

ACME

- Shielded for cleaner power
- Encapsulated and completely enclosed design electrical grade silica and resin compounds completely enclose the core and coil to seal out all moisture and air
- Quiet operation with sound levels well below NEMA standards
- UL Type 3R enclosure for indoor or outdoor service
- UL Listed, CSA Certified
- Meets or exceeds all listing criteria including NEMA, ANSI, and OSHA standards



Item Number	KVA	Dimensions inches" (cm) HxWxD	Weight in lbs. (kg)	Price
240 x 480 Primary Volts, 120/240 Secondary Volts, Four Windings, 1 Ø, 60 Hz.				
T-2-53007-S	.25	8.68(22) x 4.08(10.4) x 3.88(9.9)	10(4.5)	\$271.60
T-2-53008-S	.50	9.06(23) x 4.37(11.1) x 4.20(10.7)	15(6.8)	\$315.68
T-2-53009-S	.75	9.68(24.6) x 4.75(12.1) x 4.50(11.4)	19(8.6)	\$393.93
T-2-53010-S	1	10.50(26.7) x 5.50(14) x 5.13(13)	24(10.9)	\$477.15
T-2-53012-S	2	13.00(33) x 5.50(14) x 5.13(13)	38(17.2)	\$719.38
T-2-53014-4S	5	14.38(36.5) x 10.31(26.2) x 7.13(18.1)	75(34)	\$1,318.85
T-2-53515-3S	7.5	15.19(38.6) x 13.50(34.3) x 10.84(27.5)	115(52.2)	\$1,844.90
T-2-53517-3S	15	16.94(43) x 14.12(35.9) x 11.59(29.4)	170(77.1)	\$2,833.40
T-2-53518-3S	25	18.44(46.8) x 16.13(41) x 13.34(33.9)	250(113.4)	\$3,495.55
190/208/220/240 x 380/416/440/480 Primary Volts, 120/240 Secondary Volts, 1 Ø, 50/60 Hz. Export Model - Maximum exciting current 5% @50Hz.				
TF-2-79260-S	1	10.50(26.7) x 5.50(14) x 5.13(13)	24(10.9)	\$924.38
TF-2-79261-S	2	13.00(33) x 5.50(14) x 5.13(13)	38(17.2)	\$1421.20
TF-2-79263-S	5	14.38(36.5) x 10.31(26.2) x 7.13(18.1)	75(34)	\$2,504.55
TF-2-79264-S	7.5	15.19(38.6) x 13.50(34.3) x 10.84(27.5)	115(52.2)	\$3,639.55
TF-2-79266-S	15	16.94(43) x 14.12(35.9) x 11.59(29.4)	170(77.1)	\$5,164.13
TF-2-79267-S	25	18.44(46.8) x 16.13(41) x 13.34(33.9)	300(136.1)	\$7,284.15



The following are guidelines from the American Boat and Yacht Council (ABYC) standard E-11.9 (Isolation of Galvanic Current): Ward's Marine Electric recommends installation to always be in accordance with the ABYC standards and to be performed by a certified marine electrician.

11.7.1. Isolation Transformers - If used, an isolation transformer shall be of the encapsulated type and shall meet the requirements of UL 1561, Dry Type General Purpose and Power Transformers and the following additional requirements.

11.7.1.4. The transformer case is to be metallic with a grounding terminal provided.

11.7.1.5. The transformer shall be tested and labeled by an independent laboratory to establish compliance with the requirements of ABYC E-11.7.1.

Call for detailed information on our Service Products or to schedule an appointment.

Transformers

BOOST

ACME Buck-Boost

- Multiple input/output voltage combinations
- Small and compact
- UL 50L Listed
- Raise voltage from 5-20%
- Quiet operation



T-1 SERIES

Item Number	KVA	Dimensions inches" (cm) HxWxD	Weight in lbs. (kg)	Price
120 x 240 Primary Volts, 12/24 Secondary Volts				
50/60Hz.				
T-1-81047	.05	6.38(16.2) x 3.19(8.1) x 3.00(7.6)	4(1.8)	\$199.53
T-1-81048	.10	6.62(16.8) x 3.75(9.5) x 3.62(9.2)	5(2.3)	\$232.38
T-1-81049	.15	7.12(18.1) x 3.75(9.5) x 3.62(9.2)	7(3.2)	\$248.28
T-1-81050	.25	8.68(22.0) x 4.08(10.4) x 3.88(9.9)	10(4.5)	\$284.03
T-1-81051	.50	9.06(23.0) x 4.37(11.1) x 4.20(10.7)	15(6.8)	\$354.90
T-1-81052	.75	9.68(24.6) x 4.75(12.1) x 4.51(11.5)	19(8.6)	\$504.10
60 Hz.				
T-1-11683	1	10.5(26.7) x 5.5(14) x 5.13(13)	24(10.9)	\$591.18
T-1-11684	1.5	11.62(29.5) x 5.5(14) x 5.13(13)	30(13.6)	\$710.33
T-1-11686	3	11.50(29.2) x 10.31(26.2) x 7.13(18.1)	55(24.9)	\$1,407.30

Ward's Marine Electric

The WME Portable Boost Transformers are safe, powerful, and can protect your 115/230 volt AC equipment from many harmful low dock voltage conditions. Both the 100 ampere and 50 ampere versions are equipped with durable carrying handles and can be conveniently set next to your dockside power pedestal. When connected, a static 10% voltage boost is delivered to provide safer and more effective power to your boat. There are no manual overrides on these units, so the voltage will be boosted 10% regardless of input voltage.

The DB50-10 portable boost transformer provides the same 10% boost as our standard BB08/230-50 boost transformer but it provides the boost only if the incoming voltage drops below 210 volts. If the incoming voltages rises above 220 volts, the boost voltage drops out to avoid feeding the boat with high voltage. This is the best solution for dock power that fluctuates.

- 10% Fixed boost
- Portable
- Compact design
- Single phase



BB208/230-50W



BB208/230-100W



DB50-10

Item Number	Amps	Weight in lbs. (kg)	Price
Portable Boost			
BB208/230-50W	50	55(25)	\$2,795.00
BB208/230-100W	100	85(39)	\$5,327.30
DB50-10	50	66(30)	Call for pricing

Not suitable for marinas where erratic voltage fluctuations occur.

Transformers

ISOLATION

Hubbell Marine Isolation Transformers

- Compact size and weight
- 12.5% taps
- Two full current-carrying shields
- Vibration Resistant
- Exceeds ABYC's 4000 Volt HIPOT test
- Full capacity taps (1:1 Voltage ratio)
- Easy access wiring chamber
- Virtually eliminates potential for in-water stray current
- Eliminates the need for Galvanic Isolation or Polarity Alarms



Item Number	KVA	Dimensions inches" (mm) HxWxD	Weight in lbs. (kg)	Color/Materials	Price
Isolation Transformers 50/60 Hz					
HBL32AITW	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	170 (77.11)	White Powder Coated Steel	\$4,115.53
HBL32AITSS	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	170 (77.11)	#316 Stainless Steel	\$4,920.43
HBL63AITW	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	250 (113.4)	White Powder Coated Steel	\$4,937.73
HBL63AITSS	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	250 (113.4)	#316 Stainless Steel	\$6,167.68
Isolation Transformers 60 Hz					
HBL50AITW	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	170 (77.11)	White Powder Coated Steel	\$3,702.95
HBL50AITSS	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	170 (77.11)	#316 Stainless Steel	\$4,525.45
HBL100AITW	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	250 (113.4)	White Powder Coated Steel	\$4,509.38
HBL100AITSS	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	250 (113.4)	#316 Stainless Steel	\$5,758.08

Hubbell Marine Isolation Boost Transformers

- Auto-boost of 12.5% will engage if voltage reading at the dock falls between 195 – 220 Volts
- AC Voltage monitored and displayed on remote control Manual Mode allows monitoring voltage and can be manually adjusted "Auto" mode automatically boosts voltage by 12.5% if low voltage is detected
- Main module cleanly mounted in easy access wiring chamber
- High-quality terminal block for wire management
- Sand-filled and epoxy topped
- Auto-boost/Remote cable receptacle



Item Number	KVA	Dimensions inches" (mm) HxWxD	Weight in lbs. (kg)	Color/Materials	Price
Isolation Transformers 50/60 Hz					
HBL32AITSSB	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	175(79.4)	#316 Stainless Steel	\$14,375.00
HBL63AITSSB	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	255(115.7)	#316 Stainless Steel	\$18,503.33
Isolation Transformers 60 Hz					
HBL50AITSSB	15	16.94(430.27) x 14.12(358.65) x 11.59(294.38)	175(79.4)	#316 Stainless Steel	\$7,285.17
HBL100AITSSB	25	18.44(468.38) x 16.13(409.7) x 13.34(338.84)	255(115.7)	#316 Stainless Steel	\$13,485.60

List pricing in catalog is subject to change without notice.

ASEA Marine Smart Isolation Boost Transformers

- Auto-Restart from shore brownout or blackout
- Auto-Restart from overload
- Fault shield for bonded, galvanic bridged/ isolated ground
- Modbus (RS-485) remote diagnostics
- kWh meter
- Advanced power monitoring (input/ output parameters)
- Microprocessor based over and under voltage/current protection



Model	Dimensions in" (mm) HxWxD	Weight in lbs. (kg)	Price
DBT12	12.8(325.12) x 13(330.2) x 18(457.2)	127(57.6)	\$6,900.00
DBT15	12.8(325.12) x 13(330.2) x 18(457.2)	165(75)	\$9,800.00
DBT24	16.1(408.94) x 19.6(497.84) x 24.5(622.3)	427(194)	\$14,600.00

Input/ Output Information

Model	Frequency	Voltage	Phase	Auto-Restart	AMP	Shore Cord
Input						
DBT12	70Hz	167-270V	Single	Standard	50A	Single
DBT15	47Hz-53Hz	167V-270V	Single	Standard	63A	Single
—	57Hz-70Hz	167V-270V	Single	Standard	50A	Single
DBT24	47Hz-53Hz	167V-270V	Single	Standard	100A	Single
—	57Hz-70Hz	285V-530V	Single	Standard	100A	Single
Model	Frequency	Nominal Voltage	Phase	Amp	Base Power Level	Paralleled Power
Output						
DBT12	60Hz	120/240V	Single/Split	50A	12kVA	24kVA
DBT15	50Hz	115/230V	Single/Split	63A	15kVA	30kVA
—	60Hz	115/230V	Single/Split	50A	12kVA	24kVA
DBT24	50Hz	115/230V	Single/Split	100A	24kVA	48kVA
—	60Hz	115/230V	Single/Split	100A	24kVA	48kVA

*See Trident System

Transformers

SMART ISOLATION BOOSTING TRANSFORMER WITH SHORE CORD COMBINING CAPABILITY

ASEA Trident System

The ASEA Trident System allows two 50A shore cords to be combined to a single 100A output. The pair of DBT12s provide three levels of boost to keep your ship powered even when input voltages sag by 35%, and the paralleling box ensures that current is shared equally between the shore cords, which allows you to maximize the amount of power you can draw from even the worst shore cord conditions. The three piece system is a direct replacement for the popular and discontinued Charles PM3TM.

- Combining of shore cord inputs to create a single output
- Auto-Restart from shore brownout, blackout, or overload
- Shore cord leveling keeps both cords at the same current to prevent imbalance and tripping
- Fault shield for bonded, galvanic bridged/isolated ground
- Modbus (RS-485) remote diagnostics
- Reverse Phase detection and correction: if hot and neutral are swapped on one pedestal, the combiner flips it
- Advanced power monitoring (input/output parameters)
- Microprocessor based over and under voltage/current protection



A/SEA TRIDENT SYSTEM

Model	Dimensions in" (mm)HxWxD	Weight lbs.(kg)	Price
Trident 24 System			system price is \$20,400.00
Master Paralleling Box	12.1(317.34) x 13.2(335.28) x 16.9(429.26)	40(18.14)	
DBT12s	12.1(307.34) x 15.5(393.7) x 18.7(474.98)	127(57.60)	

Input

Model	Frequency	Voltage	Phase	Amps	Auto Start	Shore Cord
Trident 24	47Hz-70Hz	240VAC	Single	(2)x 50A	Standard	Dual
Trident 48	47Hz-70HZ	230VAC		(2)x 100A	Standard	Dual

Output

Model	Frequency	Nominal Voltage	Phase	Amps	Power
Trident 24	47Hz-70Hz	120/240VAC	Single/Split	100A	24kVa
Trident 48	47Hz-70Hz	115/230VAC	Single/Split	200A	48kVa