DCU600M1224S



Norms – Certifications - Conformity

This device complies with:

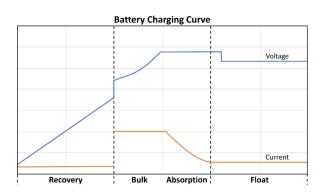
- Electrical Safety Low Voltage Directive 2014/35/EU, 2014/35/UE as follows: EN60950-1, (UL60950-1, UL508, C22.2, EN60335-2-29, UL1236), EN IEC 62368-1:2014/AC:2015.
- EMC Emission EN55011 (CISPR11), EN55022 (CISPR22) Class B, EN61000-3-3
- EMC Immunity EN61000-4-2,3,4,5,6,8,11
- Fire Detection and fire alarm systems EN54-4
- Charging cycle DIN41773

Battery Management

Charging Curve Charging Curve Charging Current setting (min/max) Battery Type, selectable by dipswitch Voltage max Boost Voltage, dip switch selectable Recovery 3,5 A/ 35,0 A 2 A/ 20,0 A Vented Lead, VRLA AGM lead, VRLA Gel lead, Li-lo, Li-PoFe, NiC 14.75 Vdc 29,50 Vdc 14.4 Vdc 28,80 Vdc According to battery type 2-10 Vdc 2-20 Vdc 9,3 Vdc 18,5 Vdc 11 Vdc 22 Vdc min 5 s, max 15 h External digital sensor Local dipswitch or Remote Linl Reverse Polarity, Disconnected Battery Wrong Battery Voltage			
Charging Current setting (min/max) Battery Type, selectable by dipswitch Voltage max Boost Voltage, dip switch selectable Recovery Charge Low Voltage Disconnect (LVD) Threshold Low Voltage Alarm Threshold Time Boost-Bulk Charge (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections	Rated Voltage	12 Vdc	24 Vdc
Battery Type, selectable by dipswitch Voltage max Boost Voltage, dip switch selectable Recovery Charge Low Voltage Disconnect (LVD) Threshold Low Voltage Alarm Threshold Time Boost-Bulk Charge (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections Vented Lead, VRLA AGM lead, VRLA Gel lead, Li-lo, Li-PoFe, NiC 14.4 Vdc 28.80 Vdc According to battery type 2-10 Vdc 2-20 Vdc 9.3 Vdc 18.5 Vdc 11 Vdc 22 Vdc min 5 s, max 15 h External digital sensor Local dipswitch or Remote Linl Reverse Polarity, Disconnected Battery Wrong Battery Voltage	Charging Curve	3 stages (IUoU) + Recovery	
dipswitch Voltage max Boost Voltage, dip switch selectable Recovery Charge Low Voltage Disconnect (LVD) Threshold Low Voltage Alarm Threshold Time Boost-Bulk Charge (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections VRLA Gel lead, Li-Io, Li-PoFe, NiC 14.75 Vdc 29.50 Vdc According to battery type 2-10 Vdc 2-20 Vdc 9.3 Vdc 18.5 Vdc 11 Vdc 22 Vdc min 5 s, max 15 h External digital sensor Local dipswitch or Remote Linl Reverse Polarity, Disconnected Battery Wrong Battery Voltage	Charging Current setting (min/max)	3,5 A / 35.0 A	2 A / 20,0 A
Voltage max14.75 Vdc29.50 VdcBoost Voltage14.4 Vdc28.80 VdcFloat Voltage, dip switch selectableAccording to battery typeRecovery Charge2-10 Vdc2-20 VdcLow Voltage Disconnect (LVD)9.3 Vdc18.5 VdcTime Boost-Bulk Charge (Typ. IN)11 Vdc22 VdcTemperature CompensationExternal digital sensorBoost voltage Enable/DisableExternal digital sensorProtectionsReverse Polarity,Disconnected BatteryWrong Battery Voltage	Battery Type, selectable by	Vented Lead, VRLA AGM lead,	
Boost Voltage 14.4 Vdc 28.80 Vdc Float Voltage, dip switch selectable 14.4 Vdc 28.80 Vdc Recovery Charge 2-10 Vdc 2-20 Vdc Low Voltage Disconnect (LVD) 9.3 Vdc 18.5 Vdc Time Boost-Bulk Charge (Typ. IN) 11 Vdc 22 Vdc Temperature Compensation Boost voltage Enable/Disable 11 Vdc 22 Vdc Protections Local dipswitch or Remote Link Reverse Polarity, Disconnected Battery Wrong Battery Voltage	dipswitch	VRLA Gel lead, Li-lo, Li-PoFe, NiCd	
Float Voltage, dip switch selectable Recovery Charge According to battery type Low Voltage Disconnect (LVD) Threshold 9.3 Vdc 18.5 Vdc Low Voltage Alarm Threshold 11 Vdc 22 Vdc Time Boost-Bulk Charge (Typ. IN) min 5 s, max 15 h External digital sensor Boost voltage Enable/Disable Local dipswitch or Remote Linit Reverse Polarity, Disconnected Battery Nonnected Battery	Voltage max	14.75 Vdc	29.50 Vdc
Recovery Charge 2-10 Vdc 2-20 Vdc Low Voltage Disconnect (LVD) 9.3 Vdc 18.5 Vdc Threshold 11 Vdc 22 Vdc Low Voltage Alarm Threshold 11 Vdc 22 Vdc Time Boost-Bulk Charge (Typ. IN) min 5 s, max 15 h External digital sensor Boost voltage Enable/Disable External digital sensor Local dipswitch or Remote Linin Protections Pisconnected Battery Wrong Battery Voltage		14.4 Vdc	28.80 Vdc
Low Voltage Disconnect (LVD) Threshold Low Voltage Alarm Threshold Time Boost-Bulk Charge (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections Protections Destroal distance (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections Destroal distance (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections	Float Voltage, dip switch selectable	According to battery type	
Threshold University of the second se	Recovery Charge	2-10 Vdc	2-20 Vdc
Threshold II Vdc 22 Vdc Low Voltage Alarm Threshold II Vdc 22 Vdc Time Boost-Bulk Charge (Typ. IN) min 5 s, max 15 h Temperature Compensation External digital sensor Boost voltage Enable/Disable Local dipswitch or Remote Linil Protections Reverse Polarity, Disconnected Battery Wrong Battery Voltage	Low Voltage Disconnect (LVD)	0.7.\/de	
Time Boost-Bulk Charge (Typ. IN) Temperature Compensation Boost voltage Enable/Disable Protections Temperature Compensation Boost voltage Enable/Disable Protections Temperature Compensation Boost voltage Enable/Disable Protections Temperature Compensation Boost voltage Enable/Disable Protections Temperature Compensation Disconnected Battery Wrong Battery Voltage	Threshold	9.3 Vuc	10.5 VUC
Temperature Compensation Boost voltage Enable/Disable Protections External digital sensor Local dipswitch or Remote Linl Reverse Polarity, Disconnected Battery Wrong Battery Voltage	Low Voltage Alarm Threshold	11 Vdc	22 Vdc
Boost voltage Enable/Disable Protections Disconnected Battery Wrong Battery Voltage	Time Boost–Bulk Charge (Typ. IN)	min 5 s, max 15 h	
Boost voltage Enable/Disable Protections Disconnected Battery Wrong Battery Voltage	Temperature Compensation	External digital sensor	
Protections Reverse Polarity, Disconnected Battery Wrong Battery Voltage			
Disconnected Battery Wrong Battery Voltage		Reverse Polarity,	
Wrong Battery Voltage			
Battery Diagnostics Sulphated Battery	Battery Diagnostics	Sulphated Battery,	

 Cell-In Short Circuit

 Life Test
 Automatic Every 2 h in Standby, Manual on Push Button



600 W – 12/24 V

DC-UPS, AC to DC uninterruptable power systems for critical DC loads.

All-in-One: Power supply + Battery charger + Back-up functions, all packaged in one box.

- Selectable Output Voltage, 12 Vdc or 24 Vdc
- Load-first, Dynamic Load/Battery power sharing
- Adjustable maximum battery charging current
- Suitable for backup of high inrush current DC loads
- Buffer time setting of load backup
- Universal charging output, selectable Battery Type
- External digital sensor for Temperature compensation
- Manual Battery start-up button with no mains
- Battery life test, automatic or manual via push button
- Extensive BATTSAFE battery management firmware
- Full set of protection and monitoring functions
- Local monitoring and diagnostics on LEDs
- Remote alarms via 3 voltage-free relay contacts
- Communication via MODbus data link

Features

Input		
Rated Input Voltage AC	115/230/277 Vac (ra	ange 85–305 Vac)
Frequency Range	50/60 Hz (rang	
Input Current AC (Typ.)	5.3 A (115 Vac),	2.5 A (230 Vac)
Rated Input Voltage DC	110/220 Vdc (ran	ge 110–420 Vdc)
Input Current DC (Typ.)	6.0 (110 Vdc), 3	
Inrush Current (Typ. Cold Start)	15 A	
Setup, Rise Time Max	1	s
Recommended External Fuse/MCB	10 A, curve B	
Load Output - Power Supply Mode - Mair	s ON & Battery OFF	
Voltage, selectable by Dip Switch ¹	12 Vdc	24 Vdc
Rated Current (I _R)	35 A	20 A
Ripple / Noise ²	80 mV _{PP}	100 mV _{pp}
Short Circuit Protection	ye	
Overload Protection	Constant Curren	t mode > 110% I _R
Over Voltage Protection	35 \	/dc
Load Output - Standby Mode - Mains ON	& Battery ON	
Voltage Range, Automatic Set ¹	12-14.4 Vdc	24–28.8 Vdc
Max Continuous Current (I _R +I _{BATT})	45 A	40 A
Max Current for 30 s	50 A	45 A
Max Current for 15 s	55 A	50 A
Max Current for 5 s	< 60 A	< 55 A
Load Output - Backup Mode - Mains OFF	& Battery ON	
Voltage Range, Automatic Set 1	9.5–12 Vdc	18.5–24 Vdc
Max Continuous Current (I _R +I _{BATT})	45 A	40 A
Max Current for 30 s	50 A	45 A
Max Current for 15 s	55 A	50 A
Max Current for 5 s	< 60 A	< 55 A
Time Buffering for Backup	30 s u	o to ∞
Start from battery with no mains	Yes, on Push Button	
Quiescent current	< 100 mA	
Signal Output/Input		
Standby / Backup	Change-over relay c	ontact, M terminals
Common Fault	Change-over relay contact, F terminals	
Rectifier failure	Change-over relay contact, S terminals	
Fullset of monitor and alarm LED signals	Flashing code on 3, Three-color LEDs	
MODbus / CANbus data link	Dual RJ45	connector
Climatic Data		
Operating Ambient Temperature (T _A)	–25 up to +70 °C	
Relative Humidity, no condensation@25°C	max 95%	
Storage Temperature	-40 up to +85 °C	
Cooling	Natural Co	onvection
General Data		
Efficiency (Typ.)	> 90 %	> 92 %
Temperature Derating Factor ¹	2.5 %/°C , T _A > 50°C	
Altitude Derating Factor ¹	0.5°C/100 m, above 2000 m	
Insulation Voltage (In/Out)	4 kVac	
Insulation Voltage (In/PE)	2 kVac	
Insulation Voltage (Out/PE)	500 Vdc	
Insulation Resistance (500 V)	> 100 MΩ	
Protection Class (EN/IEC 60529)	IP 20	
Pollution Degree Environment	2	
Dimensions (W x H x D)	100 x 130 x 126 mm	
Weight	1.2 kg	
Commercial Data		
Weight per unit, including packing	1.25	kg
Dimensions per unit, including packing	110 x 138 x 134 mm	
Volume per unit, including packing	0.0012 m ³	
Custom Tarif HS	8504	4055
Country of origin	Ita	ly

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