

# ACEPACK DRIVE WITH Gen3 SiC MOSFETs



## Compact, high performance module for traction inverters



**Combining the features of SiC Gen3 technology with an optimized compact design, ACEPACK DRIVE is ideal for HEV/EV traction inverters**

ACEPACK DRIVE power modules have been specifically designed for satisfying the growing demand from automobile manufacturers for greater power ranges and higher efficiency in HEV/EV traction inverters.

Using the industry standard footprint, these ready-to-use power modules reduce the design effort of the driving board and the time-to-market.

Thanks to the direct liquid-cooled base plate, ACEPACK DRIVE modules offer optimal thermal performance, and enhanced lifetime as a result of the sintering technology used as die attach, combined with the AMB substrates.

### KEY FEATURES & BENEFITS

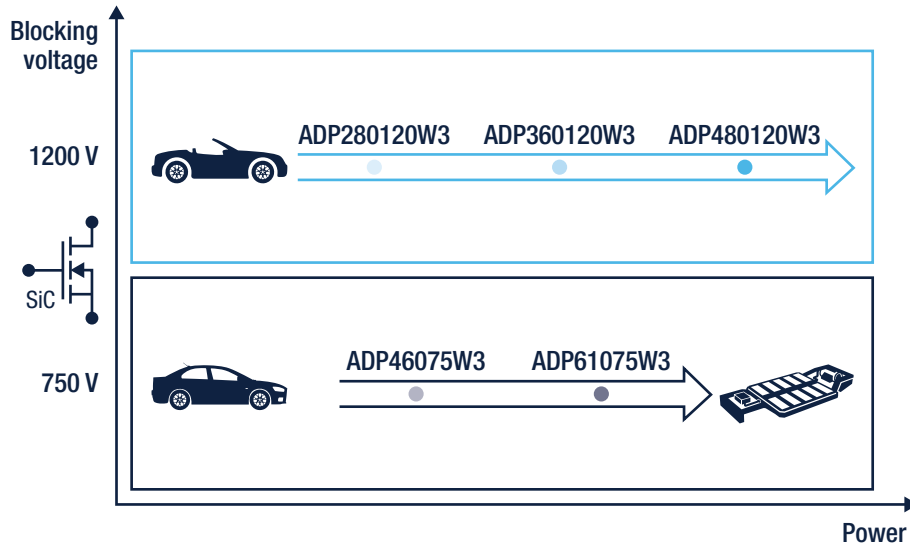
- 750 V and 1200 V breakdown voltages
- Extremely high power density and efficiency
- 175 °C maximum junction temperature
- Press fit connections
- AMB substrate and direct liquid-cooled base plate
- Unequaled  $R_{DS(on)}$
- 4.2 kV DC 1 s isolation
- Dedicated NTC for each single substrate

### KEY APPLICATIONS

Main inverter (electric traction):

- Light electric vehicles
- UAM
- Commercial & agriculture vehicles
- Trucks & buses
- E-motorbikes
- Sport cars

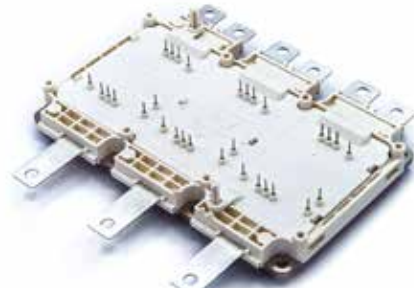
ACEPACK DRIVE power modules are based on the 3<sup>rd</sup> generation of SiC MOSFETs that offers optimal efficiency and performance. Furthermore, the incredibly high power density of the modules minimizes system room occupation and covers a power range from 175 to more than 300 kW at a voltage rating from 750 V to 1200 V.



**AC bus bar options available**



Short tab



Long tab

**Product portfolio**

Part number	Breakdown Voltage (V)	$R_{DS(on)}$ @ 25 °C (mΩ)	$R_{DS(on)}$ @ 175 °C (mΩ)	Target power (kW)	Features
ADP280120W3	1200	3.8	6.5	180	Short tab
ADP360120W3		2.55	4.25	230	Short tab
ADP480120W3		1.9	3.35	300	Short tab
ADP480120W3-L					Long tab
ADP46075W3	750	1.6	2.6	175	Short tab
ADP61075W3		1.2	1.95	220	Short tab
ADP61075W3-L					Long tab



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