

Product Catalogue 2025



Ghadir
Tavan Pardaz

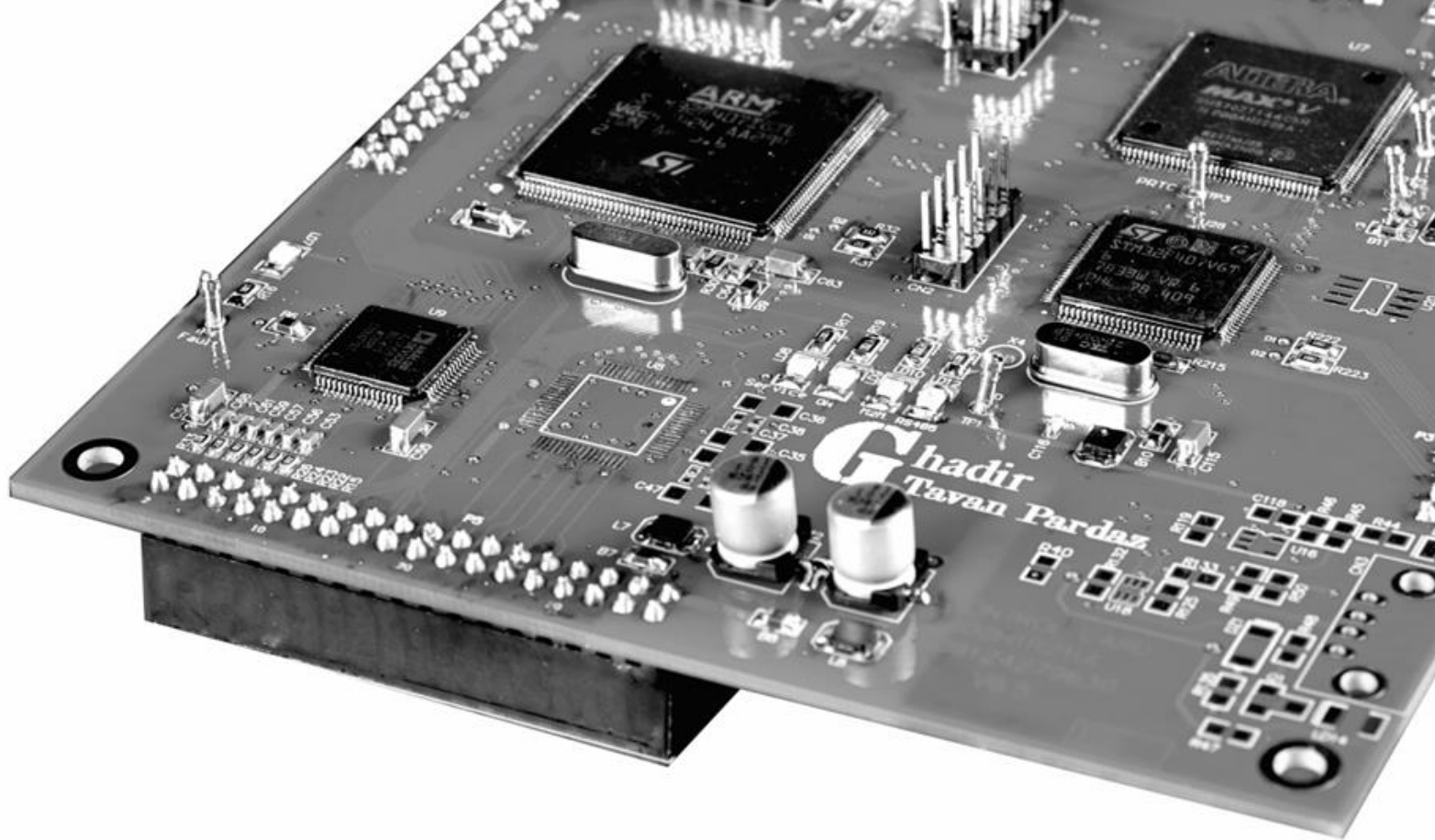
Solution Provider For Induction Furnaces



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Businesses in today's world will only survive by upgrading and developing technology and using expert, innovative consultants who are proficient in modern knowledge.

Ghadir Tavan Pardaz Co.



About Ghadir Company

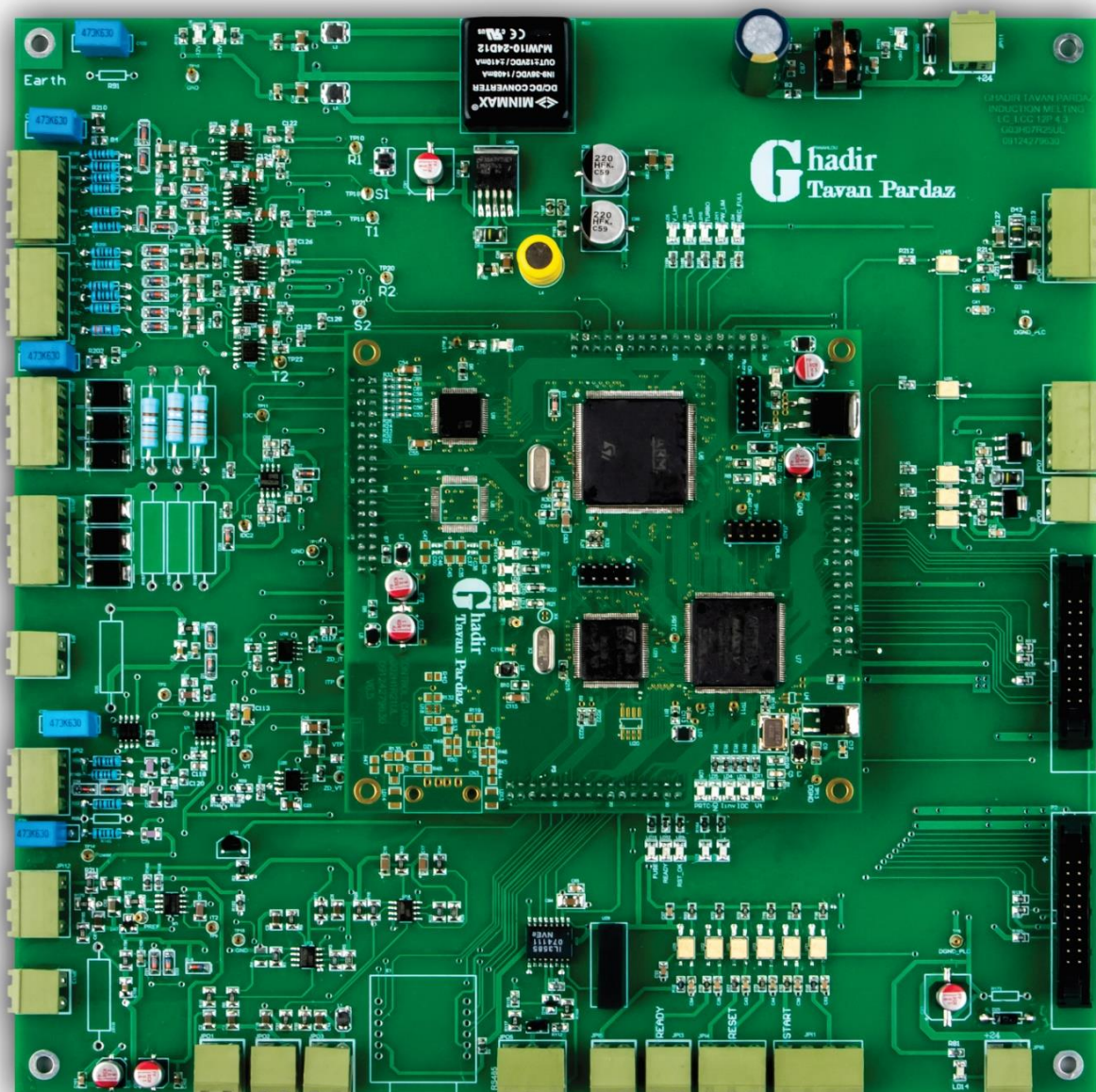
Ghadir group was established in 2015 to design, manufacture, install and commission electrical and electronic systems for induction furnaces in the field of melting and heat treatment production. With over 18 years of experience in designing power electronics and control projects, mainly induction furnaces, this group has ability to solve various electrical and electronic problems of all types of induction furnaces.

Ghadir technology group is continuously researching and investigating high-level technologies related to induction furnace equipment in embedded products, induction coils, DC links (DC chokes), system efficiency and optimal power consumption management.

DIGITAL CONTROL

Digital control board for induction melting furnaces

These boards based on the digital processors and the controllers are implemented in software and can be installed on all types of furnaces with parallel, series, and series-parallel topologies. These boards are designed with the following goals: reducing electronic circuits and simplifying hardware, thereby increasing reliability, covering various needs in induction furnaces, such as using crucibles with different tonnages with one electrical panel, making the furnace easier to use, reducing the need for expertise for melting operators, allowing for the development of various sections in the future.



CONTROL SYSTEM

Digital control setting and monitoring

A new digital control system for induction and heat treatment melting furnaces with the following features: • Accurate, safe and reliable control • Using the maximum capabilities of induction melting furnaces. • User friendly • Possibility of increasing furnace power to rated power • Furnace performance within the permissible reactive range. • Reliable and accurate protection (over 10 electrical protection)



FMC COILS

20% faster melting

These coils are designed using advanced technologies in the field of electromagnetic analysis and calculation, which is considered one of the new achievements in the field of induction furnaces in the world. Ghadir Company proudly now has the full ability to design, analyze and manufacturing this new product. These coils allow the system to make melt 20% faster at the beginning of the melting process.



ENERGY CABLES

Long-life single-strand energy cables

Since these cables are constantly exposed to bending and there is a possibility of blocking the water path by multi-strand cables, Ghadir company, relying on its technical knowledge and experience, has produced this product using a single-strand cable with long life.



TRANSPULSE

Transformers with strong insulation

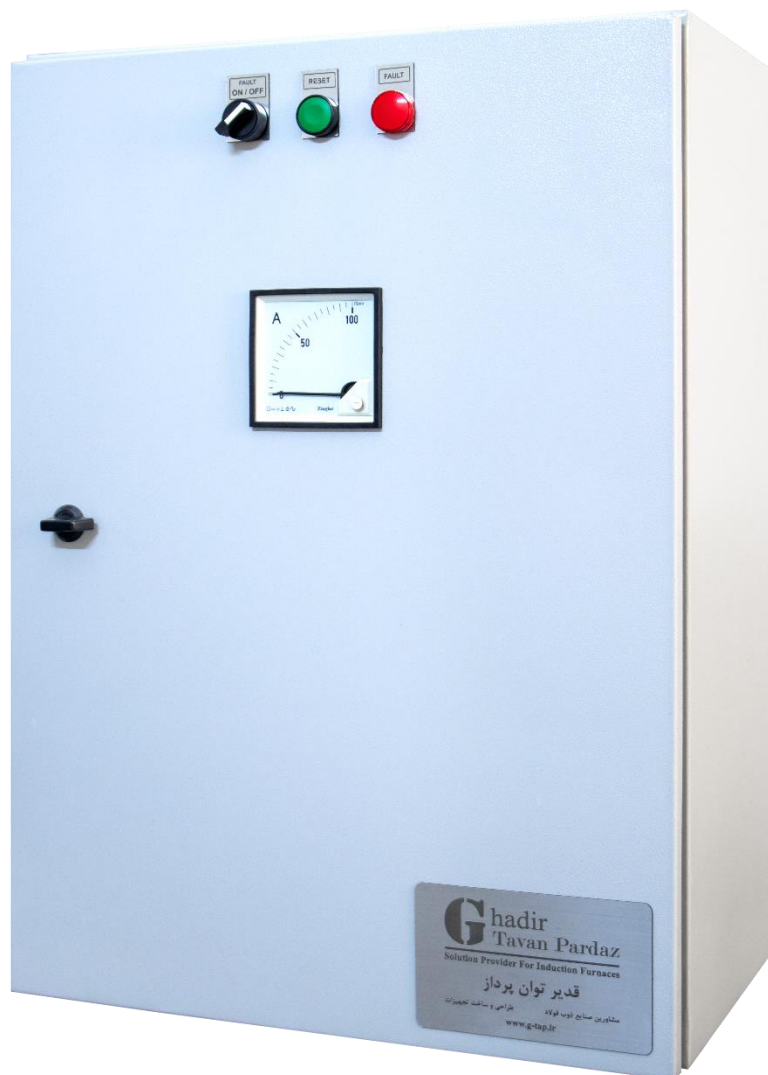
Considering the need for induction furnace electrical panels to transfer control system pulses to thyristors with appropriate technical specifications, Ghadir company has designed and produced a new generation of transformers that have all the required parameters such as high voltage isolation, sufficient current carrying capacity, and high di/dt .



EARTH LEAKAGE DETECTION SYSTEM

Earth leak detection with high sensitivity and detection speed

One of the important and effective protections in preventing damage to the coil as well as the thyristors of the electrical panel in induction furnaces is the ground leakage current detection system. Using this system, any increase in leakage current and decrease in connection resistance between the furnace circuit and ground is indicated to the operator. Due to the high importance of this system, Ghadir company, after reviewing the systems and algorithms of various European companies, has designed and built a leakage detection system that can be used for most furnaces in Iran.



ENERGY MEASUREMENT

Data acquisition of energy parameters

With using this system, every parameter such as: active and reactive power, network frequency, power factor, energy consumption and some other parameters, can be achieve. This system helps to managers and commissioners to improve efficiency and managing critical events.



GHADIR WORKSHOP

Ghadir's modern and well-equipped workshop

Ghadir Workshop, with modern and advanced equipment, experienced and skilled technical personnel, and suitable workshop space, is serving the steel smelting industry in the field of manufacturing coils, yokes, and DC chokes.





Ghadir, the key
to success in modern
production...

Contact Us



+989124279630

+989912752113

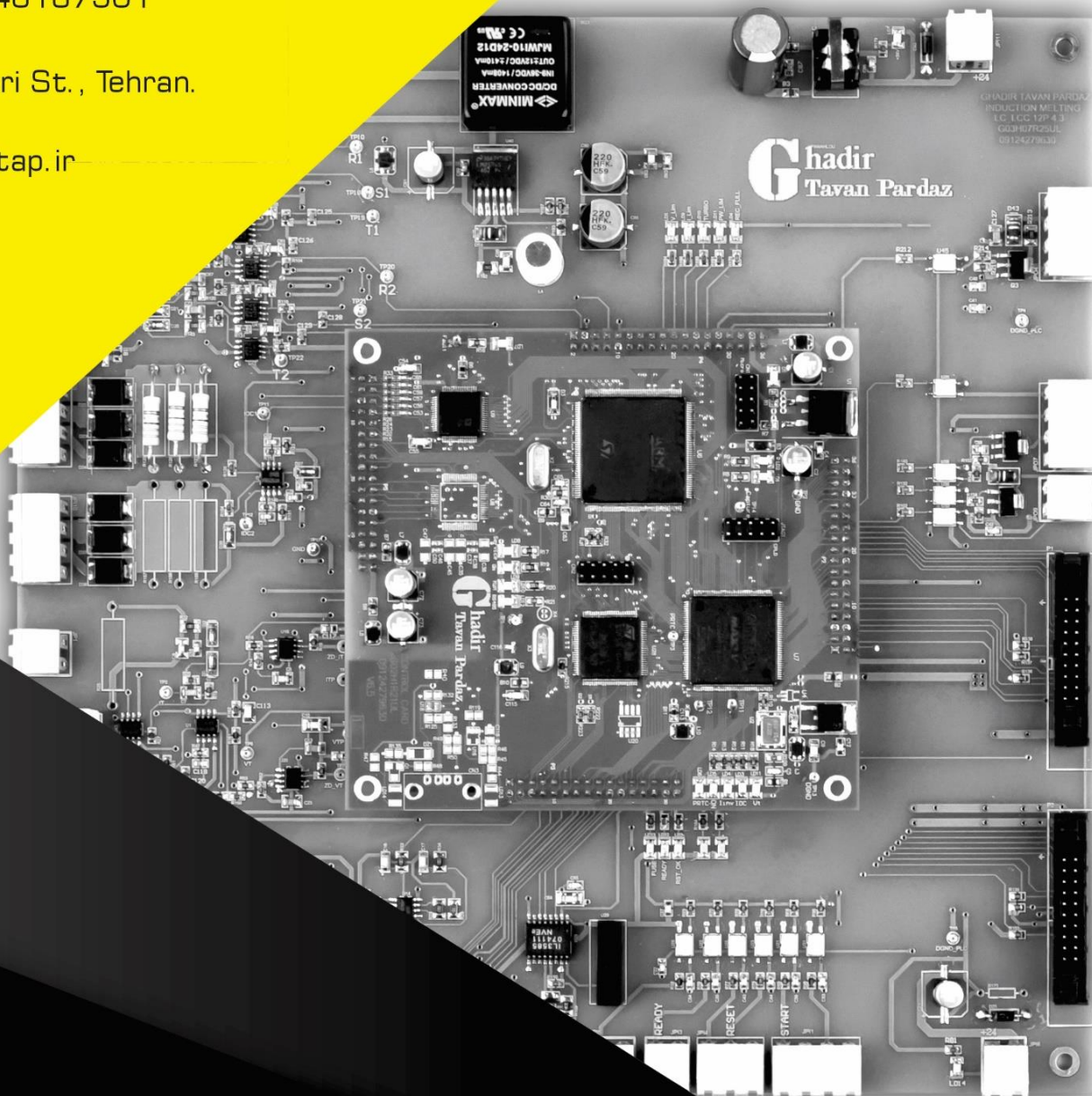
+982146137501



Jomhoori St., Tehran.



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