

ELAN-Cast[®] resins for
**Power Generation and
Distribution**

Power Generation and Distribution

Application Methods

- Vacuum Casting



Product Summary

ELAN-Cast® E epoxy resins are two-component systems that provide electrical insulation with superior environmental protection. Some are suitable for high temperature applications and offer excellent thermal shock resistance.

ELAN-Cast® P 86 resins are single-component systems combining excellent moisture resistance with low electrical loss at elevated temperatures.

Product Uses

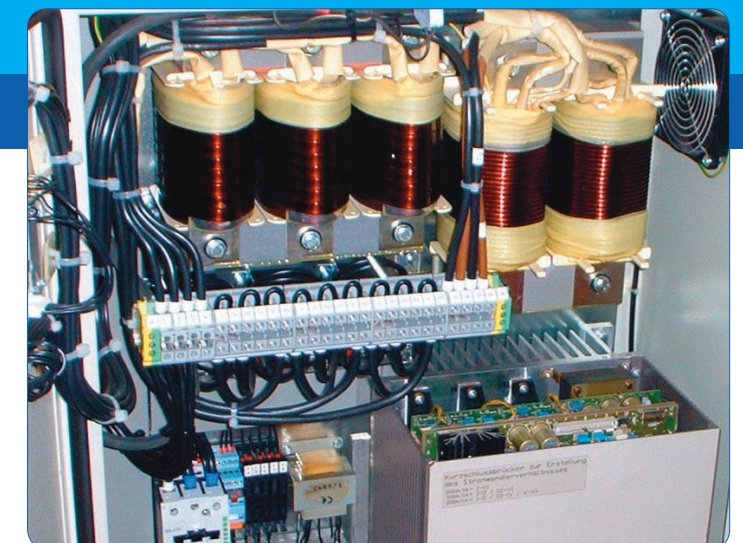
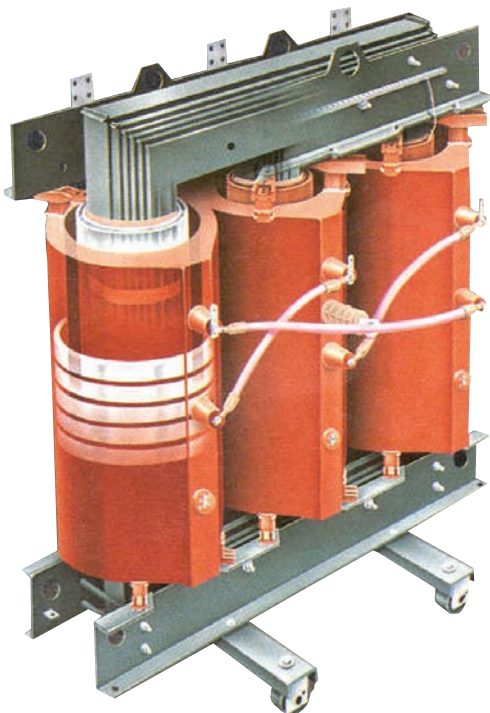
- Dry Type Transformers
- Resin-Cast Transformers
- Large Motors
- Generators
- Outdoor Devices

Product Characteristics at a Glance

		Mixed Viscosity cP at 25°C	Mix Ratio (by weight)	Glass Transition Temperature (T _g)	Coefficient of Thermal Expansion (ppm/°C) before/after T _g	Gel Time 125°C (minutes)	Cure Schedule for Optimum Properties	Thermal Conductivity W/m.K	Maximum Service Temperature (IEC 60085)
ELAN-Cast® E 88 Resin ELAN-Cast® C 89 Hardener	Two-component, rigid, filled epoxy resin system. Heat cure. UL 94 V0 listed. High heat deflection temperature.	50000 - 70000 400 - 800 at 90°C	100 : 114	97 - 103°C	45 / 155	7 - 13	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.95 - 1.05	180°C
ELAN-Cast® E 81 Black Resin ELAN-Cast® C 81 Hardener	Two-component, fast-setting, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. Thermal shock resistant. UL system listed.	10000 - 15000	100 : 100	85 - 90°C	40 / 140	3 - 5	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.60 - 0.70	155°C
ELAN-Cast® E 494-RQ Red Resin ELAN-Cast® C 494-RQ Hardener	Two-component, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. Suitable for high voltage distribution transformers, chokes, etc. Thermal shock resistant. UL system listed.	25000 - 30000	100 : 100	35 - 40°C	85 / 235	12 - 18	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.40 - 0.50	180°C
ELAN-Cast® E 617 FR Resin ELAN-Cast® C 161 FR Hardener	Two-component, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. UL 94 V0 listed.	50000 - 70000 4600 - 6600 at 55°C	100 : 100	35 - 40°C	75 / 200	22 - 32	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.35 - 0.45	155°C
ELAN-Cast® E 43-5701 Gray Resin ELAN-Cast® C 402 Hardener	Two-component, semi-rigid, filled epoxy resin system. Heat cure. Resilient for casting large collector rings. Suitable for outdoor applications.	12000 - 17000	100 : 25	40 - 46°C	80 / 175	25 - 30	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.58 - 0.68	180°C
ELAN-Cast® P 86-5001 Resin	Single component, semi-rigid, filled resin system. Heat cure. Moisture-resistant.	3000 - 6000	-	72 - 78°C	135 / 175	5 - 15	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.70 - 0.80	180°C

Alternate cure schedule may be possible for your application. Consult with your ELANTAS PDG representative.

For More Information Ask For Our Technical Data Sheets.



ELANTAS PDG, Inc.

ELANTAS Electrical Insulation

Around the world, ELANTAS Electrical Insulation companies are respected as market leaders in the development and manufacturing of impregnating resins (varnishes), wire enamel, potting compounds and casting resins for a number of electrical, industrial, aerospace and civil applications. No matter what your challenge, be assured that ELANTAS Electrical Insulation products will meet your most demanding needs.

ELANTAS PDG, Inc.

Today, ELANTAS PDG, Inc. is recognized as the premier global supplier of specialty polymers for the electrical and electronic industries. ELANTAS PDG, Inc. is a member of ALTANA's ELANTAS Electrical Insulation Division based in Wesel, Germany.

With the support of ALTANA and by working with other ALTANA divisions, we offer a unique global approach to research, manufacturing and service that translates into more creative solutions, dependable supply and consistently high quality.

Many ELANTAS PDG, Inc. products are recognized as components of electrical insulation systems in accordance with UL 1446. ELANTAS PDG, Inc. is registered to ISO 9001:2000 and ISO/TS 16949:2002- Second Edition.

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A member of  **ALTANA**



ELANTAS PDG, Inc. headquarters in St. Louis, Missouri

ELANTAS Electrical Insulation companies are strategically located throughout the world to meet the primary insulation, secondary insulation and electronic and engineering materials needs of our customers.

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