ACEPACK™: Adaptable, Compact, and Easier Packages Power Modules

Compact, high-performance power modules for simple, efficient and rugged industrial motor designs up to 30 kW

ST offers new ACEPACK 1 and ACEPACK 2 Power Modules with Sixpack and Converter Inverter Brake (CIB) topologies. With an embedded NTC thermistor, these highly reliable power modules offer the best compromise between conduction and switching loss, maximizing the efficiency of any converter system up to 20 kHz in hard-switching circuitries for an application range from 3 to 30 kW. Offering PressFIT and additional solder pin options for flexible and stable mounting, these robust power modules, which are part of ST’s M series Trench Gate Field-Stop IGBTs, ensure a compact design and cost-effective system.

KEY FEATURES
• 15 to 75 A current rating at 25 °C
• 650 to 1200 V Breakdown voltage
• 2.5 kV isolation voltage (AC, t=60s)
• Integrated 5K NTC temperature sensor
• Soft and fast recovery diode
• PressFIT and solder contact pin options
• Reliable and easy mounting system
• Low stray inductance module design

KEY BENEFITS
• High power density
• High reliability and quality
• 175 °C maximum junction temperature for increased robustness

KEY APPLICATIONS
• Industrial motor drives
• 3-phase inverters for motor drivers up to 30 kW
• Uninterruptible power supplies (UPS)
• Hybrid and electric vehicles (HEV and EV)
The flexibility and characteristics of ACEPACK packages bring additional power and design features to ensure the best possible solution for your applications.

![ACEPACK Switching off](image)

**PRODUCTS OFFER**

<table>
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<th>Package</th>
<th>Internal configuration</th>
<th>PN</th>
<th>Voltage (V)</th>
<th>Ic (A) Tc=100 °C</th>
<th>Power switch</th>
<th>Min. isolation voltage (V)</th>
<th>Max. junction temperature (°C)</th>
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**Module Type**

- A1 = ACEPACK 1
- A2 = ACEPACK 2

**Internal Configuration**

- P = Sixpack (3 phase Full Bridge)
- C = Converter Inverter Brake (CIB)

**Current Indication (DC) for IGBT**

**Diode Features**

- S = Soft Diode

**Additional Options**

- F = Press Fit

**Series**

- M = Low Loss IGBTs

**Breakdown Voltage**

2 digits: value ÷ by 100

Total power loss @ Ipeak=25.38A, Tj=135°C