

PM-740

POWER MODULE

FOR ENERGY CONVERSION APPLICATIONS

IRIS
Certification



Product Description

ASELSAN's PM-740 is a high performance and a highly intelligent power module developed mainly for railway traction drives and also suitable with wind turbine and high power converter applications.

PM-740 having 400kW power rating and 97% efficiency mainly consists of IGBTs, IGBT drivers, capacitors, heat sink, discharge resistor and sensors (current, voltage, temperature) as well as an extensive protective system.

PM-740 with its new IGBT technology and advanced control options provides safe, reliable and efficient operation. No external controller is required for the operation. Embedded software is developed on DSP platform inside the Inverter Control Unit (ICU).

PM-740 is an open-frame system with protective rating IP00. Power module is supplied without a cooling fan and must be made available during the application.

Typical Applications

- Traction Drives
- Wind Turbines
- High Power Converters
- UPS Systems
- Resonant Inverters

Product Features

- Control of single or two parallel connected loads
- Rheostatic braking interface with braking chopper
- Integrated Traction Control Unit and flexible algorithm development architecture
- Texas Instruments' DSP28377 processor
- RS422/485 and CANopen interface options
- Encoder/Resolver interface
- NTC thermistor and PT100 interfaces
- Analogue inputs and discrete I/Os
- Overvoltage, overcurrent and overtemperature protection
- Passive discharge
- Galvanic isolation between HV and LV
- Fully automated self-test at start-up
- Complies with EMC requirements

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Technical Specifications

Ratings

Topology	: 2 Level, 3 Phase Inverter
Load Type	: Resistive, Inductive
Operating Voltage Range	: 500-1000 VDC
Nominal Voltage	: 750 VDC
Peak Power (30 sec)	: 600 kW
Continuous Power	: 400 kW
Switching Frequency	: 2.5 kHz
Efficiency	: 97 %
Control Voltage Range	: 24 VDC

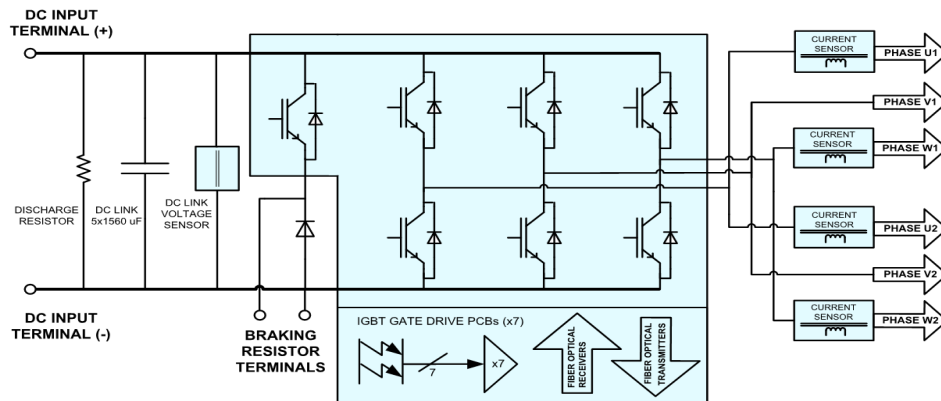
Thermal & Mechanical Data

Cooling Type	: Forced air cooling
Weight	: 117 kg
Operational Temperature	: -40 °C / +50 °C
Storage Temperature	: -40 °C / +65 °C

Standards

EElectrical	: EN 50155, EN 50163, : EN 50124-1, EN 50124-2, : EN 50388, EN 61287-1, : EN 61377-3
Mechanical	: EN 61373
Electromagnetic Compatibility (EMC)	: EN 50121-3-2

Electrical Diagram



Dimensions

