Custom Products & Processor Based Embedded Controllers

Applications:
Machinery - Control of inputs and outputs (analog, digital, miliamps, amps, voltages)

Pumping - Level, pressure and temperature sensing to fill, drain or maintain flow rates or pressure

Instrumentation- Conductivity, resistance, temperature & pressure to provide process control

MMI - Custom operator interface with membrane buttons, switches, LEDs & alpha-numeric displays

Motor Protection - Voltage, phase, current & horsepower monitoring to avoid equiment damage

Benefits:
1. Get the product that does exactly what you want it to do.
2. 50%+ reduction in sub-panel space is typical
3. $0 cost increase over your existing control
4. 20% or more improvement in features and benefits you can offer to your customers
5. 40% or greater reduction in assembly and wiring time

Criteria:
Quantity - 100+ controls per year
Value - $15,000+ per year of purchases (cost of components being replaced x quantity = $15,000+)

Design Information:
1. List of I/O with voltage & current characteristics
2. Word description of relationship of Inputs to Outputs
3. Desired size and rough sketch of possible membrane panel (if needed)

Modified Standard Design
• Phase relay without all of the standard features
• Timer with limited time ranges
• Special prox input speed sensor with 24VDC supply
• Special adjustment features

Embedded Controller with Membrane Overlay
• Reduced sub-panel space 100%
• No, wiring, connectors to attach I/O harnesses
• Digital Display (could be alpha,multi-line and/or LCD)
• Membrane buttons replace all pushbuttons and selector switches
• LEDs replace most pilot light with one special light thru panel
• HP rated relay on controller
• Nema 4 gasketing
Intrinsically Safe Products:
• Custom IS relay in a case
• Float switch or resistance/conductivity inputs
• LEDs to show tank levels
• DIP switches to alter pre-programmed logic
• Pluggable terminal blocks
• Custom logic, unique for the customer

PLC Interface module:
• Duplicates customer’s hard-wired control
• All relays are plug-in
• LEDs on PCB, not in relays to maintain diagnostics
• Fusing on critical relay outputs (replaceable)
• Connectors for Inputs and Outputs to reduce wiring time

Motor Controller:
• Power DC output for motor control
• Forward & Reverse
• Machine safety logic incorporated on controller

RF Based Controller:
• Remote controlled by 5 button key fob
• Super bright LEDs for daylight visibility
• Controller automatically programmable to fob
• Multiple power outputs