



RPC-500

The OptiCool RPC-500 system provides best-in-class precision cooling in any mission-critical space where Direct eXpansion (DX) cooling applications are required.

The OptiCool RPC-500 is a highly efficient low-pressure pumped 513a refrigerant system supporting up to 40 Active Heat eXtractor (AHX) units for applications achieving 500kW of non-condensing 100% sensible cooling. Employing a pumped R-513a solution ensures a highly reliable, oil-free, non toxic, non-conductive, and non corrosive sustainable cooling ecosystem to efficiently extract heat at the source.

The RPC-500 pump is part of a system and requires other OptiCool products for effective heat transfer out of the room. Each RPC-500 pump also requires an Outdoor Heat eXpansion unit (ODX-500).



Specifications

MIN/MAX KW CAPACITY	23kW / 500kW
EXTERNAL HEAT REJECTION	DIRECT EXPANSION (DX) R410A / R454B
NUMBER OF AHX SUPPORTED	3 TO 40 PER PUMP UNIT
POWER OPTIONS	480V, 3 PHASE, 60Hz 208V, 230V, 1 PHASE, 60Hz
FULL LOAD AMPS	48V, 6.5 AMP 208V / 230V, 16 AMP
PUMP DRY WEIGHT	3,800 LB
PUMP DIMENSIONS	51 in x 54 in x 79 in
REFRIGERANT DISTRIBUTION NETWORK EQUIVALENT SUPPLY LENGHT (MAX)	185 ft
COMMUNICATION / MONITORING	MODBUS,BACNET, OR SNMP
CERTIFICATION	ISO 9001

Features

-  Assembled in the USA.
-  Industry standard hardware and software for easy BMS integration.
-  Aesthetic design with flexible location and compact footprint.
-  Energy efficient pump motor and VFD with automatic changeover.
-  System designed with cooling capacity management to efficiently handle load change fluctuations.
-  Intuitive 10-inch touchscreen controls.
-  Dynamic self-balancing pressure independent flow control valve for precise capacity control.



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