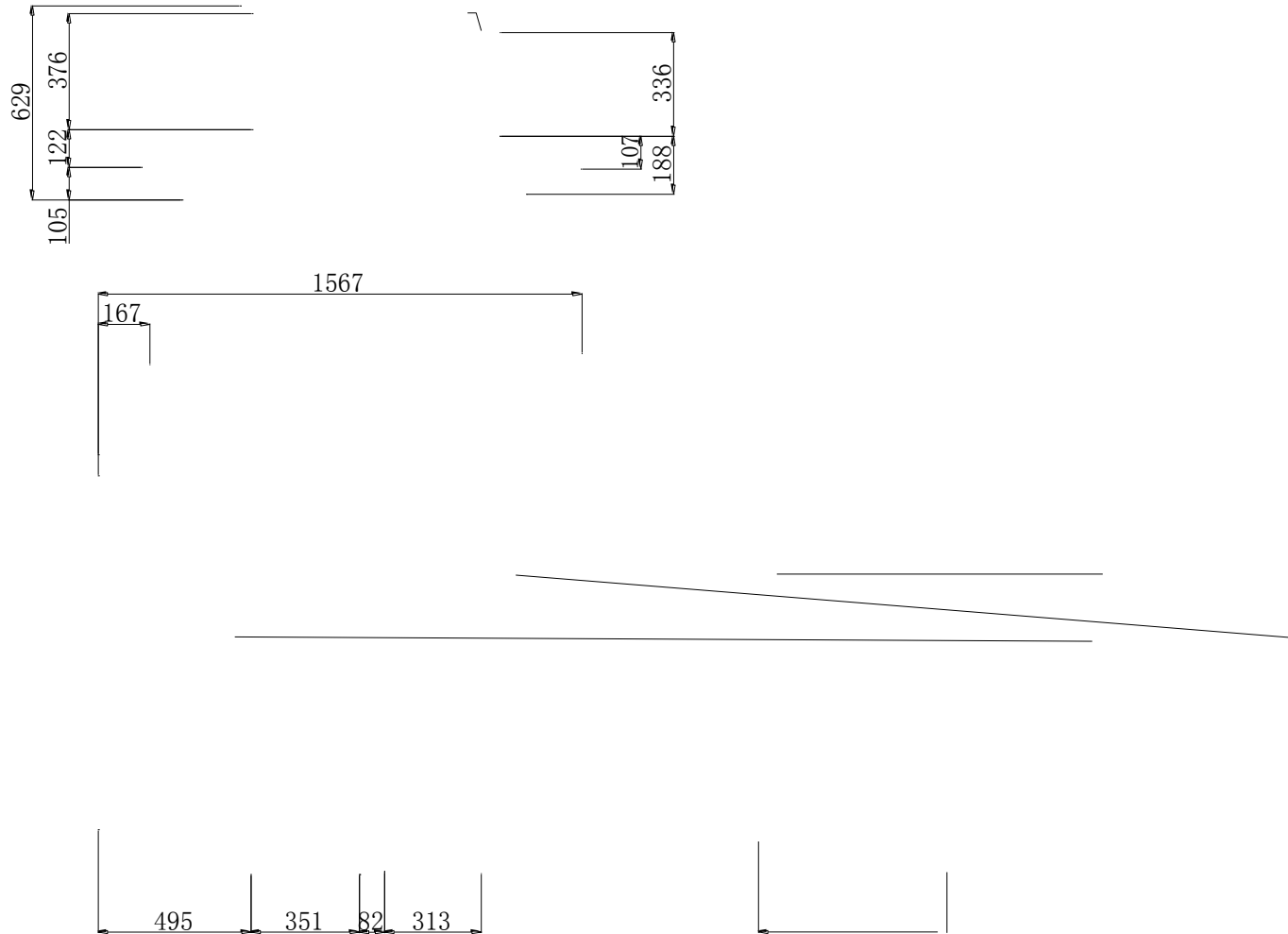
Performance data sheet LT-S-L

For ECO load data, please download the HANBELL model selection software, and select according to design conditions.

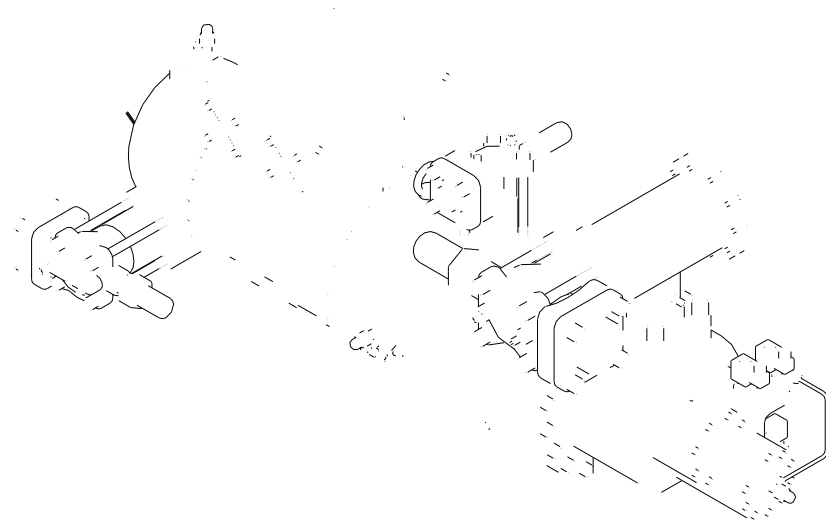
LT-S-83/41-L R404A Performance sheet (including ECO)_380V 50HZ													
Saturated Discharge Temp °C	Saturated Suction Temp °C	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10
30	Cooling capacity KW)	56.57	85.53	114.49	142.57	179.34	220.72	269.30	324.28	384.37	445.62	--	--
	Power(KW)	97.83	101.26	104.68	109.58	113.81	125.05	135.35	145.56	155.04	166.00	--	--
	COP	0.58	0.84	1.09	1.30	1.58	1.77	1.99	2.23	2.48	2.68	--	--
35	Cooling capacity KW)	55.41	82.97	110.54	138.32	174.19	214.83	262.06	314.23	373.02	434.76	498.85	591.80
	Power(KW)	100.74	104.81	111.50	118.19	124.88	131.57	139.38	147.18	157.22	169.48	181.75	195.13
	COP	0.55	0.79	0.99	1.17	1.39	1.63	1.88	2.13	2.37	2.57	2.74	3.03
40	Cooling capacity KW)	54.24	80.41	106.58	134.07	169.05	208.94	254.82	304.18	361.66	423.90	489.02	575.43
	Power(KW)	122.80	127.74	132.67	137.81	143.05	151.30	160.46	170.10	179.88	192.90	204.06	215.93
	COP	0.44	0.63	0.80	0.97	1.18	1.38	1.59	1.79	2.01	2.20	2.40	2.66
45	Cooling capacity KW)	53.08	77.85	102.63	129.82	163.90	203.04	247.57	294.13	350.31	413.04	479.18	559.06
	Power(KW)	129.46	136.58	146.66	151.92	157.67	164.42	173.01	182.37	192.30	206.34	217.48	230.04
	COP	0.41	0.57	0.70	0.85	1.04	1.23	1.43	1.61	1.82	2.00	2.20	2.43
50	Cooling capacity KW)	51.91	75.29	98.67	125.57	158.75	197.15	240.33	284.07	338.96	402.18	469.34	542.69
	Power(KW)	146.29	153.09	159.88	166.46	173.29	180.62	189.17	197.88	207.17	218.90	229.26	242.63
	COP	0.35	0.49	0.62	0.75	0.92	1.09	1.27	1.44	1.64	1.84	2.05	2.24
55	Cooling capacity KW)	50.75	72.73	94.72	121.32	153.60	191.26	233.09	274.02	327.60	391.31	459.50	526.32
	Power(KW)	157.30	165.20	173.10	181.01	188.91	196.81	205.33	213.38	222.04	231.46	241.05	255.22
	COP	0.32	0.44	0.55	0.67	0.81	0.97	1.14	1.28	1.48	1.69	1.91	2.06
60	Cooling capacity KW)	--	--	90.76	117.07	148.46	185.36	225.85	263.97	316.25	380.45	449.66	509.95
	Power(KW)	--	--	186.57	195.55	204.53	213.01	221.49	228.89	236.91	244.02	252.83	267.82
	COP	--	--	0.49	0.60	0.73	0.87	1.02	1.15	1.33	1.56	1.78	1.90

Remarks The performance data above is in accordance with the latest selection software of Hanbell. The software may updated without prior notice

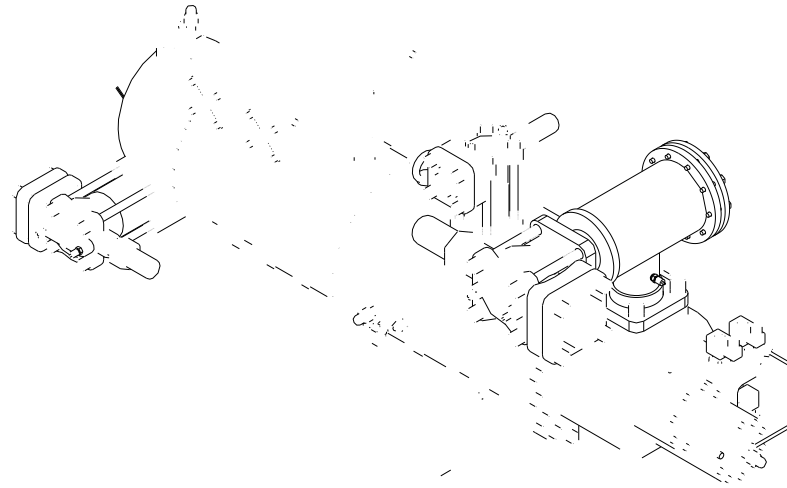
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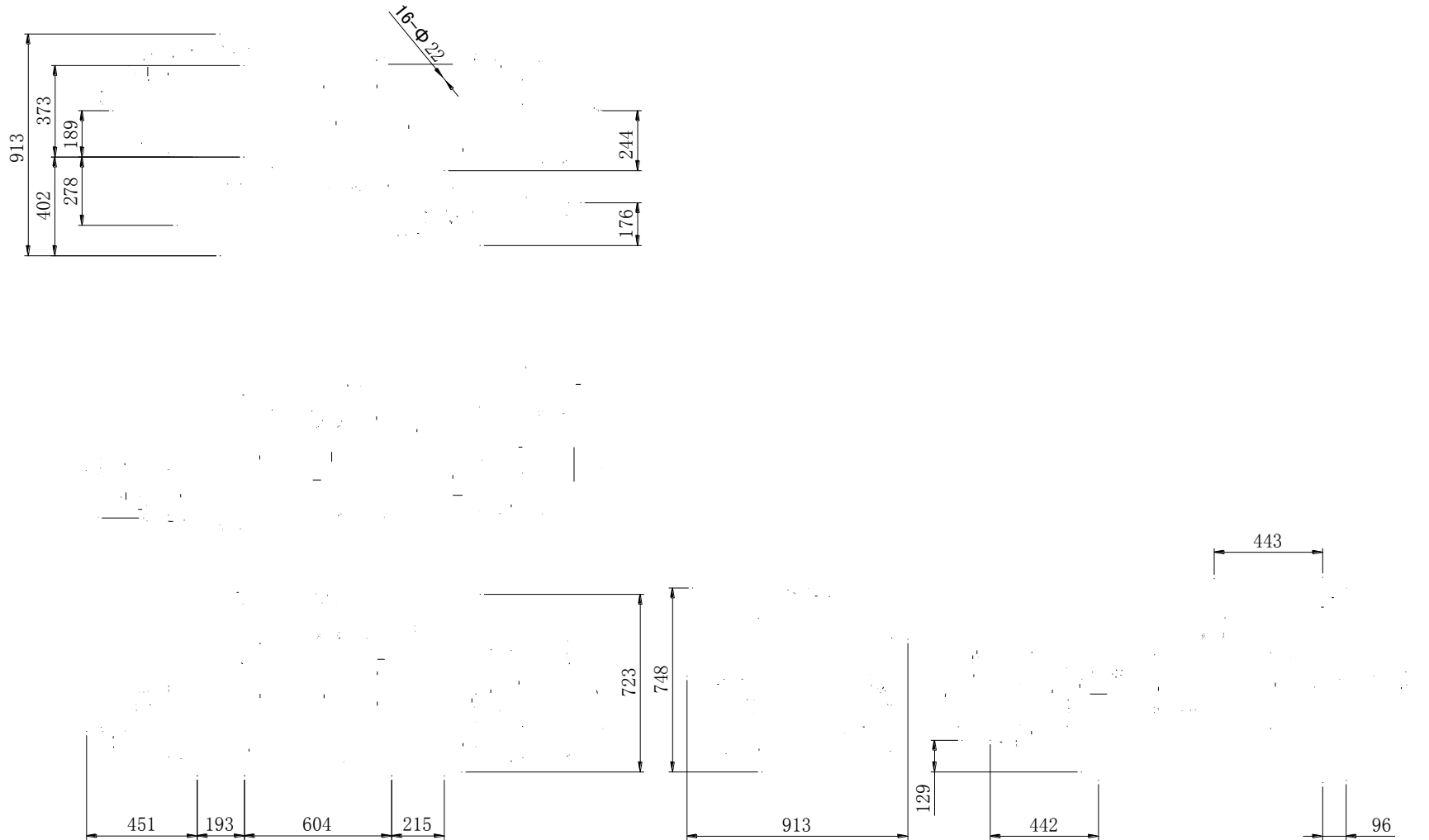
LT-S-30/12 Drawing



LT-S-45/20&55/25 Drawing



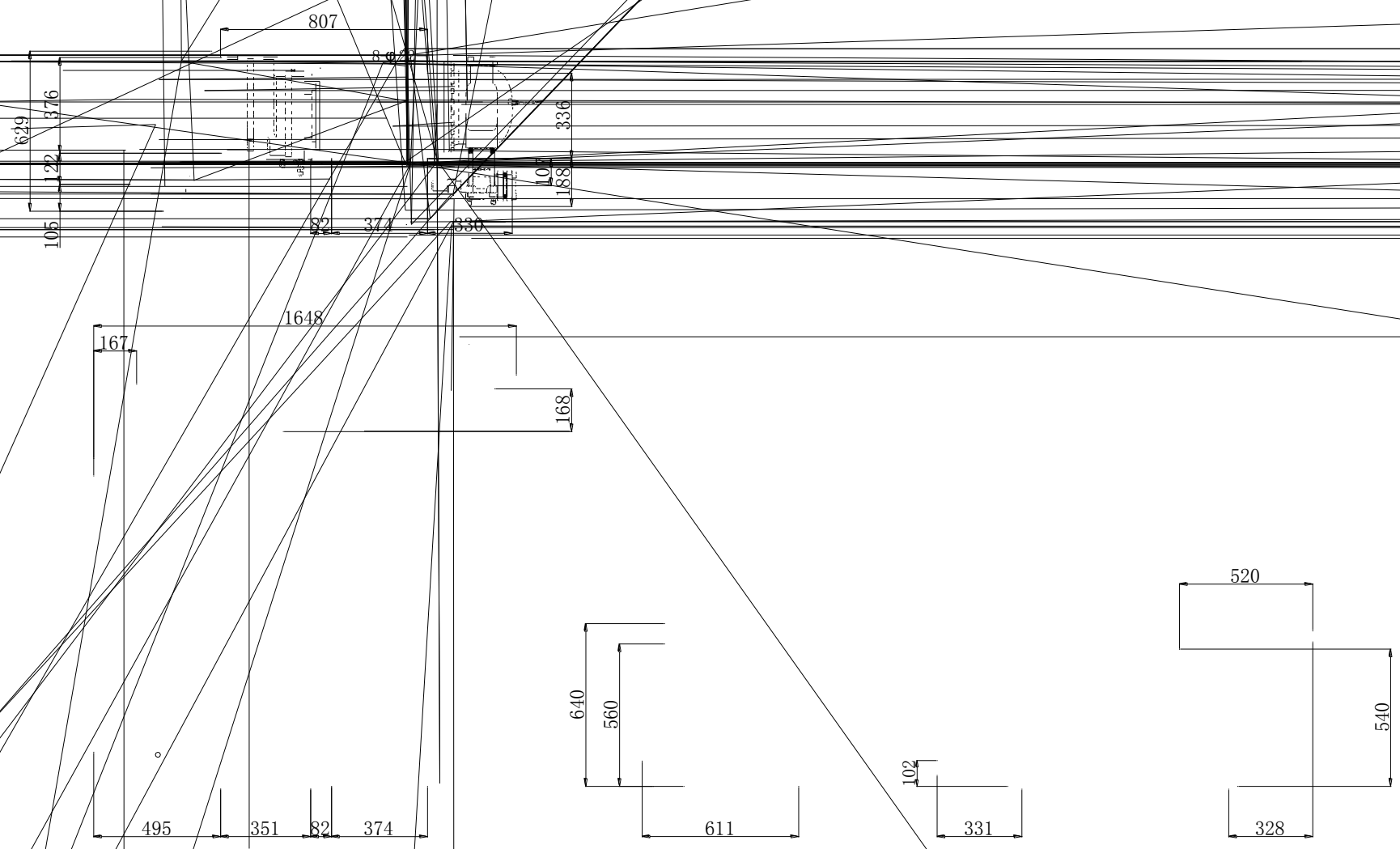
LT-S-65/32&83/41 Drawing



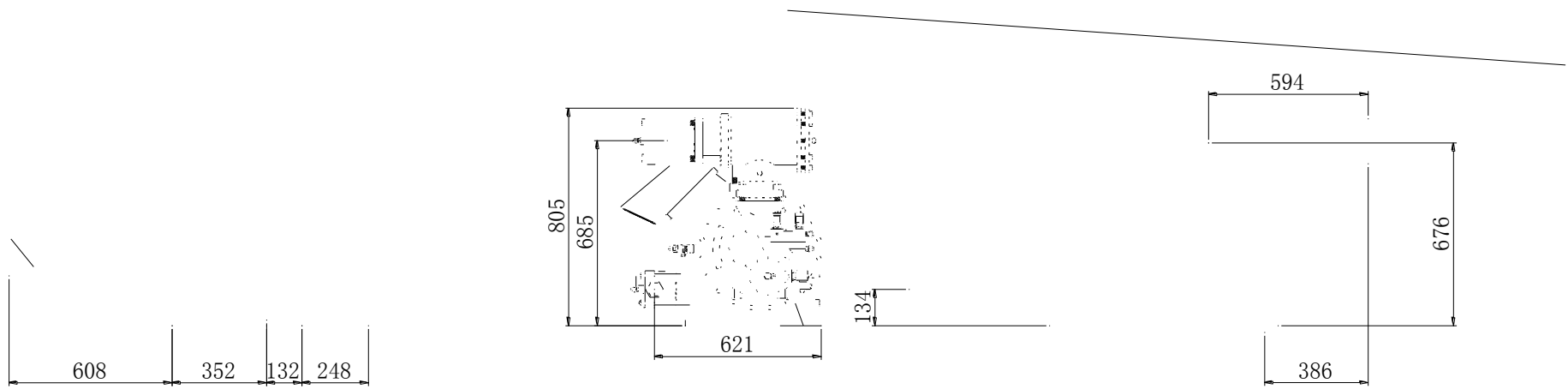
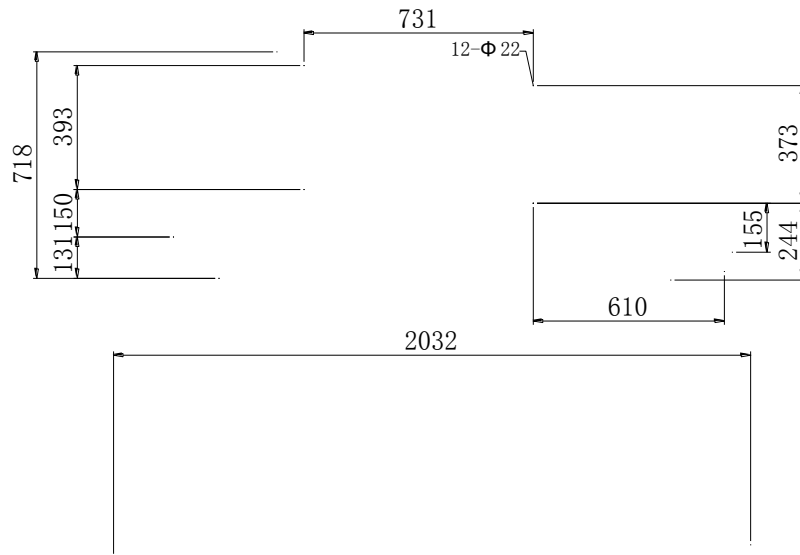


LT-S-20/10- L Drawing

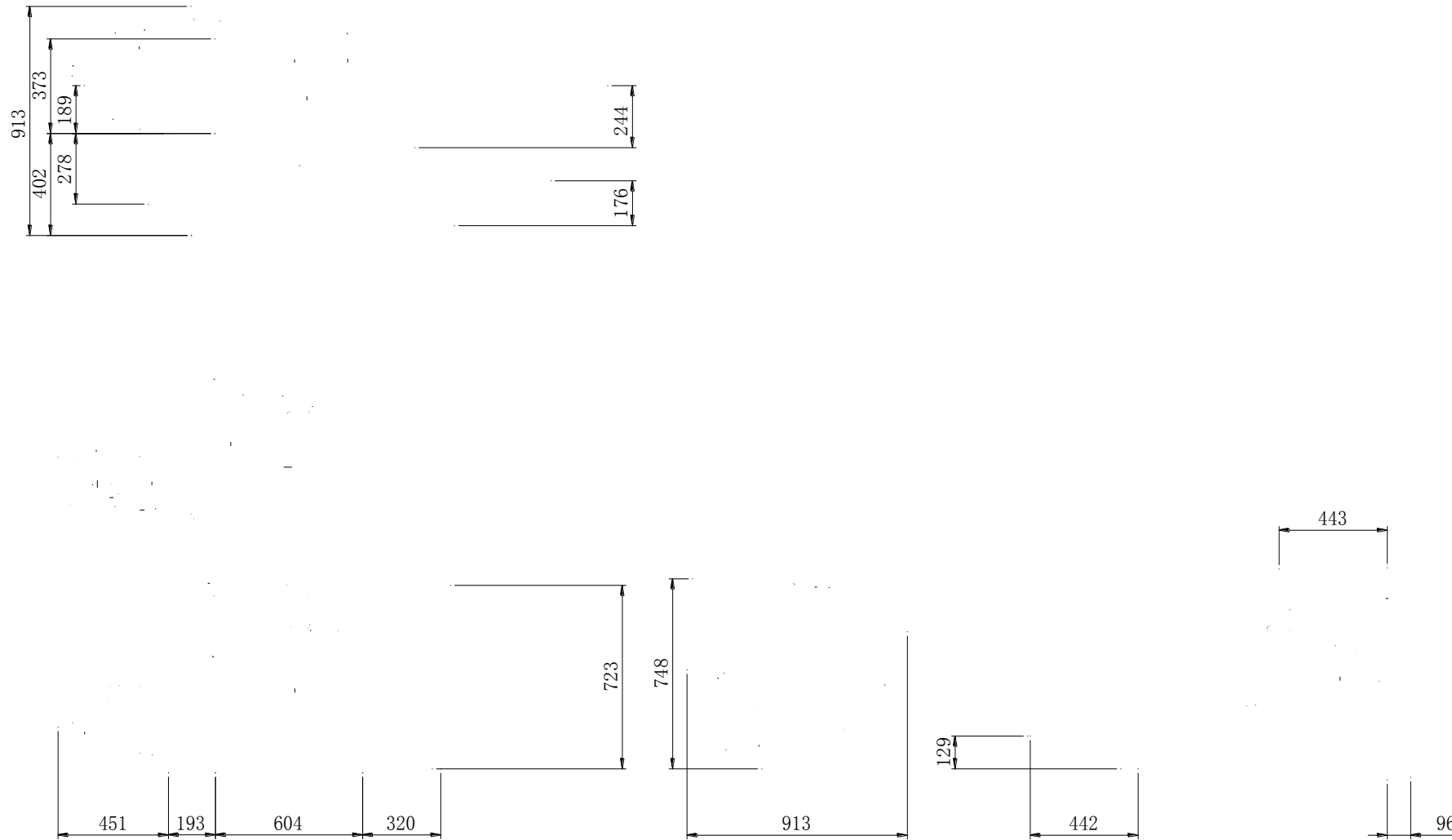
LT-S -L Series Cryogenic Refrigeration Compound Compressor



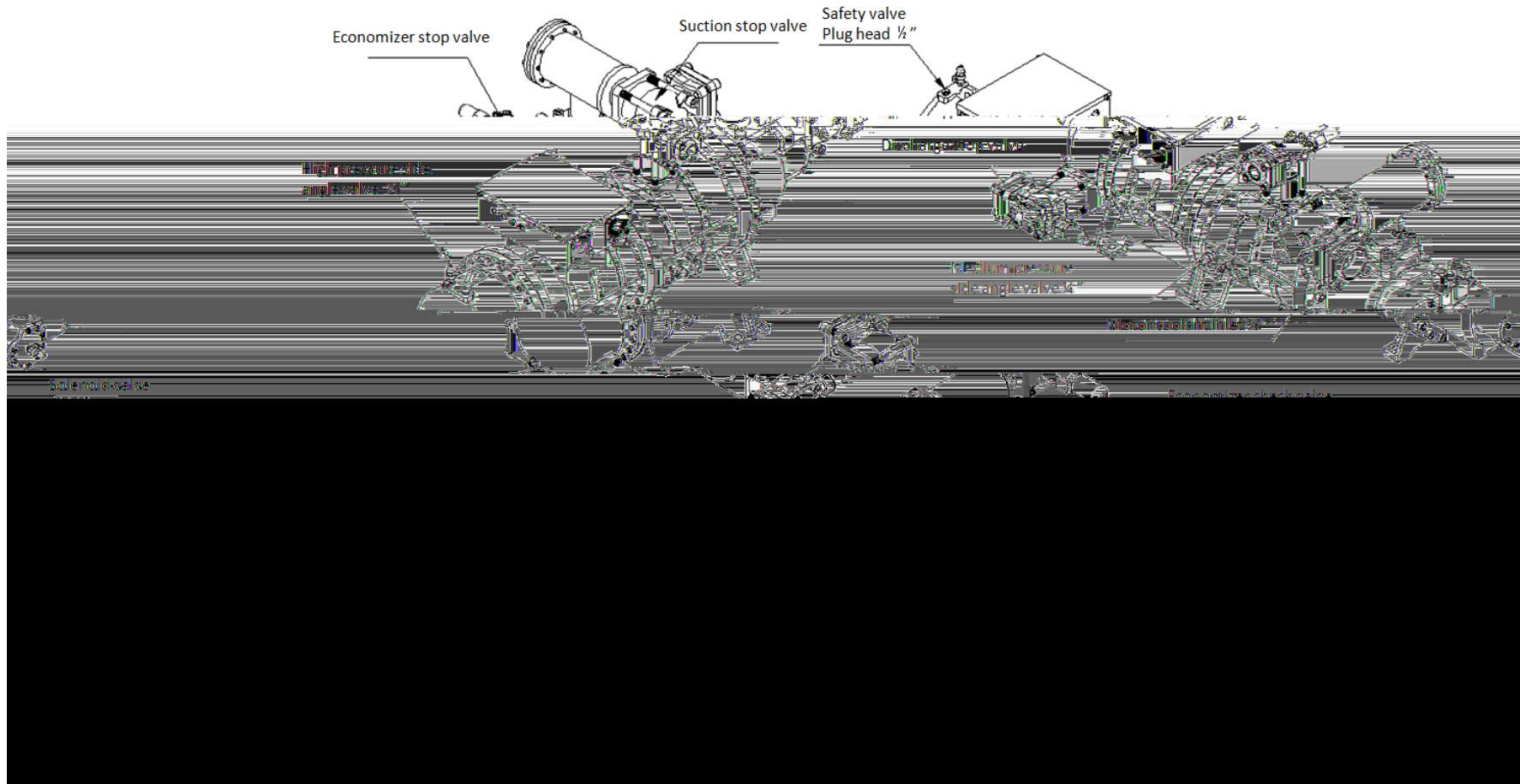
LT-S-45/20-L& LT-S-55/25-L Drawing



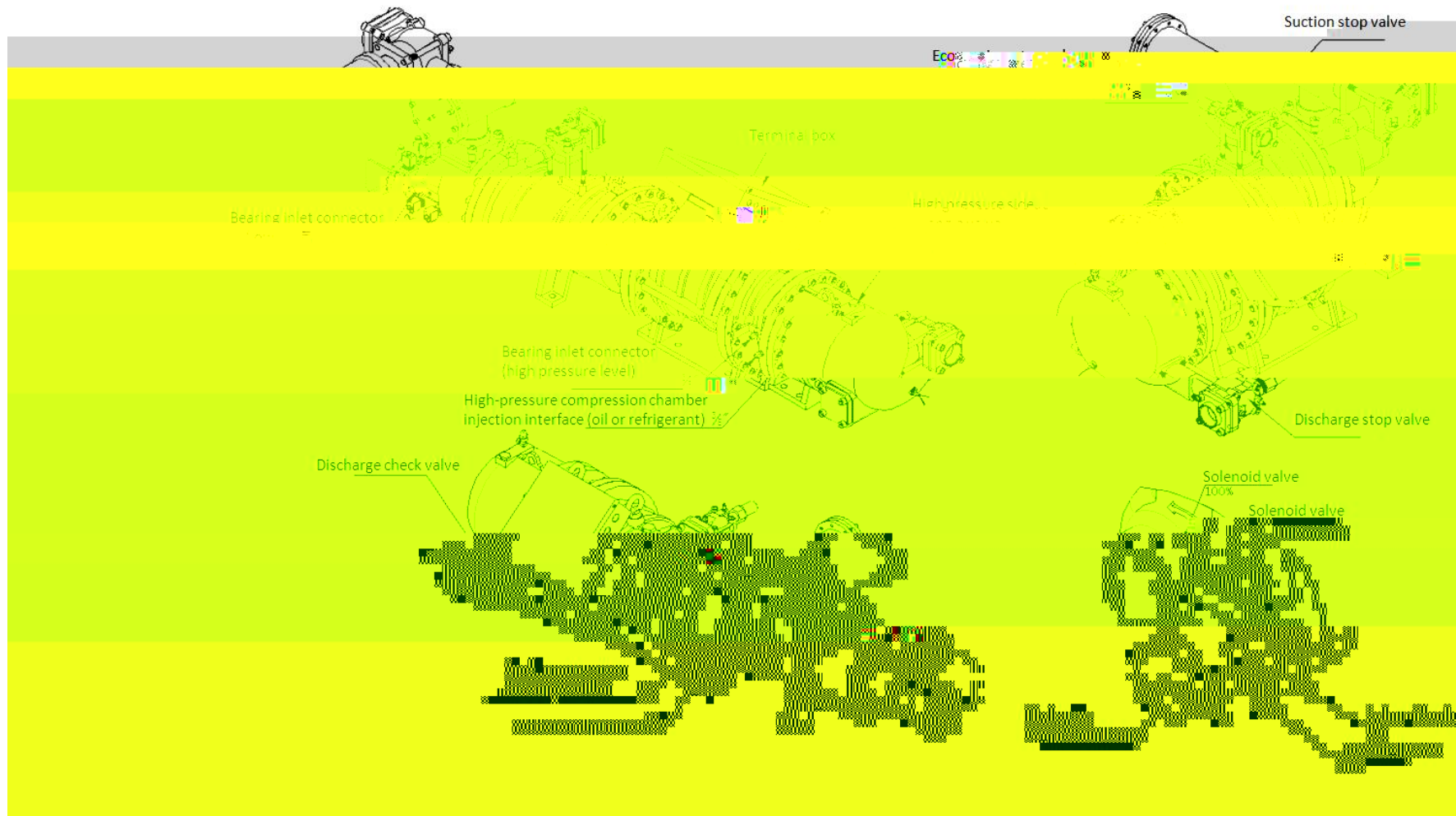
LT-S-65/32-L& LT-S-83/41-L Drawing



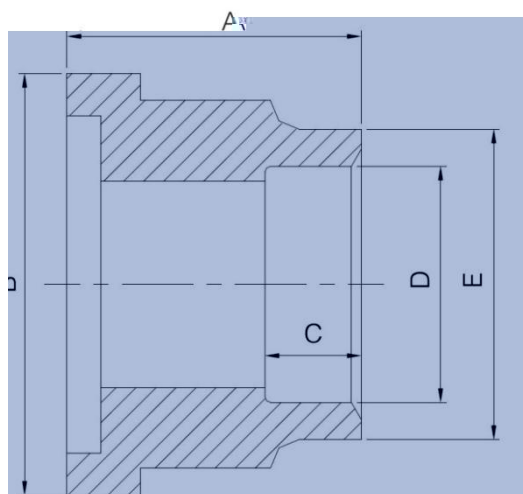
LT-S-20/10 -L &30/12 Drawing



LT-S-45/20&55/25 -L Drawing



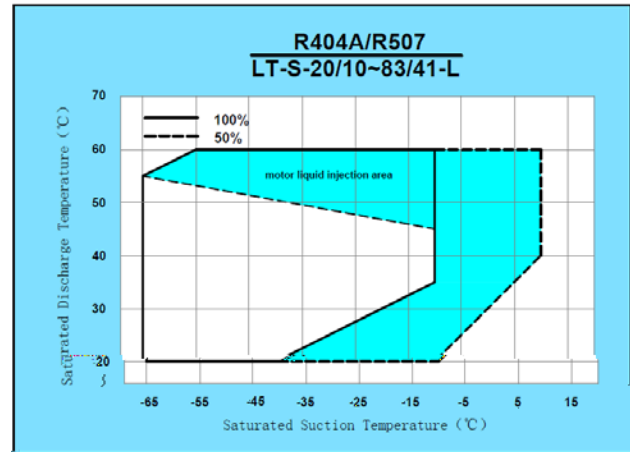
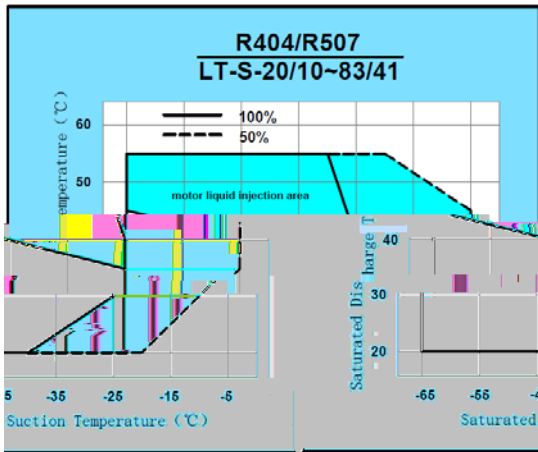
LT-S -L Suction/Discharge casing size and pipe diameter specifications



Casing

Model	Position	Pipe diameter and material		Casing Size				
				A	B	C	D	E
LT-20/10 -L LT-30/12	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	ECO	Copper	1 5/8"	52	75	35	42	52
		Steel	1 1/2"				49.3	64
LT-45/20 LT-55/25 -L	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	ECO	Copper	2 1/8"	50	90	30	55	65
		Steel	2"				61.3	74
LT-83/41 LT-65/32 -L	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	ECO	Copper	2 1/8"	50	90	30	55	65
		Steel	2"				61.3	74

Application Limits



Official website



Official WeChat



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