

# Reciprocating compressor 4ML-15X



Producer: **Copeland**

Line: **Stream**

Model: **4ML-15X**

Cooling capacity [kW]: **35.41**

Displacement [m<sup>3</sup>/h]: **71.4**

Refrigerant: **R134a, R404A, R407A, R407F, R448A, R449A, R450A, R454A, R454C, R455A, R513A**

Capacity control: **None, Step (option), Inverter (option)**

Power supply: **400V/3Ph/50Hz**

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	71.4
Cylinders quantity		4
Cylinder bore	[mm]	68.3
Cylinder stroke	[mm]	56.0
Oil charge	[l]	3.30
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	180.00

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	35.4
Locked rotor amperage	[A]	156.0
Maximum motor frequency	[Hz]	70
Minimum motor frequency	[Hz]	30
Maximum suction pressure	[bar]	22.5
Maximum discharge pressure	[bar]	32.5

### Dimensions

Suction valve diameter	[inch]	1 5/8
Discharge valve diameter	[inch]	1 1/8
Length	[mm]	638
Height	[mm]	452
Width	[mm]	501

### Other

Approved refrigerants	R134a, R404A, R407A, R407F, R448A, R449A, R450A, R454A, R454C, R455A, R513A
Allowed oil types	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Capacity control	None, Step (option), Inverter (option)
Protection rating	IP54 (IEC34)

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## Performance

Nominal conditions: refrigerant: R404A , evaporation (dew point): -10 °C, condensation (dew point): 45 °C, superheating: 10 K, subcooling: 0 °C

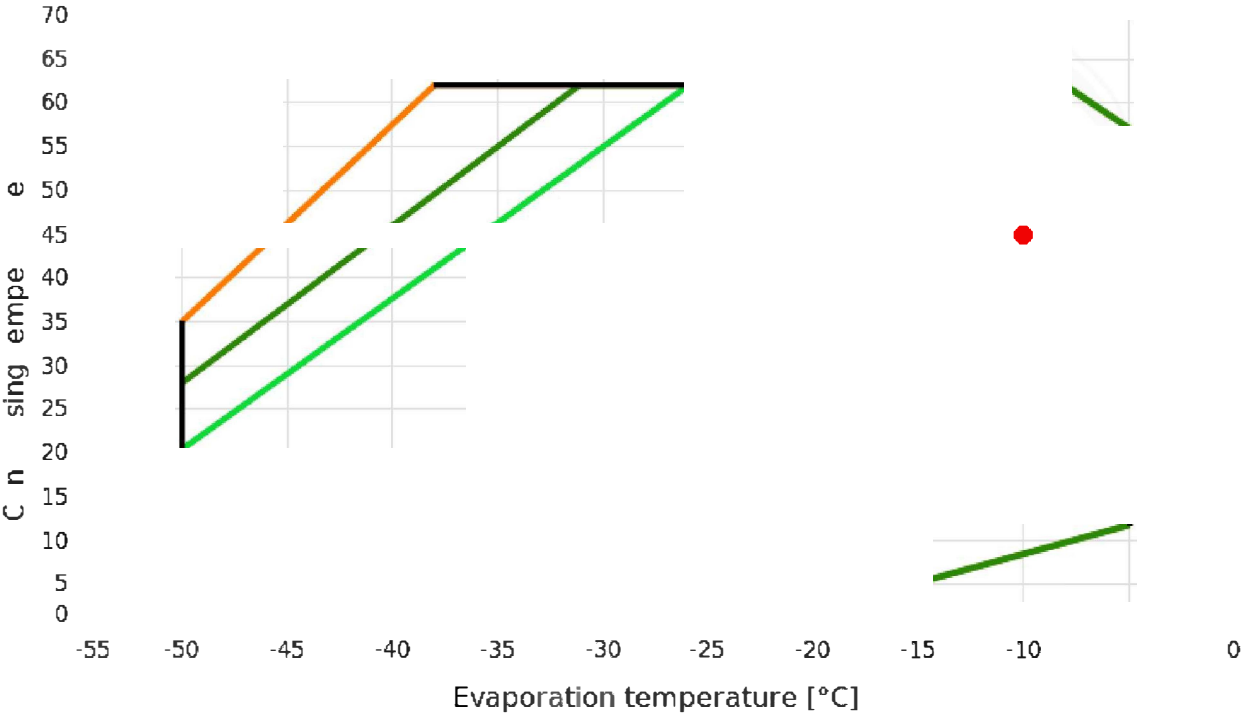
### Cooling capacity [kW]

		Evaporation temperature [°C]											
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5		
Condensation temperature [°C]	5	8.38	11.67	15.90	21.15	27.52	35.12	44.08					
	10	7.53	10.69	14.70	19.66	25.68	32.86	41.32	51.19	62.59			
	15	6.69	9.71	13.50	18.18	23.84	30.59	38.57	47.90	58.68	71.04		
	20	5.84	8.72	12.30	16.69	22.00	28.34	35.83	44.61	54.79	66.49		
	25	5.00	7.74	11.11	15.21	20.16	26.08	33.10	41.33	50.90	61.94		
	30	4.16	6.75	9.91	13.73	18.33	23.83	30.36	38.05	47.02	57.41		
	35	3.33	5.77	8.71	12.24	16.49	21.58	27.63	34.78	43.15	52.88		
	40		4.79	7.51	10.76	14.66	19.33	24.90	31.51	39.28	48.36		
	45		3.82	6.31	9.28	12.83	17.08	22.17	28.24	35.41	43.84		
	50			5.13	7.80	10.99	14.83	19.45	24.97	31.54	39.32		
	55			3.97	6.33	9.17	12.59	16.72	21.70	27.67	34.79		
	60				4.89	7.36	10.35	13.99	18.41	23.78			
	62				4.33	6.64	9.45	12.89	17.09	22.21			

### Power consumption [kW]

		Evaporation temperature [°C]											
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5		
Condensation temperature [°C]	5	4.68	5.46	6.20	6.87	7.40	7.74	7.85					
	10	4.81	5.67	6.53	7.33	8.02	8.55	8.88	8.94	8.70			
	15	4.91	5.85	6.80	7.73	8.57	9.29	9.81	10.11	10.12	9.80		
	20	4.99	5.99	7.04	8.08	9.06	9.94	10.67	11.18	11.44	11.39		
	25	5.05	6.10	7.23	8.38	9.50	10.53	11.44	12.17	12.66	12.87		
	30	5.09	6.19	7.39	8.63	9.87	11.06	12.14	13.06	13.78	14.24		
	35	5.13	6.26	7.52	8.85	10.20	11.52	12.77	13.88	14.82	15.52		
	40		6.31	7.62	9.02	10.48	11.93	13.33	14.62	15.76	16.70		
	45		6.35	7.70	9.17	10.71	12.28	13.82	15.29	16.62	17.78		
	50			7.76	9.28	10.91	12.59	14.26	15.89	17.41	18.78		
	55			7.80	9.37	11.07	12.85	14.65	16.42	18.12	19.69		
	60				9.45	11.21	13.07	14.98	16.89	18.76			
	62				9.47	11.25	13.14	15.10	17.07	18.99			

**Application range**



**Legend**

- Suction gas superheating: 20 K
- Suction gas temperature: 20°C
- Suction gas temperature: 0°C
- Current operating conditions