



# SMA6820MP High Voltage 3-Phase Motor Drivers

### **General Description:**

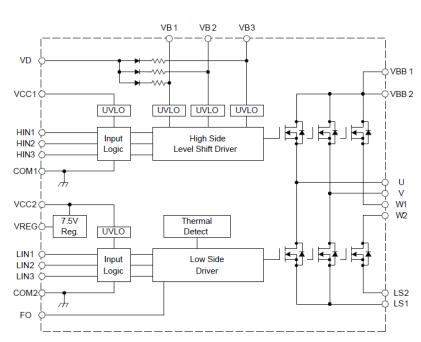
The SMA6820MP inverter power module (IPM) series provides a robust, highly-integrated solution for optimally controlling 3-phase motor power inverter systems variable speed control systems used in energy-conserving designs to drive motors of residential and commercial appliances. These ICs take 230 VAC input voltage, and up to 2.5 A (continuous) output current. They can withstand voltages of up to 500 V (MOSFET breakdown voltage).



The SMA6820MP power package includes an IC with all of the necessary power elements (six MOSFETs) and pre-driver ICs (two) needed to configure the main circuit of an inverter. This enables the main circuit of the inverter to be configured with fewer external components than traditional designs.

#### **Key Features:**

- Built-in pre-drive IC and 3 bootstrap diodes as a high-side drive power supply
- CMOS compatible input (3.3 to 5 V)
- High-side gate driver using bootstrap circuit or floating
- power supply
- One pin for 7.5 V regulator output
- Built-in protection circuit for controlling power supply
- voltage drop
- Built-in overheat detection circuit (TD)
- Output of fault signal during operation of protection circuit
- Output current 1.5, 2, or 2.5 A
- Small SIP (SMA 24-pin)





## **Applications:**

- Air conditioner fan
- Small ventilation fan
- Dishwasher pump

#### **Related Products Information:**

Mfr Part #	Farnell #	Newark #	Description
SMA6822MPLF2452	1791395	54M5302	High Voltage 3-Phase Motor Drivers -lo(max) is 1.5-
			Power SIP Lead form 2452
SMA6823MPLF2452	1791396	67R9085	High Voltage 3-Phase Motor Drivers -lo(max) is 2.5-
			Power SIP Lead form 2452

