



**The EX[®]-7L
power
capacitor:**

**The
inside
story**

COOPER Power Systems

The EX[®]-7 Laser power capacitor is the latest example of Cooper Power Systems' commitment to innovations that set new industry standards. And you can count on us for more capacitor innovations down the line.

Here are the reasons why the EX-7L capacitor is the industry leader:

1

Low-resistance/high-current brass ground terminal combines superior strength with excellent electrical performance.

2

Environmentally safe Edisol[®] XT fluid dielectric reduces losses; enhances DIV characteristics across entire temperature range.

3

Extended-foil construction assures exceptionally uniform current distribution throughout packs, resulting in outstanding transient performance.

4

Laser cut foil assures superior DIV characteristics, under all operating conditions.

5

Type 409 stainless-steel tank assures superior corrosion resistance—even in harsh environments.

6

High-energy/low-resistance EX mechanical crimp connector assures unequalled energy-handling characteristics. EX-7L capacitor can be applied in high-fault current (up to 10 kA) installations without risking tank rupture.

7

Extended-foil/tabless construction + EX solderless mechanical-crimp connectors permit connecting up to 9300 parallel kvars using expulsion fuses. (That's twice as many kvars as conventional tabbed capacitors.)

8

Full-annealed-copper impregnation fill tube cold-welded and soldered to protect Edisol fluid dielectric from contamination.

9

Induction-silver-brazed connections assure high-strength joint between tank and impregnation tube and tank and ground terminal.

10

Patented induction-soldered bonding connection at terminal caps integrates terminal cap with porcelain to assure leak-free hermetic seal.

11

Field-proven, industry-standard, wet-process-porcelain bushings meet all application BIL and creepage requirements.

12

Tank seams TIG-welded with stainless-steel fillet wire assures structural integrity.

13

Discharge resistors of lathe-trimmed, thick-film resistive elements on high-durability ceramic cores assure long mechanical and electrical life.

14

Individual closed-loop impregnation system (not shown) assures superior process control and positive pressure impregnation for outstanding cold-temperature performance.

15

Surface-altered film permits 89% stacking factor; reduces amount of fluid dielectric needed to impregnate EX-7L capacitor, resulting in unprecedented low loss level of 0.07 watt/kvar.

You Can Count on Cooper Power Systems Down the Line



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