

# DS12ZeMa70



*Maintenance free TPPL AGM Technology  
for Rolling Stock Applications  
Engine Starting*



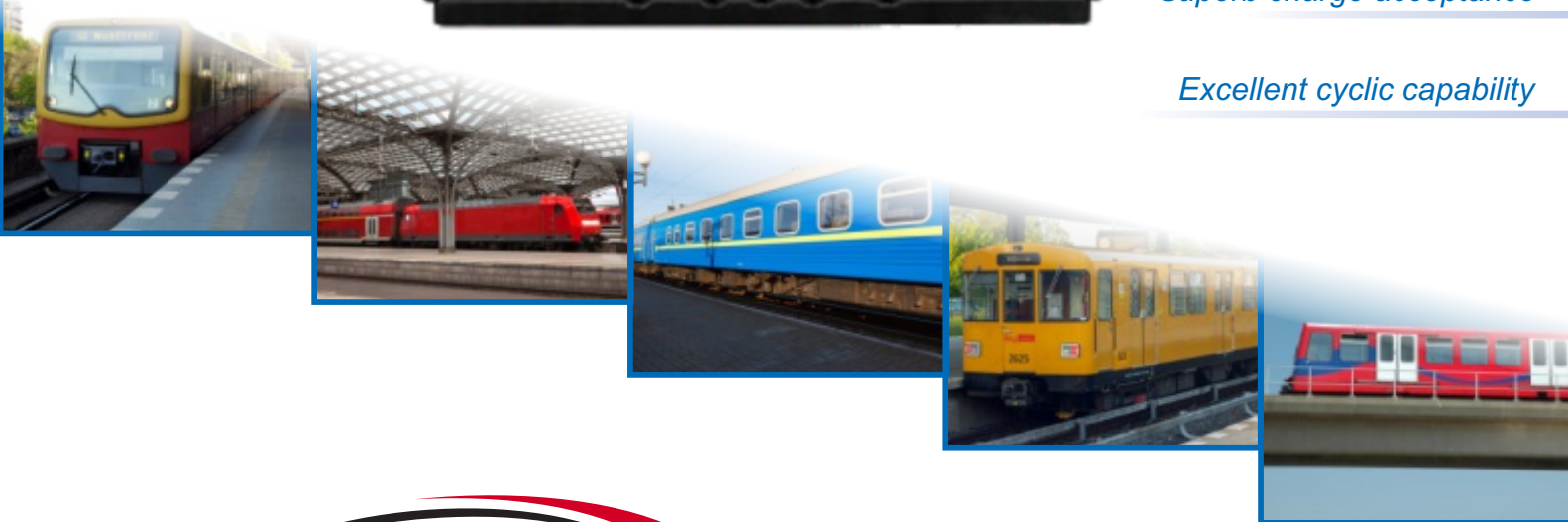
*Resistant to  
abusive discharges*

*Superior cold  
cranking performance*

*Shock resistant*

*Superb charge acceptance*

*Excellent cyclic capability*



*Keeping you on track*

# Hawker® ZeMaRail™ DS12ZeMa70

Technical Data	
Technology	*TPPL / *AGM / *VRLA
Nominal Voltage	12 V
Charging Voltage	14.4 V @ 20 °C
Float Voltage	13.74 V @ 20 °C
Nominal Capacity C <sub>20</sub>	70 Ah
Nominal Capacity C <sub>10</sub>	64.8 Ah
CCA (EN)	680 A
Internal Resistance	5,7 mΩ
Operating Temperature range	-40 °C to +50 °C
Short Circuit Current	2200A
Weight	20.7 kg
Storage	60 Months**
Storage at 25°C without recharge	24 Months
Terminals	DIN Lead Post
Service life	3 to 10 Years
Flame retardancy class	Non flame retardant

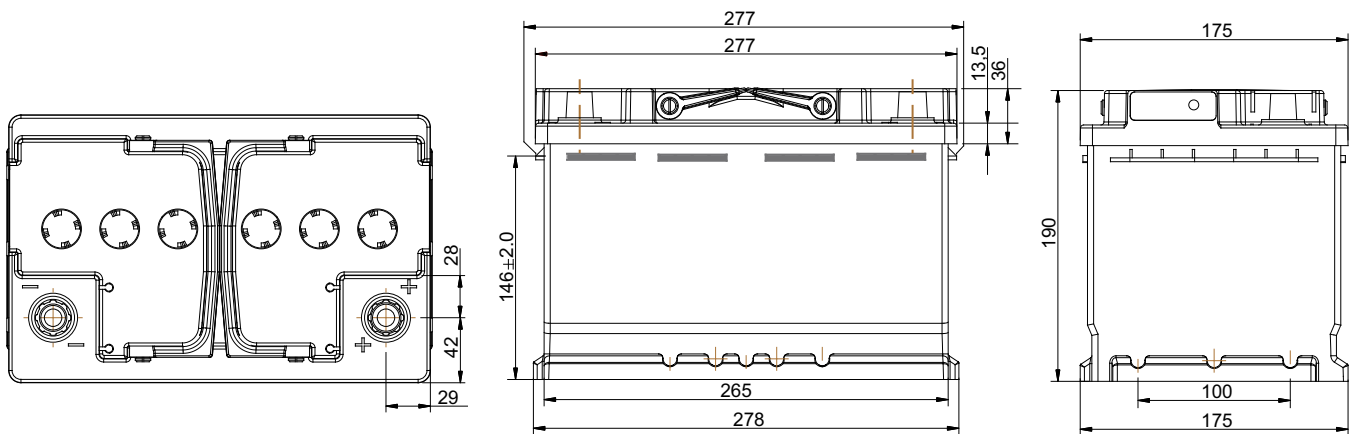
- \*TPPL: Thin Plate Pure Lead
- \*AGM: Absorbed Glass Mat
- \*VRLA: Valve Regulated Lead Acid
- \*\*Refresh charge required when OCV is less than 2.10Vpc

**ZeMaRail** Diesel Starting batteries combine excellent starting power with exceptional deep cyclic capability.

EnerSys® TPPL technology with 99.99% purity lead-tin plates and highly compressed AGM separators delivers superior cranking power and deep cyclic characteristics of 400 cycles to 80% DOD.

The internal elements are specifically designed to withstand extreme levels of shock and vibration ensuring reliability and long life in demanding applications.

The ZeMaRail Diesel Starter battery is designed with quality in mind to boost your energy, when you need it the most.



Global & Americas  
Headquarters  
**EnerSys**  
2366 Bernville Road  
Reading,  
Pennsylvania 19605  
USA  
Tel. + 1-610-208-1991

EMEA  
Headquarters  
**EH Europe GmbH**  
Löwenstrasse 32  
8001 Zürich  
Switzerland  
Tel: +41 (0)44 215 74 10  
Fax: +41 (0)44 215 74 11

**EH Europe GmbH**  
**PDAC EMEA**  
Hagnastrasse 27  
4132 Muttenz  
Switzerland  
Tel: +41 61 706 36 36  
Fax: +41 61 706 36 37