

# CHARGING SOLUTION

**NexSys® COMpact** 

**Life COMpact**<sup>™</sup>

"POWER ON DEMAND"

INTRODUCING
THE INNOVATIVE
ON-BOARD SYSTEM
FROM ENERSYS



#### CHARGING ANYWHERE AT ANYTIME

In modern industrial activities and material handling operations the need of space to optimize every day's operations, combined with the necessity of having trucks always available, is becoming more and more demanding. This turns into a request for more flexible, compact and integrated solutions, virtually without maintenance whilst able to perform zero battery change applications. To satisfy this increasing demand, EnerSys has designed and developed the advanced range of energy integrated solutions for Class III trucks combining in one package the renowned NexSys TPPL battery technology, the new smart onboard charger NexSys® COMpact and the most advanced iQ intelligence to provide a turnkey solution to recharge ANYWHERE at ANYTIME. The new integrated solution offers to the market a breakthrough technology, eliminating any unprofitable and unproductive transfer to dislocated charging stations.

For all other applications and battery technologies which require an onboard solution, EnerSys presents its new **Life COMpact™** onboard charger that can either be installed inside the battery compartment or become an integral part of the truck.



#### **HOW CAN THIS BE ACHIEVED?**

NexSys TPPL technology enables fast and opportunity charge that allows one battery to deliver more than its nominal energy during the day. Integrating the NexSys COMpact charger with the battery, together with our unique iQ charging profiles, will allow the operator to drive to the closest AC socket and recharge the battery with no need to drive to the charging station.

## WHY SHOULD YOU CONSIDER USING NexSys® COMpact AND LIFE COMpact™ FOR YOUR CLASS III TRUCK?

Because it offers substantially lower costs of ownership and potentially reduced capital investment for your energy infrastructure (charging rooms and battery handling equipment).

When integrated with our NexSys TPPL sealed VRLA batteries the truck can be recharged anywhere, anytime requiring no topping up, virtually maintenance free whilst reducing service costs and manual intervention.

NexSys® technology provides a green approach in powering your trucks with a low carbon footprint, 99% recyclable battery and high energy efficiency.



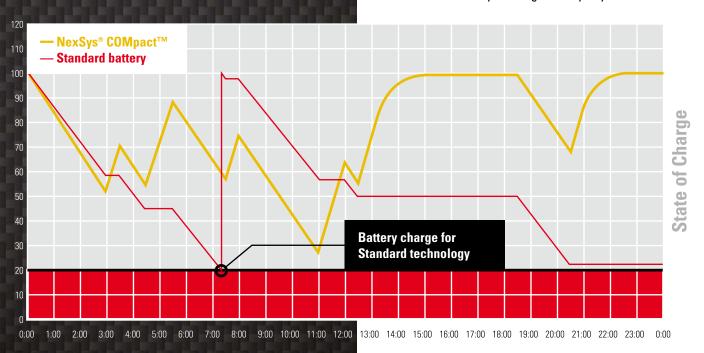
The onboard charger is physically installed into the battery tray or into the truck making charging an easy and standard task.

- Hard to fulfill unexpected work duties?
- · Lack of space for charging rooms?
- No time to drive to charging room for opportunity charge?

These inefficiencies are totally removed by using the new **onboard COMpact range** solutions.

The Charging Room becomes "portable" and wherever there is an AC socket the system can be opportunity charged.

The NexSys TPPL Technology can deliver up to 160% of its nominal capacity by means of fast and opportunity charges and can always work in partial state of charge with no necessity to be totally recharged every day.



### COMpact, OUR MOST COMPACT SIZE TO DATE

The **onboard COMpact** range has been designed to fit most of the range of 24V batteries for Class III, without requiring any further additional space or redesign. Featuring our most compact size to date, it also represents the best-in-class high frequency onboard charging solution for all applications in the field of material handling equipment.



The high efficiency (up to 94%) of **onboard COMpact range** and the optimized charging factors designed by EnerSys make the range a cost-saving benchmark which reduce your overall battery recharge costs by consuming less electricity and reducing carbon footprint.

#### **←→** COMMUNICATION, NOT JUST PURE ELECTRONICS

What's new about **onboard COMpact range**? It's smart. The unique EnerSys iQ intelligence and the advanced charging profiles embedded into the charger will govern every step of the charging process guaranteeing a safe, fast, efficient and reliable recharge ensuring that your equipment runs at optimum capacity with no downtime to your operation.

The LVA (Low Voltage Alarm) is also a standard equipment of the pack and will control, by visible and audible alarms, any kind of misuse of the battery linked to over-discharges or incorrect procedures.

With its bluetooth BLE capability the COMpact range can communicate with EnerSys designed Apps and can allow an easy and precise monitoring of all the chargers in site with a simple click. Data can be clouded and analyzed by an EnerSys expert to ensure the best performance of your activities and avoid catastrophic failures.









Specifications	Units	NexSys COMpact	LIFE COMpact		
Nominal Battery Voltage	V	24			
Input voltage	Vac	230V +/-10%			
Frequency	Hz	50Hz			
Max current draw @ 230V AC/ Module	А	5.4			
Power factor		0.99			
AC input cable	mm²	1.0			
AC input cable Length	m	2.5			
Max output current/ Module	А	38			
Battery cables section	mm²	1	10		
Battery cables length	m	1.0			
IP Protection		IP	20		
Operating temperature	°C	0-45°C			
Display		LE	Ds		
Weight /Module	kg	2.7			
Dims. (H x W x D) without rubber	mm	69.4 x 131	.0 x 274.5		
Dims. (H x W x D) with rubber	mm	84.4 x 131	.0 x 277.0		

NexSys COMpact								Life COMpact					
	Profile	NEXSYS STND		NEXSYS FAST		NEXSYS BLOCS			Profile	Flooded HD		GEL	
	Charging rate	0,2C5	0,25C5	0,26C5	0,4C5	0,2C5	0,7C5		Charging Rate	0,13C5	0,25C5	0,17C5	0,22C5
	Recharge time 20%-100% SOC	6,25 h	5,5h	5,5 h	4,6h	6,25h	3,5h		Recharge time 20%-100% SOC	8,5h	6,5h	10h	9h
	Recharge time 40-80% SOC	2h	1,6h	1,5h	1h	2h	0,6h		Recharge time 40-80% SOC	7h	6h	8,5h	8h
Model	C5 battery capacity (Ah)							Model	C5 battery capacity (Ah)				
NexSys COMpact 1kW	5 A- 38A	120- 190	120- 152	124- 147		26- 190	26- 55	LifeCOMpact 1kW	5 A- 38A	47- 293	24- 152	36- 224	
NexSYs COMpact 2 kW	39A-76A	195- 380	156- 304	150- 293	120- 190	195- 380	56- 109	LifeCOMpact 2kW	39A-76A	300- 585	156- 304	230- 448	219- 346

## SPECIAL SOLUTIONS FOR NexSys® COMpact IN DIN CONFIGURATION FOR CLASS III APPLICATION

Batt	ery Type	Standard Pack					NexSys COMpact				
Battery Type	sizes (mm)	V batt	C5/Technology	MAX Avail Cap per Day	Charger	V batt	C5/ Technology	MAX Available Capacity	NexSys Charger		
DIN 1	621x209x625	24V	250Ah Flooded 220Ah GEL	200Ah Flooded 176Ah GEL	24Volts 35/40 A	24V	190Ah TPPL	<b>304Ah</b> TPPL	NexSys COMpact 1 kW (38 A)		
DIN 2	621x281x625	24V	375Ah Flooded 330Ah GEL	300Ah Flooded 264Ah GEL	24Volts 50/60 A	24V	<b>285Ah</b> TPPL	<b>456Ah</b> TPPL	NexSys COMpact 2 kW (76 A)		
BS	660x145x690	24V	200Ah Flooded 162Ah GEL	160Ah Flooded 129Ah GEL	24Volts 25/35 A	24V	166Ah TPPL	<b>256Ah</b> TPPL	NexSys COMpact 1 kW (38 A)		

Most common standardised models. Specific customised models can be developed

#### **ABOUT ENERSYS®**

EnerSys®, the global leader in stored energy solutions for industrial applications, manufactures and distributes reserve power and motive power batteries, battery chargers, power equipment, battery accessories and outdoor equipment enclosure solutions to customers worldwide.

Motive power batteries and chargers are utilized in electric forklift trucks and other commercial electric powered vehicles.

Reserve power batteries are used in the telecommunication and utility industries, uninterruptible power supplies, and numerous applications requiring stored energy solutions including medical, aerospace and defense systems.

Outdoor equipment enclosure products are utilized in the telecommunication, cable, utility, transportation industries and by government and defense customers.

The company also provides aftermarket and customer support services to its customers from over 100 countries through its sales and manufacturing locations around the world.







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