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AC890PX Series

High Power Modular AC Drive with
Advanced Cooling Technology (300 - 2000kW)



ENGINEERING YOUR SUCCESS.

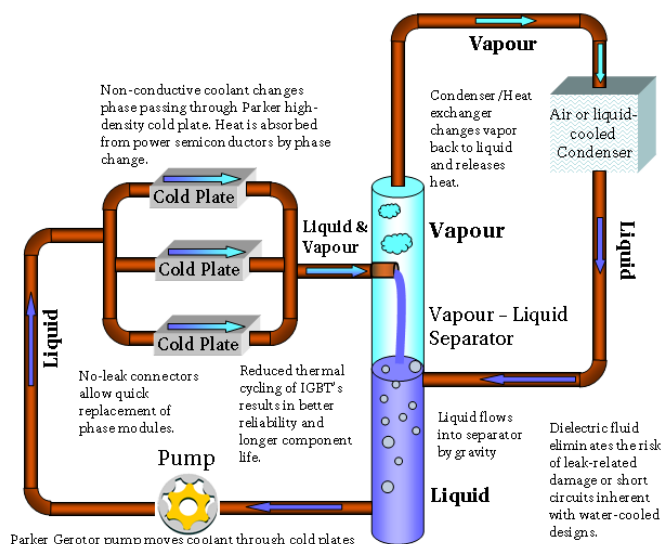
Advanced Cooling System

More Power, Smaller Footprint

Advanced Cooling Process

The AC890PX Series Advanced Cooling design draws from years of Parker experience in refrigeration technology combined with state of the art drive design to produce a truly high-performance AC drive range. The award-winning two-phase coolant system rapidly absorbs heat from drive IGBTs in the Vaporizable Dielectric

Fluid (VDF) coolant's change of phase from liquid to vapor. This requires less coolant flow to be pumped and reduces the thermal cycling of the drive electronics while maintaining performance. The system itself is hermetically sealed, requires no routine maintenance and uses a non-corrosive, non-conducting coolant.



Parker Gerotor pump moves coolant through cold plates



AC890PX Features

Pluggable power modules

- Sealed modules can be replaced in minutes
- Modules weigh under 25kg airfreight weight allowance

Integrated bus system

- Power wiring minimized
- Keyed modules eliminate fitting errors

Wide range of variants

- Active Front End (AFE) option for grid-tie or regenerative systems
- Suitable for use with induction, torque or permanent magnet motors
- Wide range of industry standard communications options
- Heat exchanger can be mounted remotely or on top of the drive

Configuration Software

- Programmable through graphical configuration software (DSE Lite)
- Deterministic Object Oriented programming

Comparison of Cooling Technologies

Air Cooled

- Lowest efficiency
- Poor power density
- Subject to contamination

Water/Glycol

- Requires coolant source
- High maintenance needs
- Leaks can be damaging to plant
- Subject to corrosion

AC890PX

Pumped 2-phase system

- Non-conductive coolant
- High efficiency cooling
- Highest power density
- Hermetically sealed system
- No condensation
- No compressor
- No routine maintenance
- No -lead dry break fittings
- No derating for ambient temperature or altitude

AC890PX Series

High Power Modular AC Drive
with Advanced Cooling Technology

Product Overview

The AC890PX is an innovative, modular, high power AC drive system, that has been developed to minimize drive footprint and reduce installation time and costs, for a range of motor control and power conversion applications. The AC890PX is delivered as a complete package, ready for connection to the power supply and downstream motor or power conversion connection.

Increased Power Density with Advanced Cooling System

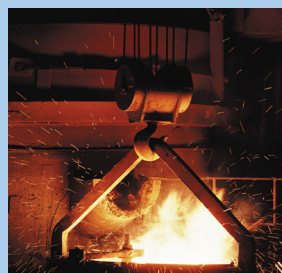
With the introduction of an innovative Parker-engineered cooling system, the AC890PX Series offers increased power output in the same compact drive footprint. The Advanced Cooling design uses a high efficiency hermetically sealed and maintenance-free system.

Voltage (V)	Size (Stacks)	Current (A)	Power (kW)	Power (HP)	Part Number
400	1	480	250	-	890PXAC/4/0480/X/XX/A
400	1	580	315	-	890PXAC/4/0580/X/XX/A
400	2	960	500	-	890PXAC/4/0960/X/XX/A
400	2	1160	630	-	890PXAC/4/1160/X/XX/A
400	3	1440	750	-	890PXAC/4/1440/X/XX/A
400	3	1740	945	-	890PXAC/4/1740/X/XX/A
460	1	480	-	400	890PXAC/4/0480/X/XX/A
460	1	580	-	500	890PXAC/4/0580/X/XX/A
460	2	960	-	800	890PXAC/4/0960/X/XX/A
460	2	1160	-	1000	890PXAC/4/1160/X/XX/A
460	3	1440	-	1200	890PXAC/4/1440/X/XX/A
460	3	1740	-	1500	890PXAC/4/1740/X/XX/A
575	1	420	-	400	890PXAC/6/0420/X/XX/A
575	1	480	-	500	890PXAC/6/0480/X/XX/A
575	2	840	-	800	890PXAC/6/0840/X/XX/A
575	2	1400	-	1500	890PXAC/6/1400/X/XX/A
575	3	1260	-	1200	890PXAC/6/1260/X/XX/A
575	3	2100	-	2200	890PXAC/6/2100/X/XX/A
690	1	340	315	-	890PXAC/7/0340/X/XX/A
690	1	430	400	-	890PXAC/7/0430/X/XX/A
690	2	680	630	-	890PXAC/7/0680/X/XX/A
690	2	1400	1300	-	890PXAC/7/1400/X/XX/A
690	3	1020	945	-	890PXAC/7/1020/X/XX/A
690	3	2100	2000	-	890PXAC/7/2100/X/XX/A

Subject to change; additional specifications available from your Parker SSD representative



Paper and Pulp



Metals



Offshore and Marine



Alternative Energy

Applications

The AC890PX is suited to many different motor control applications, where power density and compactness are key design considerations.

- Automotive Test Stands
- Extruders
- Decanter and batch centrifuges
- Hoists and cranes
- Winder / unwind stands
- Wind turbine grid-tie
- Solar energy capture
- Ocean / wave energy grid-tie
- Ski lifts and cable cars
- Offshore and marine

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Your local authorized Parker distributor

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