

DCC600 MIL
600W 24VDC/12VDC CONVERTER IP65

Document: DO-14	Edition: 2.1	Date: 17/11/2014	Page: 1/2
-----------------	--------------	------------------	-----------

DESCRIPTION

600W isolated dc/dc converter with IP65 case for use in military vehicles

INPUT

DC input voltage	24Vdc
Minimum DC input voltage	19,2Vdc
Maximum DC input voltage	36,0Vdc
Efficiency	> 85%

OUTPUT

1

Output voltage	12V
Maximum continuous current (Io)	50A
Line regulation	0,2%
Load regulation	1%
Ripple	50mVpp
Ripple + noise (BW 20MHz)	100mVpp
Total Output power (Po):	600W
Total peak power:	600W

ENVIRONMENTAL

Minimum operating temperature	-40°C
Maximum operating temperature	60°C
Cooling	Natural convection
Relative humidity	< 50%
Shock	STANAG 4370, AECTP 401A-1 40g, sawtooth 11ms; 3 shocks for every directions
Vibration	STANAG 4370, AECTP 401A Grond Vehicles
Environmental regulations	RoHS according to directive 2011/65/EU

EMC

Emission according to norm/s MIL STD-461 F

TEST	NORM	PORT	LIMITS	FREQUENCY
Conducted emissions	MIL STD-461 E	Input	CE102-1	10kHz-10MHz

Immunity according to norm/s MIL STD-461 F

TEST	NORM	PORT	SEVERITY	CONDITIONS
Radiated susceptibility	MIL STD-461 E		CS-114-1	10kHz-1GHz
Power leads	MIL STD-461 E	Input	CS-101-1	30Hz-100kHz
Bulk cable injection	MIL STD-461 E	Input	CS-115-1	
Damped sinusoidal transients	MIL STD-461 E	Input	CS-116-2	10kHz-100kHz

SAFETY

Safety according to norm/s	EN60950-1
Dielectric strength Input/Output	3000Vac
Dielectric strength Input/Earth	1500Vac
Dielectric strength Output/Earth	500Vac
Protection Degree	IP65

DCC600 MIL
600W 24VDC/12VDC CONVERTER IP65

Document: DO-14	Edition: 2	Date: 17/11/2014	Page: 2/2
-----------------	------------	------------------	-----------

MECHANICAL

Mechanical shape	Closed case
Approximate dimensions:	
Height (mm)	70
Width (mm)	230
Depth (mm)	230
Connection type	Terminal blocks

PROTECTIONS AND CONTROL

Output/s protected against overloads and shortcircuits
Over-temperature protection shutdown
Design for application in mobile service
PCB conformal coated