

Oil cooling unit AKS**5, AKS**3



Features

- 1. Wide range of applied temperature (No.1 among Industries)**
Possible to use in wide range of applied temperature such as 5~45°C for room temperature and 5~50°C for oil temperature. (see*note).
Coping with intensive temperature conditions under winter and summer, it exhibits steady cooling capacity.
- 2. Multiple function's microcomputer is mounted**
Multiple function's microcomputer pursuing easy use is mounted.
 - One touch choice is possible for oil temperature control method (room temperature tuning type, fixed temperature type)
 - LED displays abnormal situations of individual nine kinds or seven levels of inlet oil temperatures.
 - Turnover switch enables the operation switch to do fool-safe operated and to prevent ceased operation.
- 3. Slim and compactness**
Realized the slim and compactness design matching to the main machine, and it makes it possible to save space.
- 4. To put importance on the characteristics of installation and maintenance**
Front suction and upper exhausting system keep superiority for installation and maintenance works.
- 5. Enriched self & safety functions**
Eleven protection devices give you freedom from cares.
(*Note: Refer to the specification table below for AKS303AK.)

Specifications

Model name		"5"series				"3"series
		AKS35AK	AKS55AK	AKS105AK	AKS205K	AKS303AK
Max. cooling capacity (50/60Hz)	kW	0.93/0.95	1.7/1.8	2.8/3.1	5.9/6.3	9.9/10.7
	kcal/h	800/820	1500/1570	2400/2700	5100/5400	8500/9200
Power supply	Main circuit (50/60Hz)	Three phase 200/200-220V				
	Control circuit (50/60Hz)	Single phase 200/200-220V				
	Capacity (200/220V) kVA	1.2/1.3	1.7/1.9	2.3/2.6	4.7/5.0	9.0/10.0
Exterior color		Ivory (5Y 7.5/1)				
External dimensions (H×W×D) mm		640×360×440	640×360×440	790×360×440	1100×475×545	1530×630×730
Compressor (hermetic rotary type)		0.25kW, 2P	0.4kW, 2P	0.6kW, 2P	1.5kW, 2P	2.2kW, 2P ^{Note)3}
Evaporator		Shell and coil type				Shell & Tube type
Condenser		Cross-fin coil type				
Fan		Propeller fan				
Motor	Oil pump	0.4kW, 4P			0.75kW, 4P	1.5kW, 4P
	Fan	Common use with oil pump			66W, 4P×2 pieces	160W, 4P
Oil pump displacement volume (50/60Hz)L/min		4.5/5.4	12.1/14.4	24.0/29.0	34.5/41.5	46.0/55.0
Temp. control (Selectable)	Tuned type ^{Note)2}	Inlet oil temperature or outlet oil temperature for room temperature -10~+10 C (factory set value: inlet oil temperature control, 0 C)				
	Fixed type	Inlet oil temperature 10~50 C ^{note) 5}				
Refrigerant control		Capillary tube				
Protection devices		Over-current relay (for compressor and pump motor), high pressure switch, compressor protection thermostat, (discharge gas temperature detector for AKS303AK), reverse phase protector, restart protector, low room temperature protector (except for AKS303AK), high temperature oil protection thermostat, low oil temperature protection thermostat, pump relief valve, fuse (circuit protector for AKS303AK)				
Refrigerant	Name	R22				
	Charged volume kg	0.47	0.40	0.50	1.23	3.4
Refrigeration oil	Name	SUNISO 4GS Di				
	Charged volume L	0.4			0.85	1.2
Application range	Room temperature C	5~45				10~45
	Inlet oil temperature C	5~50				10~50
	Oil viscosity mm ² /s	4~200				
	External pressure loss	Discharge side	0.3MPa {3.0kgf/cm ² } or less			
Suction side		-30.7~0kPa {-230~0mmHg}				
Usable oil		Lubricant, petroleum oil hydraulic working oil.				
Weight kg		43		48	105	250
Transport vibration performance ^{Note)8}		B			A	
Rated current of wiring circuit breaker ^{Note)6} A		15			30	

- Note) 1. The max. cooling capacity shows the max. value in an applied range of ISO VG32.
 2. The separate arrangement of optional parts makes it possible to use in a machine tuning.
 3. Compressor for AKS303AK is totally hermetic reciprocating type.
 4. "-10~+10°C for room temperature" in a column of "temperature control" stands for the temperature differential in between the inlet oil temperature based on a room temperature.
 (ex. Oil temperature can be set in a range of -10~+10°C of your own accord)
 5. Fixed type of AKS303AK should be coped with the optional parts [AKS103AK-OP1]
 6. Provide the most suitable wiring circuit breaker corresponding to the supply capacity of above mentioned models for the power supply.
 7. Contact us if any special specification is included.
 8. Among the transport vibration performance, A means vertical 1G×7.5h (but 10~100 Hz sweeping, 5 min/cycle) and B means vertical 1.5G×2.5h (but, 10~100 Hz sweeping, 5 min/cycle).