FAQ

SBM Retrofit Kit FAQ: Eaton 9315 to 9395/9395P Product Refresh

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1. **What KVA ranges of 9315's can we perform SBM retrofits?**
    a. 500 kVA to 750/751 kVA units only. It is not cost effective to retrofit smaller kVA units with SBMs.
2. **90% of units have momentary duty static switch vs. continuous which is needed to run ESS. Does engineering have a solution to upgrade the static switch to continuous?**
    a. Yes, but a site assessment is required to confirm accessibility and retrofit of a continuous static switch. Cost of retrofit would increase as well.
3. **Do we recommend installing new breakers, refurbishing old breakers, or doing nothing?**
    a. Breaker inspection and maintenance (lubrication) is recommended during the product refresh. Breakers 25-30 years old, should be replaced or refurbishment.
4. **For aesthetics, can we replace the panels of the 9315 SBMs and battery cabinets?**
    a. Yes, we can order new exterior panels in black (will need to be investigated on a case-by-case basis.) The interior frame will remain the previous color, which is usually black. Cost would increase for parts and labor.
5. **Will parts be available for 9315 Retrofitted SBMs?**
    a. Yes, we are removing most all parts from the 9315 SBM and using 9395 parts for the retrofit. Since 9395 is a current production model there will be no issues with discontinued parts.
6. **Can we reuse the existing 9315 battery cabinets/systems with new 9395/9395P UPSs given that the DC link varies for older 9315 models?**
    a. 9315 750/751's with wet cell battery systems: **Yes,** there is flexibility to configure wet cell battery systems voltages, by adding cells if necessary, to make the existing system work with 9395/9395P's.
    a. 9315 751's with 480VDC Link VRLA battery cabinets: **Yes,** the 9395/9395P's have a 480C DC Link (240 cells / 6 cells per battery = 40 batteries per cabinet x 12 = 480 VDC).
    a. 9315 750's with 384VDC Link VRLA battery cabinets: **No,** the 9395/9395P's do not have a 384 DC Link (192 cells / 6 cells per battery = 32 batteries per cabinet x 12 = 384V VDC).
7. **Are their feeder breaker sizes that may not line up?**
    a. Unless the customer needs a larger kVA UPS, the existing breakers will work, and this is typically not a problem.
8. **What is needed to get a kit quoted from DCCG?**
    a. We need to look-up the original order. Please provide serial numbers & sales order #'s
    b. All final proposals require site assessment
9. **What is collected during the onsite site assessment?**
    a. See Site Assessment Checklist document
10. **If some SBM's do not have MOB's (Module Output Breakers), is there a solution for a switchboard or circuit breakers to add for 9395 MOB's to work as parallel system?**
    a. A custom MOB cabinet can be installed to the left of the 9395P.
11. **What is the expected service life of SBM breakers?**
    a. SBM breakers should be refurbished or replaced every 25-30 years **12. What is the expected service life of a static switch in a SBM?**
    a. Static switches should be inspected annually and replaced every 20 years

13. **Can we still get replacement Static switch if needed (tests bad, etc.)?**
    a. Yes, the site assessment will determine if the existing SBM static switch needs to be replaced or serviced. Most static switches can be replaced or upgraded in the field.
    b. If the static switch cannot be replaced or upgraded, we can convert to a distributed bypass solution (eliminating the static switch).
14. **Can we make this kit work with competitors SBM's (SCC) (like MGE, Liebert, Mitsu, etc.)?**
    a. We cannot convert a competitor's SBM to a fully functioning Eaton SBM. Technically challenging, cost prohibitive and better to just replace with an Eaton SBM.
15. **Will this SBM kit work with 93PM's as well if the customer wanted to downsize?**
    a. No, 93PMs cannot be used.
16. **Since the Static switches are in the SBM already can the 9395's be different kVA sizes?**
    a. Yes however, most of the time the customer is not going to want to change wiring and breaker sizes and will want to go with the same size kVA UPS to reuse their existing breakers and conduit runs.
17. **Does the input and output cables need to be the same length as we do with Distributed Bypass systems?**
    a. Cable lengths do not need to be considered in a SBM; only if they convert to a distributed bypass system (rare).
18. **Do we have any info we can provide on Lead times to ship out a retrofit kit?**
    a. The entire kit is custom and will require a custom lead time quote.
19. **How long for the labor to do the work (estimated downtime, etc.)?**
    a. 1-2 weeks onsite labor per SBM vs. 2-4 months for traditional rip and replace. This is an estimate only which is based on Eaton's experience; however, this is not a guarantee as site conditions differ and unforeseen events may occur.
20. **For customers with hot ties do they need to be replaced?**
    a. Typically, hot ties need to be upgraded with new controls just like the SBMs
21. **Are 9315 battery and breakers the same (48 VDC ST, and 40 jars per string)? Or do we offer up retrofit changes there too?**
    a. See answer #6; it is likely we will need to change the existing 24VDC shunt trips to 48V.
22. **Why does the SBM retrofit solution include a 5-year assurance plan?**
    a. We are confident in our solution to retrofit existing SBMs but want to ensure the entire system operates flawlessly to our customers' satisfaction. The 5- year assurance plan covers the SBMs and connected UPSs (7x24, 8-hour response, parts and labor, per SOW R10 and R -30) and includes one annual UPS PM. PredictPulse and Battery PMs can be added optionally. All SBM retrofits include the 5-year assurance plan. We will not perform the SBM retrofit without the assurance plan. The assurance plan is non-discountable.