DCU150M1224

DC-UPS



Norms - Certifications - Conformity

- This device complies with:
- Electrical Safety Low Voltage Directive 2014/35/EU, 2014/35/UE as follow:
- 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
- UL Pending

Battery Management

Rated Voltage	12 Vdc	24 Vdc	
Charging Curve	3 stages (IUoU) + Recovery		
Charging Current setting (min/max)	1.0 A / 10.0 A	0.5 A / 5.0 A	
Battery Type, selectable by	Vented Lead, VRLA AGM lead,		
Dip Switch	VRLA Gel lead, Li-lo, Li-PoFe, NiCd		
Voltage max	14.75 Vdc	29.50 Vdc	
Boost Voltage	14.4 Vdc	28.80 Vdc	
Float Voltage, dip switch selectable	According to battery type		
Recovery Charge	2-10 Vdc	2-20 Vdc	
Low Voltage Disconnect (LVD)	071/1-		
Threshold	9.3 Vac	18.5 Vac	
Low Voltage Alarm Threshold	11 Vdc	22 Vdc	
Time Boost–Bulk Charge (Typ. IN)	min 5 s, max 15 h		
Temperature Compensation	Digital sensor on UART Serial port		
Boost voltage Enable/Disable	Local dipswitch		
Protections	Reverse Polarity.		
	Disconnect	Disconnected Battery	
	Wrong Battery Voltage		
Battery Diagnostics	Sulphated Battery, Cell-In Short Circuit		
, <u>,</u>			

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



150 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
- Universal charging output, selectable Battery Type
- SBS Smart Temperature Compensation probe (opt.)
- Manual Battery start-up button with no mains
- Battery life test, automatic or via manual button
- Extensive BATTSAFE battery management firmware
- Full set of protection and monitoring functions
- Local monitoring and diagnostics on LEDs
- Remote alarms via 2 voltage-free relay contacts

Features

Input			
Rated Input Voltage AC	115/230/277 Vac (ra	nge 85–305 Vac)	
Frequency Range	50/60 Hz (range 47–440 Hz)		
Input Current AC (Typ.)	1.6 A (115 Vac), 0	1.6 A (115 Vac), 0.6 A (230 Vac)	
Rated Input Voltage DC	110/220 Vdc (rang	110/220 Vdc (range 110–420 Vdc)	
Input Current DC (Typ.)	1.4 (110 Vdc), 0.	5 A (220 Vdc)	
Inrush Current (Typ. Cold Start)	15 A n	15 A max	
Setup, Rise Time Max	ls		
Recommended External Fuse/MCB	6 A, curve C		
Load Output – Power Supply Mode – Ma	ins ON & Battery OFF		
Voltage, selectable by Dip Switch ¹	12 Vdc	24 Vdc	
Rated Current (I _R)	10 A	5 A	
Ripple / Noise ²	80 mV _{pp}	100 mV _{pp}	
Short Circuit Protection	yes	S	
Over Load Protection	Constant Current	Constant Current mode > 110% I _R	
Over Voltage Protection	35 V	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})	15 A	10 A	
Max Current for 30 s	17 A	15 A	
Max Current for 15 s	20 A	20 A	
Max Current for 5 s	< 25 A	< 25 A	
Load Output – Backup Mode – Mains OFI	- & Battery ON		
Voltage Range, Automatic Set '	9.5-12 Vdc	18.5-24 Vdc	
Max Continuous Current (I _R +I _{BATT})	15 A	10 A	
Max Current for 30 s	17 A	15 A	
Max Current for 15 s	20 A	20 A	
Max Current for 5 s	< 25 A	< 25 A	
	Yes, on Push Button		
Start from battery with no mains	Yes, on Pus	sh Button	
Start from battery with no mains Quiescent current	Yes, on Pus < 90 ا	sh Button mA	
Start from battery with no mains Quiescent current Signal Output/Input	Yes, on Pus < 90	n Button mA	
Start from pattery with no mains Quiescent current Signal Output/Input Standby/Backup Common Fault	Yes, on Pus < 90 r	n Button mA ontact, M terminals	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault	Yes, on Pus < 90 r Change-over relay co Change-over relay co	mA mA ontact, M terminals ontact, F terminals	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data	Yes, on Pus < 90 i Change-over relay co Change-over relay co Flashing code on 3,	mA mA ontact, M terminals ontact, F terminals Three-color LEDs	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitzrandalarmLEDsignals Climatic Data Operating Ambinet Temperature (T.)	Yes, on Pus < 90 r Change-over relay co Change-over relay co Flashing code on 3, 25 up to	th Button mA pontact, M terminals pontact, F terminals Three-color LEDs	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetOmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Polative Jumidity no condensation@2550	Yes, on Pus < 90 r Change-over relay co Change-over relay co Flashing code on 3, -25 up to may 6	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs 0+70°C	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Tomporeburg	Yes, on Pus < 90 r Change-over relay cc Change-over relay c Flashing code on 3, -25 up to max 2 (0 up to	in Button mA pontact, M terminals ontact, F terminals Three-color LEDs 0+70°C 55%	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FulsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling	Yes, on Pus < 90 r Change-over relay co Change-over relay co Flashing code on 3, -25 up to max 9 -40 up to Natural Co	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 55% >+85°C pyection	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetOfmonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data	Yes, on Pus < 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up to Natural Co	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 55% 0+85°C nvection	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetCronoitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Tyn)	Yes, on Pus < 90 r Change-over relay co Change-over relay co Flashing code on 3, -25 up to max 2 -40 up to Natural Co	sh Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 95% +85°C nvection >97%	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Eactor ¹	Yes, on Pus <pre>< 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up to Natural Co >90%</pre>	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 05% +85°C nvection >92% L > 50°C	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetOfmonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Eactor ¹	Yes, on Pus < 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up tc Natural Co >90% 2.5 %/°C, 1 0.5°C/000 m. al	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 55% >+85°C nvection >92% r_a > 50°C over 2000 m	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltace (In/Out)	Yes, on Pus < 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up tc -40 up tc Natural Co >90% 2.5 %/°C, 1 0.5°C/100 m, a 4	sh Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 05% +85°C nvection >92% T _A > 50°C oove 2000 m ac	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/OE)	Yes, on Pus < 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up tc Natural Co >90% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +70°C 05% +85°C nvection >92% F _A > 50°C oove 2000 m ac	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetOfmonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Out) Insulation Voltage (In/DE)	Yes, on Pus < 90 / Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up to Natural Co >90% 2.5 %/°C , 1 0.5°C/100 m, at 4 kV 2 kV 2 kV	in Button mA ontact, F terminals Three-color LEDs +77°C 55% >+85°C nvection >92% F_A > 50°C poove 2000 m ac ac /dc	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/DE) Insulation Voltage (Out/PE) Insulation Desistance (500 VI)	Yes, on Pus < 90 / Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to Matural Co >90% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 \ > 100	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs +770°C 95% +85°C nvection >92% I_A > 50°C source 2000 m iac iac MO	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (Out/PE) Insulation Voltage (Out/PE) Insulation Class (FN/IEC 60529)	Yes, on Pus <pre>< 90 r</pre> <pre>Change-over relay cc</pre> Change-over relay cc Change-over relay cc Flashing code on 3, <pre>-25 up to max 9 -40 up tc Natural Co </pre> <pre>>90% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 \ 2 kV 500 \ > 100</pre>	in Button mA ontact, F terminals Three-color LEDs +70°C -55% +85°C nvection -92% Fa> 50°C Sove 2000 m ac /dc MQ 20	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetOfmonitzrandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Out) Insulation Voltage (Out/PE) Insulation Resistance (500 V) Protection Class (EN/IEC 60529) Pollution Degree Environment	Yes, on Pus < 90 / Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up tc Natural Co >90% 2.5 %/°C , 1 0.5°C/100 m, al 4 kV 2 kV 500 V 2 loV 500 V 2 loV 2 loV	in Button mA ontact, K terminals Three-color LEDs +77°C 55% >+85°C nvection >92% Γ _A > 50°C powe 2000 m f _a < powe 2000 m f _a f _a < 50°C f _a < 50°C	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetOfmonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Ott) Insulation Voltage (In/PE) Insulation Voltage (In/PE) Insulation Notage (Stor V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D)	Yes, on Pus <pre>< 90 /</pre> <pre>< 90 /</pre> <pre>Change-over relay cc Change-over relay cc Flashing code on 3,</pre> -25 up to	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs 0+70°C 55% 0+85°C nvection >92% Γ _A > 50°C pove 2000 m ac ac ac 126 mm	
Start from battery with no mains Quiescent current Signal Output/Input Standby / Backup Common Fault FulsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/VE) Insulation Voltage (Out/PE) Insulation Resistance (500 V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight	Yes, on Pus <pre>< 90 r</pre> <pre></pre> <pre>Change-over relay cc</pre> Change-over relay cc Change-over relay cc <pre>Flashing code on 3,</pre> -25 up to max 9 -40 up tc Natural Co <pre>>90% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 \ 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 \ 2 kV 500 \ 100 0 1P 2 2 60 x 130 x 0.75</pre>	in Button mA ontact, F terminals Three-color LEDs +70°C -55% +85°C nvection -92% Γ _A > 50°C oove 2000 m ac /dc MΩ 20 126 mm ka	
Start from batterly with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Out) Insulation Voltage (In/VE) Insulation Voltage (In/VE) Insulation Voltage (In/VE) Insulation Voltage (In/VE) Insulation Voltage (In/VE) Insulation Resistance (S00 V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Conmercial Data	Yes, on Pus <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs >+70°C 55% >+85°C nvection >92% Γ _A > 50°C pove 2000 m fac ac AC MΩ 10 126 mm kg	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetCimonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Out) Insulation Voltage (Out/PE) Insulation Resistance (500 V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Conmercial Data Weight per unit, including packing	Yes, on Pus <pre>< 90 / Change-over relay cc Change-over relay cc Flashing code on 3, -25 up tc max 9 -25 up tc Matural Co >90% 2.5 %/°C , 1 0.5°C/100 m, al 4 kV 2 kV 500 \ </pre>	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs 0+70°C 55% 0+85°C nvection >92% Γ _A > 50°C powe 2000 m ac ac /dc MΩ 126 mm kg	
Start from batterly with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Det) Insulation Voltage (In/Det) Insulation Voltage (Out/PE) Insulation Voltage (Out/PE) Insulation Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Commercial Data Weight per unit, including packing Dimensions per unit, including packing	Yes, on Pus <pre>< 90 i <pre></pre></pre> <pre></pre> <pre>Change-over relay cc Change-over relay cc Change-over relay cc Flashing code on 3, <pre>25 up to max 920 up to Natural Co <pre>>90% 2.5 %/°C, 1 0.5°C/100 m, al 50% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 V <pre>>100 IP 2 2 60 x 130 x 0.75 0.8 I 65 x 138 x </pre></pre></pre></pre>	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs 0+70°C 95% 0+85°C nvection >92% Γ _A > 50°C pove 2000 m ac ac ac /dc MΩ 126 mm kg kg 134 mm	
Start from batterly with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FulsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/PE) Insulation Voltage (In/PE) Insulation Voltage (In/PE) Insulation Resistance (500 V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Conmercial Data Weight per unit, including packing Dimensions per unit, including packing	Yes, on Pus < 90 r Change-over relay cc Change-over relay cc Flashing code on 3, -25 up to max 9 -40 up to Natural Co >90% 2.5 %/°C, 1 0.5°C/100 m, al 4 kV 2 kV 500 N > 100 IP 2 2 2 60 x 130 x 0.75 0.8 I 65 x 138 x 0.031	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs >9 35% >+85°C nvection >92% Γ _A > 50°C solve 2000 m fac ac AC MΩ 126 mm kg 134 mm 2 m ³	
Start from battery with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetCimonitorandalarmLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/Out) Insulation Voltage (Out/PE) Insulation Resistance (500 V) Protection Class (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Commercial Data Weight per unit, including packing Dimensions per unit, including packing Volume per unit, including packing Volume per unit, including packing	Yes, on Pus <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	in Button mA ontact, M terminals ontact, F terminals Three-color LEDs 0+70°C 55% 0+85°C nvection >92% Γ _A > 50°C poove 2000 m ac ac /dc MΩ 126 mm kg 134 mm 2 m ³ 055	
Start from batterly with no mains Quiescent current Signal Output/Input Standby/ Backup Common Fault FullsetofmonitorandalamLEDsignals Climatic Data Operating Ambient Temperature (T _A) Relative Humidity, no condensation@25°C Storage Temperature Cooling General Data Efficiency (Typ.) Temperature Derating Factor ¹ Altitude Derating Factor ¹ Insulation Voltage (In/Out) Insulation Voltage (In/VE) Insulation Voltage (Out/PE) Insulation Voltage (Out/PE) Insulation Calss (EN/IEC 60529) Pollution Degree Environment Dimensions (W x H x D) Weight Commercial Data Weight per unit, including packing Dimensions per unit, including packing Volume per unit, including packing Country of origin	Yes, on Pus <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	in Button mA pontact, F terminals Three-color LEDs > +70°C ->5% > +85°C nvection ->92% Γ _A > 50°C ->92% Γ _A > 50°C ->92% ->9	

