
Future Use of Space in Powell Equipment

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Powell's switchgear and motor control equipments frequently include space which is not used by active switching devices, but is available for future use. This space varies in the amount of equipment present, and is called by many different names. Some of the terms used include space, future, future space, equipped space, space only, spare, and blank. Unfortunately, there are no industry standards defining these terms and their use varies widely throughout the industry, so there is often confusion between specifier and manufacturer or between engineering and shop personnel about what is desired on a particular job.

In order to minimize the confusion, we have adopted the following terms and descriptions in Powell for internal use:

Spare - A complete, ready-to-operate unit, including the drawout switching device (circuit breaker or motor starter) and all required secondary devices, fully wired. A spare differs from an active unit only in that the spare has no assigned function in the power system.

Fully Equipped Space - A spare without the drawout switching device. Includes all required secondary devices and wiring, a finished unit door, primary buswork and disconnecting devices, and all cell parts required for inserting the drawout switching device.

Equipped Space - Includes a door with cutouts for primary switching devices but not for secondary and control devices, primary disconnecting devices and riser bus connecting them to the main bus, and all cell parts required for inserting the drawout switching device. No primary or secondary devices are included, and wiring is minimal.

Blank Space - A blank door, no primary or secondary devices, buswork, wiring, or cell parts required for inserting the drawout switching device. Steelwork should be done so that the blank space can be equipped in the field with little or no cutting or welding.

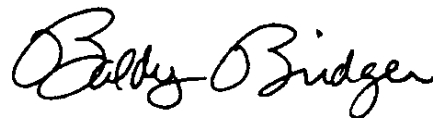
Blank - An area that can never be used for a primary switching device. This area is made unusable by thermal limitations of the equipment, inability to bus to the area or to maintain proper isolation of bus or outgoing leads, or some similar problem.

Related to these definitions but somewhat different is **Mounting and Wiring** for a future device or a device to be field installed by the user. Mounting and wiring may be furnished in any of the above units or in an active unit. Mounting and wiring includes the necessary space, physical supports, and primary and secondary connections to allow easy installation of the future device. This may include temporary primary and/or secondary connections or jumpers to allow use of the circuit pending the addition of the future device.

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Where any of these conditions leave openings in the front door or in isolation barriers required by standards, the opening must be covered by a temporary cover plate.



Baldwin Bridger, P.E.
Technical Director