



SINGLE cooling systems and chillers with integrated cooling circuit

SKA series

Whenever water-cooled circulation is required, cooling systems and chillers from the SKA series are the ideal solution. Equipped with an integrated cooling circuit and a vast cooling capacity range, they are widely used in all industrial applications, from 1 KW for laboratory processes through to 1,000 KW in central systems. Premium quality and process reliability characterise these closed-circuit and contamination-free systems with a variety of special customizing options to meet special requirements and operation conditions.

SKA 1-60

Standard equipment

General

- Rugged, powder-coated sheet steel housing
- High-quality materials and components
- Suitable for indoor operation
- Air-cooled or water-cooled condensers

Hydraulics

- Nominal capacity at 10 °C water temperature and ambient temperature of 35 °C
- Refrigerant R134a or R404A

Electrical and control equipment

- Micro-processor controller with control accuracy of up to $\pm 1K$
- Switch box to IP54
- Capacity control from SKA 36

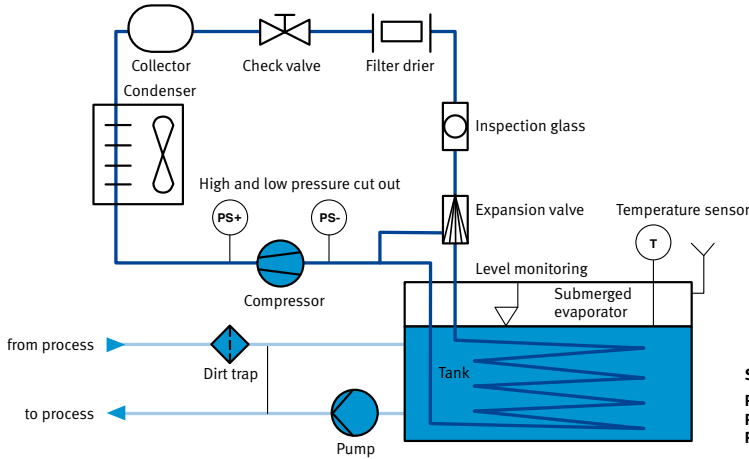
Options

- SC standard controller with colour display
- Equipment for extreme ambient temperatures
- Equipment for extreme fluid temperatures of between -50 °C and +180 °C
- Split construction with external condenser
- Pressure gauging
- Flow rate metering by means of differential pressure
- Additional heater for extended temperature range
- Tank pump units
- Connection for various analogue and digital electric interfaces
- Virtually unlimited hydraulic and electric options





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SKA 1 - SKA 8 air-cooled
PI: Pressure manometer
PS+: High-pressure cut out
PS-: Low-pressure cut out

SKA series								
Structural units		SKA 1	SKA 2	SKA 3	SKA 4	SKA 5.5	SKA 5	SKA 8
Refrigerant		R 134a	R 134a	R 134a	R 134a	R 134a	R 134a	R 134a
Cooling capacity (10 °C water temperature)	kW	1	2	3	4	5	6,4	9,3
Max. flow rate	l/min	27	40	60	60	60	60	60
Max. pressure (max. values of the characteristic)	bar	4,5	3,8/5,5*	3,8/5,5*	3,8/5,5*	3,8/5,5*	4,7/5,9*	4,7/5,9*
Connections circulating media	mm/FPT	14	14	14	14	14	G 3/4"	G 3/4"
Air flow-rate (with air-cooled condenser)	m ³ /h	1000	1000	2250	2250	2250	3600	4000
Cooling water-flow rate (with water-cooled condenser)	l/min	6	7	8	11	14	21	32
Connections cooling water	FPT	G 3/8"	G 1/2"	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Temperature range	°C	-5...+30	-5...+30	-5...+30	-5...+30	-5...+30	-5...+30	-5...+30
Dimensions (without connections)	L mm	700	765	910	910	960	820	1020
	W mm	370	455	575	575	635	640	640
air-cooled	H mm	480	690	810	810	940	1260	1460
water-cooled	H mm	480	690	810	810	940	1260	1460
Approximate weight	kg	50	120	130	135	175	200	270

SKA series								
Structural units		SKA 12	SKA 17	SKA 22	SKA 27	SKA 36	SKA 50	SKA 60
Refrigerant		R 404a	R 404a	R 404a	R 404a	R 404a	R 404a	R 404a
Cooling capacity (10 °C water temperature)	kW	13,9	19,7	25,5	31,3	41,8	58	70
Max. flow rate	l/min	150	150	150	240	240	400	400
Max. pressure (max. values of the characteristic)	bar	4/7,5*	4/7,5*	4/7,5*	4,1/6,7*	4,1/6,7*	5,8/7,3*	5,8/7,3*
Connections circulating media	FPT	G 1,25"	G 1,25"	G 1,25"	G 1,5"	G 1,5"	G 2"	G 2"
Air flow-rate (with air-cooled condenser)	m ³ /h	5800	7500	8000	13000	16500	26900	42000
Cooling water-flow rate (with water-cooled condenser)	l/min	44	50	67	110	167	250	300
Connections cooling water	FPT	G 1"	G 1"	G 1"	G 1,5"	G 1,5"	G 1,5"	G 1,5"
Temperature range	°C	-10...+20	-10...+20	-10...+20	-10...+20	-10...+20	-10...+20	-10...+20
Dimensions (without connections)	L mm	1450	1450	1450	2015	2015	2415	2415
	W mm	750	750	750	850	850	1300	1300
air-cooled	H mm	1680	1680	1680	1920	2015	2050	2050
water-cooled	H mm	1550	1550	1550	1565	1565	1770	1770
Approximate weight	kg	400	470	480	750	850	1100	1400

* Special pump



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SKA series

Serie SKA 150-1000 Standard equipment

General

- Rugged, powder-coated sheet steel housing in RAL 7035
- Air-cooled or water-cooled condensers
- Suitable for outdoor operation

Hydraulics

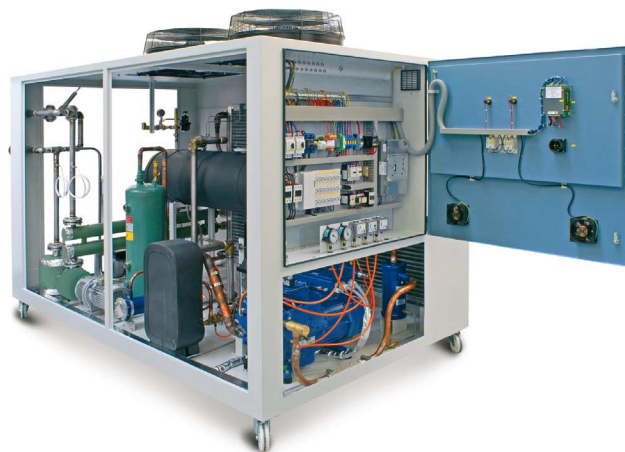
- High-quality materials and components
- Refrigerant R134a
- Water temperature adjustment range of between 6 °C and 20 °C
- Nominal capacity at 10 °C water temperature and ambient temperature of 38 °C
- Final pump pressure of 4.5 bar
- Max. ambient temperature: 45 °C for air-cooled systems
- Max. cooling water temperature: 40 °C for water-cooled systems

Electrical and control equipment

- Micro-processor controller with text display and remote operation, centralized fault indication and operating hours counter
- Efficient capacity control

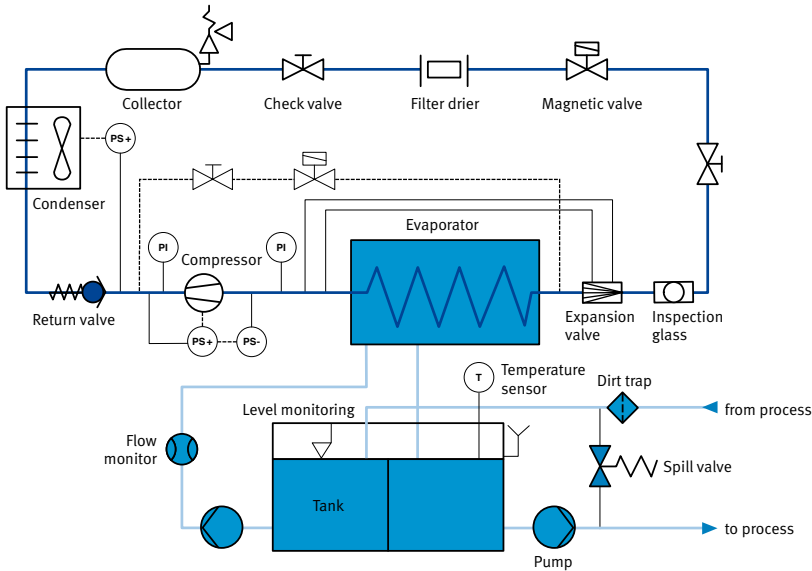
Options

- Refrigerant R407C
- Data remote monitoring via modem
- Integrated free cooler for economizing on operating costs
- High-pressure pumps
- Equipment for waste heat recovery
- Minimizing the noise pressure level to below 40 dB(A)
- Connection for digital electric interface RS 485
- All chiller-related installations and services





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SKA 12 - SKA 60 air-cooled

PI: Pressure manometer

PS+: High-pressure cut out

PS-: Low-pressure cut out

SKA series															
Structural units		SKA 150	SKA 200	SKA 300	SKA 400	SKA 500	SKA 600	SKA 700	SKA 800	SKA 850	SKA 900	SKA 1000			
Refrigerant	°C	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20	+6...+20			
Cooling capacity (10 °C water temperature)	kW	150	200	300	400	500	600	700	800	850	900	1000			
Flow rate	l/min	430	570	860	1140	1430	1710	2000	2290	2430	2570	2860			
Pressure	bar	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5			
Air flow-rate (with air-cooled condenser)	m³/h	40000	55000	78000	89000	105000	140000	180000	205000	-	235000	280000			
Cooling water-flow rate (with water-cooled condenser)	l/min	550	750	1100	1450	1900	2200	2600	-	3150	-	3800			
water-cooled															
Tank capacity	l	1000	1000	1000	1000	1500	1500	1500	-	2000	-	2000			
Dimensions (without connections)	L	mm	3500	3500	3500	3500	3500	3500	-	5000	-	5000			
	W	mm	2000	2000	2000	2000	2000	2000	-	2000	-	2000			
	H	mm	2200	2200	2200	2200	2500	2500	2500	-	2500	-	2500		
Approximate weight	kg	2490	2580	2780	3670	3950	4130	4480	-	6850	-	6930			
air-cooled															
Number of ventilators		4	4	5	6	8	10	10	12	-	12	12			
Tank capacity	l	750	750	750	900	1500	1800	1800	2400	-	2400	2400			
Dimensions (without connections)	L	mm	4765	4765	5790	5082	6120	7158	7158	8196	-	8196	8196		
	W	mm	1370	1370	1370	2244	2244	2244	2244	2244	-	2244	2244		
	H	mm	2140	2140	2140	2370	2370	2370	2370	2370	-	2370	2370		
Approximate weight	kg	2580	2660	3650	4550	6050	6752	6820	8220	-	8345	8345			
with integrated free cooler															
Number of ventilators		4	5	5	6	8	10	12	12	-	8	6	8	8	
Dimensions (without connections)	L	mm	4765	5790	5790	5082	6120	7158	8196	8196	-	6120	3500	6120	4538
	W	mm	1370	1370	1370	2244	2244	2244	2244	2244	-	2244	2244	2244	2244
	H	mm	2140	2140	2140	2370	2370	2370	2370	2370	-	2370	2370	2370	2370
Approximate weight	kg	3250	3980	4120	4954	6724	7542	9120	9380	-	7120	4080	7480	4890	