

**We Know How To  
Charge Your Batteries**

**BALMAR**<sup>®</sup>  
WWW.BALMAR.NET  
**DC CHARGING SOLUTIONS**

## Smart Ready<sup>®</sup> Technology for Yanmar Engines Equipped with Valeo Alternators

**Now Yanmar Owners can add Balmar Smart Regulation  
without Disposing of the Valeo 120A/12V Alternator  
Present on Recent Production Engines**

**A Simple Retrofit of the Valeo Alternator  
Converts the Valeo to Accept  
Balmar's Famous Multi-Stage External Regulators**

- Reduce the Cost of Adding Balmar Multi-Stage Regulation by Half
- Balmar's Patented Smart Ready<sup>®</sup> Design
- The Internal Regulator provides "Come-Home" Capability if the External Regulator Fails (12V versions only)
- Temperature Sensing provides Protection for your Battery and Alternator to Prevent Damage from Overheating
- Perfect for Large AGM or Lithium Battery Banks
- Kits Come with All Required Conversion Parts
- Conversion can be Completed in 30 Minutes
- 12V and 24V\* Versions Available
- Balmar's Industry-Best Application and Technical Support

Part Number	Description	MSRP
30-SR12-02	Smart Ready <sup>®</sup> Retrofit Kit Only (Kit Contents: Internal Regulator Retrofit and Replacement Cover)	\$199
ARS-5-VL-01	ARS-5 Kit (12V) (Kit Contents: 30-SR12-02, ARS-5 Regulator & Temp Sensor Cables)	\$499
MC-614-VL-01	Max Charge Kit (12V) (Kit Contents: 30-SR12-02, MC-614 Regulator & Temp Sensor Cables)	\$599
MC-624-VL-01*	Max Charge Kit (24V) (Kit Contents: Internal Dummy, MC-624 Regulator & Temp Sensor Cables)	\$645

\*MC-624-VL-01 (24V Version) is not Smart Ready<sup>®</sup>

**New  
for  
2017**



**ARS-5-VL-01**



**MC-614-VL-01**



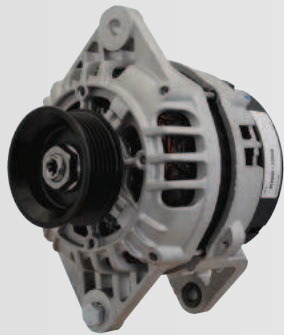
**MC-624-VL-01**

**CDI  
Electronics**

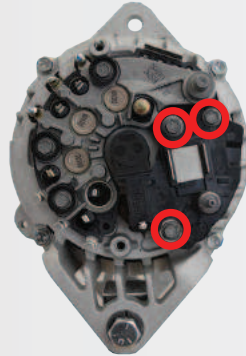
CUSTOMER/TECH SUPPORT: 1.360.435.6100 • balmar.net • cdielectronics.com

## Quick & Easy Installation

*Required Tools: 7mm & 8mm Nut Drivers, 13mm Wrench  
Kit includes Tool for Installing Brushes*



Valeo 12V PN: 128990-772250  
Valeo 24V PN: 129677-77250



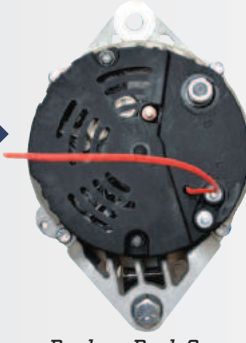
*Remove the Back Cover (2 screws)  
Alternator can Stay on the Engine  
Remove Standard Internal Regulator (3 screws)*



*New Smart Ready<sup>®</sup>  
Internal Regulator  
(30-SR12-02)*



*Install Smart Ready<sup>®</sup>  
(same 3 screws)*



*Replace Back Cover  
New Cover Provided in 12V Kit  
(same 2 screws)*

**Balmar's Multi-Stage, Smart Charging Technology delivers the benefits found in shore power charging systems for your on-board, alternator-based charging system, including:**

- 30% Faster, More Complete Charging
- User-Selectable Preset Battery Programs
- Advanced Programming Modes
- Over-Temperature Protection
- Detuning Capabilities for Belt Load Management and Reducing Alternator Wear
- Longer Battery and Alternator Life
- Less Fuel Consumption



**Optimize Your Charging System and Experience the Balmar Difference!**

## Yanmar Engine Models Equipped with a Valeo 120A/12V Alternator

Model #	Serial Number
2YM15	E05891 & after
3YM20	E11910 & after
3YM30E	E20848 & after
3JH5E	E12749 & after
4JH5E	E14236 & after
4JH4-TE	E15602 & after
4JH4-THE	E24940 & after
4JH4-HTE1	E40232 & after
4JH3-DTE	E35417 & after

## Operating Specifications

Parameter	Min	Max
Operating Temperature Range	-30°C	125°C
Voltage Set Point	14.0V	14.2V
Load Regulation	-	-0.6V
Saturation Voltage 5A @ 12 Volts	-	-0.5V
Temperature Coefficient	-6mV/°C	0mV/°C
Standby Current	-	2mA
Cut-In Speed	1200 RPM	