

# **Ablemail Electronics**

A Division of Merlyn Electronics

Merlyn House, Merlyn Rd, Salford, M6 6EL

Tel: +44(0)161 745 7697 Fax: +44(0)161 737 5615 info@ablemail.co.uk www.ablemail.co.uk

### PART NUMBER: AMC24-12-30E

#### **DESCRIPTION:**

This AMC charger works on vehicles with a 24V electrical system to charge nominal 12V battery packs. It works with Ignition control, Constant Voltage Alternators, Euro 5 & 6 engines, STOP/START, Smart Alternator charging systems & Vehicles with Regenerative Braking, (Mercedes Benz Blue Efficiency Vehicles, VW Blue Motion Vehicles, Ford ECOnetic vehicles, Vauxhall ecoFlex vehicles to name a few).

The unit can also charge Lithium batteries, The unit delivers 30A charging currents, The unit has output overload and over temperature protection with a fully automatic reset, The 24V input and 12V outputs share a common negative. The software controlled switching converter provides a low noise output (<50mV)closely regulated against variations in input voltage & changes in output load current. The software optimises the battery charging cycle, If a greater charging current is required units can be run in parallel or a bigger unit selected from the range.

The charging cycle is configured to suit most types of lead acid including Gel, AGM and can easily be reprogrammed to fit a particular type of battery or customer specification using the **Ablemail Software Interface (ASI)**. The serial interface can be used to interface to other ABLEMAIL products or the Vehicle Power Management System. The serial interface and powerful in built microcontroller and software allow the converter to work as the system power management controller.

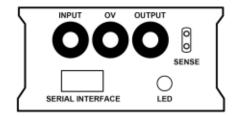
A Interface Card can be added to allow further optimisation of the charging cycle, The Interface Card adds Remote Output Voltage monitoring for when the secondary battery is a long way from the charger. The Interface Card adds Battery Temperature monitoring for operating in extremely hot or cold conditions. Each of these inputs can be used to fine tune the parameters which determine speed of charge & battery life, The unit can switch the charger output on when supply voltage reaches 26.2V (engine running detection / Ignition feed on).

There is a charging status led & the Interface card allows remote indication (cab display) to be added.

The unit is assembled in an aluminium extruded case which allows reliable operation in harsh vehicle environments, It can be supplied with a variety of connection options see the **Ablemail Hardware Options**. This product is part of a large range & if this product specification does not meet your requirement please contact our technical department.

ISOLATION	Non-Isolated
INPUT VOLTAGE	24 Volt nominal vehicle supply (9-32V).
OUTPUT VOLTAGE	12 Volt Varied as required for battery charging programme
OUTPUT LOAD CURRENT	30A max. See AMNperformance for more detail
NO LOAD INPUT CURRENT	Max 4mA @ 24V input.
PROTECTION	Output overload & over temperature protection with fully automatic reset.
OPERATING TEMPERATURE	Maximum 70°C. Minimum -30°C
STANDARDS	E11 Approval-Immunity requirements UNECE regulation 10 issue 4 Which covers all aspects of EN50489:2010 & CE Approval-Immunity to requirements of EN61204-3
SIZE AND WEIGHT	Length: 180mm, Height: 46mm, Width: 124mm, 700g
CONNECTIONS	





For Guidance on component size Installation & troubleshooting: See Installation Instructions 30A



## **Ablemail Electronics**

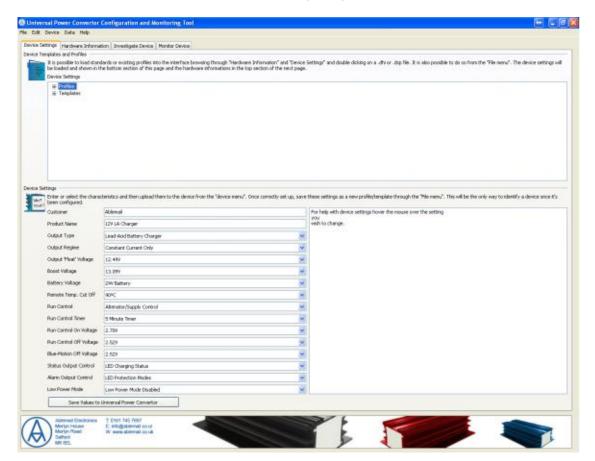
A Division of Merlyn Electronics

Merlyn House, Merlyn Rd, Salford, M6 6EL

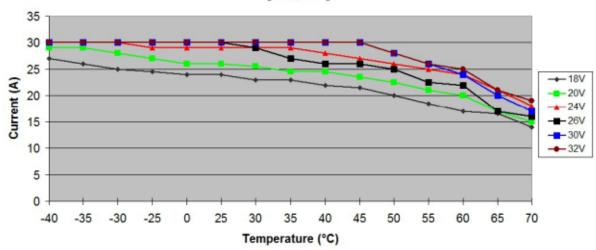
Tel: +44(0)161 745 7697 Fax: +44(0)161 737 5615 info@ablemail.co.uk www.ablemail.co.uk

PART NUMBER: AMC24-12-30E

### **ABLEMAIL SOFTWARE INTERFACE (ASI):**



### Maximum continuous current at 27.6V output [18V,32V]



For More Info see Ablemail Universal Power Convertor Performance Charts