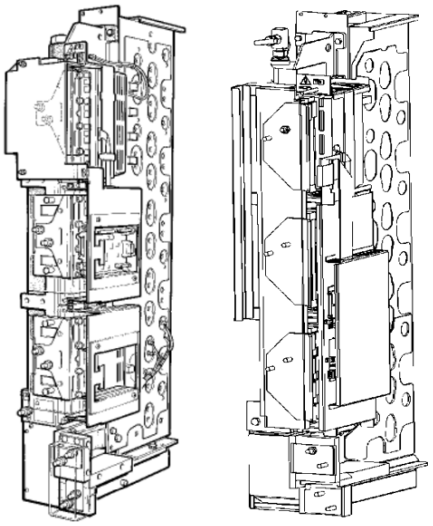
MV3000 - MVDL643 DELTA UPGRADE

The MVDL643 DELTA module from ALSTOM/Converteam, has been obsolete for many years but you can extend the life of your converter system by substituting it with a current design MVDL800 unit from AVID Controls.

The MVDL800 DELTA modules are the same physical size as the MVDL643 and are designed to fit into the same cubicle system.

Likewise, the AC and DC power connections are in approximately the same location.



MVDL643 MVDL800

Electrical Comparison

The MVDL800 provides around 25% more current than the MVDL643, the actual ratings are given in Table 1.

Table 1

Conditions	MVDL643	MVDL800
Continuous AC RMS. current allowing for a 1.5 x overload	471 A	587 A
Continuous AC RMS current allowing for a 1.1 x overload	643 A	800 A

Coolant Connections

It is likely that your MVDL643 has two self-sealing Staubli hose connectors at the base of the unit. These are also available on the MVDL800 DELTA.

Mixing Different DELTA Types within the Same Converter

The MVDL643 and MVDL800 can NOT be mixed within the same converter bridge i.e. all DELTA connected in parallel must be of the same type. This is due to current sharing being completely different between the two. For a single DELTA converter then this is not an issue. For a converter with two or more parallel DELTAS, all must be changed to MVDL800.

Control Interface

The MVDL800 connects to the drive controller (CDC) via a 40-way ribbon cable which should be the same as the existing DELTA. The drive rating is stored on the DELTA and so the controller will know that the DELTA rating has been changed from 643 to 800A. The MVDL800 works with the same SMPS (Power Supply) as the MVDL643 being the MVC3001-4003 for 600/690VAC systems.

Models and Variants

The 800A DELTA which contains Staubli hose connectors as the base and has internal cooling fan for the capacitor bank is model number MVDL800-47931101. Other model numbers are available for different plumbing options. Avid also provides DELTAs as brand-new build or as REMAN grade – contact Avid for further details.