

CLAIMS:

1. An industrial automation and control system, comprising:
an enclosure;
a plurality of monitoring and/or control modules disposed within the enclosure and configured to perform a monitoring and/or control function, wherein adjacent monitoring and/or control modules are slidably connected by a single vertical movement using a plurality of hooks and corresponding vertical slots on mating surfaces of the adjacent modules, wherein the hooks and corresponding vertical slots are maintained in position relative to one another by a latch coupled with a corresponding receiving slot of the mating surfaces of the modules, and wherein the latch is directly operable by hand for disengagement with the receiving slot to thereby disconnect the adjacent modules.
2. The industrial automation system of claim 1, wherein the plurality of monitoring and/or control modules comprise a power supply and a programmable logic controller.
3. The industrial automation system of claim 1, wherein the plurality of hooks and corresponding vertical slots facilitate alignment of the adjacent modules and wherein the latch is configured to slidably engage with the corresponding receiving slot in the same single movement.
4. The industrial automation system of claim 3, wherein the latch comprises plastic.
5. The industrial automation system of claim 1, wherein each of the plurality of monitoring and/or control modules are independently removable from the enclosure by selectively disengaging the latch from the receiving slot and vertically sliding each monitoring and/or control module.