## **CRYOMECH**

## Helium Reliquefier Specification Sheet HeRL02-RM with CPA2850

Reliquefaction rate ≥ 7.5 L/day at 0.50 psig

(Recondensing boil-off from Cryostat)

Cool down time < 4 hours between start up and liquid helium production

Max operating pressure 5.0 psig (0.34 bar) Pressure relief valve cracking pressure

Cryostat interface

Standard drain leg diameters:  $\emptyset$  1/2 inch (12.7 mm)

Ø 3/8 inch (9.5 mm) Ø 12 mm (0.472 inch)

(Custom sizes available upon request)

Standard drain leg length 12 inch (305 mm) – 35 inch (889 mm)

(Custom lengths available upon request)

Vapor return line Connects to vent port

Supplied with 1/4 inch MNPT and KF16 adaptor

System monitoring and control

Pressure control Balances boil-off rate with condensing rate

Temperature monitor Monitors the cold head temperature using a calibrated

diode

Reliquefier weight 65 lb (29.5 kg)
Cold head PT405-RM

Helium compressor package CPA2850, available as water or air cooled

Water cooled:

Weight 243 lb (110 kg)

Dimensions See compressor package outline drawing

Electrical rating 200/230VAC, 3 Ph, 60 Hz

440/480VAC, 3Ph, 60Hz 200VAC, 3Ph, 50Hz 380/415VAC, 3Ph, 50Hz

Power consumption at steady state 5.4 kW, 60 Hz

4.9 kW, 50 Hz

Cooling water flow rate Minimum flow 1.8 GPM (6.8 LPM) at 80 °F (27 °C) maximum

temperature

Air cooled:

Weight 384 lb (174 kg)

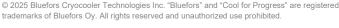
Dimensions - See compressor package outline drawing

Electrical rating 200/230 VAC, 3Ph, 60Hz

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Power consumption at steady state 6.0 kW, 60 Hz

5.5 kW, 50 Hz





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Flexible lines

Standard length 25 ft (7.6 m) Weight per pair 23 lb (10.4 kg)

System parameters

Helium pressure 220  $\pm$  5 psig (15.2  $\pm$  .34 bar) at 60 Hz

250 ± 5 psig (17.2 ± .34 bar) at 50 Hz

Ambient temperature range 45 °F to 100 °F (7 °C to 38 °C)

Maximum sound level

Water cooled 70 dBA at 1 meter Air cooled 74 dBA at 1meter

Mounting interface (8) 5/16 -18 threaded holes on HeRL base

See Reliquefier outline drawing



