



LG HVAC SOLUTION

# LG WATER COOLED SCREW CHILLER



**COP 5.3**

Cooling Capacity  
74-373RT

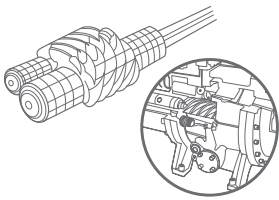


## Why LG Water Cooled Screw Chiller?

LG Electronics developed water-cooled screw chiller through advanced technologies and manufacturing / installation / operation experience over several decades. LG water-cooled screw chiller is high efficient and reliable by adapting falling film type evaporator and oil reclaim system.

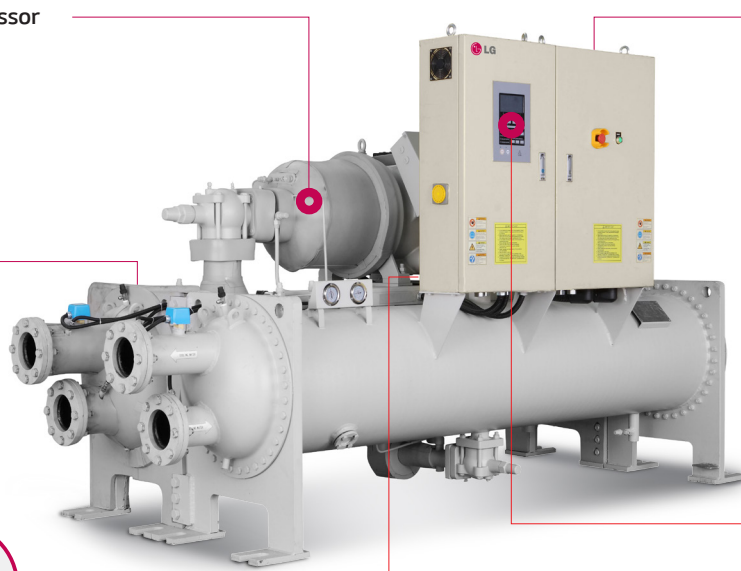
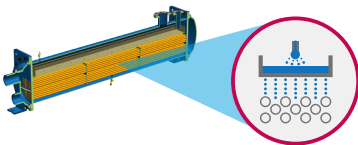
### High Performance Screw Compressor

- High efficiency rotor profile
- Premium grade low-loss core steel



### Falling Film Type Evaporator

- High thermal efficiency
- Low refrigerant charge



### Safety Control System

- Various safety devices for reliability



### Oil Reclaim System

- To maintain sufficient lubricant oil



### User Friendly Controller

- 7 inch LCD display
- Operation status, scheduling etc.



## Standard Efficiency Model COP 5.3

| AHRI condition, 180 RT |



### High energy efficiency

- Screw compressor with 5:6 patented rotors & semi-hermetic motor
- Falling film type evaporator

### Convenience

- User friendly controller with various functions
- Easy BMS interface (Modbus, BACnet, TCP/IP)

### Reliability & Stability

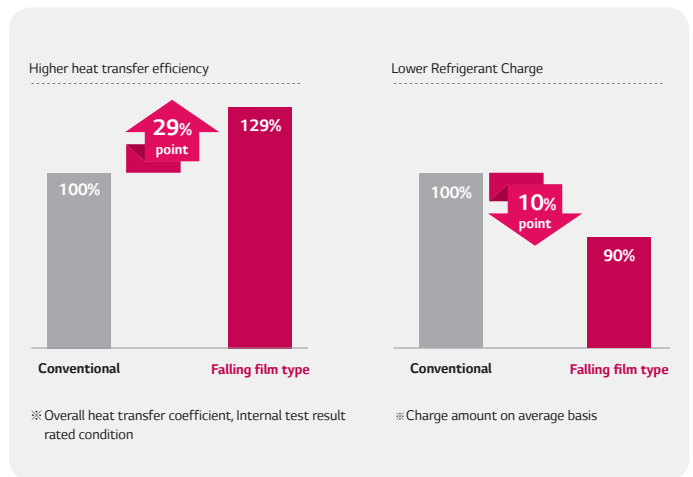
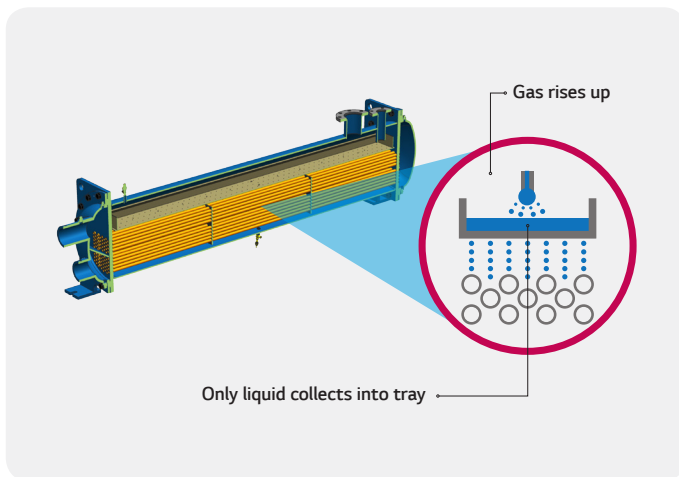
- Stable oil reclaim system using external oil separator
- Safety control system using various sensors & switches
- Precise capacity control (Step / Stepless)
- R-134a refrigerant, ODP=0
- AHRI certified model selection program
- AHRI certified factory performance test facility



## High Energy Efficiency

### Falling Film Type Evaporator

- Gravity dropping distribution
  - Prevent sludge
  - Stable operation
- Using eliminator, separate gas and liquid refrigerant for better distribution
- Optimized vapor lane design improves heat transfer efficiency

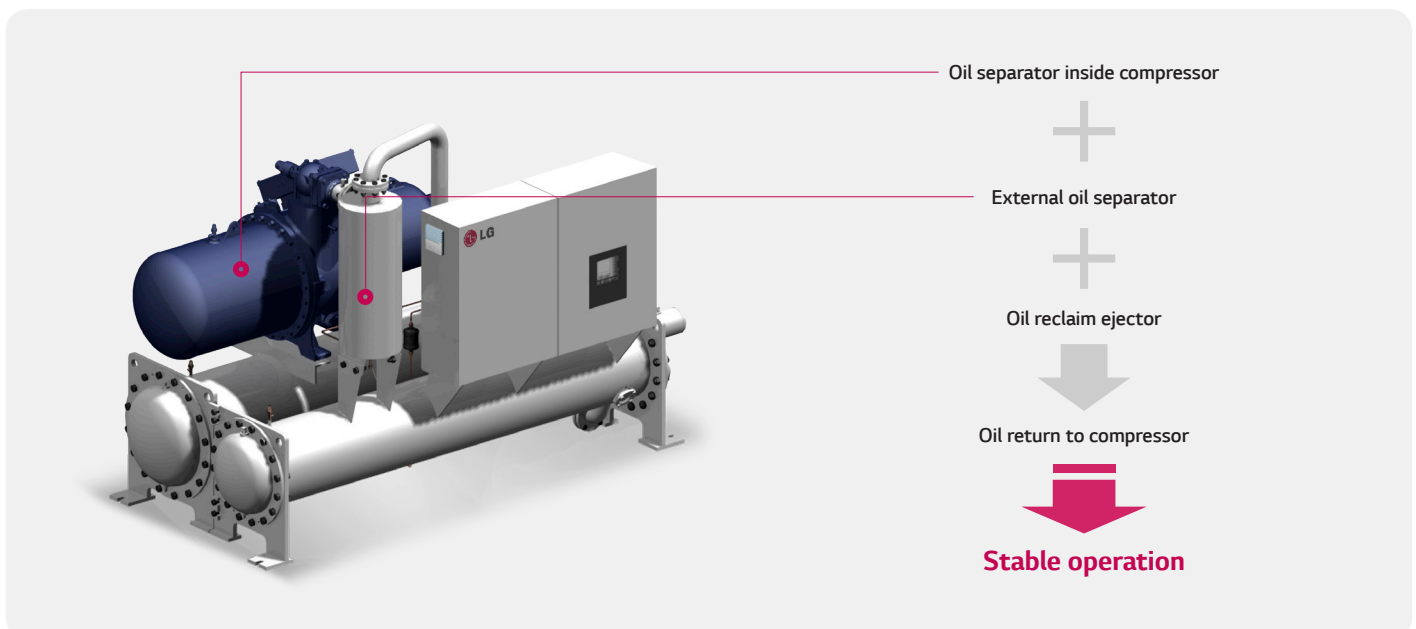


## Stable Oil Reclaim System

Newly developed oil reclaim system makes operation more stable by utilizing external oil separation.


### | Technologies & Benefits |

- Easy maintenance
  - Cleaning oil separator without disassemble
- Reduce oil content in evaporator
  - Improve heat transfer efficiency



## Line-up

(Unit : usRT)

Model		50	100	150	200	250	300	350	400
	R-134a								
	50Hz		75						364
	60Hz		75						374

## Specification

### R134a / 50Hz

Model		Units	RCWW008CA1A	RCWW010CA1A	RCWW011CA1A	RCWW012CA1A	RCWW014CA1A	RCWW016CA1A	RCWW018CA1A
AHRI condition	Cooling capacity	usRT	75	93	101	113	131	155	180
Weight	Shipping/Operating	kg	2,320/2,460	2,410/2,570	2,490/2,660	2,530/2,710	3,020/3,250	3,140/3,390	3,220/3,500
Compressors	Quantity	EA	1	1	1	1	1	1	1
Water Connections	Condenser	DN	100	100	100	100	125	125	125
	Evaporator	DN	100	100	100	100	125	125	125
Dimension	L/W/H	mm	2,940/1,470/1,815	2,940/1,470/1,850	2,940/1,470/1,855	2,940/1,470/1,855	2,940/1,480/1,890	3,050/1,480/1,895	3,120/1,480/1,950

Model		Units	RCWW020CA2A	RCWW022CA2A	RCWW024CA2A	RCWW028CA2A	RCWW032CA2A	RCWW036CA2A
AHRI condition	Cooling capacity	usRT	187	205	230	263	313	364
Weight	Shipping/Operating	kg	4,220/4,500	4,520/4,830	4,780/5,130	5,360/5,750	5,710/6,160	5,990/6,520
Compressors	Quantity	EA	2	2	2	2	2	2
Water Connections	Condenser	DN	125	150	150	150	200	200
	Evaporator	DN	125	150	150	150	200	200
Dimension	L/W/H	mm	3,800/1,455/1,960	3,900/1,455/1,970	4,268/1,485/2,005	4,295/1,485/2,050	4,380/1,515/2,060	4,520/1,545/2,075

### R134a / 60Hz

Model		Units	RCWW008CA1A	RCWW010CA1A	RCWW011CA1A	RCWW012CA1A	RCWW014CA1A	RCWW016CA1A	RCWW018CA1A	RCWW020CA2A
AHRI condition	Cooling capacity	usRT	75	91	103	111	130	156	175	184
Weight	Shipping/Operating	kg	2,190/2,330	2,360/2,520	2,450/2,620	2,440/2,620	2,730/2,960	3,060/3,310	3,180/3,460	4,140/4,410
Compressors	Quantity	EA	1	1	1	1	1	1	1	2
Water Connections	Condenser	DN	100	100	100	100	125	125	125	125
	Evaporator	DN	100	100	100	100	125	125	125	125
Dimension	L/W/H	mm	2,940/1,450/1,760	2,940/1,470/1,810	2,940/1,470/1,810	2,940/1,470/1,840	2,940/1,470/1,890	2,940/1,480/1,945	3,050/1,480/1,950	3,630/1,455/1,890

Model		Units	RCWW022CA2A	RCWW024CA2A	RCWW026CA2A	RCWW028CA2A	RCWW032CA2A	RCWW036CA2A	RCWW040CA2A
AHRI condition	Cooling capacity	usRT	209	225	244	262	315	350	374
Weight	Shipping/Operating	kg	4,460/4,780	4,600/4,940	4,720/5,080	4,770/5,150	5,580/6,040	5,910/6,430	5,930/6,480
Compressors	Quantity	EA	2	2	2	2	2	2	2
Water Connections	Condenser	DN	150	150	150	150	200	200	200
	Evaporator	DN	150	150	150	150	200	200	200
Dimension	L/W/H	mm	3,685/1,455/1,890	3,800/1,485/1,995	3,900/1,485/2,005	3,860/1,485/1,995	4,295/1,485/2,055	4,380/1,515/2,105	4,380/1,515/2,105

Note :

1. usRT = 3,024 kcal/hr = 3.517kW
2. Chilled water leaving temperature is 6.7°C (44°F). Cooling water entering temperature is 29.4°C (85°F).
3. Fouling factor of water in evaporator is 0.018 m<sup>2</sup>·C/kW (0.00002 ft<sup>2</sup>·h·°F/Btu). Fouling factor of water in condenser is 0.044 m<sup>2</sup>·C/kW (0.00005 ft<sup>2</sup>·h·°F/Btu)
4. Due to our policy of innovation some specifications may be changed without prior notification.

## LG Electronics, Home appliance & Air solution company

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For continual product development, LG reserves the right to change specifications or designs without notice.  
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