

VWK/1 & SVK

AIR COOLED CHILLERS

VWK/1 range

Quality gain in the manufacturing process

The installation of a refrigerated water chiller with an independent water circuit enables you to effect and influence the quality and cleanliness of the cooling water for your process.

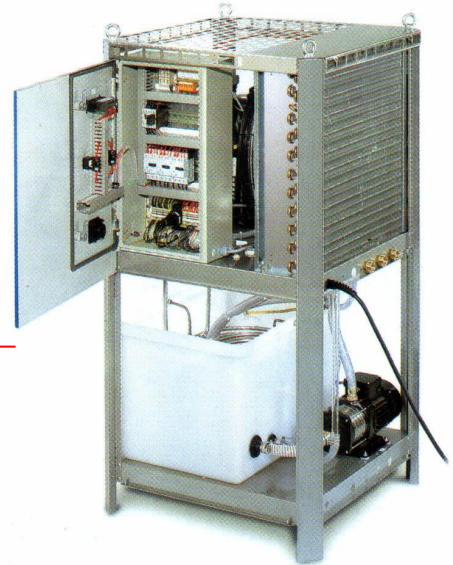
Environmentally friendly reduction in costs

The working life of your tools is significantly extended by a supply of clean cooling water at a constant temperature. Low make-up water consumption simultaneously saves costs and protects the environment.

Design and quality standards are the decisive factors

- built to ISO 9001 quality standard
- all equipment manufactured to EN 60204
- designed in accordance with the respective German UW, VBG and VDE regulations for industrial machinery and equipment

- all components sourced from renowned manufacturers
- compact and service-friendly design with easily removable panels.
- stainless steel housing frames
- finish in any RAL colour on request.



Standard systems

Process cooling via high quality and reliable chilled water coolers is indispensable in today's industry. Standard equipment incorporates the following criteria:

- Environmentally-friendly refrigerant, R407C.
- Compressors – low noise state-of-the-art scroll compressors which are economical in operation.
- Condensers incorporate inner-ribbed copper pipes and aluminium louvred type fins
- Temperature control by digital thermostat with temperature hysteresis of ± 0.5 K.
- High/low refrigerant pressure controls.
- Non ferrous tanks constructed of plastic or stainless steel depending on system size.
- Electrical system 400V 3ph 50Hz 3 wire (no neutral required).

- Motors minimum protection of IP54.
- For use in ambients up to $+ 37^{\circ}\text{C}$.

Special applications

We can offer individual solutions for cooling in all areas of mechanical plant engineering. Exploit the experience we have gained during the many years of cooperation with many OEMs. You can specify your own design criteria. Further options include:

- temperature hysteresis from ± 0.3 K.
- high-pressure pumps.
- Water-cooled condenser.
- Heat recovery systems.
- Systems suitable for deionised water.
- External heat exchanger for cooling of other fluids.
- Special voltages

- Design compliant with all common automotive industry standards and in line with UL and CSA regulations.
- Easily replaced air filters.
- External water filters.

Standard features

- Suitable for pure water systems
- IP54 protection
- Water pressure gauge
- Fault indicator lights
- Tank drain valve
- Freeze stat
- Water bypass valve
- Level switch

Additional options

- DC control voltage
- Low ambient start kit
- Hot gas bypass to give close temperature control +/-0.3°C
- Air filter
- High and low temperature alarms
- Stainless steel pipework
- Water set point up to 40°C

Cooling capacities											
Temperatures		SVK 140/1	SVK 180/1	SVK 220/1	SVK 270/1	SVK 320/1	SVK 360/1	SVK 540/1	SVK 440/1/2	SVK 540/1/2	SVK 640/1/2
Ambient Air	Water	Cooling capacities in kW									
32°C	10°C	14,1	16,9	21,4	25,7	31,4	38,9	51,4	42,9	51,4	62,9
	15°C	16,6	20	25,3	29,9	37	45,5	59,9	50,7	59,9	74,1
	20°C	18,3	21,7	28	33,5	41,5	51,8	67,1	56	67,1	83,1
37°C	10°C	13,1	16,4	20,2	23,9	29,6	35,2	47,9	40,5	47,9	59,2
	15°C	15,7	19,2	23,9	28,2	34,9	42,1	56,5	47,8	56,5	69,8
	20°C	17,2	20,5	26,2	31,1	37,9	49	62,4	52,4	62,4	75,9
42°C	10°C	12,9	15,6	19,6	22,9	25	33,3	45,8	39,3	45,8	50
	15°C	15,4	18,5	22,9	27,4	30,9	40,2	54,9	45,8	54,9	61,9
	20°C	17	20,1	25,6	30,2	35	47,3	60,6	51,3	60,6	70

Specifications											
		SVK 140/1	SVK 180/1	SVK 220/1	SVK 270/1	SVK 320/1	SVK 360/1	SVK 540/1	SVK 440/1/2	SVK 540/1/2	SVK 640/1/2
Compressor type (number)		ZR72 1	ZR90 1	ZR11 1	ZR12 1	ZR16 1	ZR19 1	ZR250 1	ZR11 2	ZR12 2	ZR16 2
Power consumption Compressor max.	kW	6,2	7,9	9,7	11,1	14,6	16,8	24,6	19,4	22,2	29,2
Power consumption max.	kW	9	10,9	12,5	14,6	18,74	21,2	31,4	24,8	29,1	36,1
Current max.	A	15,6	18,9	21,5	25,3	31,1	34,8	52,1	42,9	50,9	63,3
Air flow rate max.	m3/h	9.300	9.300	9.300	11.000	11.000	14.400	22.000	18.600	22.000	22.000
Water tank volume	l	330	330	330	330	330	390	390	500	660	660
Water pressure	bar	3,8	3,6	3,2	3,0	3,2	3,0	3,6	4,0	3,6	3,0
Nominal water flow	m3/h	2,9	3,5	4,3	5,1	6,5	7,0	10,3	8,0	10,3	12,7
Water connections inlet/outlet	Grundfos Inch	CH4-60 1 1/4	CH4-60 1 1/4	CH4-60 1 1/4	CH4-60 1 1/4	CH8-50 1 1/4	CH8-50 1 1/2	CH12-50 1 1/2	CH12-50 2	CH12-50 2	CH12-50 2
Water connections feed	Inch	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Length (L)	mm	1000	1000	1000	1000	1000	1500	1500	2000	2000	2000
Width (B)	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Height (H)	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Weight (approx.)	kg	320	370	400	400	410	485	520	795	800	810
Power supply 400V/3ph/50Hz Control voltage 24 V AC. All technical data is valid for machines for a maximum ambient temperature of +42°C											
* Nominal flow at: 32°C ambient temperature / 15°C water temperature / 5 K diff. Temp. between water in-outlet.											



F&R Products
 Richards Close, Wellington,
 Somerset, TA21 0BD, England

Telephone: 0044 (0) 1823 663281
 Facsimile: 0044 (0) 1823 664378
 E-mail: sales@fandrproducts.co.uk
 Web: www.fandrproducts.co.uk

We reserve the right to alter the specifications detailed in this brochure without prior notice.