

KOOL-PURE PLUS™

Ultra High Purity, High Capacity, Chemical Heater/Chiller System

For applications requiring high heating and cooling capacities and where temperature stability, high purity, and reliability are of critical importance.



APPLIED INTEGRATED SYSTEMS

KOOL-PURE PLUS™

Ultra High Purity, High Capacity, Chemical Heater/Chiller System

Introducing *Kool-Pure Plus*™, Applied Integrated Systems' ultra high purity, resistive and vapor-compression based, chemical and DI water heater/chiller system for applications requiring high heating and cooling capacities and where temperature stability, high purity, and reliability are of critical importance.

AIS's unique patented technology is ideal for re-circulation and single pass applications. Innovative, patented plug-flow design provides a continuous, smooth, flow path for your fluid, without any sharp corners or crevices where contaminants can accumulate.

Features and Benefits

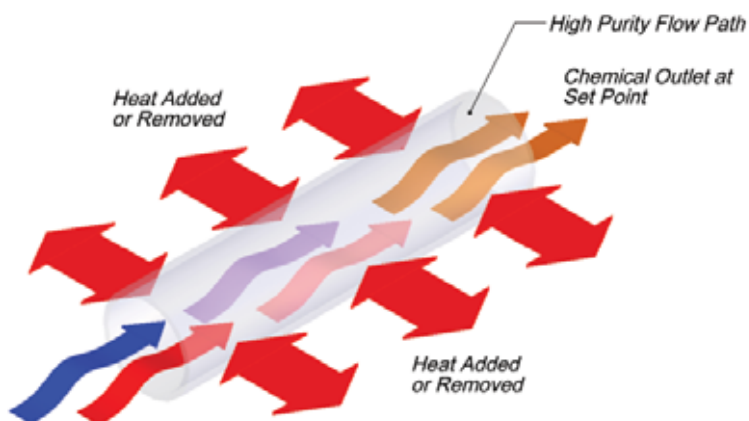
- **ULTRA HIGH PURITY HEATING/COOLING**
All Teflon flow path with no seals, no o-rings, no pipe threads, and no metal exposure eliminates any potential for contamination and assures the highest purity level is maintained.
- **HIGH TEMPERATURE ACCURACY**
AIS's unique heating/cooling module design assures tight temperature accuracy is achieved.
- **RESISTIVE AND VAPOR-COMPRESSION TECHNOLOGY**
AIS's innovative resistive heating coupled with vapor-compression technology allows for high heating and cooling capacities in one small package with years of maintenance free operation.
- **NO COOLING/HEATING COILS REQUIRED**
Unique flow path design allows the chemical to flow directly through it, thus eliminating the need to dip expensive and pin-hole prone cooling/heating coils into the process bath.
- **PATENTED PLUG-FLOW FLUID PATH**
Patented plug-flow path design provides a continuous, smooth, flow path for your fluid, without any sharp corners or crevices where contaminants can accumulate.
- **FLEXIBLE DESIGN**
Modular design approach allows for a wide range of wattages, physical shapes, electrical configuration, plumbing connections, mounting styles...all configured around your preference.
- **COMPACT FOOTPRINT**
High efficiency heating/cooling module coupled with modular design approach allows for the most compact footprints in the market.
- **HIGH RELIABILITY**
The *Kool-Pure Plus*™ product series only utilize the highest quality components available in the market, resulting in years of maintenance free operation.
- **USER FRIENDLY**
Intuitive design makes it simple to install and operate.
- **SAFETY**
Heating/cooling module over-temperature protection and redundant over-temperature interlocks. CE, SEMI, UL compliant.

Specifications

Wetted Flow Path	Teflon (PFA)
Heating/Cooling Technology	Resistive with Vapor Compression
Heating Capacity	Up to 100 KW
Cooling Capacity	Up to 100 KW
Voltages	120 - 600 VAC, 1Ø, 3Ø, 50/60Hz
Temperature Control	-5°C to 85°C
Temperature Accuracy	±0.5°C (varies with application)
Pressure Rating	Up to 689 Kpa (100 psig)
Process Flow Rate Range	Up to 100 lpm (26 gpm)
Process Temp Sensor	J-type thermocouple
Process Over-Temp Sensor	K-type thermocouple
Fluid Connections	1/2" (12mm) up to 1.0" (25mm) Flare, Pillar, Sanitary, 1" to 2" (32-63mm) union
Power/Interlock Connections	Hard wired
Control System	PID
Enclosure Material	FM4910 (CPVC, CP7D, Powder Coated Steel, others)
Compliance	SEMI, CE, UL
Warranty	12 months

Applied Integrated Systems reserves the right to change specifications without notice.

Flow Path Technology



Safety Features

- Process over-temperature protection
- Heating/cooling module over-temp protection
- Enclosure environment over-temp protection
- Over-current and over-load protection
- Fire retardant enclosure
- Grounded heating/cooling module
- SEMI, CE, UL compliance

Options

- Heating and cooling capacities
- Host communication signals
- Chemical inlet/outlet type
- Physical shape
- Enclosure material
- Leak detection
- Electrical connection style
- Extended warranty
- Additional options upon request

For more information, contact AIS at: sales@appliedintegratedsystems.com



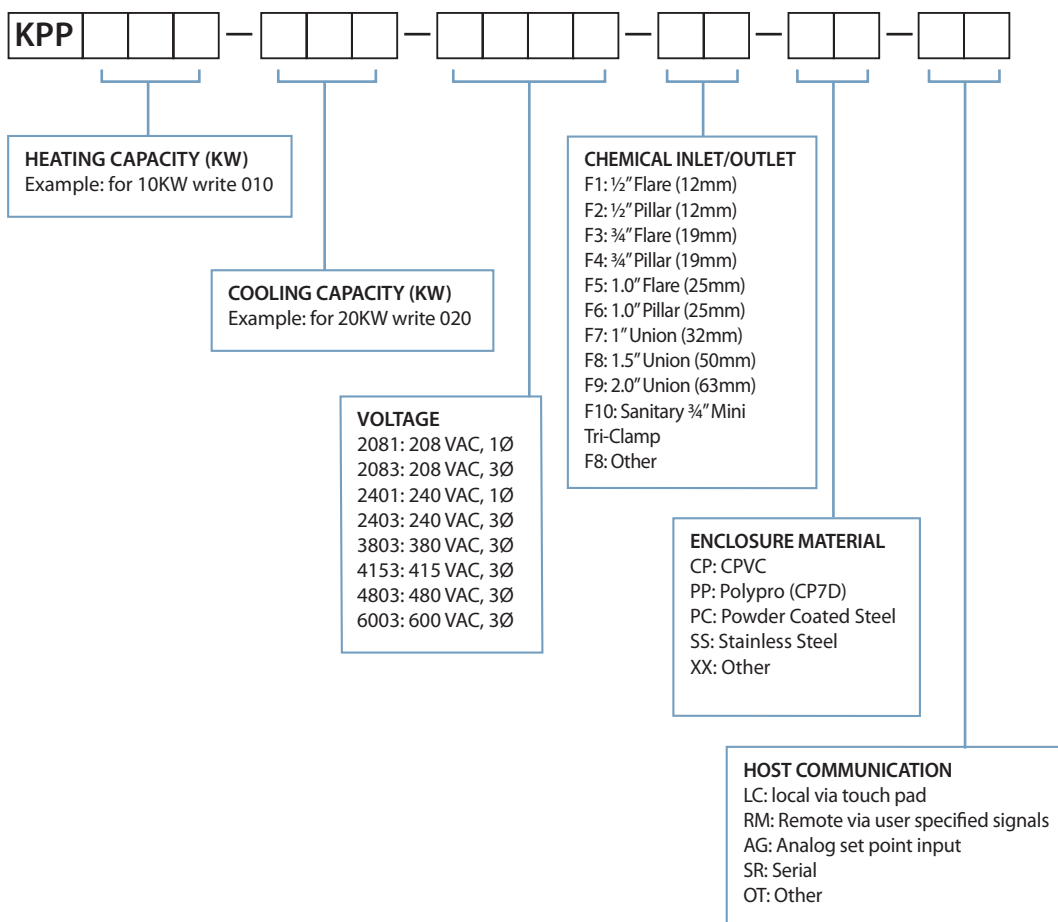
KOOL-PURE PLUS™

ORDERING INFORMATION

Please don't hesitate to contact us to help you determine the best product for your application. You may compose the part number of your *Kool-Pure Plus*™ heater/chiller by using the guideline below or simply call one of our product specialists for assistance.

You may also e-mail us at sales@appliedintegratedsystems.com

USE THIS CHART TO COMPOSE THE PART NUMBER



CONTACT US

www.appliedintegratedsystems.com

