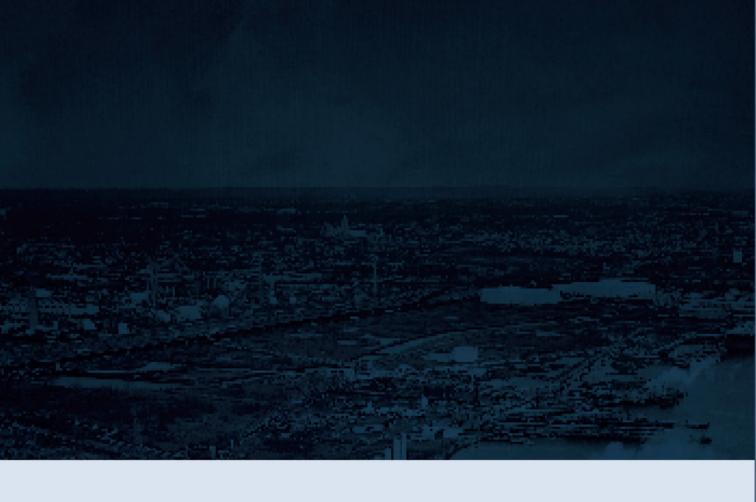




Amvaje Abi IGBT
Driver Compatible
with SINAMICS GM150







# Amvaje Abi: A Legacy of Expertise and Commitment to Quality

Amvaje Abi Company stands at the forefront of the industry, boasting over two decades of invaluable experience in designing, manufacturing, and advancing control systems and precision tools. Specializing in various sectors, particularly oil and gas, this knowledge-based company has earned its reputation as a trailblazer in Iran.

Established in 2002 with a mission to develop electronic systems tailored to the nation's needs, Amvaje Abi has evolved significantly over the years. In 2010, facing economic sanctions and stringent restrictions, the company successfully diversified into the production of control systems and precision tools, consistently delivering top-notch products across industries like oil and gas, mining, and steel.

Amvaje Abi's journey includes remarkable milestones, such as expanding R&D units, stringent quality control measures, and efficient production in the engineering department in Shiraz. Complemented by a management and commercial branch in Tehran, the company operates with a dedicated team of over 50 experts and skilled engineers, all alums of prestigious universities in the country.

In its commitment to international standards, Amvaje Abi has earned membership in the EP and AVL list of the Ministry of Petroleum and the National Petrochemical Company. The company has also secured multiple certifications and approvals from renowned organizations like the Association of Oil and Gas Industry Equipment Manufacturers and the Industrial Automation Companies Association.

With a portfolio boasting over 200 successful products, Amvaje Abi has achieved essential certifications domestically and internationally and has also seen exclusive use in major Iranian refineries and petrochemical plants by getting an exclusive MESC Code. Notable among these are the Pars South Gas Complex, Khangiran, Parsian, Shazand Oil, and numerous other significant petrochemical complexes.

Building on its rich experiences, Amvaje Abi has ventured into international trade, exporting its high-quality products to various countries. Committed to excellence, development, support, and the incorporation of cutting-edge technologies, the company has solidified its position as a leading force in Iran's electronic and industrial control industry and is recognized as a dependable supplier.

# Amvaje Abi IGBT-Driver Compatible with SINAMICS GM150

- The SINAMICS GM150 system by Siemens is used for driving rotating machines with medium voltage. This system can be used for driving constant loads and quadratic loads. Examples of applications include driving various fans, extruders, mixers, pumps, compressors, and mills.
- The IGBT-Driver of Amvaje Abi is fully compatible with the IGBT-Driver card of the SINAMICS GM150 system. It is suitable for driving the gate module FZ800R33KF2C and all IGBT modules that have similar electronic and mechanical specifications to the mentioned module.

#### **Specifications:**

- Compatible Modules:
  - O IGBT: FZ800R33KF2C
  - O Ultra High Power Resistor: UXP-600
- Power supply:
  - O Pulse Power Supply
  - O Frequency: 100KHz
  - O Amplitude: 48 V(P-P)
  - O Current: 2.5A
- Operation Temperature Range: -40°C ~ 85 C°
- Input Command Signal & Output Feedback Signal: Optical Signal (630nm Optical Signal)
- Delay Between Optical Command and Gate Drive: 1.5µs
- Gate Voltage in OFF State: -10V
- Connection between IGBT Driver and Modules: Easy connection with M4 and M5 screws
- Connection between IGBT Driver and Controller: Optical Fiber



# **Company's Capabilities and Specialized Areas of Activity:**

- Engineering and Manufacturing Services:
O Designing various electronic and control systems.
O Reverse engineering and redesigning electronic cards and control systems.
O Electronic component assembly and mass production of various
electronic and control systems.
O Testing and quality control of electronic cards.
- Specialized commercial services:
O Consultation and procurement of industrial control systems.
O Consultation and procurement of various electronic,
telecommunication, and precision instruments.
O Consult and procure remote control wireless systems.
- Specialized Repairs:
O Specialized repair of electronic cards and precision instruments for refineries and petrochemical plants.
- Training and Technical Engineering Support

- Control Systems

#### - Control Systems Integration and Commissioning

O In addition to its diverse and prominent activities, Amvaje Abi Company, with its essential capabilities, is recognized as one of the active companies in the field of designing and integrating control systems and precision instruments. This includes implementation, commissioning, support, and maintenance. The Instrument and Control System Department of Amvaje Abi, with over 15 years of practical experience in industrial automation and precision instruments, has become a key player in providing suitable solutions for major industries, including oil and gas, petrochemicals, steel, etc.

## The primary activities and services of the Instrument and Control System Department at Amvaje Abi:

- Consultation and Engineering
- Software design and development
- Conducting FAT processes
- Upgrading and Revamping
- Procurement of project components

- SAT
- Commissioning
- Repair and Maintenance
- Training
- Project Management
- Design of engineering documents and documentation
- Control systems Integration and precision instruments
- Cybersecurity Based On Project Requirements

## Customers















































### **Certificates and Standards**

# Implemented Standards IEC 61508-7-210 BSI BS EN 60079-0 BSI BS EN 60079-1 BSI BS EN 60079-20-1 BSI BS EN 60079-7 IPC 7351B IPC 7711C.7721C IPC A-600J





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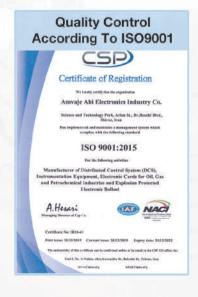
IPC A-610F A1-2016

ISO9001-2015

ISO IEC 80079-34-2018

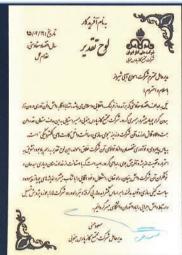






## **Appreciation Letters**









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