





DX Model Pump Performance

Protech's cool water recirculators are specially designed for the adoption to scientific and laboratory instrumentation applications. These units are completely self-contained, consisting of a hermetically sealed refrigeration compressor, a water tank, a water pump and an electronically automated control system for supply of constant cooling water at the required temperature, pressure and flow rate.

Using refrigerated chillers that use water in a closed circuit offer many advantages over free flowing tap water for cooling instruments/machineries.

- i) There is no need to have a water source and no need for drainage at site. Machine operation is not AFFECTED by water supply.
- ii) There is better temperature and pressure control thus improving operation efficiency.
- iii) There is no scaling problem as compared to using raw water as the cooling medium. Scaling reduce heat transfer and restrict/block the flow in the system.

Ease of installation / set up

- Fill the storage tank
- Connect the power supply
- Make the hose connection to the equipment

Benefits

- Save costs
- Increase productivity
- Eliminate scaling
- Increase flexibility
- Conserve resources

Control Panel

- Controller display
- Mains ON/OFF
- Compressor ON/OFF
- Pump failure lamp
- Compressor failure lamp

Specifications

MODEL	640-DX 680-DX			
Cooling capacity	5274 Kcal/h or 18000 BTU/h	9376 Kcal/h or 32000 BTU/h		
Compressor motor	1.12 KW or 1.50 HP	1.86 KW or 2.50 HP		
Bath capacity	50 litres			
Compressor type	Fully hermetic			
Refrigerant type	404a			
Controller type	Digital temperature controller			
Temperature control range	5 to 25°C			
Temperature accuracy	±2°C			
Chilled water flow rate L/M	50 litres / minute			
Water pressure	145 psi			
Pipe size (inlet/outlet)	25 / 25 mm			
Safety device	High & Low Pressure Switch, Thermal Overload For Compressor			
Overall dimensions (mm)	670W x 710D x 1025H	750W x 670D x 1100H		
Bath dimensions (mm)	435W x 220D x 325H			
Lid opening area (mm)	408W x 200D			
Electrical	240 VAC, 50Hz, 8.6A	415 VAC, 50Hz, 3Ø4W, 14.3A		
Weight	114 kg	180 kg		

Applications

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NMR and ESR magnets	ICP, FTIR	Distilling apparatus	Plastic injection molding machines	
Lasers	E.D.M	Evaporating apparatus	Turbo-moleculars pumps	
SEM's - TEM's	Diffusion pumps	Laboratory use	Rotary evaporators	
X-Ray diffraction	Condenser cooling	Welding	Hydraulic machining	
Electron microscopes	Power supplies	Machining	Vacuum system	