Ken Koty

Ken's Korner

CHECKLISTS FOR POWER WHIP INSTALLATION

Uptime in a data center may not always be a life or death proposition, but there is no doubt that there is a cost when systems fail. No matter how well trained and experienced, there are too many opportunities for people to make mistakes if they have to rely on memory alone. Using checklists helps to ensure that routine tasks are performed correctly, completely and efficiently.

Having a checklist helps to eliminate unforeseen surprises and delays when new equipment is ready to be installed. In the data center, checklists help ensure routine tasks are completed on-time and as specified, even if performed by multiple people together or separately. Consider checklists a step towards data center uptime success.

Here is a checklist for installing branch circuit power whips.

15 Tips for Successful Data Center Power Whip Installation

1. Research to find out the total additional load required from the new equipment being installed.
2. Check how additional equipment load will affect the data center utility service, UPS systems and diesel generators existing load.
3. Does the PDU/RPP have enough excess capacity to add new circuits?
4. Are closest PDU/RPP's being used to minimize power whip lengths? Longer whips cost more money and if excessively long can cause voltage drop.
5. If server is dual corded, is there ample capacity in the PDU/RPP for a fail over.
6. Check the load of each phase in the PDU/RPP to ensure a proper balance.
7. What effect will new equipment have on existing cooling system?
8. Do the receptacles match the plug on the equipment being installed?
9. Be sure the circuit breaker is the correct amperage for conductors and receptacle on the whip.
10. Pre-test each new circuit breaker.
11. Check each receptacle for proper voltage, phase-to-phase and phase-to-ground.
12. If three-phase, check for proper rotation per manufacturers specification.
13. Verify that each whip is properly labeled on each end, and that the label information is entered into the PDU/RPP directory.
14. Have perforated tiles installed in the cold isle.
15. Make sure floor grommets are installed and ready for power and communication cables/leads to feed new server cabinet.