

Specifications/ Equipment Ratings

	EK45	EK90
Working Temperature Range¹	-45°C to +40°C -49°F to +104°F	-90°C to +40°C -130°F to +104°F
Ambient Temperature Range²	+10°C to +40°C +50°F to +104°F	+10°C to +40°C +50°F to +104°F
Maximum Relative Humidity (Non Condensing)	80%/31°C to 50%/40°C	80%/31°C to 50%/40°C
Operating Altitude	Sea Level to 2000 meters (6560 feet)	Sea Level to 2000 meters (6560 feet)
Pollution Degree	2	2
Overvoltage Category	II	II
Degree of Protection	IP20	IP20
Sound Level³	less than 58 dBA	less than 58 dBA
Cooling Capacity at +20°C	350 watts/60Hz (300 watts/50Hz)	300 watts
at -10°C	250 watts/60Hz (220 watts/50Hz)	280 watts
at -40°C	-	170 watts
at -60°C	-	100 watts
Compressor Cooling	Air	Air
Refrigerant	R404A	R404A/R23
Hose Length	150 cm	150 cm
Cooling Coil (Ø x L)	81 x 195 mm	13 x 900 mm
Smallest Bending Radius⁴	-	40mm
Cooler Dimensions (H x W x D)	380 x 225 x 465 mm	490 x 380 x 460 mm
Evaporator Material	300 Series Stainless Steel	300 Series Stainless Steel
Nominal Weight kg/lb	27.2 / 60.0	62.7 / 138.2
Electrical Requirements⁵	230V/50Hz or 115V/60Hz	230V/50Hz or 115V/60Hz
Total Maximum Wattage	900VA	1300VA

1. The lowest possible temperature in a bath and the shortest cooling down time are dependent on: the volume of liquid to be cooled, the type of liquid and its viscosity at the desired working temperature, the heat conductivity of the liquid, the bath vessel and covering insulation, the heat created by any EK immersed in the bath used to recirculate or stir the liquid.

The lowest temperatures possible for the EK45 and EK90 specified above were reached in a Dewar vessel with a volume of 2 liters. Methylcyclohexane was used as the bath liquid and the bath was not stirred.

2. The cooling capacity is reduced at ambient temperatures of > 25°C. 30°C max ambient for setpoints >20°C for EK90, or >0°C for EK45. Example: Setpoint 40°C, max ambient = 30°C.

3. 1 meter from EK.

4. Never bend the probe when it is cold.

5. Nominal values ±10%.

• Thermo Fisher Scientific reserves the right to change specifications without notice.