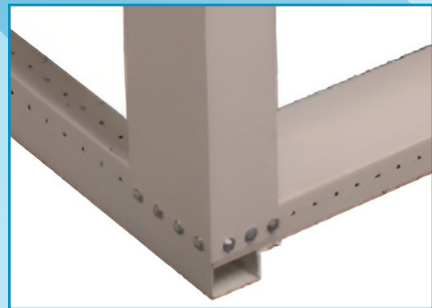




Air Cooled Chiller

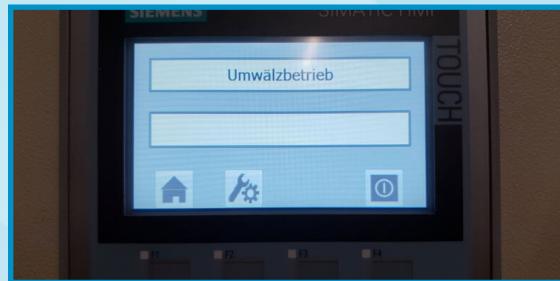


AIR COOLED SCROLL CHILLER



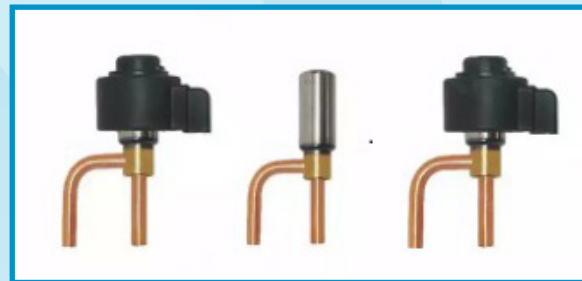
Body

- Galvanized steel sheet with electrostatic paint coating Sound insulation to reduce sound level
- Manufactured with NC & CNC machines
- Air arteries on the columns of body to allow more air to pass through the V section of condenser



PLC Programming

- Automatic troubleshooting
- Display the performance status of all control parameters
- Display operating hours
- Display number of start times of compressors separately
- Complete observance of the operation schedule of the compressors
- Recording of the latest errors that have occurred



Liquid Line Equipment

- Danfoss EEV (Ability to adapt to working conditions and reduced energy consumption by 8 to %13) Castel trademark solenoid valve and sight Glass Receiver with rotolock valve
- Castel trademark filter dryer for dehumidification gas phase refrigerant

Compressor

- The combination of Semi-Hermetic Scroll type With high coefficient of performance
- Anti Vibration Joint Oil heater System
- Dehumidifier filter dryer with replaceable cartridge Relief valve for protect compressor at high Pressure Discharge and Liquid Line Solenoid Valve
- Discharge and Liquid Line Pressure Transmitter

Evaporator

- Shell and tube evaporator with 2 separate circuit
- Weldless steel pipe for shell and 3/8" inner groove copper pipe with up to 300 PSI compressive strength for tubes
- Tested in accordance ASME section VIII standard Special design for low pressure drop and optimized heat transfer
- Water flow switch - Water Strainer - Anti Freeze System

Condenser

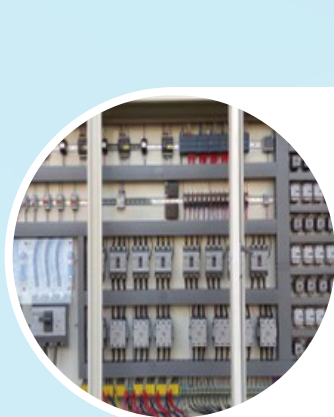
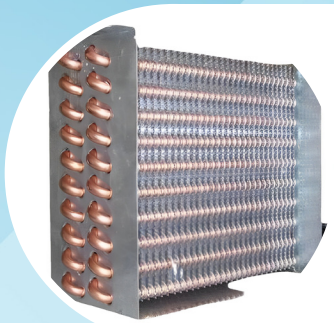
- Our new V shaped style that bring more heat exchange surface compared conventional flat heat exchanger
- Fin and Tube series
- Thanks to this technology, the dimensions of the device have been reduced
- With high efficiency and low pressure drop
- 3/8" copper pipe with up to 450 PSI compressive strength

Fan

- Axial low noise model
- Variable frequency drive for saving energy and reduce sound level
- Sound Reduction diffuse(optional)
- ROSENBERG trademarks with IP55 for different models

Electrical and safety equipment

- Siemens PLC
- Ability to synchronize with BMS
- Compatible with network connection protocols Danfoss trademark high pressure and low pressure sensor
- Electrical cabinet with IP65
- Electrical cabinet with siemens trademark
- Main switching, phase control, Contactor, thermal Switch
- selector switch(optional)
- UPS buffered controller to prevent damage during operating
- signal LED(optional) Alarm and fault system



AIR COOLED SCREW CHILLER



Compressor

- Combination of compact screw Type
- With high coefficient of performance
- Anti Vibration Joint
- Oil heater System
- Dehumidifier filter dryer with replaceable cartridge
- Relief valve for protect compressor at high Pressure Discharge and Liquid Line Solenoid Valve
- Discharge and Liquid Line Pressure Transmitter
- Soft start to prevent current spike(optional)



Body

- Galvanized steel sheet with electrostatic paint coating
- Sound insulation to reduce sound level Manufactured with NC & CNC machines
- Air arteries on the columns of body to allow more air to pass through the U section of condenser
- Antivibration spring system (optional)
- Ability to remote condenser (optional)

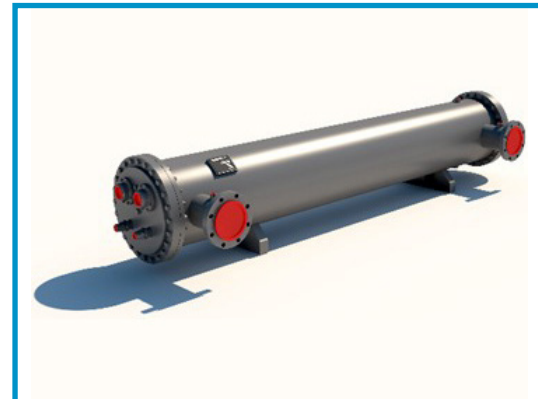
Fan

- Axial low noise model
- Variable frequency drive for saving energy and reduce sound level
- Sound Reduction diffuse
- ROSENBERG trademark with IP55



Refrigerant

- R134a
- The most efficient and most useful
- R407C
- We don't offer because of limitations on operating in difference temperature compared R134a refrigerant type
- R22
- Harmful to nature and outdated so We don't offer



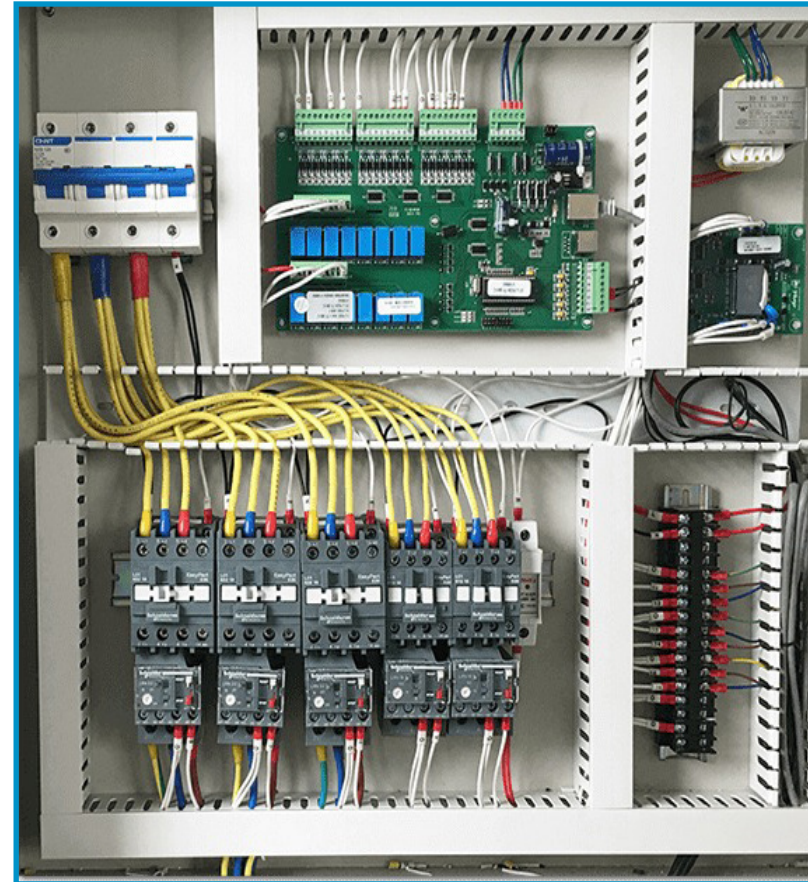
Evaporator

- Shell and tube evaporator with 2 separate circuit
- Weldless steel pipe for shell and 3/8" inner groove
- copper pipe with up to 300 PSI compressive strength for tubes
- Tested in accordance ASME section VIII standard Special design for low pressure drop and optimized heat transfer
- Water flow switch
- Water Strainer
- Anti Freeze System



Liquid Line Equipment

- Danfoss EEV (Ability to adapt to working conditions and reduced energy consumption by 8 to %13)
- Castel trademark solenoid valve and sight Glass Receiver with Rotolock valve
- Castel trademark filter dryer for dehumidification gas phase refrigerant



Electrical and Safety Equipment

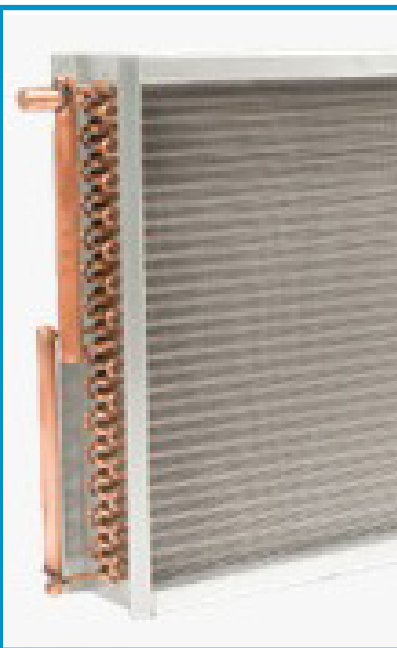
- Siemens PLC
- Ability to synchronize with BMS
- Compatible with network connection protocols
- Danfoss trademark high pressure and low pressure sensor Electrical cabinet with IP65
- Electrical cabinet with siemens trademark ;
- Main switching, phase control, Contactor, thermal Switch Multi-device module capability
- selector switch(optional)
- UPS buffered controller to prevent damage during operating(optional)
- Light for cabinet with switch (optional)
- Laptop table for using during maintenance
- signal LED(optional) Alarm and fault system

PLC Programming

- Automatic troubleshooting
- Display the performance status of all control parameters
- Display operating hours
- Display number of start times of compressors separately
- Complete observance of the operation schedule of the compressors
- Recording of the latest errors that have occurred

Condenser

- Our new V shaped style that bring more heat exchange
- surface compared conventional flat heat exchanger
- Fin and Tube series
- Thanks to this technology, the dimensions of the device have been reduced
- With high efficiency and low pressure drop
- 3/8" copper pipe with up to 450 PSI compressive strength 12FPI number of Fin per Inch



air cooled scroll chiller

	Model No.	AB-A-SL-00611C	AB-A-SL-00822C	AB-A-SL-01022C	AB-A-SL-01222C	AB-A-SL-01622C	AB-A-SL-02022C	AB-A-SL-02422C	AB-A-SL-04824C	AB-A-SL-05224C	AB-A-SL-06024C	AB-A-SL-07826C	AB-A-SL-09026C	AB-A-SL-10024C
1	Cooling capacity	KW	15.0	20.5	25.1	29.9	34.7	43.7	54.6	62.6	109.2	134.8	159.2	238.8
	RT		4.25	5.83	7.14	8.50	12.4	15.3	18.8	21.4	39.8	48.8	56.8	85.2
	Total input power	KW	5.2	7.7	9.2	10.5	15.9	19.9	21.4	39.8	48.8	56.8	67.91	74.8
	Total rated current	A	10.5	15.5	18.5	19.6	28.9	37.4	40.1	74.8	91.7	115.1	137.5	171.2
	EER	-	2.88	2.66	2.72	2.84	2.7	2.74	2.76	2.76	2.80	2.76	2.80	2.75
2	Cooling capacity	KW	14	19.2	23.3	27.9	40.6	50.8	57.1	101.6	147.2	186	220.8	243.6
	RT		4.0	5.5	6.6	7.9	11.5	14.4	16.3	28.9	35.3	41.9	52.9	69.3
	Total input power	KW	5.77	8.6	10.2	11.7	17.5	21.9	23.1	43.8	54	62.8	81	94.2
	Total rated current	A	11.4	16.5	19.6	21.4	32.1	40.1	43.2	86.4	98.3	122.2	147.4	183.2
	EER	-	2.42	2.24	2.29	2.39	2.5	2.32	2.34	2.30	2.34	2.30	2.34	2.31
Evaporator	ESEER	-	3.93	3.57	3.67	3.88	3.7	3.15	3.2	3.33	3.37	3.33	3.37	3.69
	Type	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
	Brand	-	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX
	Water flow rate	gpm	14	16.5	21	23	34	45	90	105	112	131	154	182
	m /h		3.2	3.7	4.8	5.2	7.7	10.2	20.4	22.5	25.4	29.7	35.0	44.9
Condenser	Water pressure drop	kPa	4.3	5.4	8.5	9	9	11.0	12.3	12.3	15.8	34.7	55.61	38
	Water inlet/outlet	in	1	1	1	1	1	2	3	3	3	4	4	4
	Max design pressure	Mpa	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Type	-	H shape	H shape	H shape	H shape	H shape	H shape	V shape	V shape	V shape	V shape	V shape	V shape
	Brand	-	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX
Fan	Heat exchanger	-	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin
	Number of rows	-	3	3	3	3	3	3	4	4	4	4	4	4
	Fins per inch	FPI	12	12	12	12	12	12	12	12	12	12	12	12
	Type	-	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Brand	-	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG
Compressor	Number	-	2	2	2	2	2	2	4	4	4	4	4	6
	Speed	rpm	1350	1430	1430	1430	1430	1430	900	900	900	900	900	900
	Diameter	mm	450	500	500	500	630	630	710	710	800	800	800	800
	Air flow rate	m /h	4700	9200	9200	9200	12000	12000	15000	15000	22000	22000	22000	22000
	Discharge	Side/Top	Side	Side	Side	Side	Top	Top	Top	Top	Top	Top	Top	Top
Refrigerant	Type	-	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic	Semi-Hermetic
	Brand	-	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND	COPELAND
	Model	-	ZR72KCE-TFD	ZR48K3E-TFD	ZR61KCE-TFD	ZR72KCE-TFD	ZR94KCE-TFD	ZR125KCE-TFD	ZR144KCE-TFD	ZR160KCE-TFD	ZR190KCE-TFD	ZR160KCE-TFD	ZR190KCE-TFD	ZR310KCE-TWD
	Combination	Pieces	1	2	2	2	2	2	4	4	4	6	6	4
	Oil type	-	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF	POE RL3-32MAF
Oil charge amount	L	1.77	1.36	1.66	1.77	2.51	3.25	3.25	3.25	3.25	3.37	3.37	3.37	3.38
	Oil heater	-	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Refrigerant Type	Brand	-	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C
	Ambient	°C	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52	21 ~ 52
	Command	Type	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC
Sound	dB(A)	~ 70	~ 72	~ 72	~ 72	~ 72	~ 72	~ 72	~ 72	~ 72	~ 72	~ 74	~ 74	~ 74
	Power	Ø , V , Hz	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50
Dimension	WxHxD	mm							1435x2250x2225	1435x2250x2225	1662x2250x2425	1662x2250x2425	1662x2250x2425	2400x2250x3200
	Net weight	kg	150	350	350	350	350	800	800	1500	2000	2000	2000	3000

1 - Chilled water inlet / outlet : 12 °C / 7 °F
Outdoor ambient temp. : 35 °C DB
Sea level : 4000 ft
Fan input power included
Pump input power not included

2 - Chilled water inlet / outlet : 12 °C / 7 °F
Outdoor ambient temp. : 40 °C DB
Sea level : 4000 ft
Fan input power included
Pump input power not included

- Evaporating SST: 4.1 °C
- Water side fouling factor : 0.000018 m²·°C / KW
- ESER calculations is based on European standard.
- Measuring sound pressure level at 3m away and 3±dB tolerance.
- The characteristics of water flow rate and water pressure drop are based on case "1".

air cooled screw chiller

	Model No.	AB-A-SW-06011B	AB-A-SW-07011B	AB-A-SW-08011B	AB-A-SW-09011B	AB-A-SW-11011B	AB-A-SW-12022B	AB-A-SW-14022B	AB-A-SW-16022B	AB-A-SW-18022B	AB-A-SW-20222B	AB-A-SW-25022B
1	Cooling capacity	KW	124.9	146.9	180.5	208	249.8	293.8	361	416	487	539
	RT		35.5	41.8	51.3	59.1	71.0	83.5	102.6	118.3	138.5	153.2
	Total input power	KW	43.2	51.7	61.2	68.7	86.4	103.4	122.4	137.2	161.7	179
	Total rated current	A	78.4	91.4	100.7	115.2	141.3	156.8	182.8	201.4	230.4	282.8
	EER	-	2.89	2.84	2.95	3.03	2.89	2.84	2.95	3.03	3.01	3.01
2	Cooling capacity	KW	115.4	134.8	167.9	193.5	230.8	269.6	335.8	387	450	500
	RT		32.8	38.3	47.7	55.0	65.6	76.6	95.5	110.0	127.9	142.2
	Total input power	KW	46.7	56.3	66.8	75.5	93.4	112.6	133.6	151	177	196.2
	Total rated current	A	83.3	97.9	109.2	125.4	152.6	166.6	184.4	218.4	250.8	339.8
	EER	-	2.47	2.39	2.51	2.56	2.47	2.39	2.51	2.56	2.54	2.55
Evaporator	ESEER	-	3.77	3.77	3.78	3.97	3.77	3.78	3.86	3.97	3.97	3.97
	Type	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
	Brand	-	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX
	Water flow rate	gpm	91	106	130	150	181	212	260	300	352	389
	m³/h		20.7	24.1	29.5	34.1	41.1	48.1	59.0	68.1	83.3	92.9
Condenser	Water pressure drop	kPa	14.4	23.6	13.6	25.3	16.5	33	36.3	44.3	42	49
	Water inlet/outlet	in	2 1/2	2 1/2	3	3	4	4	4	4	5	5
	Max design pressure	Mpa	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Type	-	V Shape	V Shape	V Shape	V Shape	V Shape	V Shape	V Shape	V Shape	V Shape	V Shape
	Brand	-	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX	AIRBOX
Fan	Heat exchanger	-	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin	Aluminium fin
	Number of rows	-	2	2	3	3	2	2	3	3	3	3
	Fins per inch	FPI	12	12	12	12	12	12	12	12	12	12
	Type	-	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Brand	-	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG	ROSENBERG
Compressor	Number	-	4	4	4	4	8	8	8	8	12	12
	Speed	rpm	900	900	900	900	900	900	900	900	900	900
	Diameter	mm	800	800	800	800	800	800	800	800	800	800
	Air flow rate	m³/h	22000	22000	22000	22000	22000	22000	22000	22000	22000	22000
	Discharge	Side/Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
Refrigerant	Type	-	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC
	Sound pressure	dB(A)	~ 80	~ 79	~ 80	~ 79	~ 80	~ 79	~ 80	~ 79	~ 80	~ 81
Power supply	Power supply	Ø , V , Hz	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50	3 , 400 , 50
	Dimension	WxHxD	1662x2250x2425	1662x2250x2425	1662x2250x2425	1662x2250x2425	2400x2250x4400	2400x2250x4400	2400x2250x4400	2400x2250x4400	2400x2250x4400	2400x2250x6400
	Net weight	kg	~ 3500	~ 3500	~ 3500	~ 4000	~ 4000	~ 4200	~ 4200	~ 4200	~ 5400	~ 5400

1 - Chilled water inlet / outlet : 12 °C / 7 °F
Outdoor ambient temp. : 35 °C DB
Sea level : 4000 ft
Fan input power included
Pump input power not included

2 - Chilled water inlet outlet : 12 °C / 7 °F
Outdoor ambient temp. : 40 °C DB
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- Evaporating SST: 4.1 °C
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