



ORIGINAL
MANUFACTURED EQUIPMENT

SEMI-HERMETIC

SCREW COMPRESSORS

SINGLE SCREW COMPRESSOR UNIT

ORIGINAL MANUFACTURED EQUIPMENT

SU



Version 50Hz

Watch BITZER video



PRODUCTS SPECIFICATIONS

Single Semi-hermetic or Open drive screw compressors

The proven series of HS and OS screw compressors from BITZER with displacement ranging from 84 to 535m³/h (50 Hz) and of Horse Power (HP) from 20 to 160 HP.

The single compressor packages are available with several options.

Important features

- Robust construction with compact dimensions
- High energy efficient compressors
- High flexibility with capacity control
- Fully piped oil system complete with safety devices
- High efficiency oil separator with level control, oil heaters, thermostat, sight glasses and pressure relief valve
- Intelligent motor protection devices, thermal monitoring, phase sequence and restart time delay
- Demountable suction gas strainer before the compressor inlet
- Liquid receiver with pressure relief valve
- Generously sized liquid filter drier
- Liquid line sight glass
- Maximum allowable pressure 28 bar on discharge
- High and low pressure switches
- Oil charge for start up supplied

Comprehensive application range

- Refrigerants: R134a, R404A, R507A and R407C. Other refrigerants available on request.
- High, medium and low temperature
- Shipped with a Nitrogen protective holding charge

Options

- Water cooled condenser to suit the application
- Water cooled or air cooled oil coolers (if required) with oil temperature regulating valve
- Suction accumulator to reduce the danger of liquid flood back to the compressor
- Pressure gauges: High and Low pressure gauges with isolation valve
- Electrical control board complete with suction pressure management, compressor contactors and overloads, run lights and individual fault lights. (Multiple options available)
- Optimum economiser operation for both medium and low temperature application using high quality heat exchanger
- Insulated sub cooled liquid line with isolation valve
- Varipack frequency inverter
- IQ Module SE-i1 for Enhanced Protection and Monitoring

Performance data

All given values of the cooling capacity (kW) are based on 50 Hz. The liquid temperature is defined as 5 K above saturated temperature according to EN 12900 at economiser inlet (t_{cu} = t_{ms} + 5 K).



ASERCOM certified compressor data see BITZER Software.



Certified Management System
DIN EN ISO 9001:2000

Factory ISO9001 Quality Certification.

Explanation of type designation

Example

SU - L - HSN7471 - 75

SU - Screw Unit

SU - **L** - HSN7471 - 75

Application range: L - Low temperature, M - Medium temperature

SU - L - **HSN7471** - 75

Compressor model

SU - L - HSN7471 - **75**

Nominal motor horsepower

PERFORMANCE DATA

R134a

Performance data, based on 10k suction gas superheat, economizer operation; 50Hz

Unit Model	Cond. Temp. °C		Cooling Capacity Q_o [kW]			Total Heat Rejection THR [kW]			
			10	5	0	Evaporating Temperature °C			
						-5	-10	-15	-20
SU-M-HSK5343-30	30	Q			57.04	47.92	39.84	32.73	26.49
		THR			69.10	59.64	51.29	43.95	37.52
	40	Q	75.67	64.61	54.72	45.92	38.12	31.24	25.20
		THR	90.59	79.22	69.13	60.20	52.29	45.31	39.14
	50	Q	72.21	61.57	52.04	43.55	36.02	29.37	23.53
		THR	90.90	80.02	70.31	61.70	54.09	47.42	41.62
60	Q	68.17	57.97	48.84	40.70	33.47			
	THR	92.07	81.67	72.34	64.10	56.97			
SU-M-HSK5353-35	30	Q			68.11	57.24	47.63	39.16	31.75
		THR			81.84	70.66	60.79	52.08	44.42
	40	Q	90.32	77.12	65.33	54.84	45.54	37.36	30.18
		THR	107.68	94.12	82.07	71.39	61.95	53.65	46.35
	50	Q	85.94	73.33	62.06	52.01	43.10	35.22	28.31
		THR	107.44	94.53	83.06	72.91	63.90	56.12	49.41
60	Q	80.89	68.98	58.31	48.77	40.27			
	THR	108.09	95.98	85.11	75.57	67.17			
SU-M-HSK5363-40	30	Q			77.37	65.51	55.00	45.73	37.60
		THR			92.74	80.59	69.85	60.34	51.93
	40	Q	102.47	87.93	74.89	63.26	52.92	43.79	35.77
		THR	122.12	107.18	93.89	82.10	71.67	62.49	54.42
	50	Q	98.08	84.02	71.38	60.08	50.02	41.09	33.22
		THR	122.58	108.22	95.38	83.98	73.92	65.29	57.82
60	Q	92.40	78.98	66.89	56.05	46.34			
	THR	123.30	109.58	97.29	86.45	77.04			
SU-M-HSK6451-40	30	Q			90.80	76.06	63.01	51.52	41.46
		THR			107.33	92.53	79.45	67.91	57.74
	40	Q	120.94	103.01	87.01	72.78	60.20	49.14	39.46
		THR	142.14	124.11	108.21	93.98	81.40	70.34	60.46
	50	Q	114.96	97.86	82.59	69.02	57.01	46.42	37.15
		THR	142.06	125.06	109.89	96.32	84.31	73.52	63.85
60	Q	107.94	91.84	77.42	64.57	53.15			
	THR	142.64	126.64	112.32	99.37	87.75			
SU-M-HSK6461-40	30	Q			108.54	91.38	76.23	62.92	51.29
		THR			129.84	112.18	96.53	82.83	70.99
	40	Q	143.35	122.40	103.72	87.14	72.48	59.57	48.26
		THR	170.55	149.00	129.82	112.84	97.88	84.67	73.06
	50	Q	135.75	115.71	97.84	81.95	67.88	55.46	44.55
		THR	169.05	148.61	130.34	114.05	99.78	87.06	76.05
60	Q	126.69	107.78	90.90	75.86	62.50			
	THR	167.89	148.58	131.40	116.06	102.60			
SU-M-HSK7451-50	30	Q			132.57	110.45	91.02	74.02	59.21
		THR			156.37	134.45	115.32	98.52	83.71
	40	Q	177.41	150.26	126.25	105.09	86.52	70.28	56.15
		THR	207.51	180.56	156.95	136.19	117.92	101.68	87.15
	50	Q	166.51	141.07	118.58	98.74	81.31	66.05	52.75
		THR	205.21	180.27	158.38	138.94	121.71	106.05	91.75
60	Q	153.62	130.29	109.62	94.50	75.21			
	THR	204.02	181.29	160.92	140.50	126.31			
SU-M-HSK7461-60	30	Q			149.47	124.85	103.23	84.31	67.83
		THR			175.97	151.15	129.43	110.41	93.73
	40	Q	198.68	168.59	141.96	118.48	97.87	79.84	64.15
		THR	232.58	202.39	175.66	152.28	131.67	113.54	97.45
	50	Q	186.80	158.48	133.41	111.31	91.88	74.85	60.01
		THR	230.00	201.68	176.61	154.61	135.08	117.75	102.21
60	Q	173.20	146.94	123.66	103.06	84.87			
	THR	227.90	201.64	178.36	157.66	139.07			
SU-M-HSK7471-70	30	Q			162.93	136.82	113.90	93.88	76.47
		THR			194.13	167.12	143.50	122.88	105.17
	40	Q	214.90	182.87	154.52	129.53	107.58	88.36	71.59
		THR	254.70	221.67	192.52	166.83	144.38	124.76	107.59
	50	Q	201.63	171.34	144.54	120.88	100.05	81.77	65.76
		THR	250.13	218.94	191.54	167.28	146.05	127.47	111.26
60	Q	186.20	158.01	133.04	110.95	91.44			
	THR	245.60	216.71	191.24	168.75	149.04			
SU-M-HSK8551-80	30	Q			210.52	176.59	146.82	120.83	98.24
		THR			247.72	214.69	185.72	160.23	137.84
	40	Q	278.80	236.80	199.62	166.84	138.06	112.88	90.96
		THR	326.40	285.20	249.12	217.44	189.46	164.48	141.96
	50	Q	261.80	221.55	185.91	154.43	126.74	102.46	81.25
		THR	325.10	286.35	252.11	221.63	194.34	169.46	146.35
60	Q	241.09	202.85	168.92	138.92	112.47			
	THR	326.59	289.85	256.82	227.02	199.67			
SU-M-HSK8561-90	30	Q			234.95	197.04	163.83	134.87	109.73
		THR			277.15	239.44	206.33	177.57	152.33
	40	Q	312.02	264.90	223.35	186.84	154.86	126.97	102.74
		THR	366.52	319.70	278.65	242.74	211.16	183.27	158.64
	50	Q	291.70	247.24	208.04	173.58	143.36	116.94	93.90
		THR	364.00	320.24	281.74	247.78	217.66	190.74	166.50
60	Q	213.94	174.13	140.16	111.35	87.09			
	THR	299.34	258.53	223.66	193.85	168.29			

operation at this conditions allowed only without Economizer

PERFORMANCE DATA

R134a

Performance data, based on 10k suction gas superheat, economizer operation; 50Hz

Unit Model	Cond. Temp. °C		Cooling Capacity		Q _o [kW]	Total Heat Rejection		THR [kW]		
			10	5	Evaporating Temperature °C					
					0	-5	-10	-15	-20	
SU-M-HSK8571-110	30	Q			264.11	222.64	186.27	154.55	127.03	
		THR			312.01	269.94	232.97	200.75	172.83	
	40	Q	347.55	296.31	251.01	211.15	176.23	145.76	119.28	
		THR	410.85	358.71	312.71	272.35	237.13	206.46	179.78	
	50	Q	326.02	277.40	234.51	196.80	163.73	134.82	109.62	
		THR	405.22	356.20	313.21	275.60	242.63	213.92	188.92	
	60	Q	300.01	254.83	214.99	179.91	149.09			
		THR	399.91	354.93	315.59	281.11	250.89			

PERFORMANCE DATA

R404A

Performance data, based on 10k suction gas superheat, economizer operation; 50Hz

Unit Model	Cond. Temp. °C		Cooling Capacity Q_o [kW]					Total Heat Rejection		THR [kW]	
			Evaporating Temperature °C					-10	-15		-20
			5	0	-5	-10	-15				
SU-M-HSK5343-30	30	Q	109.42	94.71	81.45	69.53	58.87	49.37			
		THR	130.12	115.21	101.65	89.53	78.73	69.02			
	40	Q	102.91	89.06	76.56	65.31	55.23	46.22			
		THR	128.41	114.46	101.76	90.41	80.13	70.92			
	50	Q	94.84	81.98	70.34	59.82	50.33	41.79			
		THR	126.84	113.98	102.24	91.52	81.83	72.89			
SU-M-HSK5353-35	30	Q	127.30	110.36	95.05	81.28	68.93	57.89			
		THR	151.30	134.06	118.45	104.48	91.93	80.69			
	40	Q	119.43	103.57	89.24	76.34	64.76	54.40			
		THR	148.93	132.97	118.54	105.44	93.76	83.20			
	50	Q	110.05	95.42	82.19	70.23	59.46	49.77			
		THR	147.15	132.52	119.19	107.23	96.26	86.47			
SU-M-HSK5363-40	30	Q	143.71	125.11	108.20	92.90	79.09	66.69			
		THR	170.71	151.71	134.50	118.90	104.79	92.19			
	40	Q	135.60	117.96	101.92	87.40	74.27	62.43			
		THR	168.80	150.96	134.72	120.00	106.67	94.63			
	50	Q	124.74	108.39	93.50	79.97	67.69	56.54			
		THR	166.24	149.79	134.80	121.17	108.69	97.24			
SU-M-HSK6451-50	30	Q	174.21	150.81	129.68	110.69	93.69	78.53			
		THR	203.51	179.91	158.68	139.79	122.79	107.63			
	40	Q	161.72	140.01	120.46	102.91	87.19	73.17			
		THR	198.32	176.71	157.26	139.81	124.09	109.87			
	50	Q	146.19	126.56	108.87	92.94	78.62	65.77			
		THR	191.99	172.66	155.07	139.24	124.82	111.77			
SU-M-HSK6461-60	30	Q	206.52	178.66	153.58	131.09	111.00	93.10			
		THR	245.12	216.56	190.78	167.69	147.10	128.80			
	40	Q	192.30	166.28	142.89	121.93	103.14	86.34			
		THR	239.30	212.78	188.89	167.43	148.14	130.84			
	50	Q	173.09	149.50	128.28	109.20	92.01	76.53			
		THR	230.99	207.00	185.38	165.90	148.21	132.03			
SU-M-HSK7451-70	30	Q	260.01	223.17	190.45	161.47	135.87	113.30			
		THR	299.71	263.87	232.05	203.97	179.07	157.00			
	40	Q	237.71	204.07	174.23	147.81	124.44	103.80			
		THR	289.61	256.97	228.13	202.51	179.74	159.50			
	50	Q	209.92	180.18	153.75	130.26	109.38	90.82			
		THR	277.42	248.88	223.45	200.66	180.18	161.72			
SU-M-HSK7461-80	30	Q	287.04	246.92	211.15	179.39	151.27	126.45			
		THR	334.84	294.22	258.25	226.49	198.27	173.25			
	40	Q	262.29	225.65	193.11	164.27	138.76	116.22			
		THR	321.99	285.25	252.71	223.87	198.26	175.42			
	50	Q	232.46	200.04	171.24	145.68	122.98	102.84			
		THR	307.36	275.14	246.44	220.88	197.98	177.64			
SU-M-HSK7471-90	30	Q	310.43	267.13	228.54	194.28	163.96	137.18			
		THR	367.13	322.53	282.74	247.38	216.06	188.58			
	40	Q	285.26	245.33	209.85	178.38	150.48	125.76			
		THR	353.76	312.73	276.25	243.88	215.08	189.56			
	50	Q	252.64	217.06	185.45	157.36	132.36	110.05			
		THR	336.24	299.76	267.35	238.36	212.56	189.45			
SU-M-HSK8551-110	30	Q	409.56	351.98	300.74	255.27	215.04	179.57			
		THR	479.46	421.98	370.94	325.67	285.64	250.37			
	40	Q	378.44	324.56	276.58	233.95	196.18	162.84			
		THR	467.14	414.16	367.08	325.05	287.68	254.54			
	50	Q	269.39	220.80	179.20	143.80	113.84	88.68			
		THR	367.39	317.60	275.00	238.70	207.94	182.28			
SU-M-HSK8561-125	30	Q	455.08	390.78	333.83	283.60	239.42	200.66			
		THR	534.68	469.88	412.63	362.20	318.12	279.56			
	40	Q	416.84	357.04	304.33	257.96	217.24	181.54			
		THR	516.14	456.74	404.53	358.76	318.64	283.34			
	50	Q	368.69	315.13	268.01	226.61	181.50	150.50			
		THR	496.09	444.23	398.71	358.71	313.50	279.50			
SU-M-HSK8571-140	30	Q	500.94	431.66	369.81	315.03	266.75	224.35			
		THR	589.94	519.26	456.41	400.83	352.15	309.75			
	40	Q	459.17	394.59	337.48	287.12	242.82	203.90			
		THR	568.47	503.29	445.98	395.72	351.62	313.10			
	50	Q	406.54	348.85	297.98	253.15	213.66	178.89			
		THR	544.04	487.05	437.08	393.25	354.76	320.79			

operation at this conditions allowed only without Economizer

PERFORMANCE DATA

R404A

Performance data, based on 10k suction gas superheat, economizer operation; 50Hz

Unit Model	Cond. Temp. °C		Cooling Capacity Q_o [kW]				Total Heat Rejection THR [kW]		
			Evaporating Temperature °C						
			-15	-20	-25	-30	-35	-40	-45
SU-L-HSN5343-20	30	Q	58.67	49.45	41.26	34.02	27.64	22.07	17.22
		THR	79.97	70.15	61.46	53.61	46.58	40.27	34.57
	40	Q	55.55	46.68	38.76	31.74	25.54	20.09	15.33
		THR	82.25	72.68	64.06	56.24	49.04	42.49	36.33
	50	Q	29.70	23.40	18.14	13.77	22.36	17.02	12.33
		THR	29.70	23.40	18.14	13.77	51.56	44.42	37.73
SU-L-HSN5353-25	30	Q	68.48	57.74	48.21	39.77	32.35	25.87	20.23
		THR	92.88	81.44	71.21	62.07	53.85	46.47	39.84
	40	Q	64.75	54.49	45.34	37.22	30.05	23.76	18.26
		THR	95.05	83.99	74.04	64.92	56.75	49.16	42.26
	50	Q	35.60	28.10	21.90	16.71	26.58	20.47	15.11
		THR	35.60	28.10	21.90	16.71	59.68	51.77	44.31
SU-L-HSN5363-30	30	Q	78.22	66.03	55.19	45.60	37.17	29.80	23.41
		THR	105.82	92.73	80.99	70.50	61.07	52.70	45.21
	40	Q	73.92	62.36	52.07	42.94	34.90	27.85	21.71
		THR	108.32	95.76	84.47	74.24	64.90	56.55	49.01
	50	Q	42.10	33.50	26.20	20.20	15.28	24.82	18.93
		THR	42.10	33.50	26.20	20.20	15.28	60.92	53.13
SU-L-HSN6451-40	30	Q	94.42	79.55	66.35	54.67	44.37	35.35	27.48
		THR	125.62	109.65	95.35	82.67	71.27	61.15	52.08
	40	Q	89.07	75.01	62.52	51.48	41.76	33.25	25.85
		THR	127.27	112.21	98.62	86.38	75.36	65.55	56.65
	50	Q	52.70	41.80	32.70	25.20	37.70	29.78	22.88
		THR	52.70	41.80	32.70	25.20	80.20	70.58	61.78
SU-L-HSN6461-50	30	Q	108.66	91.60	76.52	63.23	51.58	41.42	32.60
		THR	146.96	128.50	111.92	97.13	83.88	72.12	61.60
	40	Q	101.25	85.44	71.45	59.11	48.25	38.76	30.50
		THR	147.85	130.34	114.65	100.41	87.75	76.46	66.40
	50	Q	60.80	48.40	38.10	53.12	43.18	34.40	26.70
		THR	60.80	48.40	38.10	104.32	92.28	81.50	72.10
SU-L-HSN7451-60	30	Q	135.97	113.82	94.37	77.34	62.47	49.53	38.32
		THR	181.47	157.02	135.97	117.84	101.97	87.83	75.12
	40	Q	124.61	104.43	86.69	71.12	57.50	45.61	35.29
		THR	179.11	157.23	138.29	121.62	106.90	93.71	81.79
	50	Q	74.40	59.00	76.64	62.89	50.77	40.14	30.84
		THR	74.40	59.00	141.14	125.89	112.37	100.34	89.64
SU-L-HSN7461-70	30	Q	151.83	127.52	106.14	87.39	70.99	56.68	44.24
		THR	200.93	174.72	151.54	131.09	113.09	97.18	82.94
	40	Q	140.75	118.23	98.45	81.10	65.93	52.69	41.18
		THR	199.95	175.63	154.05	134.90	117.93	102.79	89.38
	50	Q	125.94	105.77	88.02	72.40	58.67	46.65	36.15
		THR	198.34	176.37	156.92	139.50	123.77	109.55	96.55
SU-L-HSN7471-75	30	Q	160.05	134.49	112.10	92.53	75.47	60.67	47.87
		THR	215.35	187.49	162.80	141.03	121.67	104.57	89.47
	40	Q	147.06	123.77	103.34	85.46	69.83	56.22	44.41
		THR	213.46	187.57	164.54	144.06	125.93	109.82	95.61
	50	Q	130.29	109.78	91.71	75.79	61.77	49.44	38.61
		THR	210.89	187.48	166.51	147.79	130.97	116.14	103.21
SU-L-HSN8571-125	30	Q	267.39	225.22	188.31	156.11	128.11	103.84	82.90
		THR	360.19	312.52	270.41	233.61	201.51	173.84	150.30
	40	Q	244.61	205.67	171.56	141.72	115.68	93.01	73.33
		THR	352.61	307.87	268.66	234.32	204.18	177.91	154.93
	50	Q	216.05	181.02	150.21	123.12	99.30	78.37	59.97
		THR	344.55	303.52	267.41	235.32	206.60	180.67	156.87
SU-L-HSN8591-160	30	Q	334.08	280.30	233.42	192.65	157.28	126.66	100.22
		THR	444.78	386.00	334.82	290.35	251.28	217.06	186.62
	40	Q	302.53	253.99	211.53	174.42	142.03	113.79	89.19
		THR	436.73	383.59	336.93	295.52	258.63	225.39	195.29
	50	Q	265.80	223.04	185.37	152.12	122.71	96.63	73.38
		THR	435.70	388.04	344.97	305.62	269.31	235.53	203.58

PERFORMANCE DATA

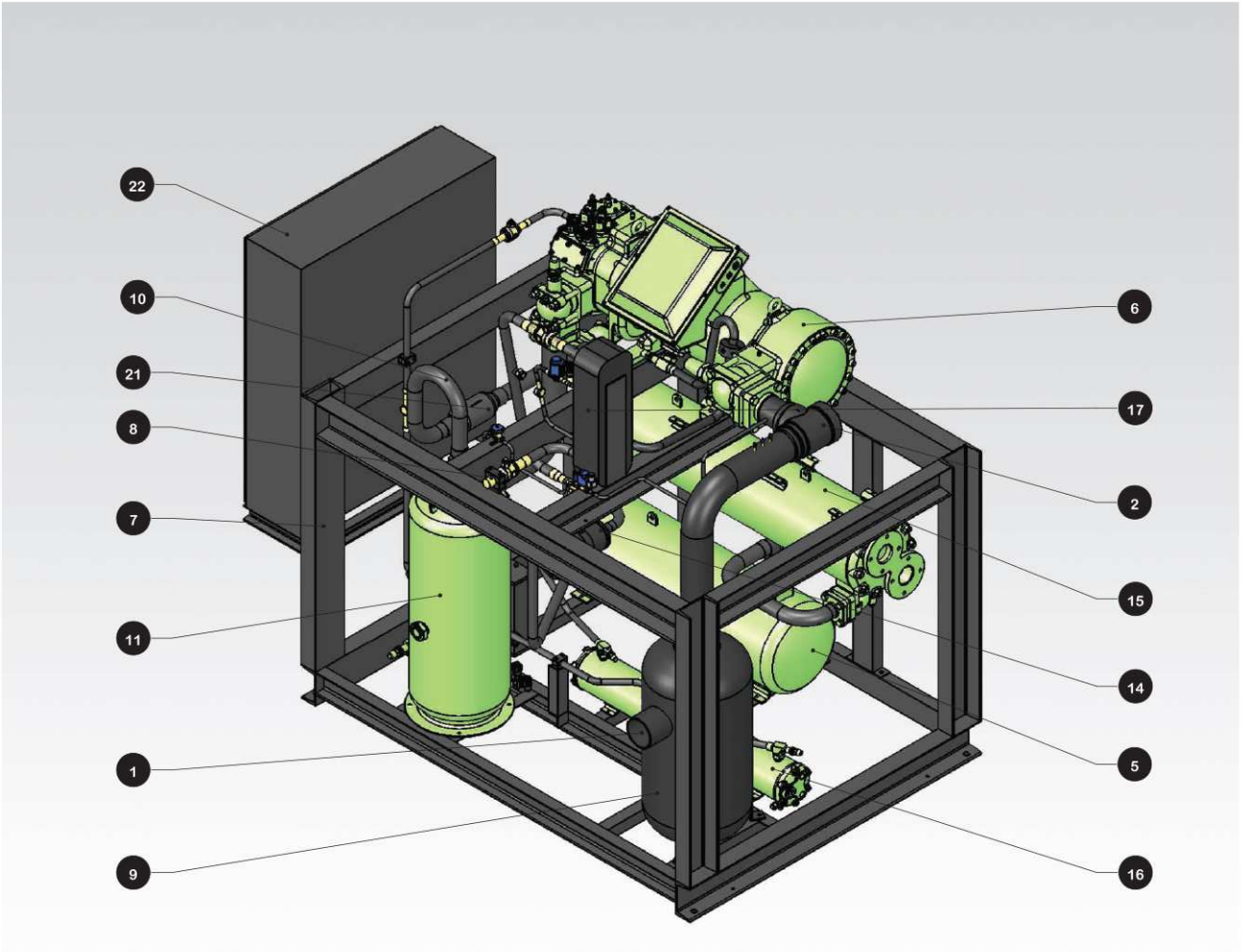
R407C

Performance data, based on 10k suction gas superheat, economizer operation; 50Hz

Unit Model	Cond. Temp. °C		Cooling Capacity Q_o [kW]					Total Heat Rejection THR [kW]		
			Evaporating Temperature °C					-10	-15	-20
			10	5	0	-5				
SU-M-HSK5343-30	30	Q	112.64	97.02	82.96	70.36	59.12	49.15	40.35	
		THR	131.23	115.09	100.58	87.60	76.03	65.82	56.85	
	40	Q	106.58	91.60	78.11	66.00	55.19	45.57	37.07	
		THR	129.08	113.80	100.01	87.50	76.29	66.37	57.67	
	50	Q	98.62	84.36	71.51	59.95	49.62	40.42	32.28	
		THR	126.32	111.86	98.71	86.75	75.92	66.12	57.38	
SU-M-HSK5353-35	30	Q	130.75	112.83	96.66	82.15	69.18	57.66	47.47	
		THR	152.45	133.73	116.86	101.89	88.54	76.72	66.28	
	40	Q	124.37	107.11	91.55	77.56	65.06	53.93	44.07	
		THR	150.77	132.91	116.85	102.36	89.46	77.83	67.57	
	50	Q	115.72	99.32	84.52	71.22	59.32	48.73	39.35	
		THR	147.92	131.42	116.42	102.82	90.52	79.43	69.45	
SU-M-HSK5363-40	30	Q	0.00	126.63	109.04	93.17	78.93	66.22	54.94	
		THR	0.00	149.83	131.64	115.27	100.63	87.52	75.94	
	40	Q	139.79	120.88	103.74	88.30	74.44	62.09	51.14	
		THR	168.69	149.28	131.74	115.90	101.64	89.09	78.04	
	50	Q	130.69	112.61	96.25	81.54	68.36	56.64	46.27	
		THR	166.29	148.01	131.35	116.24	102.66	90.74	80.17	
SU-M-HSK6451-50	30	Q	0.00	152.20	130.51	111.00	93.56	78.05	64.34	
		THR	0.00	177.80	155.61	135.80	118.16	102.45	88.64	
	40	Q	169.09	145.75	124.68	105.74	88.80	73.73	60.37	
		THR	201.89	178.15	156.88	137.74	120.70	105.63	92.17	
	50	Q	159.24	136.80	116.53	98.29	81.95	67.37	54.42	
		THR	200.24	178.10	158.03	139.79	123.35	108.57	95.42	
SU-M-HSK6461-60	30	Q	0.00	181.92	155.73	132.26	111.32	92.73	76.33	
		THR	0.00	214.82	187.63	163.36	141.72	122.53	105.53	
	40	Q	202.69	174.34	148.81	125.92	105.47	87.30	71.20	
		THR	243.99	214.74	188.41	164.72	143.67	124.90	108.30	
	50	Q	190.40	163.26	138.79	116.79	97.07	79.45	63.74	
		THR	241.00	213.46	188.49	165.89	145.57	127.15	110.64	
SU-M-HSK7451-70	30	Q	267.75	229.29	194.99	164.56	137.68	114.07	93.43	
		THR	301.05	263.29	229.69	199.86	173.38	150.17	129.73	
	40	Q	251.37	214.93	182.47	153.66	128.18	105.75	86.10	
		THR	295.77	260.23	228.57	200.36	175.28	153.05	133.50	
	50	Q	231.29	197.37	167.10	140.14	116.20	95.01	76.33	
		THR	290.19	257.27	227.80	201.44	177.80	156.61	137.73	
SU-M-HSK7461-80	30	Q	0.00	252.52	215.74	182.92	153.79	128.05	105.42	
		THR	0.00	293.72	256.04	222.72	193.19	167.05	144.12	
	40	Q	279.21	239.69	204.34	172.83	144.86	120.14	98.36	
		THR	331.91	291.59	255.74	223.83	195.66	170.74	148.86	
	50	Q	260.07	222.60	189.09	159.21	132.64	109.07	88.24	
		THR	325.47	288.30	254.89	224.91	198.14	174.27	153.14	
SU-M-HSK7471-90	30	Q	0.00	274.97	234.66	198.74	166.90	138.81	114.14	
		THR	0.00	323.17	281.46	244.24	211.30	182.31	156.74	
	40	Q	305.09	261.50	222.55	187.88	157.12	129.93	105.97	
		THR	365.59	320.50	280.25	244.38	212.62	184.53	159.77	
	50	Q	283.92	242.67	205.80	172.92	143.64	117.62	94.53	
		THR	357.52	315.57	277.80	244.02	213.74	186.62	162.43	
SU-M-HSK8551-110	30	Q	416.83	357.51	304.49	257.39	215.77	179.19	147.23	
		THR	470.53	412.61	360.99	315.09	274.47	238.69	207.23	
	40	Q	396.49	339.06	287.80	242.23	201.87	166.28	135.05	
		THR	468.79	412.86	363.00	318.63	279.17	244.18	213.15	
	50	Q	365.70	310.59	261.28	217.32	178.24	143.61	113.02	
		THR	460.50	407.69	360.18	317.52	279.14	244.51	213.42	
SU-M-HSK8561-125	30	Q	468.35	401.32	341.27	287.88	240.68	199.14	162.75	
		THR	533.55	465.82	405.57	352.18	305.08	263.54	226.95	
	40	Q	440.46	376.05	318.70	267.84	222.89	183.29	148.51	
		THR	523.16	457.65	400.40	350.14	305.89	266.89	232.01	
	50	Q	403.72	343.27	289.47	241.70	199.36	161.89	128.81	
		THR	506.42	447.47	395.37	348.90	307.36	269.79	235.61	
SU-M-HSK8571-140	30	Q	0.00	440.46	376.05	318.33	267.04	221.74	181.91	
		THR	0.00	520.86	453.75	393.33	339.54	291.84	249.81	
	40	Q	485.85	416.41	354.20	298.82	249.73	206.38	168.22	
		THR	585.45	512.61	447.60	389.82	338.53	293.28	253.52	
	50	Q	449.17	383.38	324.56	272.09	225.33	183.65	146.48	
		THR	567.77	500.18	439.56	385.09	336.13	291.85	251.58	

PRODUCT LAYOUT

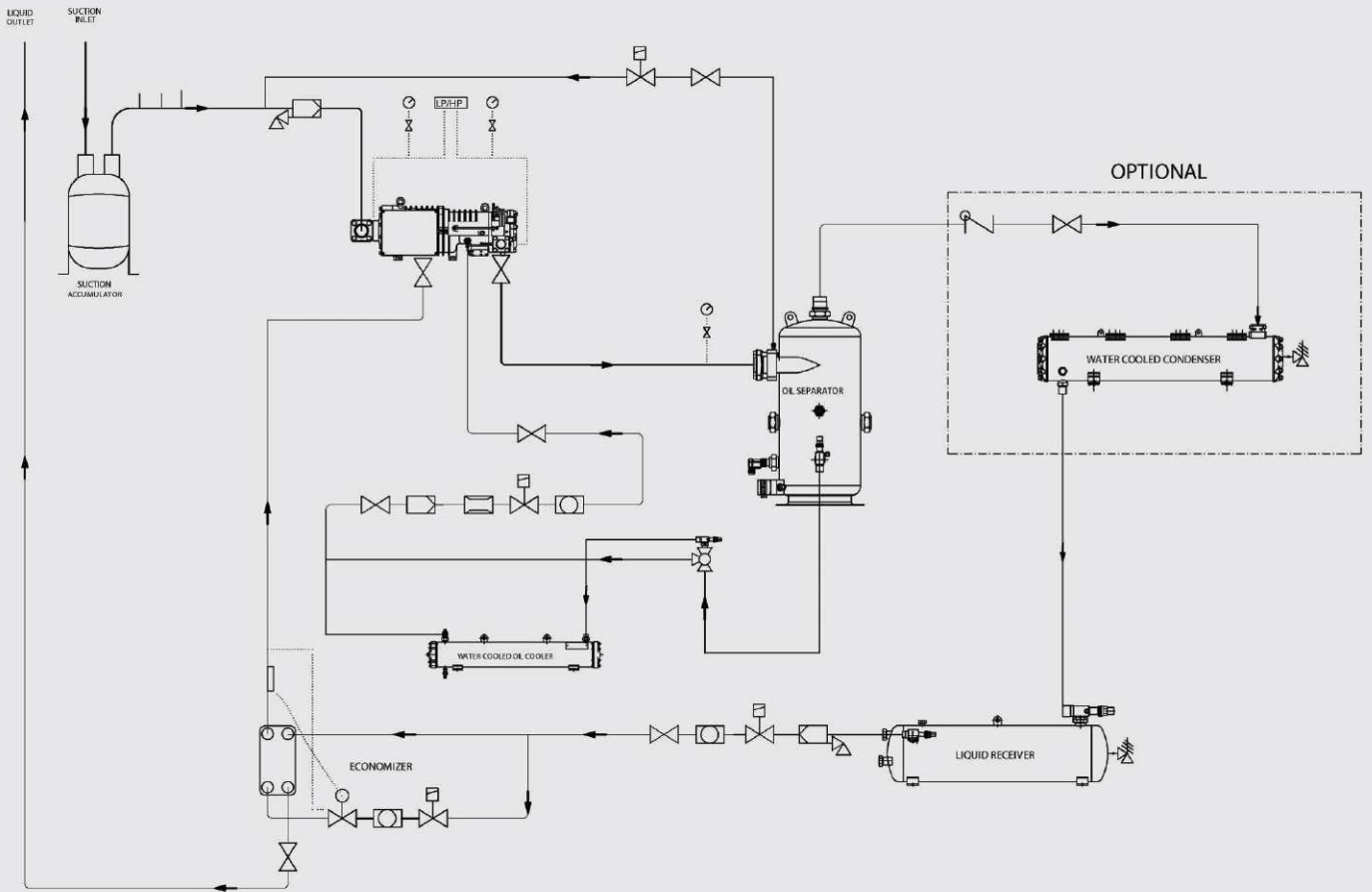
Screw Unit



- | | | |
|------------------------------------------|-------------------------------|------------------------------|
| 1 Suction connection | 8 Liquid outlet connections * | 15 Condenser – Water cooled |
| 2 Liquid filter demountable | 9 Suction accumulator | 16 Oil cooler – Water cooled |
| 3 Liquid receiver pressure relief valve | 10 Discharge connection | 17 Economiser insulated |
| 4 Liquid receiver inlet connection * | 11 Oil separator | 18 Discharge check valve |
| 5 Liquid receiver with sight glass | 12 Oil filter and isolation * | 19 Electrical board position |
| 6 BITZER Screw Compressor | 13 Pressure safety switches * | * not visible. |
| 7 Solid metal frame protecting pipe work | 14 Liquid filter drier | |

SCHEMATIC DIAGRAM

Water Cooled



ITEM	DESCRIPTION
	AMOT VALVE
	PRESSURE GAUGES
	PRESSURE SWITCH
	SOLENOID VALVE
	EXPANSION VALVES
	BALL VALVE / HAND VALVE
	CHECK VALVE
	PRESSURE RELIEF VALVE
	ANGLE VALVE
	FILTERS
	SIGHT GLASS
	OIL FLOW

TECHNICAL DATA

MODEL	No. of comp.	Total Displacement (m ³ /h)	System		Oil Charge ¹ (dm ³)	Oil Sep. sump heater [Watts]	Liquid receiver pump down ² (kg)	
			Voltage (V) / Phase	Max Current (Amps)			R134 a	R404 A
SU-M-HSK5343-30	1	84.0	380-420/3	52.0	18.0	1 x 14 0	59.6	51.9
SU-M-HSK5353-35	1	100.0		58.0	18.0	1 x 14 0	59.6	51.9
SU-M-HSK5363-40	1	118.0		66.0	18.0	1 x 14 0	59.6	51.9
SU-M-HSK6451-40	1	140.0		65.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK6451-50	1	140.0		79.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK6461-40	1	165.0		65.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK6461-60	1	165.0		60.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK7451-50	1	192.0		79.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK7451-70	1	192.0		124.0	18.0	1 x 14 0	80.5	70.2
SU-M-HSK7461-60	1	220.0		98.0	40.0	2 X14 0	98.2	85.5
SU-M-HSK7461-80	1	220.0		144.0	40.0	2 X14 0	98.2	85.5
SU-M-HSK7471-70	1	250.0		142.0	40.0	2 X14 0	98.2	85.5
SU-M-HSK7471-90	1	250.0		162.0	40.0	2 X14 0	98.2	85.5
SU-M-HSK8551-80	1	315.0		144.0	40.0	2 X14 0	123.6	107.7
SU-M-HSK8551-110	1	315.0		180.0	40.0	2 X14 0	123.6	107.7
SU-M-HSK8561-90	1	359.0		155.0	40.0	2 X14 0	251.6	219.2
SU-M-HSK8561-125	1	359.0		216.0	40.0	2 X14 0	251.6	219.2
SU-M-HSK8571-110	1	410.0	182.0	40.0	2 X14 0	251.6	219.2	
SU-M-HSK8571-140	1	410.0	246.0	40.0	2 X14 0	251.6	219.2	

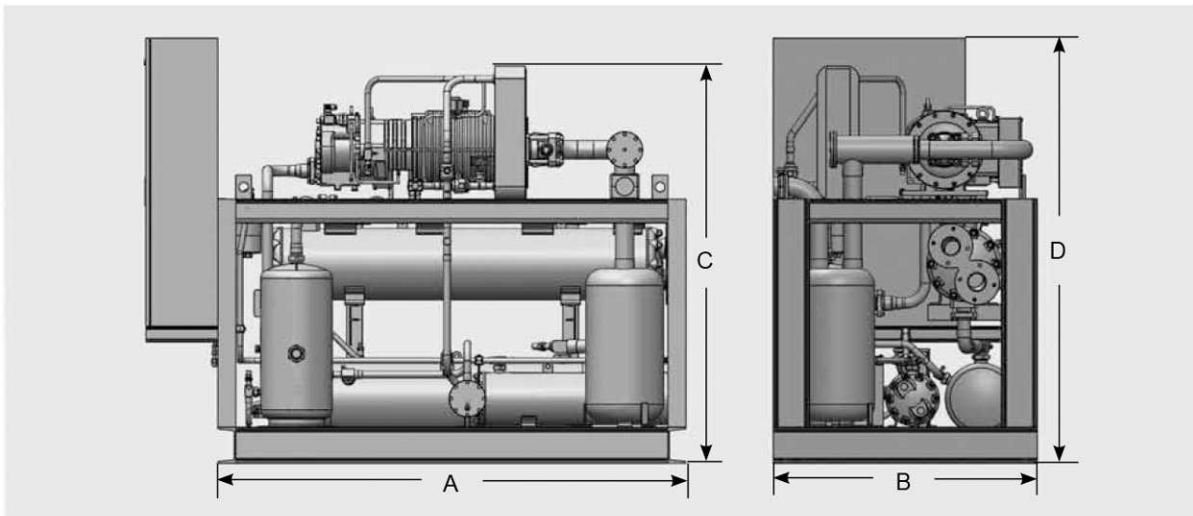
MODEL	No. of comp.	Total Displacement (m ³ /h)	System		Oil Charge ¹ (dm ³)	Oil Sep. sump heater [Watts]	Liquid receiver pump down ² (kg)	
			Voltage (V) / Phase	Max Current (Amps)			R134 a	R404 A
SU-L-HSN5343-20	1	84.0	380-420/3	48.0	18.0	1 x 14 0	43.0	37.5
SU-L-HSN5353-25	1	100.0		52.0	18.0	1 x 14 0	43.0	37.5
SU-L-HSN5363-30	1	118.0		58.0	18.0	1 x 14 0	59.6	51.9
SU-L-HSN6451-40	1	140.0		65.0	18.0	1 x 14 0	59.6	51.9
SU-L-HSN6461-50	1	165.0		79.0	18.0	1 x 14 0	59.6	51.9
SU-L-HSN7451-60	1	192.0		98.0	18.0	1 x 14 0	80.5	70.2
SU-L-HSN7461-70	1	220.0		124.0	18.0	1 x 14 0	80.5	70.2
SU-L-HSN7471-75	1	250.0		144.0	18.0	1 x 14 0	80.5	70.2
SU-L-HSN8571-125	1	359.0		216.0	40.0	2 X 14 0	123.6	107.7
SU-L-HSN8591-160	1	535.0		260.0	40.0	2 X 14 0	123.6	107.7

1 Oil charge is based on the oil separator charge, additional oil may be required during commissioning

2 Maximum refrigerant pump down capacity of the receiver may be different from the system requirement.

DIMENSION DRAWINGS

Screw Unit



Compressor Type	Liquid receiver model	Condenser model	Dimensions (mm)			
			A	B	C	D
HS 53	F562N	Up to K813H	1500	1000	1405	1570
		Up to K1353T	1850	1000	1405	1570
HS 64	F562N; F732N	Up to K813H	1850	1000	1454	1570
		Up to K1973T	1950	1100	1654	1570
HS 74	F732N; F902N	Up to K2923T	1950	1100	1654	1770
HS 85	F1202N; F2202N	Up to K4803	2000	1500	2012	1910

System unit type	Suction line connection (inch)	Oil separator outlet connection (inch)	Liquid receiver inlet connection (inch)	Liquid line connection for R404A (inch)	Liquid line connection for R134A (inch)
SU-HSK5343-30	2 1/8	1 5/8	1 3/8	1 1/8	3/4
SU-HSK5353-35	2 1/8	1 5/8	1 3/8	1 1/8	3/4
SU-HSK5363-40	2 1/8	1 5/8	1 3/8	1 1/8	3/4
SU-HSK6451-40	2 1/8	1 5/8	1 3/8	1 3/8	7/8
SU-HSK6451-50	2 1/8	1 5/8	1 3/8	1 3/8	7/8
SU-HSK6461-40	2 1/8	1 5/8	1 3/8	1 3/8	7/8
SU-HSK6461-60	2 1/8	1 5/8	1 3/8	1 3/8	7/8
SU-HSK7451-50	3 1/8	2 1/8	1 3/8	1 5/8	1 1/8
SU-HSK7451-70	3 1/8	2 1/8	1 3/8	1 5/8	1 1/8
SU-HSK7461-60	3 1/8	2 1/8	1 5/8	1 5/8	1 1/8
SU-HSK7461-80	3 1/8	2 1/8	1 5/8	1 5/8	1 1/8
SU-HSK7471-70	3 1/8	2 1/8	1 5/8	1 5/8	1 1/8
SU-HSK7471-90	3 1/8	2 1/8	1 5/8	1 5/8	1 1/8
SU-HSK8551-80	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSK8551-110	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSK8561-90	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSK8561-125	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSK8571-110	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSK8571-140	DN100	3 1/8	2 1/8	2 1/8	1 3/8
SU-HSN5343-20	2 1/8	1 5/8	7/8	7/8	Not Available
SU-HSN5353-25	2 1/8	1 5/8	7/8	7/8	
SU-HSN5363-30	2 1/8	1 5/8	1 1/8	7/8	
SU-HSN6451-40	2 1/8	1 5/8	1 3/8	1 1/8	
SU-HSN6461-50	2 1/8	1 5/8	1 3/8	1 1/8	
SU-HSN7451-60	3 1/8	2 1/8	1 3/8	1 3/8	
SU-HSN7461-70	3 1/8	2 1/8	1 3/8	1 3/8	
SU-HSN7471-75	3 1/8	2 1/8	1 3/8	1 3/8	
SU-HSN8571-125	DN100	3 1/8	2 1/8	1 5/8	
SU-HSN8591-160	DN100	3 1/8	2 1/8	1 5/8	