



# AnEnergy Product Introduction

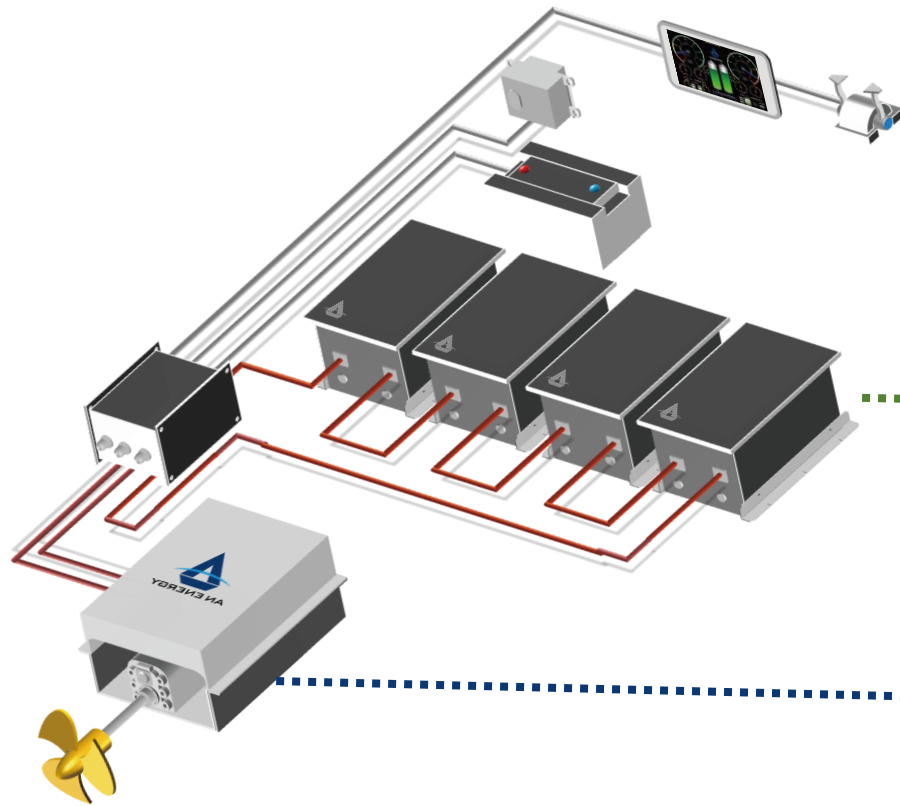
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Date : 2024.02.26 v2

ENERGIZING FUTURE LIFE

# Electric system

## System Integration



### Electric Control

Boat control unit  
HMI panel  
Throttle

Extensions :  
Remote monitoring  
Electricity transformer (DC/AC)

### Battery System

Battery pack (Li/lead-acid)  
Battery management system  
Charger

Extensions :  
Solar system  
Shore power station  
Fuel cell

### Propulsion system

Powertrain (Inboard motor)  
Motor control unit  
Cooling system

Extensions :  
Propeller  
Gen set

# Product List



## Propulsion System

### Powertrain (Inboard Motor+MCU+Gearbox)

i25 / 25kW

i48 / 48kW

i75 / 75kW

i150 / 150kW

i270 / 270kW

### Cooling System

Radiator

## Battery System

### Lithium Battery System (Battery Pack+BMS)

**Marine EV Power**

36kWh ~864kWh

**ENPower (ESS)**

40kWh ~3MW

### Charger

**On-board charger**

4kW OBC

8kW OBC

**24V charger**

1.2kW charger

1.7kW charger

## Electric Control

### Throttle

Single screw

Twin screw

### HMI

12 inches panel

### BCU

Digital communication (CANBus)

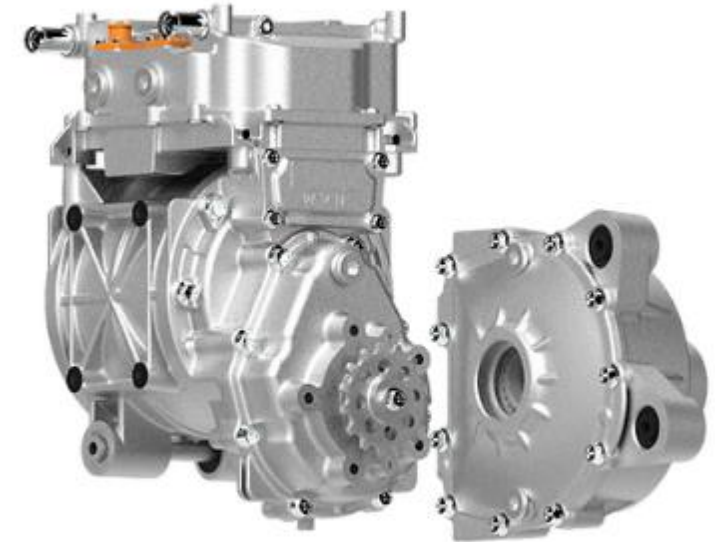
# Propulsion System

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Powertrain  
Cooling System

# Powertrain – i25

Component	MCU(Controller). Motor. Gearbox
Continue Power	25kw
Peak Power (Max working time is around 30 sec)	40kw
Rated Voltage	336 Vdc
Continue Speed	800 RPM
Max. Speed	1100 RPM
Continue Torque	270 Nm
Max. Torque	360 Nm
Operation Temperature	-40~85 °C
Cooling Method	Water & Oil Cooled
Weight	< 60 kg



# Powertrain – i48

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Component	MCU(Controller). Motor. Gearbox(1:5)
Continue Power	48kw
Peak Power (Max working time is around 30 sec)	85kw
Rated Voltage	336 Vdc
Continue Speed	800 RPM
Max. Speed	1200 RPM
Continue Torque	420 Nm
Max. Torque	700 Nm
Operation Temperature	-40~85 °C
Cooling Method	Water & Oil Cooled
Weight	< 90 kg

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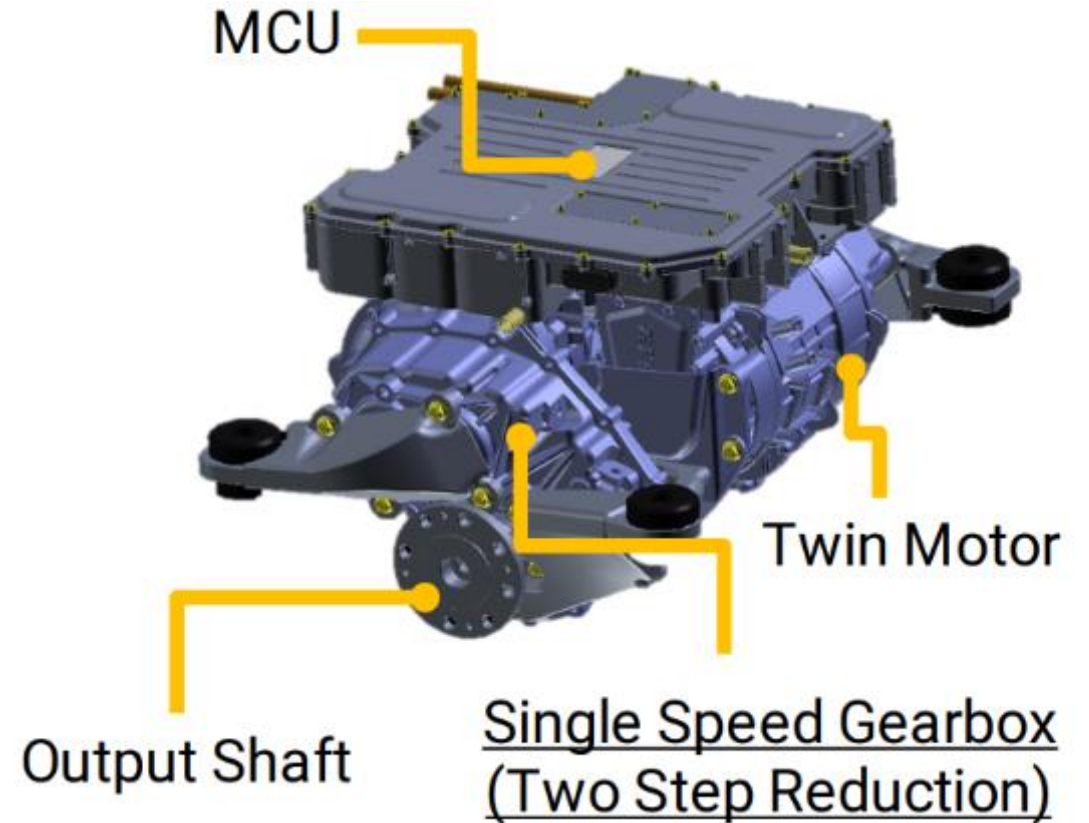
# Powertrain – i75

Component	MCU(Controller). Motor. Gearbox(1:5)
Continue Power	75kw
Peak Power (Max working time is around 30 sec)	125kw
Rated Voltage	664 Vdc
Continue Speed	800 RPM
Max. Speed	1200 RPM
Continue Torque	800 Nm
Max. Torque	1200 Nm
Operation Temperature	-40~85 °C
Cooling Method	Water & Oil Cooled
Weight	< 130 kg



# Powertrain – i150

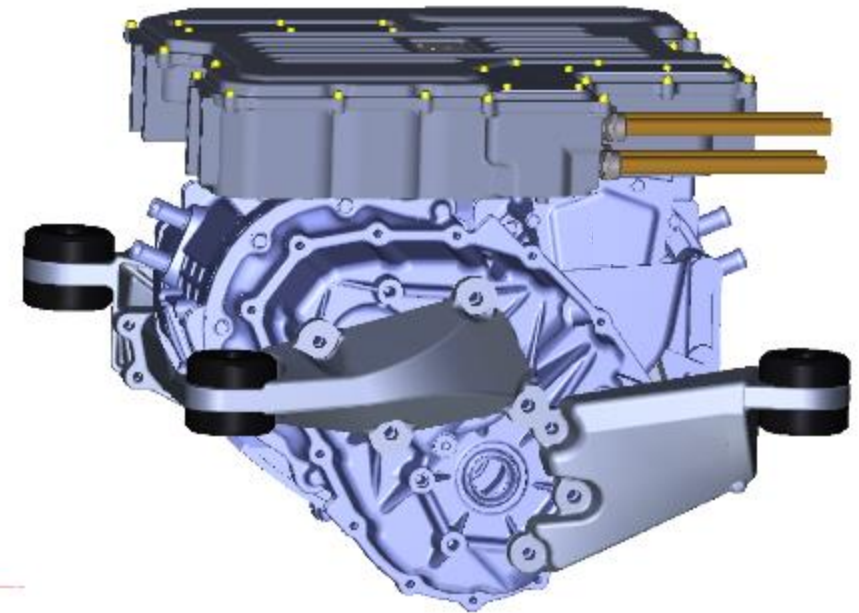
Component	MCU(Controller). Motor. Gearbox(1:9.78)	
Continue Power	150 Kw	
Peak Power	250 Kw	
Rated Voltage	664 Vdc	
Continue Speed	850 RPM	
Max. Speed	1150 RPM	
Continue Torque	1800 Nm	
Max. Torque	2200 Nm	
Operation Temperature	-40~85 °C	
Cooling Method	Water & Oil Cooled	
Weight	< 200 kg	



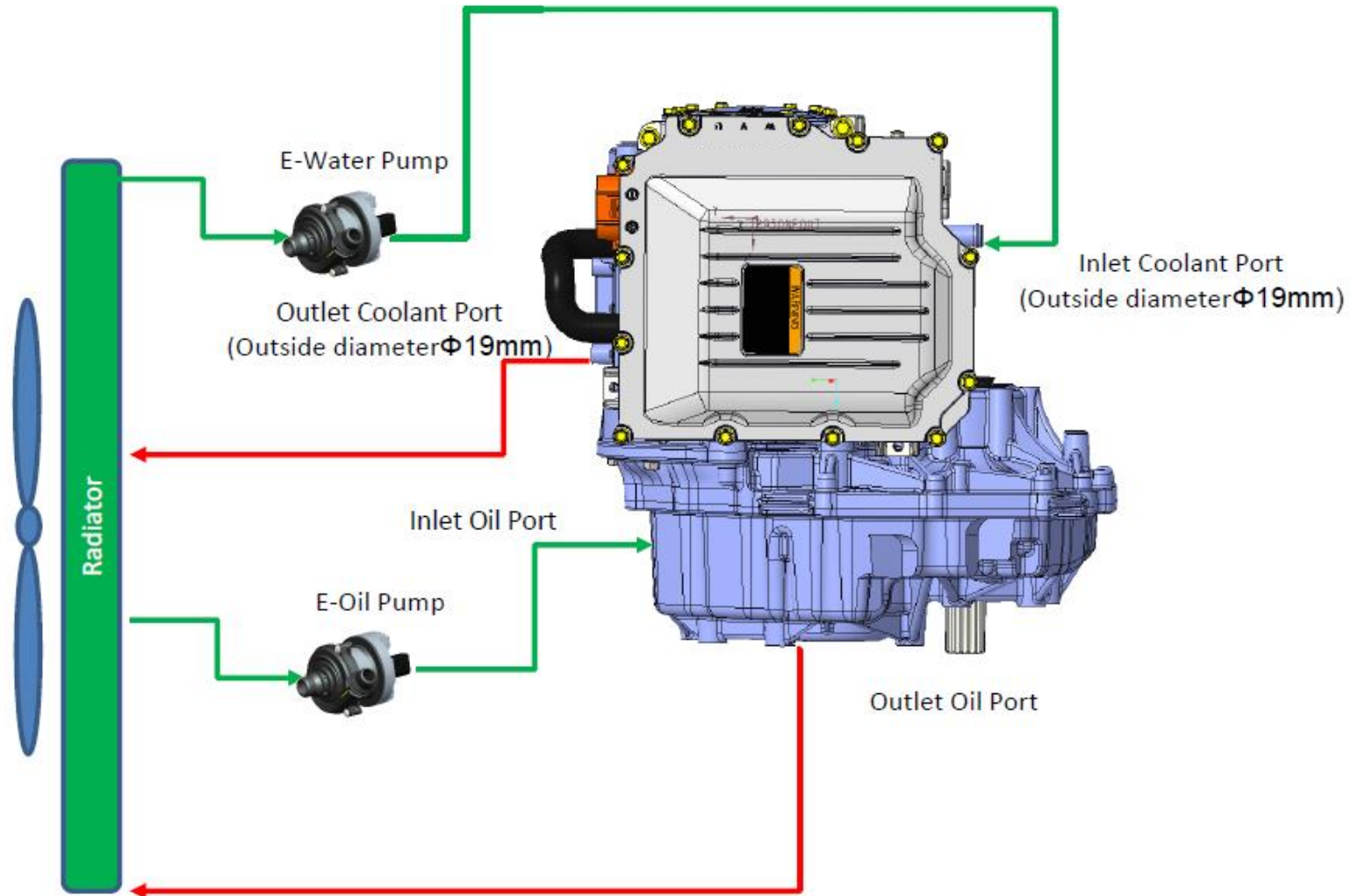


# Powertrain – i270

Component	MCU(Controller). Motor. Gearbox(1:9.78)
Continue Power	270 Kw
Peak Power	440 Kw
Rated Voltage	664 Vdc
Continue Speed	1000 RPM
Max. Speed	1200 RPM
Continue Torque	2700 Nm
Max. Torque	3700 Nm
Operation Temperature	-40~85 °C
Cooling Method	Water & Oil Cooled
Weight	< 450 kg



# Cooling System



# Battery System

Lithium Battery System  
Charger

# Lithium Battery System



## EVBP-M36

- Designed for boat use in marine with higher standards.
- High performance BMS with high accuracy measurement and protection mechanism to keep safe and extend the lifecycle.
- Laser welded cell connections for safety and stay strong.



Application	Motor power (<100kW)	Motor power (<100kW)	Motor power (>100kW)	Motor power (>100kW)
Nominal Voltage	345.6 V	345.6 V	691.2 V	691.2 V
Battery Capacity	72 kWh	216 kWh	144 kWh	432 kWh
In Series and Parallel	1S 2P	1S 6P	2S 2P	2S 6P



Certification



SAE J1939  
NMEA 2000

# Lithium Battery System



## EVBP-M36

Capacity	36 kWh
Serial-parallel number	108S 1P (LF105)
Rated voltage	345.6 Vdc
Voltage range	324~372.6 Vdc
Rated capacity	105 Ah
Rated output power	36kWh (105Ah 60min)
Maximum output power (Peak)	100kWh (310Ah 5Sec)
Cooling	Natural cooling
Installation space	650 (D)*1320(W)*264(H)mm
Total weight	305 kg
IP rating	IP67
Certification	Cell: UN38.3/IEC/UL Module : IEC62619



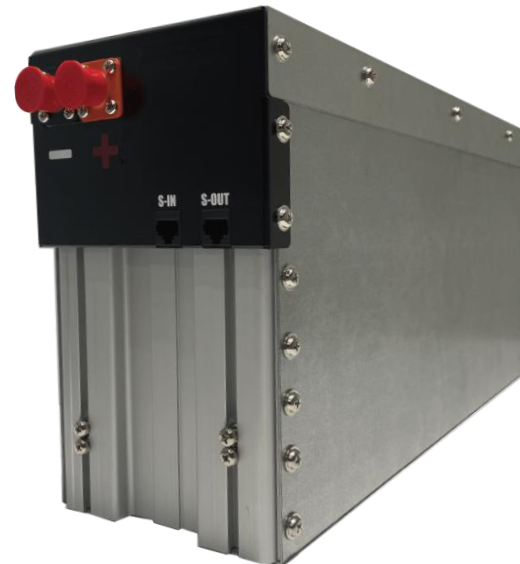
# Lithium Battery System

## ENPower series - LR Approval

ENPower, a long service life premium battery system, aims to deliver the very highest standards of quality with proprietary cell architecture, power electronics, BMS and mechanical clamping technology, well-suited to various applications. It is modular, compact and freely scalable for installations that range from 4kWh to 3MWh with flexible configuration options and designed to deliver excellent performance in harsh environment both on-and offshore.

### Features

- High energy density
- Excellent flexibility on configuration
- High-quality laser welds
- Use high thermal stability LFP cell
- High depth of discharge



# Lithium Battery System



## ENPower series - LR Approval

Module	
Capacity	105Ah
Max. Output Power	4kW
Nominal Voltage	38.4 Vdc
Cycle Life	> DOD80% 3000cycles
Cell Type	LFP
Operating Temp	-20°C ~ 55°C
Weight	31kg
Dimension	149(W)*236(H)*500(D) mm
Certification	CE/IEC62619, UL1973 LR

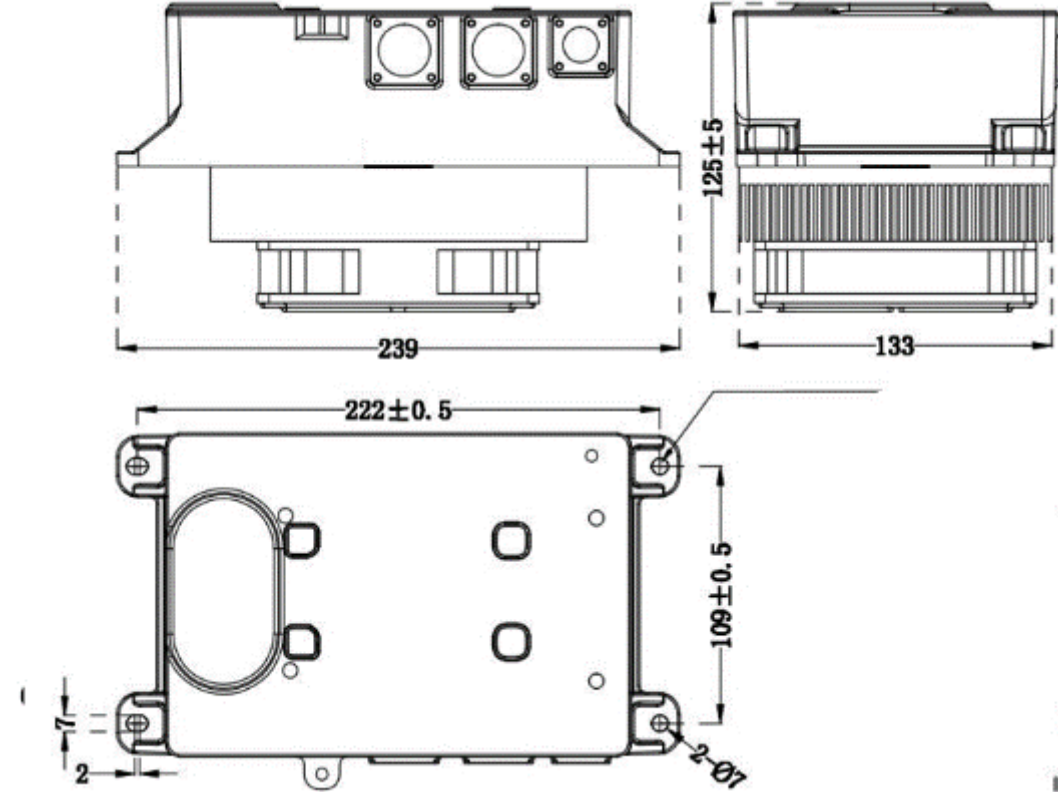
Manager Unit	
Input voltage range	18-30 Vdc
Maximum parallel	32
Serial capability	24
Weight	9kg
Dimension	522(D)*149(W)*237(H)mm
Communication	CANBUS, RS485
Certification	CE/IEC62619, UL1973, LR

\*Single System Configuration from 4kWh-3MWh

# On-Board Charger – OBC40N

Air-cooled OBC40N charger

AC Input Range	AC 90~265V
Frequency	45-65Hz
Output Mode	CV / CC





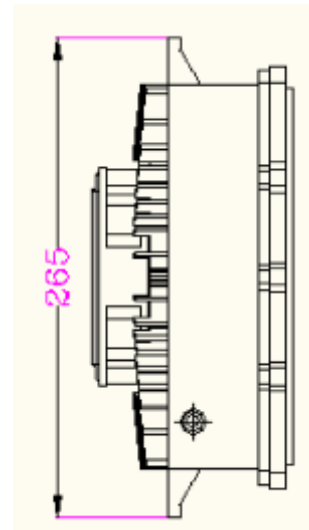
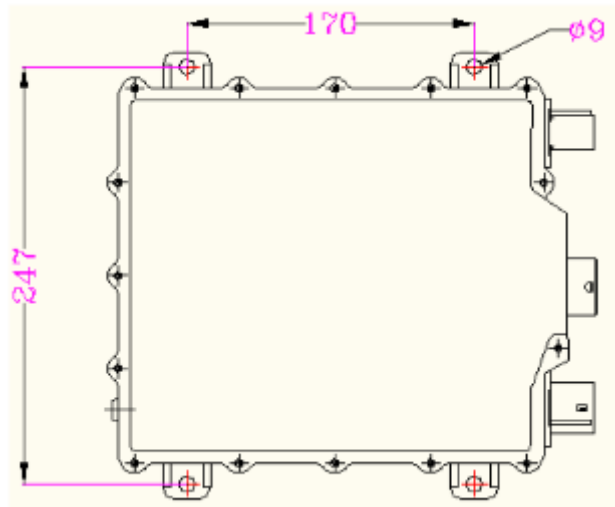
# On-Board Charger – OBC80N

Air-cooled OBC80N charger

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AC Input Range	AC 90~265V
Frequency	45-65Hz
Output Mode	CV / CC

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# 24V Charger – 1.2kW charger

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Input Voltage Range	90~264Vac 127~370Vdc
Output Voltage	27.6V
Charging Power	1209W
Working Temperature	-30~70
Output Mode	CV / CC

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# 24V Charger – 1.4kW charger

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Input Voltage Range	90~264Vac 127~370Vdc
Output Voltage	27.6V
Charging Power	1428W
Working Temperature	-30~70
Output Mode	CV / CC

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# Electric System

Throttle

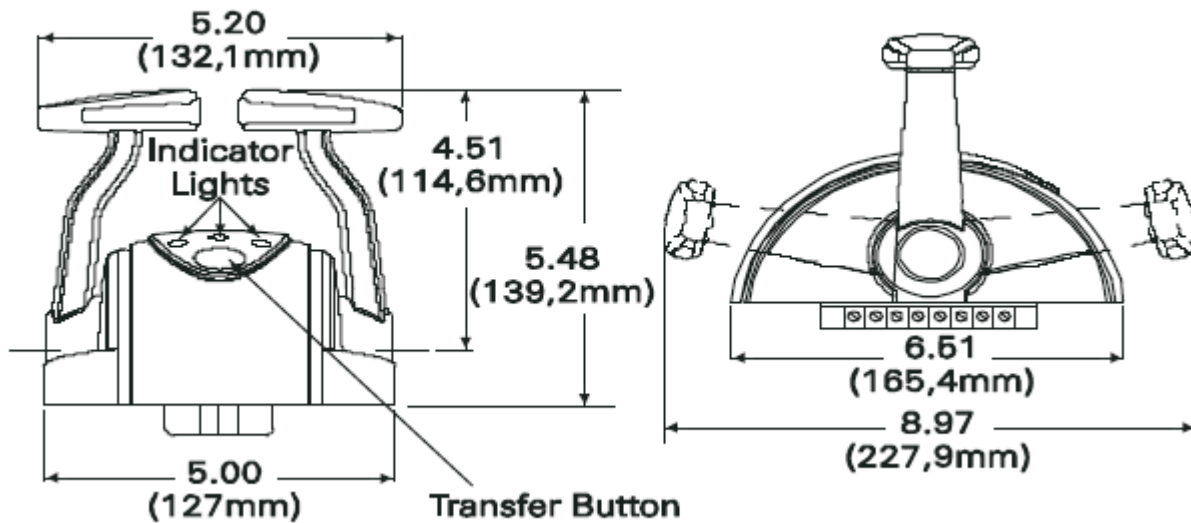
HMI

Boat Control Unit

# Throttle

Black powder coat with chrome lever

Dimension : 6.5" L x 5.2W x 5.5" H



10789A



# HMI

## X2 pro12

Size diagonal	12.1" diagonal
Resolution	1280x800 pixels
Backlight	LED Backlight
Backlight life time	50000 hours
Backlight brightness	400 cd/m2
Backlight dimming	Industrial Dimming
Display type	TFT-LCD with LED backlight
Mechanical size	340 x 242 x 57mm
Weight	2.6 kg
Certification	CE.NKK.DNV.FCC



# Boat Control Unit

