

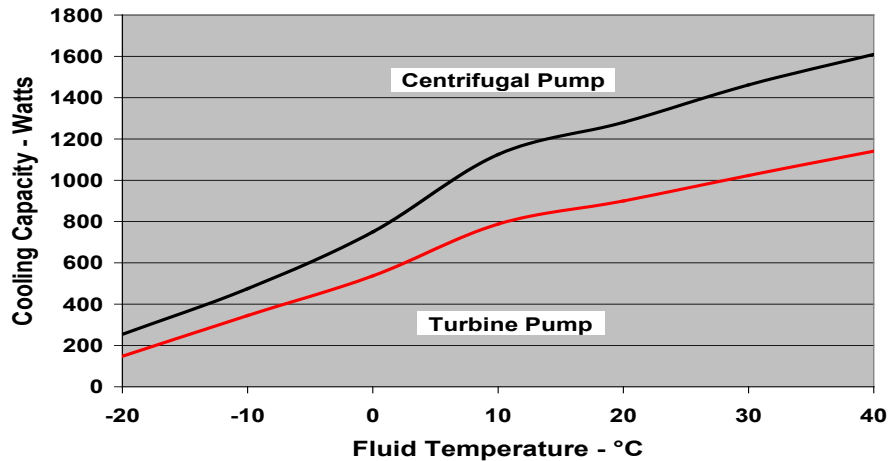
# Technical Information

## Model LS51/LS53 60Hz Compact Chiller Specifications

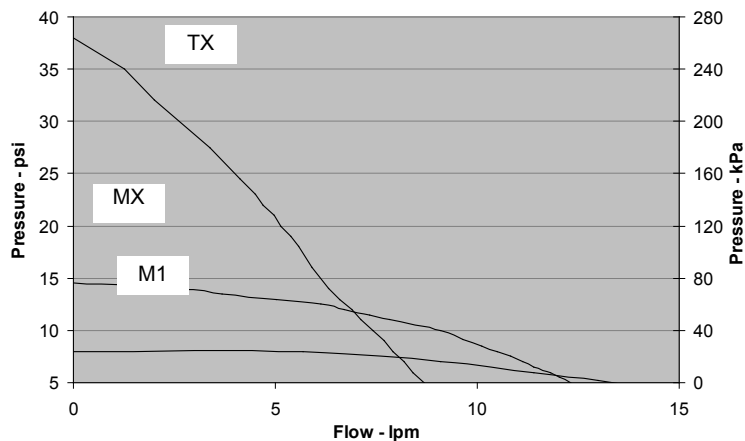
### Performance 120/230V, 60Hz

Working temperature range <sup>1</sup>	-20° to +40°C / -4° to +104°F						
Operating temperature range <sup>2</sup>	-20° to +60°C / -4° to +140°F						
Temperature Stability	±0.1°C (±0.18°F)						
Cooling capacity	Ethylene Glycol & Water (50/50 mix)						
Pump	MX Centrifugal		M1 Centrifugal		TX Turbine		
@	Watts	BTU/Hr	Watts	BTU/Hr	@	Watts	BTU/Hr
-20°C	260	888	230	785	-20°C	150	512
-10°C	475	1622	435	1486	-10°C	345	1178
0°C	750	2561	680	2322	0°C	540	1844
+10°C	1130	3859	1030	3518	+10°C	790	2698
+20°C	1290	4406	1160	3962	+20°C	900	3074
+30°C	1460	4986	1380	4713	+30°C	1020	3483
+40°C	1610	5498	1550	5294	+40°C	1140	3893

1. The temperature that the chiller can reach without an external heating or cooling source.
2. The temperature range in which the chiller can control temperature, limited by electronics.



Pump option	MX - Centrifugal	M1 - Centrifugal	TX - Turbine
Maximum Flow	13.2 lpm / 3.5 gpm	14.8 lpm / 3.9 gpm	9.8 lpm / 2.6 gpm
Maximum Pressure	14.5 psi / 0.99 bar	9 psi / 0.62 bar	43.4 psi / 2.99 bar
Maximum Head	10.2 m / 33.5 ft H <sub>2</sub> O	5.6 m / 18.5 ft H <sub>2</sub> O	26.75 m / 87.8 ft H <sub>2</sub> O



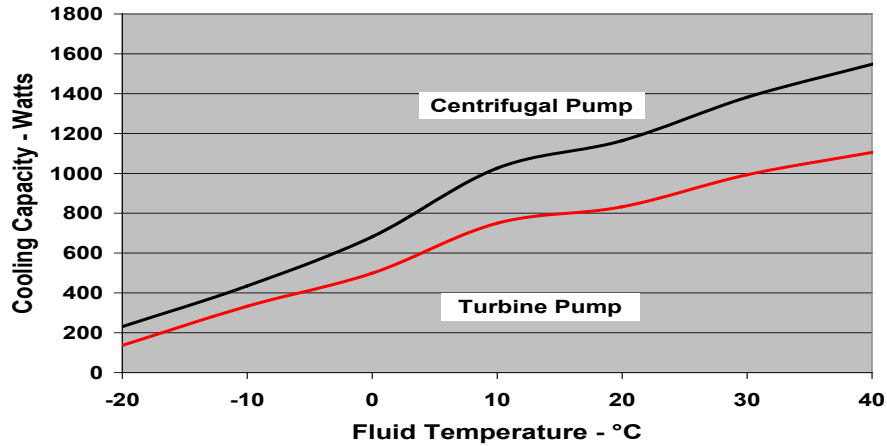
Specifications are subject to change. Performance data based on 120V or 230V, 60hz input power, 20°C ambient temperature and a 50/50 mix of Ethylene Glycol and distilled water as coolant.

# Model LS52 50Hz Compact Chiller Specifications

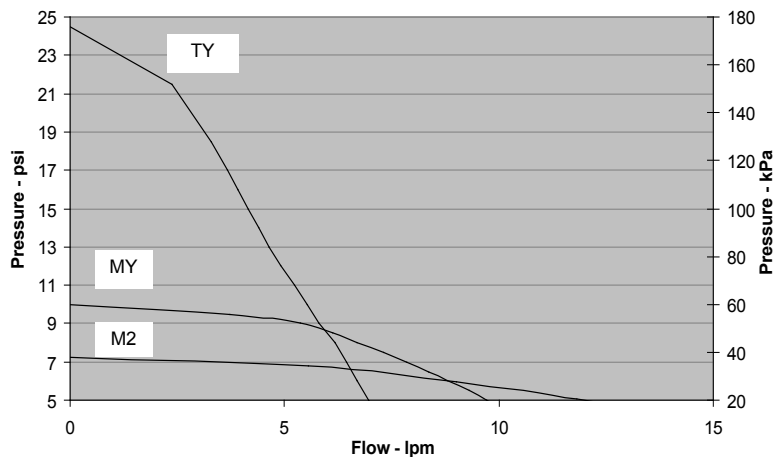
## Performance 240V, 50Hz

Working temperature range <sup>1</sup>		-20° to +40°C / -4° to +104°F					
Operating temperature range <sup>2</sup>		-20° to +60°C / -4° to +140°F					
Temperature Stability		±0.1°C (±0.18°F)					
Cooling capacity:		Ethylene Glycol & Water (50/50 mix)					
Pump	M2 Centrifugal		MY Centrifugal		TY Turbine		
@	Watts	BTU/Hr	Watts	BTU/Hr	@	Watts	BTU/Hr
-20°C	230	785	240	820	-20°C	140	478
-10°C	435	1485	460	1571	-10°C	330	1127
0°C	680	2322	700	2391	0°C	500	1708
+10°C	1030	3518	1070	3996	+10°C	750	2561
+20°C	1160	3962	1190	4064	+20°C	830	2835
+30°C	1380	4713	1420	4850	+30°C	990	3381
+40°C	1545	5276	1580	5396	+40°C	1105	3774

1. The temperature that the chiller can reach without an external heating or cooling source.
2. The temperature range in which the chiller can control temperature, limited by electronics.



Pump option	M2 - Centrifugal	MY - Centrifugal	TY - Turbine
Maximum Flow	12.9 lpm / 3.4 gpm	11.7 lpm / 3.1 gpm	8.3 lpm / 2.2 gpm
Maximum Pressure	5.5 psi / 0.38 bar	10.5 psi / 0.72 mbar	32 psi / 2.2 bar
Maximum Head	4 m / 12.8 ft H <sub>2</sub> O	7 m / 23 ft H <sub>2</sub> O	17 m / 56.5 ft H <sub>2</sub> O



Specifications are subject to change. Performance data based on 240V, 50hz input power, 20°C ambient temperature and a 50/50 mix of Ethylene Glycol and distilled water as coolant.

## General Information & Specifications

### Safety

Auto-restart on power failure	Yes
Low flow alarm and power cutoff	Yes
High temperature safety	Yes
High temperature limit	Yes (user adjustable)
Low temperature limit	Yes (user adjustable)

### Compliance

TUV (Canada, US)	Yes
CE	Yes
WEEE	Compliant
RoHS	Compliant

### Construction

Outer case	Epoxy powder coated steel
Wetted parts	Brass, Copper, Stainless Steel, EPDM Rubber, Alcryn, Nylon, PVC, and Polyethylene
Unit dimensions (L x W x H)	60.7 x 25.4 x 48.3 cm / 23.9 x 10 x 19 in.
Unit weight	46.3 kg / 102 lbs
Reservoir volume	2.65 L / 0.7 gal
Heat exchanger	Stainless steel copper-brazed plate
Noise Rating (measured at .9 m from the unit)	53 dBA
Compressor	Hermetic
Refrigerant type	R-404a

### Controller

Display type	Digital, LED
Temperature stability	±0.1°C
Display resolution	0.1°
Temperature Units	°C or °F
User calibration	Temperature

### Setup

Recommended fluid(s)	50/50 mix of distilled water and ethylene glycol
Incompatible fluids	Corrosive or flammable fluids; Deionized water package available
Ambient temperature operating range	5° to 35°C / 41° to 95°F
Maximum relative humidity	80% non-condensing
Operating power requirements	103 - 127V, 12A, 60Hz (LS51) 208 - 253V, 6A 60Hz (LS53) 216 - 264V, 6A, 50Hz (LS52)
Fluid inlet/outlet	0.5 inch female brass NPT
Recommended tubing I.D.	0.375 inch / 9.5 mm (minimum)

Specifications subject to change without notice.

Environmental Conditions	Indoor use only
	Maximum Altitude: 2000 meter
	Operating Ambient: 5° to 35°C (41° to 95°F)
	Relative Humidity: 80%, non-condensing
	Installation Category: II
	Pollution Degree: 2