

Nauti-Combine Smart Power Combiner

NC-Series

- NC-K3A/B
- NC-K4A/B
- NC-K5A/B



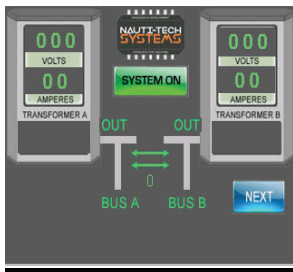
Shore/Offshore Power Management & Distribution

Nauti-Tech Systems is proud to introduce the **Nauti-Combine series**. Offering the most complete system to enhance, manage & safely stabilize the power demands & distribution on your vessel. Our combiner is available in multiple configurations for your convenience. This series allows the combining of two shore power isolation transformers into a single higher current AC voltage bus with ease. Whether you are docked, or offshore, the nauti-combine will help keep your power needs satisfied all while providing some of the most advanced safety features out on the market.

FEATURES

Our **Nauti-Combine** can be installed in or near your existing electrical panel. Nauti-combiner is always measuring voltage and current on your isolation transformers and generators. This allows the combiner to make intelligent decisions like when it is safe to combine, or if any faults are detected, it will correct it then combine. Below are some of the main features of what can be done with our system.

COMBINE



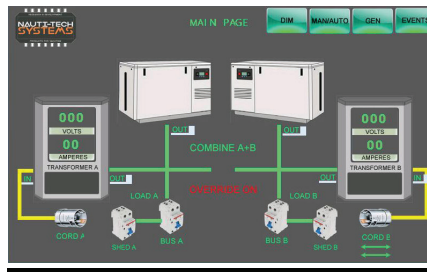
- Tie Bar A
- Tie Bar B
- Load Balancing

kW-H usage log



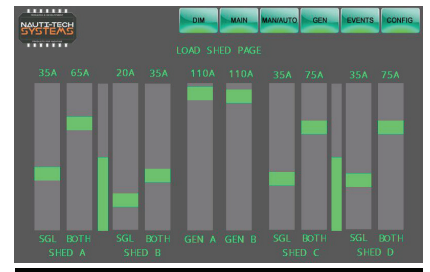
- kW-H log
- Reverse Phase
- Frequency
- Cable Disconnect

METERING & LOG



- Meter Input Voltage
- Meter Current / Frequency
- Daily Meter
- Log Events

LOAD SHEDDING



- Prioritize Appliances
- Cut-off Low Priority

CONFIGURATIONS

- Included
- * Optional

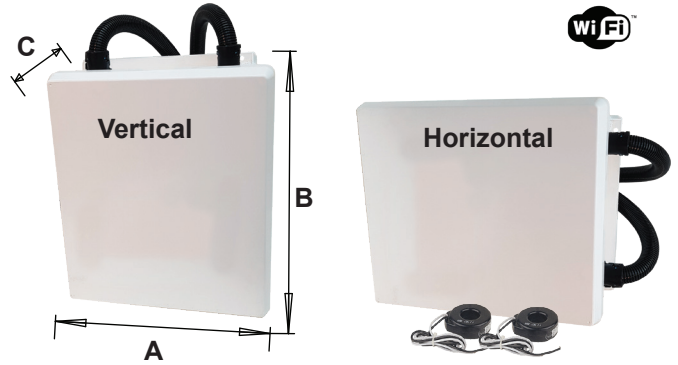


MODEL :	NC-K3A	NC-K3B	NC-K4A	NC-K4B	NC-K5A	NC-K5B	NC-K2
2*50A iso-transformer	*	*	*	*	●	*	*
2*100A iso-transformer	*	*	*	*	*	●	*
2*Current Transformer	●	●	●	●	●	●	●
2*50A or 63A support	●	*	●	*	●	*	*
2*100A or 125A support	*	●	*	●	*	●	*
2*Nauti-Boost Controller	*	*	●	●	●	●	*
Load Shedding	*	*	*	*	*	*	*

Smart Energy Management Systems

COMBINER ENCLOSED (NCK-Series)

- Fiberglass Reinforced Polyester (FRP)
- NEMA Type 4X
- Smart Energy & Load metering
- Reverse Phase detection
- Combine/TieBarA-B
- 120/240VAC Inputs
- Comes with 2 CT's for metering



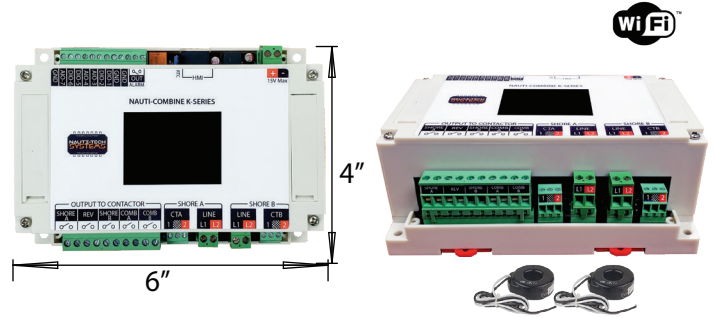
Part#	A (w)	B(h)	C(d)
NC-K2A/B NC-K3A/B	17.25"	19.25"	9.75"
NC-K4A/B NC-K5A/B	21.25"	17.25"	11.10"

Parameter	Min	Typ	Max
Supply Input Voltage (VAC)	185VAC	Varies	255VAC
Operating Current (w/wifi)	100mA	120mA	250mA
ESD Susceptibility (HBM)	N/A	N/A	2kV
Storage Temperature	-40°C	Varies	+85°C
Operating Temperature	-20°C	Varies	+60°C
Humidity Range	N/A	N/A	95%

Standalone Controller

COMBINER MODULE (NC-K2)

- Standalone Control module
- 120/240VAC Inputs
- Smart Energy & Load metering
- Reverse Phase detection
- Combine/TieBarA-B
- Comes with 2 CT's for metering
- Event & KW-H Logs



Parameter	Min	Typ	Max
Supply Input Voltage (VAC)	185VAC	Varies	255VAC
Operating Current (w/wifi)	100mA	120mA	250mA
ESD Susceptibility (HBM)	N/A	N/A	2kV
Storage Temperature	-40°C	Varies	+85°C
Operating Temperature	-20°C	Varies	+60°C
Humidity Range	N/A	N/A	95%

Load Shedding Module

NC-LS2

- Interfaces with K and V Series Combiners
- Controlled via HMI touchscreen display (3", 7" models)
- Single/Dual Cord set thresholds
- Amp threshold set for Single/Dual cords
- On/Off controls
- Din Rail compatible

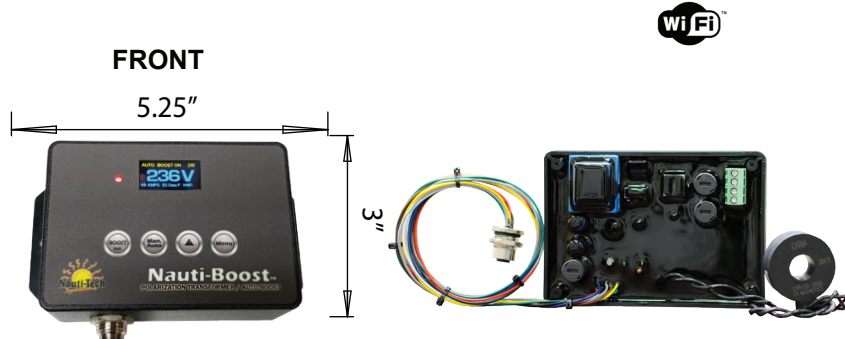
Parameter	?	?	?
NC Relays	15 kVA	60Hz	170lbs
?	25 kVA	60Hz	250lbs
?	15 kVA	50/60Hz	170lbs
?	25 kVA	50/60Hz	250lbs



Power Boost

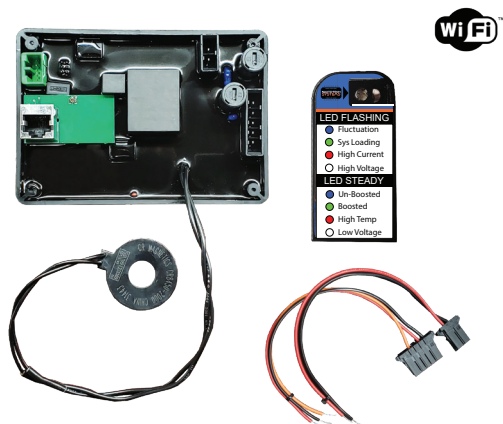
NBK

- Compatible with any ISO Boost Transformer
- Auto Boost / Manual Boost
- Compensates for low shore voltage (up to 15%)
- AC Metering Displayed on LCD
- Wifi Enabled
- Accessible via web interface
- Retrofit kits available



NBK2-HDL

- Compatible with any ISO Boost Transformer
- Auto Boost / Manual Boost
- Compensates for low shore voltage (up to 15%)
- WiFi expander with alarm RGB indicator
- Mobile friendly HTML interface
- Supports up to 2 HMI 3" touchscreen
- Supports any isolation transformer
- EventLogs
- Compatible with our K and V series combiners



Isolation

TRANSFORMER

- 50A / 100A Isolation Transformers available
- UL Listed and CSA Certified
- 12.5% Taps
- Vibration-Resistant
- Exceeds ABYC's 4000 Volt HIPOT test requirement
- Made for the Marine Industry by The Shore Power Experts

Parameter	kVA	Hertz	Weight
50A ISO Transformer	15 kVA	60Hz	170lbs
100A ISO Transformer	25 kVA	60Hz	250lbs
50A ISO Transformer	15 kVA	50/60Hz	170lbs
100A ISO Transformer	25 kVA	50/60Hz	250lbs

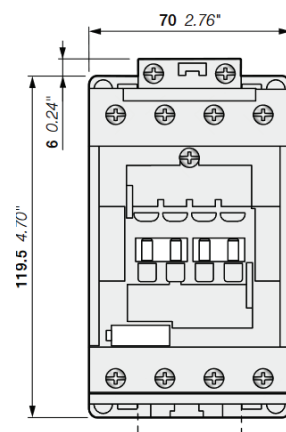


Contactor

NBK-C1

- 50A / 100A versions available
- 3pole / 4pole models
- Can manage large control voltage variations
- Reduced panel energy consumption
- Built-in surge suppression
- add-on auxiliary contact blocks

Parameter	kVA
Coil Voltage	100~250 VAC/VDC
Coil Type	Magnetic
Control Circuit	AC or DC operated coil



Accessories

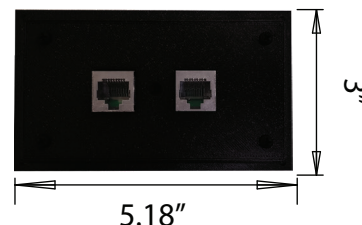
NC-S3 / NC-S3-SM

- HMI Touchscreen
- Monitor & Control
- Amp / Voltage /Frequency
- Daisy Chain w/ termination switch
- Crystal clear display
- RJ45 (RS485)
- Surface Mount (NC-S3-SM)*

FRONT



BACK



Parameter	Min
Resolution	400*240
Screen Size	3"
Backlight	LED
Weight	35.5g
Operating Voltage	4.75-7V
Total Depth Dimension	N/A

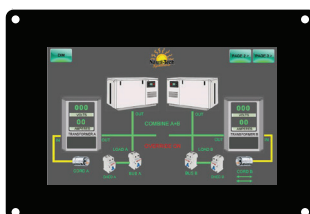
Software Options	Flush#	Surface#
Single Transformer	NC-S3-1	NC-S3-1SM
Dual Transformer	NC-S3-2	NC-S3-2SM
2*Transformer 1*NC-K	NC-S3-3	NC-S3-3SM

NC-SN5

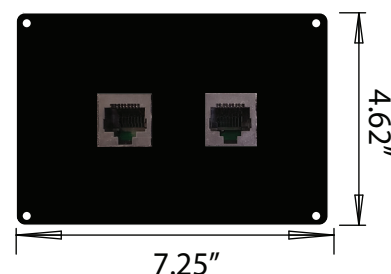
- HMI Touchscreen
- Monitor & Control
- Amp / Voltage /Frequency
- Daisy Chain w/ termination switch
- Crystal clear display
- RJ45 (RS485)

Parameter	Min
Resolution	400*240
Screen Size	5"
Backlight	LED
Weight	35.5g
Operating Voltage	4.75-7V
Total Depth Dimension	N/A

FRONT



BACK

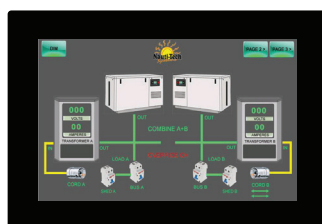


NC-SN7

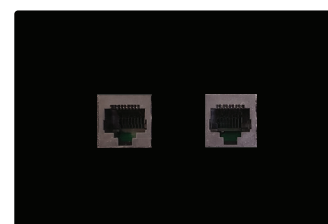
- HMI Touchscreen
- Monitor & Control
- Amp / Voltage /Frequency
- Daisy Chain w/ termination switch
- Crystal clear display
- RJ45 (RS485)

Parameter	Min
Resolution	800*480
Screen Size	7"
Backlight	LED
Weight	35.5g
Operating Voltage	4.75-7V
Total Depth Dimension	0.8" in

FRONT



BACK



5.9"

8.58"

NS-1T3

- Used to combine Combiner+NBK HMI screens
- Connector on First End: 1 x RJ-45 Male Network
- Connector on Second End: 3 x RJ-45 Female Network
- 1 to 3 RJ45 splitter
- ABS enclosed
- RJ45 (RS485)

