CLAIMS

1. A feeder pillar comprising:

a fuse switch compartment comprising:

a housing; and

a panel board within the housing; and

a cable termination compartment configured to receive one or more incoming cables configured to electrically connect an external power source to the panel board, and one or more outgoing cables configured to electrically connect the panel board to one or more electrical devices;

wherein the housing comprises an interface assembly comprising:

a molded structure comprising a plurality of through-holes extending from a first surface of the molded structure to a second surface of the molded structure opposite the first surface; and

a plurality of electrical pins inserted through the plurality of through-holes such that the housing forms a sealed enclosure, the plurality of electrical pins in electrical connection with the panel board; the plurality of electrical pins protruding from the plurality of through-holes into the cable termination compartment;

wherein a first group of electrical pins is configured to be in contact with the one or more incoming cables and configured to electrically connect the external power supply to the panel board via the one or more incoming cables; and

wherein a second group of electrical pins is configured to be in contact with the one or more outgoing cables and configured to electrically connect the panel board to the one or more electrical devices via the one or more outgoing cables.

2. The feeder pillar according to claim 1,

wherein the molded structure comprises cured dough molded compound.

3. The feeder pillar according to claim 1 or claim 2,

wherein the housing comprises a door; and

wherein the housing comprises a sealing structure for sealing the housing when the door is in a closed position.

4. The feed pillar according to claim 3,

wherein the sealing structure is a gasket comprising rubber cork or silicone.

5. The feeder pillar according to any one of claims 1 to 4,

wherein the housing further comprises one or more heat sinks.

6. The feeder pillar according to claim 5,

wherein each of the one or more heat sinks comprises a base and a plurality of fins extending from the base.

7. The feeder pillar according to any one of claims 1 to 6, further comprising:

one or more sensors; and

a processor in electrical connection with the one or more sensors.

8. The feeder pillar according to claim 7, further comprising:

a communications module in electrical connection with the processor;

wherein the communications module is configured to transmit data to an external system via wireless means or wired means.

9. The feeder pillar according to claim 7 or claim 8,

wherein the one or more sensors comprise a temperature sensor, a current sensor, a voltage sensor, a moisture sensor, and a contact sensor.

10. The feeder pillar according to any one of claims 1 to 9,

wherein the cable termination compartment comprises a plurality of louver openings.

11. The feeder pillar according to any one of claims 1 to 10,

wherein the cable termination compartment comprises a plurality of cable clamps configured to hold the one or more incoming cables and the one or more outgoing cables.

12. The feeder pillar according to any one of claims 1 to 11,

wherein the cable termination compartment comprises a side cable entry opening.

13. A method of forming the feeder pillar, the method comprising:

forming a fuse switch compartment comprising:

a housing; and

a panel board within the housing;

forming a cable termination compartment configured to receive one or more incoming cables configured to electrically connect an external power source to the panel board, and one or more outgoing cables configured to electrically connect the panel board to one or more electrical devices;

wherein the housing comprises an interface assembly comprising:

a molded structure comprising a plurality of through-holes extending from a first surface of the molded structure to a second surface of the molded structure opposite the first surface; and

a plurality of electrical pins inserted through the plurality of through-holes such that the housing forms a sealed enclosure, the plurality of electrical pins in electrical connection with the panel board; the plurality of electrical pins protruding from the plurality of through-holes into the cable termination compartment;

wherein a first group of electrical pins is configured to be in contact with the one or more incoming cables and configured to electrically connect the external power supply to the panel board via the one or more incoming cables; and

wherein a second group of electrical pins is configured to be in contact with the one or more outgoing cables and configured to electrically connect the panel board to the one or more electrical devices via the one or more outgoing cables.

14. The method according to claim 13, further comprising:

forming the interface assembly by forming the molded structure and inserting the plurality of pins through the plurality of through-holes.

15. The method according to claim 13 or claim 14,

wherein the molded structure comprises cured dough molded compound.

16. The method according to claim 15,

wherein forming the molded structure comprises:

providing uncured dough molded compound in a mold; and

heating the uncured dough molded compound to cure the uncured dough molded compound.

17. The method according to any one of claims 13 to 16, further comprising:

assembling one or more heatsinks to one or more metal covers to form the housing.

18. The method according to any one of claims 13 to 17, further comprising:

arranging one or more sensors in the fuse switch compartment; and

electrically connecting a processor to the one or more sensors.

19. The method according to claim 18, further comprising:

electrically connecting a communications module to the processor;

wherein the communications module is configured to transmit data to an external system via wireless means or wired means.

20. The method according to claim 18 or claim 19,

wherein the one or more sensors comprise a temperature sensor, a current sensor, a voltage sensor, a moisture sensor, and a contact sensor.