

! NEW GENERATION DC-DC CONVERTER

Description

This new generation of FUM - FDC series of voltage reducers offer regulated 13.8 V DC power from 20-30VDC source such as Land Rovers , commercial vehicles, recreation vehicles, farming equipment and other diesel power vehicles.

The very compact, lightweight and no vent hole casing construction is possible because of the highly efficient, switch mode design with surface mount devices.

Low heat output and low standby current take out the need for an external power on-off switch.

The plastic clip-on mounting system makes the installation easy even in awkward to reach spot. The unit is tamper and dust proof because of no vent holes and no external fuse construction. The PCB component layout is designed and built for vibration loosening resistant, and with moisture proof coating making it ideal for off-road and harsh environments.

The advanced switching mode circuit design results a cool, silent, no humming and no high frequency noise operation. Electronic safeguards and fail-safe feature such as OVP ensure good protection to expensive connected equipments even when there is a fault in the unit.

The 13.8VDC output can be used as a source for float charge for 12V auxiliary battery.

Typical applications for this new generation of DC-DC converters are:

Radio communications, car entertainment such as DVD player, printers, on board computers, security system, GPS, auxiliary lights, spot lights, charging of 12V auxiliary battery, and etc.



Features

- Slim, compact and light construction due to high efficiency & low heat output.
- Dust and tamper proof due to extruded aluminum casing of no vent hole & no external fuse.
- Reliable clip-on mounting bracket construction for easy installation even in hard to get to spot.
- Vibration loosening resistant & coated PCB assembly, ideal for off road vehicles environment.
- Advanced switching mode design & SMT components for high efficiency & cool operation.
- Low standby current takes out the need for an external on-off switch.
- Over Voltage Protection against excessive output voltage in case of wrong installation or fault.
- Auto-reset loss of earth protection.
- Auto-reset over power protection.
- Auto-reset reverse polarity protection.
- Separate LED indicator for operation and fault status.
- Meet e-Mark and CE standards.



e-Mark

Specifications

	FUM-2412-5FDC	FUM-2412-7FDC	FUM-2412-12FDC	FUM-2412-16FDC
Input Voltage Range	18V to 38VDC			
Output Voltage	13.8VDC			
Continuous Output Current	5A	7A	12A	16A
Maximum Output Current at 30% Duty Cycle	7A	12A	16A	20A
No Load Current	<20mA	<30mA	<50mA	<100mA
Ripple & Noise (Peak-Peak)	100mVp-p			
Ripple & Noise (r.m.s.)	10mVrms	10mVrms	15mVrms	20mVrms
Load Regulation	80mV			
Line Regulation	50mV			
Efficiency	>89%	>90%	>90%	>90%
Protections	OVP (Output Over-Voltage Protection), Loss of Earth Protection Self Reset Protections : a) Reverse Polarity Protection ; b) Overload Protection ; c) Short Circuit Protection			
Indicators	Green LED - Operate & Red LED - Fault			
Input & Output Connection Type	Push-on Flat Blade Connectors			
Cooling System	Natural Convection			
Max. Operating Temperature	-10°C - 50°C			
Internal Input Fuse (glass type)	8A	10A	20A	25A
e-Mark Approval No.	e11*72/245*95/54*3079*00			
Dimensions (WxHxD) mm	77 x 75 x 32	96 x 75 x 32	142 x 75 x 32	192 x 75 x 32
	3 x 3 x 1.3	3.8 x 3 x 1.3	5.6 x 3 x 1.3	7.6 x 3 x 1.3
Weight	190g (6.7oz.)	230g (8oz.)	380g (13.4oz.)	480g (16.9oz.)
Accessory	Clip-on Mounting Bracket set and Screws, Slipon Receptacles			

All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE *

<http://www.ukai.com-ukai@ukai.com>



Ukai Bilbao-headquarter
 Ribera Elorrieta, 7C
 48015 - Bilbao - Spain
 Tlfno: +34 94 474 52 52 /
 Fax: +34 94 475 9710
 E-mail: ukai@ukai.com http://www.ukai.com

Madrid office
 Av. Andalucía, 2
 Zoco Piramides 2ª Planta - Oficina 211
 28700 - S.S. de los Reyes, Madrid - Spain
 Tif: +34 91 659 03 58 / Fax: +34 91 659 05 58
 E-mail: ukaimad@ukai.com

Barcelona office
 C/ Orient 78 - 84
 Edif. Inbisa. Planta 1 - Local 7
 08172 - ST. Cugat del Vallés, Barcelona - Spain
 Tlfno: +34 93 284 08 98
 Fax: +34 93 210 67 65
 E-mail: ukaibcn@ukai.com