

**SAPA**

Transmission

# Auxiliary Power Units & Electric Machine Systems



# 28 Vdc Auxiliary Power Units

SAPA low voltage generators and IC engine conversions make the most efficient and power dense auxiliary power units that can be integrated in any combat vehicle. Customized for every application, dimensions can be adapted to space claims as small as 12 in. height.

## Silent APUs

Our APUs can now be delivered with attenuation kit providing SPL of 65 dBA at full load

### Auxiliary Power Units

Dimensions (in)	24,80 x 20,07 x 21,10	40,35 x 23,62 x 15,74	46,89 x 22,24 x 11,81	40,35 x 23,62 x 15,74
Type	28 Vdc 17kW	28 Vdc 7,5kW	28 Vdc 10kW	28 Vdc 17kW
Rated speed (rpm)	3000	3000	3000	3000
Application	6x6 / 8x8 APC	Leopard 2E	Abrams & Bradley	Leopard 2E
				

### Key Benefits

**01**

Significant improvement in battery management (extended life)

**02**

Improved vehicle availability

**03**

Reduced vehicle IR & acoustic signature in stand by condition

**04**

Electric supply to FCS, comm and HVAC

# 700 Vdc Motor / Generator

This 3 phase PM machine is conceived to work with IC engines as alternator and/or motor. It is the perfect partner for electrical and hybrid vehicles. Its high temperature operating capacity (up to 100°C) reduced volume and through shaft allows an unrivaled spectrum of applications in the electrified vehicles arena.

## 75 kW High Temperature Electric Machine & AC/DC Converter

### Technical Characteristics

Max speed	7200 rpm	DC Range (Vdc)	0-850
Nominal Torque	81,13 lb.ft	Max. Current (A)	175
Peak Torque (<60s)	221,27 lb.ft	Power @ 700 Vdc (kW)	72
Nominal Power	75 kW (700 VDC)	Output frequency (Hz)	< 2000
Peak Power (<60s)	165 kW	Switching frequency (kHz)	20
Peak Efficiency	97%	Pack Efficiency	Up to 98%
Dimensions (in)	9,45 (L) x 9,53 (D)	Dimensions (mm)	325 x 305 x 150 mm <sup>3</sup>
Weight (lb)	83,77	Weight (lb)	44



### Key Benefits

**01**

High torque and power density

**03**

Customized versions available

**02**

Liquid cooling (EGW 50-50) up to 65°C at nominal power

**04**

Possibility of integrated resolver

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## Applications

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## **CONTACT**

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**Locations:**

11971 Investment Dr.  
Shelby Township,  
MI 48315  
+1 231-215-6555

**e-mail:**

[kebalta@sapatransmission.com](mailto:kebalta@sapatransmission.com)  
[sapa@sapatransmission.com](mailto:sapa@sapatransmission.com)