

## ARCO ZEUS 24V ADVANTAGE: BETTER TECHNOLOGY = BETTER PERFORMANCE

### ARCO Zeus 4kW Low Turn On (LTO)

The ARCO Zeus 24v 4kW LTO alternator turns on at lower RPMs, runs cooler and provides more power than older designs that are larger and heavier. This alternator continuously generates over 1.4kW (51 Amps) at just under 1,500 RPM, and almost 2.4kW (87 Amps) at 2,000 Alternator RPM. Put in real world terms, a marine diesel engine idling at 750 RPM with a 2:1 pulley ratio is generating over 1.5kW (55 Amps), and a Mercedes Sprinter at 750 RPM with a 3.21:1 ratio is generating over 2.5kW (91 Amps)!

### ARCO Zeus 7kW

The ARCO Zeus 24v 7kW alternator generates extremely high amperage at cruising and higher RPMs. This alternator continuously generates over 3kW (109 Amps) at just under 3,000 alternator RPM, and almost 6kW (218 Amps) at under 6,000 RPM. To put in real world terms, a marine diesel engine at 1,500 RPM with a 2:1 pulley ratio is generating over 3kW, and a Mercedes Sprinter at 1,800 RPM with a 3.21:1 ratio is generating over 6kW!

### True 24V Alternators

Competitor's 24V alternators utilize a 12V rotor and field current which is less efficient and limits output at all RPMs. ARCO utilizes a native 24V rotor and field current. This results in our 24V alternator running cooler than competitor's 24V alternators, having a direct impact on alternator lifespan.

# ARCO Zeus 24V High Output Alternators

## 4kW LTO or 7kW: Which One's Right for You?

### Choose 4kW LTO if:

- You prioritize charging at idle (at campsite or anchor)
- You need to limit power take-off i.e. smaller engine
- You are willing to trade some top-end output for increased output at low RPMs

### Choose 7kW if:

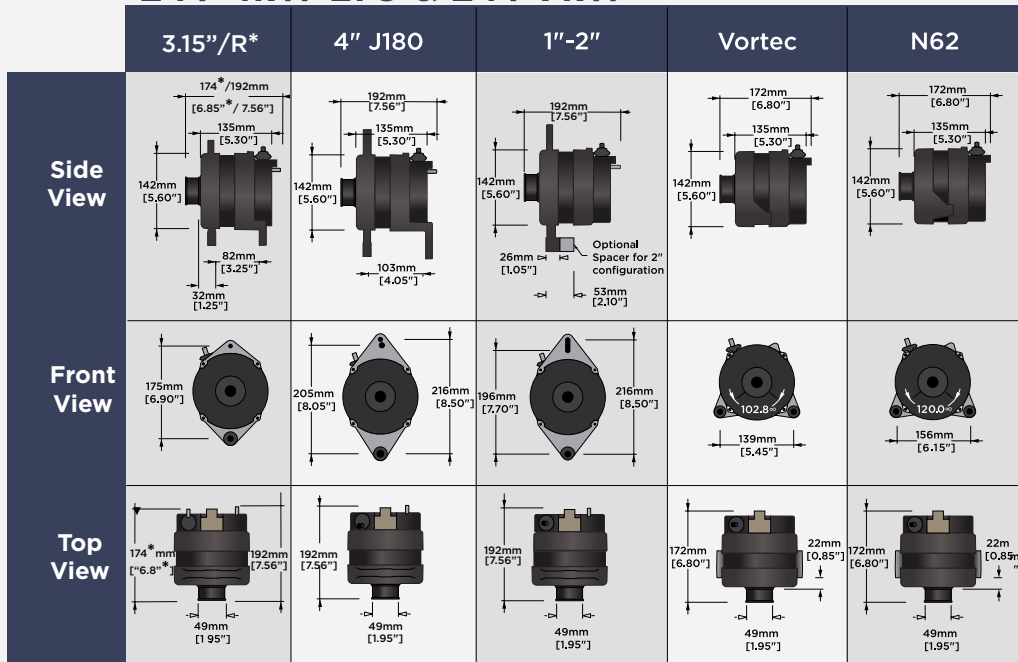
- You primarily charge at cruising rpm or on the road
- You only charge every other day when moving to a new location
- You are willing to trade low RPM output for class-leading output at mid to high RPMs

\*On the power curve graph, select 4kW LTO for use cases left of the Decision Point; otherwise, select 7kW.

## APPLICATIONS FOR 24V 4kW LTO & 24V 7kW HIGH OUTPUT

Mounting	ARCO Part Number	Application
1-2" Single Foot (Isolated ground only)	4405 (4kW LTO) 4505 (7kW)	Replaces most domestic styles using a single 1" or 2" mounting foot (e.g., Motorola, Prestolite).
3.15" Saddle Mount (Isolated ground only)	4401 (4kW LTO) 4501 (7kW)	Replaces most small case styles using a 3.15" J180 saddle style mount (e.g., Hitachi, Lucas, Mitsubishi) Most Yanmars.
3.15"R Saddle Mount, Rear Exit B+ (Isolated ground only)	4402 (4kW LTO) 4502 (7kW)	Must Be used on Yanmar Common Rail Engines introduced after 2013 (JH-CR, 3JH40, 4JH45, 4JH57, 4JH80, 4JH110).
4" J180 Saddle (Isolated ground only)	4403 (4kW LTO) 4503 (7kW)	Replaces most Volvo Penta alternators using a 4" J180 saddle style mount. Also use on many larger industrial-based engines.
Vortec	4406 (4kW LTO) 4506 (7kW)	Replaces Mando type alternators using Vortec/GM pad mounting feet (Found on many Mercurier and Volvo Penta 3.0GLM, 3.0GLP, 4.3GXi, 5.7GiL, 5.7GXiL Marine Engines).
N62 (Clutch Pulley)	4404 (4kW LTO) 4504 (7kW)	Replaces factory dual alternator on many Sprinter RVs, including Roadtrek, Thor, Winnebago, and others. For all Mercedes Sprinter applications with N62 option. Meets current Mercedes Upfitter weight and PTO requirements.

## 24V 4kW LTO & 24V 7kW



Only Isolated ground models available in 3.15", 3.15"R, 4" J180, and 1"-2" mounts.

\*Rear exit battery post for Yanmar Common Rail and other engines.

**SPECIFICATIONS**

**24V 4kW LTO**

**24V 7kW**

<b>Voltage</b>	24V			24V		
<b>Field Type</b>	P			P		
<b>Rotor Poles</b>	16			16		
<b>Stator Size</b>	138mm			138mm		
<b>Frame Size</b>	Large			Large		
<b>Weight of heaviest option (N62 with clutch pulley)</b>	15.89 lbs / 7.2 kg			15.89 lbs / 7.2 kg		
<b>Regulation</b>	External Only (EX)			External Only (EX)		
<b>Finish</b>	(Black) E-coating			(Black) E-coating		
<b>Cut-In Alt. RPM</b>	1,072 Alternator RPM			1,926 Alternator RPM		
<b>Maximum Alt RPM</b>	19,000			19,000		
<b>Battery Post</b>	M8 Thread Post, Side Mount and Rear Exit			M8 Thread Post, Side Mount and Rear Exit		
<b>Standard Pulley</b>	49K6 (6-groove, 49mm)			49K6 (6-groove, 49mm)		
<b>Pulley Mount</b>	17mm diameter shaft, 25mm long, threaded M17 x 1.5			17mm diameter shaft, 25mm long, threaded M17 x 1.5		
<b>Pulley Hardware</b>	M17 x 1.5 x 24mm nut, w/ 18mm ID x 29mm OD washer (Incl.)			M17 x 1.5 x 24mm nut, w/ 18mm ID x 29mm OD washer (Incl.)		
<b>Diodes</b>	6 positive, 6 negative, 50A Rated, Avalanche			6 positive, 6 negative, 80A Rated, Avalanche		
<b>Max Output (Cold, 9,000 RPM) at 27.5V</b>	3,960 Watts	144 Amps	5.7 kW PTO	7,810 Watts	284 Amps	11.2 kW PTO
<b>Sustained Cruising Output (Hot, 6,000 RPM) at 27.5V</b>	3,575 Watts	130 Amps	5.1 kW PTO	6,050 Watts	220 Amps	8.6 kW PTO
<b>Sustained Idle Output (Hot, 3,000 RPM) at 27.5V</b>	2,970 Watts	108 Amps	4.2 kW PTO	1,375 Watts	50 Amps	2 kW PTO
<b>Max Continuous Operating Temperature</b>	110°C / 230°F			110°C / 230°F		

**24V 4kW LTO DETAILS**

Voltage	Maximum Output Watts (Amps)	Sustained Idle Output Watts (Amps)	Housing	Regulation	Ground Type	Pulley	Part #
24V	3,960 (144)	2,970 (108)	Vortec (GM)	External Only	Case Ground	49mm K6 (6 groove)	4406
24V	3,960 (144)	2,970 (108)	N62 Clutch Pulley*	External Only	Case Ground	50mm K6 (6 groove)	4404
24V	3,960 (144)	2,970 (108)	1"-2" Single Foot	External Only	Isolated Ground	49mm K6 (6 groove)	4405
24V	3,960 (144)	2,970 (108)	3.15" Dual Foot	External Only	Isolated Ground	49mm K6 (6 groove)	4401
24V	3,960 (144)	2,970 (108)	3.15"R Dual Foot, Rear Exit B+	External Only	Isolated Ground	49mm K6 (6 groove)	4402
24V	3,960 (144)	2,970 (108)	4" J180	External Only	Isolated Ground	49mm K6 (6 groove)	4403

**24V 7kW DETAILS**

Voltage	Maximum Output Watts (Amps)	Sustained Idle Output Watts (Amps)	Housing	Regulation	Ground Type	Pulley	Part #
24V	7,810 (284)	1,375 (50)	Vortec (GM)	External Only	Case Ground	49mm K6 (6 groove)	4506
24V	7,810 (284)	1,375 (50)	N62 Clutch Pulley*	External Only	Case Ground	50mm K6 (6 groove)	4504
24V	7,810 (284)	1,375 (50)	1"-2" Single Foot	External Only	Isolated Ground	49mm K6 (6 groove)	4505
24V	7,810 (284)	1,375 (50)	3.15" Dual Foot	External Only	Isolated Ground	49mm K6 (6 groove)	4501
24V	7,810 (284)	1,375 (50)	3.15"R Dual Foot, Rear Exit B+	External Only	Isolated Ground	49mm K6 (6 groove)	4502
24V	7,810 (284)	1,375 (50)	4" J180	External Only	Isolated Ground	49mm K6 (6 groove)	4503



\*Mercedes Upfitter Compliant.