



The new Daikin '9 Series' hybrid oil coolers save you money in four distinct ways:

ENERGY

Advanced IPM motor technology and R410A refrigerant reduces energy consumption and is monitorable through the operation panel, allowing longer unit life, reduced energy costs and sustainable savings.

TEMPERATURE CONTROL

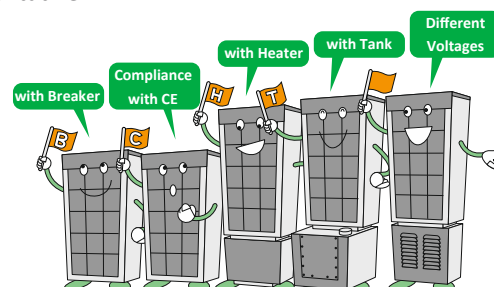
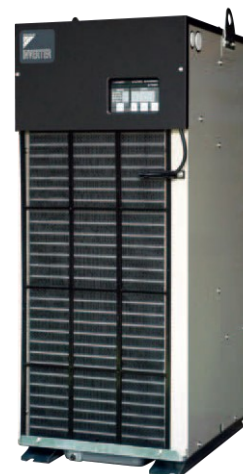
The high accuracy temperature control has been advanced further in the '9' series due to the optimal control of the compressor and electronic expansion valve.

ALARM FUNCTIONS

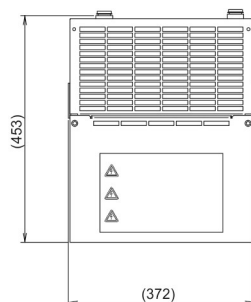
State-of-the-art features provide proper maintenance support with refrigerant gas leakage detection, an oil temperature warning, auto-tuning, a 999-hour timer and a preventative maintenance function that notifies the operator when the air filter or condenser is clogged.

COMPATABILITY

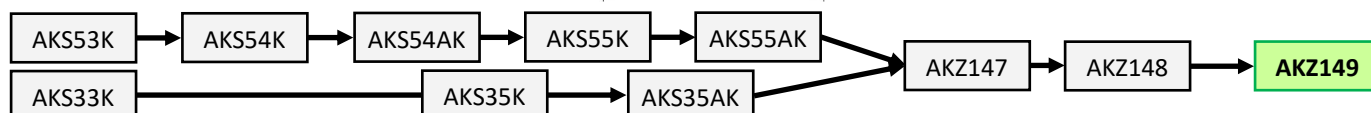
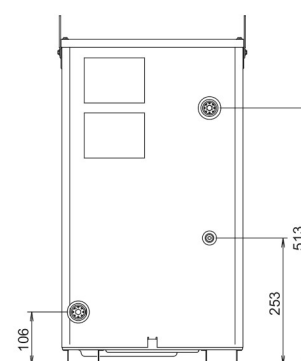
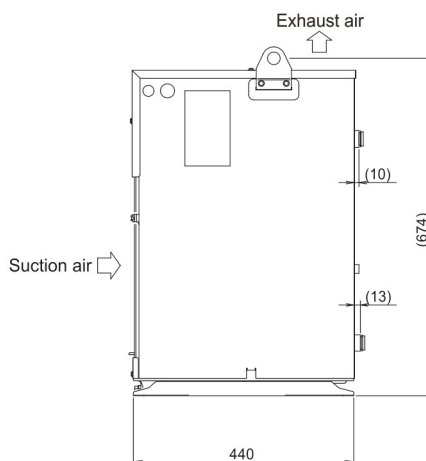
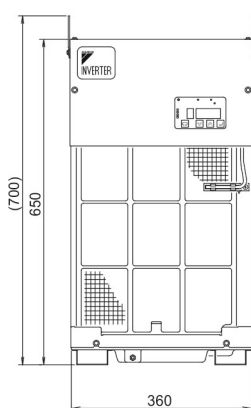
90% of all standard industrial applications can be replaced by a Daikin hybrid unit allowing for much greater continuity in your factory, and reduces the amount of new units and spare parts required to be held in stock.



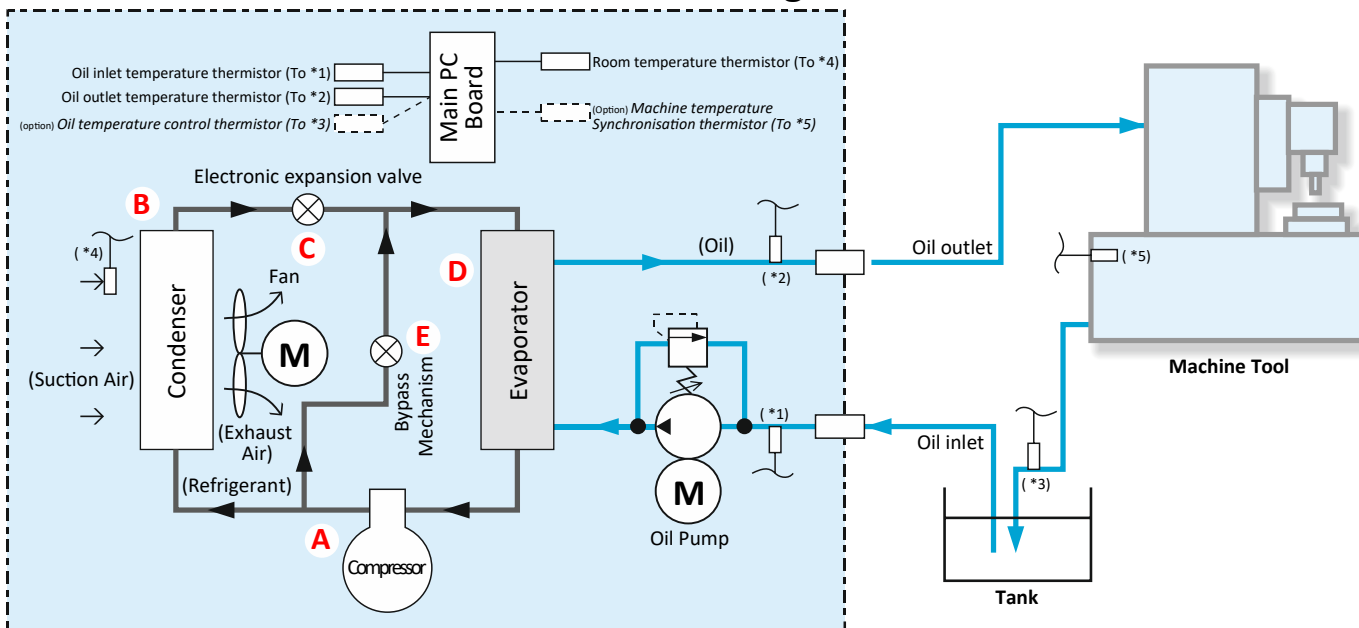
AKZ149



Horse Power	Equivalent to 0.5HP	Refrigerant Type	R410A
Cooling Capacity	1.3/1.4kW	Refrigerant Amount	0.49kg
Power Supply	AC 3-phase 200/220v	Oil Viscosity	1.4-200mm ² /S
Compressor	Equivalent to 0.4kW	Oil Inlet Port	Rc3/4
Oil Pump Discharge	12/14.4 L/min	Oil Outlet Port	Rc3/4
Operating Temp	5-50°C	Noise	62dB(A)
Dimensions	650x360x440	Weight	51kg



How do the Oil Cooling Units work?



A	Refrigerant gas is converted into compressed gas at high temperature and high pressure by a compressor so that the gas can be easily cooled and liquified by a condenser
B	In the condenser, the gas at high temperature and high pressure generated in the compressor is cooled with air and converted into liquid at high temperature and high pressure
C	The electronic expansion valve reduces the pressure of the liquid at high temperature and high pressure and converts it into liquid at low temperature and low pressure by throttling it so that it can be easily vaporised in a cooler
D	In the cooler, liquid at low temperature and low pressure generated by the electronic expansion valve absorbs heat from the oil, evaporates and is converted into gas at low temperature and low pressure
E	The bypass mechanism controls the cooling capacity by adjusting the volume of gas at high temperature and high pressure supplied to the cooler when heat load is low

Spare parts for the AKZ149

Item	Parts Description	Part Number
PC Boards	Control Panel Assembly	SB-22301816-01
	Main Control Board	SB-PP02858-01
	Inverter Board	SB-22201144-01
Compressor Parts	Compressor	SB-1YC20EXD
	Compressor Terminal Cover	SB-3PD03148-1
	Main Electronic Exp. Valve Coil	SBAKZ-004
	Main Electronic Exp. Valve Body	SB-22301926-01
	HGB Electronic Exp. Valve Coil	SBAKZ-003
	HGB Electronic Exp. Valve Body	SB-22301854-01
	Vibration Isolator	SB-22400963-01
Fan Assembly	Fan Motor	SBAKZ-005
	Fan Blade	SB-22201235-01
Thermistors	Discharge Pipe (Th-6)	SB-22301677-01
	Condenser (Th-7)	SB-22301677-03
	Expansion Valve (Th-8)	SB-22301677-02
	Oil Outlet (Th-2)	SB-22301677-05
	Oil Inlet (Th-4)	SB-22301677-04
	Room Temperature (Th-3)	SB-Y4453121-1
Other Products	Pump and Motor Assembly	SBAKZ-009
	Filter Mesh	SB-1936142-1
	Inline Filter	SB-69359
	Filter Element (Tank)	SFT-06-150W

Daikin Oil Cooling Unit (Circulation Type) Specification Cross Reference Guide

Specification Guide	AKZ149	AKZ329	AKZ439	AKZ569	AKZ909
Horse Power	0.5HP	1.2HP	1.5HP	2.0HP	3.0HP
Cooling Capacity	1.3/1.4kW	2.8/3.2kW	3.8/4.3kW	5.0/5.6kW	8.0/9.0kW
Power Supply		AC 3-phase 200/220V 50/60Hz			
Compressor	0.4kW	0.75kW	1.1kW	1.5kW	2.2kW
Oil Pump Discharge	12/14.4 L/min	24/28.8 L/min		30/36 L/min	
Operating Temp		5 to 50°C			
Dimensions (mm)	H = 650mm W = 360mm D = 440mm	H = 775mm W = 360mm D = 440mm	H = 875mm W = 360mm D = 440mm	H = 1110mm W= 470mm D = 560mm	H= 1220mm W = 560mm D = 680mm
Refrigerant Type		R410A			
Refrigerant Amount	0.49kg	0.72kg	0.98kg	1.02kg	1.48kg
Oil Viscosity		1.4 to 200mm ² /s (ISO VG2 to 32)			
Oil Inlet Port		Rc3/4		Rc1 1/4	
Oil Outlet Port		Rc3/4		Rc1 1/4	
Noise	62dB(A)		65dB(A)		67dB(A)
Weight	51kg	56kg	64kg	82kg	97kg