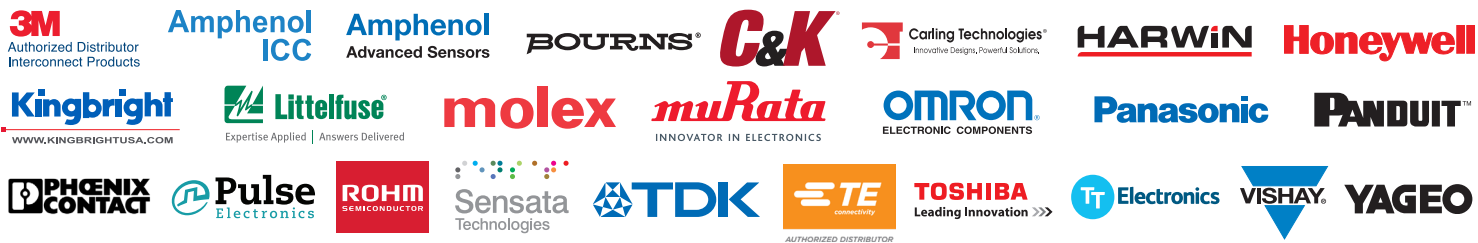
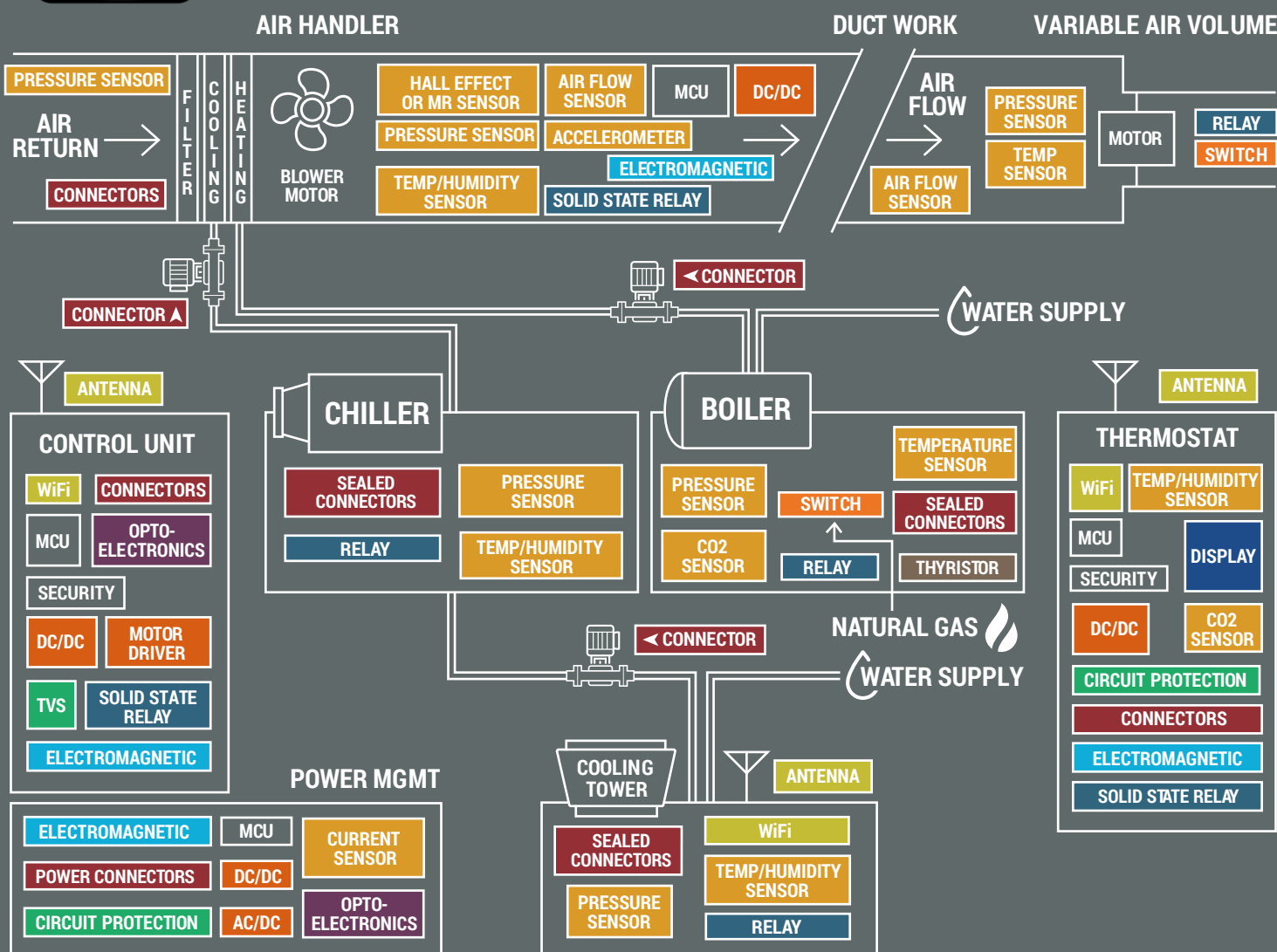




Internet of Things

Industrial HVAC System



Reach your local sales team at 1.800.CALL.TTI

Component Type	Subsystem	Variants	Suggested Products
SENSORS			
Sensors	Air Handler VAV Chiller Boiler Cooling Tower Thermostat Power Management	Hall and MR Sensors Temp/Humidity Sensor Pressure Sensor Air Flow, CO2 Sensor Thermistors Current Sensors	Amphenol T6713 CO2 Sensor Honeywell PX3 Pressure Transducer Omron D6F-PH Digital MEMS Flow Sensor ROHM KX222-1054 Accelerometer Sensata 2CP5-71-46 Pressure Sensor TDK/EPCOS Temperature Probe Assemblies TE HTU21D Digital Relative Humidity Sensor
Opto-electronics	Power Management	LEDs, Infrared Emitters Optical Switches Optocouplers Ambient Light Sensors	Kingbright APG0603SEC-E-TT LED ROHM BH1603FVC Ambient Light Sensor OPTEK OPB900W55Z Optical Switch Vishay ILD217T Optocoupler
WIRELESS CONNECTIVITY			
WiFi Modules	Control Unit Thermostat, Cooling Tower	2.4GHz, 5.0GHz	Murata LBEE5ZZ1MD WiFi Certified Module Panasonic ENW-49C01A3KF WiFi Certified Module
Antennas	Control Unit Thermostat, Cooling Tower	SMT Chip, FPC, Stick, Helical, Stamped Metal, Patch	Molex 201932-0001 Tri-Band WiFi SMT Pulse W3918B0100 WiFi Dual Band FPC TE 2118309-1 Antennas Yageo ANT2012LL00R2400A Chip Antenna
ELECTROMECHANICAL			
Relays	Control Unit VAV	General Purpose, Solid State, Contactors	Crydom CX Series Relay, CW Series Relay Omron G5Q PCB Relay TE T9G Series Relay
Circuit Breakers	Power Management	Hydraulic, Magnetic, Thermal	Carling C-Series Circuit Breaker Phoenix Contact 489 Circuit Breaker TE 6-1393250-2 Circuit Breaker, W67 Series Circuit Breaker
Switches	ALL	DIP/SIP, Interlock, Snap Action, Tactile, Toggle	C&K SDA Series DIP/SIP Switch Honeywell DM Series Door Switch, Pressure Switch, V Basic Series Switch Omron D3DC Switch, B3FS Tactile Switch TE 1825967-2 Switches
CONNECTORS			
Sealed Connectors	ALL	Miniature, WtB/ WtW, RF, Circular, Industrial, I/O, Total Solutions, Power	Amphenol MUSB Connector, MDBR D-Sub Connector, MHDR Connector Molex MIZU-P25, ML-XI, Mini50, MXP120, SRC, MX150, MX123, FAKRA, Perma-Seal Phoenix Contact M12, Heavy Connectors TE 796094-2 Connectors
Power Connectors	Power Management Control Unit Thermostat	5 to 50A mid power, 30 to 150A high power, WtW, WtB, BtB, Total Solutions, Sealed	Amphenol Minitex PWR, Metral, Bus Bar Harwin Gecko, Datamate Mix-Tek, T Socket Molex EXTreme Power, EXTreme TEN60, Mega-Fit, Sabre, Mini-Fit Jr, Micro-Fit 3.0 Phoenix Contact QUINT, PLC Relay, DIN Rail Power, 489 Circuit Breakers TE 6450120-2 Connectors
Terminal Blocks	ALL	Barrier Strips, Eurostyle, Screw Terminal, Spring Clamp, Pluggable	Molex High-current Universal Clamp, Eurostyle, MTC, Lite-Trap, Beau Barrier Strip Phoenix Contact Combicon MSTB, MKDS TE 796683-3 Terminal Blocks
Solderless Terminals	ALL	Terminals, Splices, Quick Disconnects and Termination Connectors	3M Mini Clamp, Scotchlok™ Lugs & IDC Amphenol ICC Anytek Terminals Molex Perma-Seal Terminals, Battery Lugs, Versa Krimp, Quick Disconnect Panduit DNF Series Terminals TE Positive Lock Terminals, 327654 Terminals
ADDITIONAL COMPONENTS			
Power	Power Management Control Unit, Thermostat	AC/DC, DC/DC, DIN RAIL MOSFETs, Motor Drives	Murata NKE1205SC DC/DC Module Omron S82S-7705 DC/DC DIN RAIL Phoenix Contact 2903147 AC/DC DIN RAIL Toshiba SSM3J332R, LF MOSFET Vishay SI7625DN-T1-GE3 MOSFET
Electromagnetic	Air Handler Control Unit, Wall Unit/Thermostat, Power Management	Filters, Transformers, SMT chip beads, Inductors	Bourns SRR1208 Series Inductor Murata NFL21SP106X1C3D Filter TDK MLZ1608A252BTA00 RP Inductor Vishay IHLE4040 Series Inductor
Circuit Protection	ALL	TVS Diodes, ESD Suppression, Fuses, Resettable Fuses	Bourns CDSOT23-SM712 ESD Suppression Bourns MF-MSMF020-2 Resettable Fuse Littelfuse SMT 0468001.NR Fuse ROHM VS3V3BC1HS TVS Diodes
Displays	Thermostat Control Unit	7-Segment, TFT Display, Digital Panel Meter	Kingbright SA56-11SRWA 7-Segment Display Murata DMS-20PC-1-LM-GF-C Panel Meter Vishay OLED Display
Thyristor	Boiler	SCRs, TRIACs, SIDACs	Littelfuse Q4015N5RP Triac

