



Producer: **Copeland**  
 Line: **Standard**  
 Model: **LL-301**  
 Cooling capacity [kW]:  
 Displacement [m<sup>3</sup>/h]: **18.2**  
 Refrigerant: **R22**  
 Capacity control: **None, Inverter (option)**  
 Power supply: **400V/3Ph/50Hz**

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	18.2
Cylinders quantity		2
Cylinder bore	[mm]	60.4
Cylinder stroke	[mm]	36.5
Oil charge	[l]	2.00
Oil type		Suniso 3GS
Type of lubrication		Splash lubrication
Net weight	[kg]	85.00
Gross weight	[kg]	91.00

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	7.1
Locked rotor amperage	[A]	53.0
Maximum motor frequency	[Hz]	60
Minimum motor frequency	[Hz]	25
Maximum suction pressure	[bar]	22.5
Maximum discharge pressure	[bar]	32.5

### Dimensions

Suction valve diameter	[inch]	1 1/8
Discharge valve diameter	[inch]	5/8
Length	[mm]	460
Height	[mm]	385
Width	[mm]	330

### Other

Approved refrigerants	R22
Allowed oil types	Suniso 3GS, TEXACO Capella WF 32, FUCHS Reniso KM
Capacity control	None, Inverter (option)
Protection rating	IP54 (IEC34)

## Performance

Nominal conditions: refrigerant: R22, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0°C

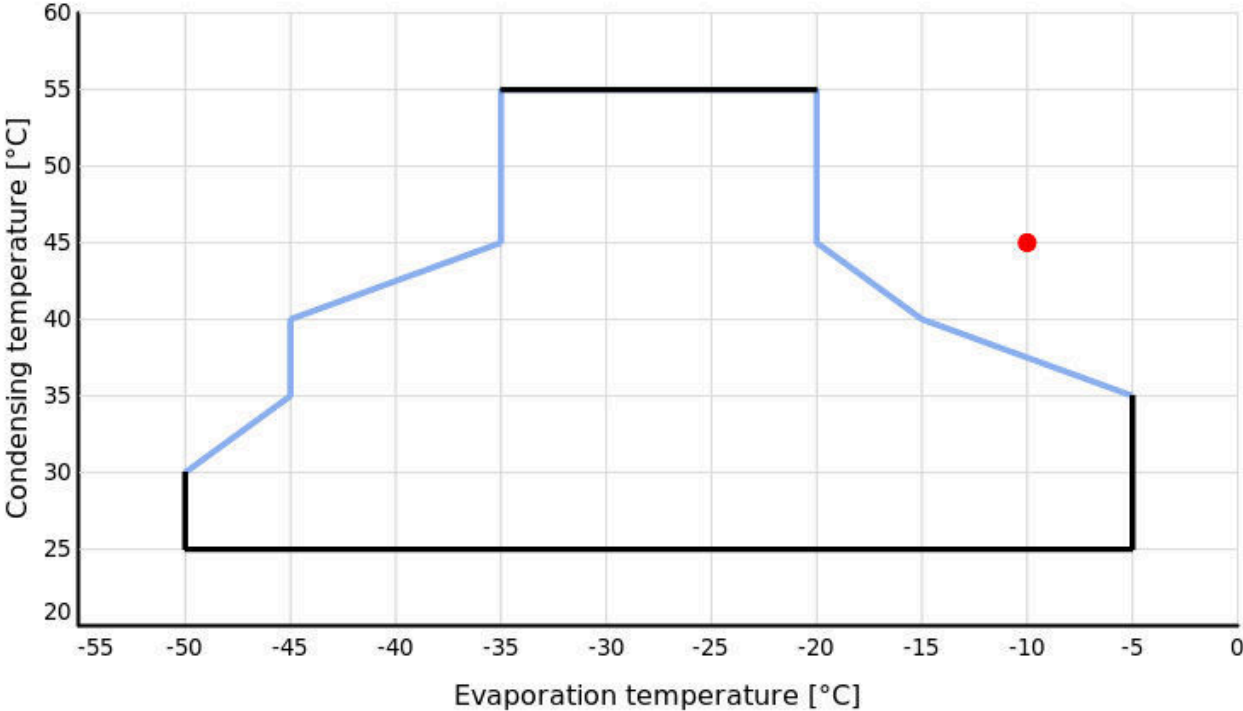
### Cooling capacity

		Evaporation temperature [°C]									
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5
Condensation temperature [°C]	25	0.74	1.36	2.17	3.19	4.43	5.90	7.63	9.63	11.93	14.54
	30	0.56	1.12	1.88	2.84	4.02	5.42	7.07	8.98	11.19	13.70
	35		0.90	1.60	2.51	3.62	4.95	6.52	8.35	10.46	12.88
	40		0.69	1.34	2.18	3.23	4.49	5.98	7.73		
	45				1.87	2.85	4.04	5.46			
	50				1.58	2.49	3.61	4.94			
	55				1.30	2.14	3.19	4.45			

### Power consumption

		Evaporation temperature [°C]									
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5
Condensation temperature [°C]	25	1.20	1.42	1.67	1.92	2.17	2.42	2.64	2.84	3.01	3.12
	30	1.19	1.42	1.68	1.96	2.24	2.53	2.80	3.05	3.26	3.44
	35		1.41	1.69	1.99	2.30	2.62	2.94	3.23	3.51	3.75
	40		1.39	1.68	2.01	2.35	2.71	3.07	3.41		
	45				2.02	2.40	2.79	3.18			
	50				2.03	2.43	2.86	3.29			
	55				2.03	2.46	2.91	3.39			

Application range



Legend

■ Suction gas temperature: 25°C, additional head cooling