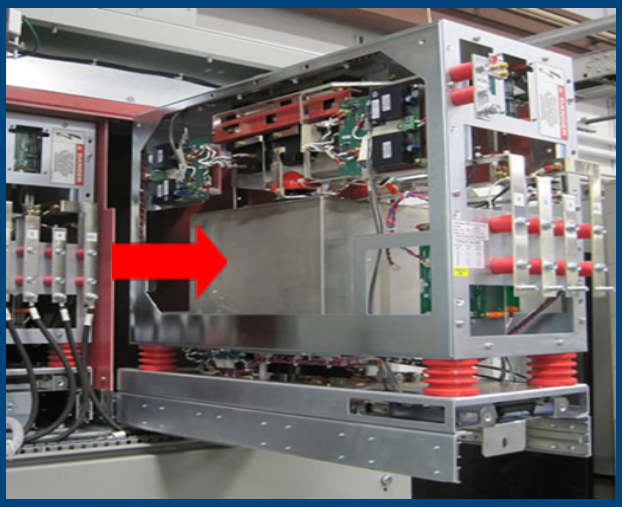
TOSHIBA
Leading Innovation

MOTORS & DRIVES

CUSTOM ADJUSTABLE SPEED DRIVE (CASD) GROUP

OIL FILLED VS. ELECTROLYTIC CAPACITORS

OIL FILLED CAPACITOR IN POWER MODULE



VS.

ELECTROLYTIC CAPACITOR

CASD SUPPORT NEWS:

Oil-filled and aluminum electrolytic capacitors that are used for the DC link in medium voltage drives have a specific life expectancy. Oil-filled capacitors have a life expectancy of 20 – 30 years compared to 7-9 years for electrolytic capacitors. Several competitors incorporate aluminum electrolytic capacitors.

•The capacitors are used in series to obtain the required voltage rating and used in parallel for energy storage

•The capacitors are smaller than oil-filled capacitors, which increases the component count.

•Higher temperatures and slight overvoltage conditions will reduce the life expectancy of electrolytic capacitors

Replacement of the aluminum electrolytic capacitors contributes to the life time cost of the drive and in some cases, it typically requires up to one week of down time.

Toshiba only uses oil-filled capacitors for the DC link in our complete line of medium voltage drives.

CASD Technical/Product Support:
TIC-CASD@toshiba.com
(855) 803-7090

www.toshiba.com/tic