BATTERY CHARGERS CDS4

12V – 24V – 48V HIGH POWER RANGE



ENAGs new generation of CDS4 battery chargers continues to evolve with the introduction of a high power range.

Enhanced functionalities, more efficient battery charging with the option of voltage compensation to correct line drops. Polyvalent, it can be used as a battery charger, a DC power supply or integrated into your back up power supply systems.

The new range is adapted for rugged environments in marine, defence or industrial applications

ADVANTAGES OF CDS4

Efficiency

- High charging current
- Compensation of voltage line drops.
- Fan speed control: low noise levels
- Large of input voltage range with overvoltage protection board (easily replaced)
- Works at temperatures of up to 50°C without derating
- Three outputs with distribution of load current
- CAN bus communication

Reliability

- Battery type selection: AGM, GEL, Open lead/acid, Lead Calcium, Lithium...
- Charge cycle selection: Boost, Absorption, Floating, Refresh, Reboost.
- Temperature sensor

Ruggedness

- Aluminium case painted to withstand marine conditions
- Boards marine tropicalized
- Efficient thermal dissipation
- Option to mount 4 chargers in parallel with current balancing







web

CDS4 - TECHNICAL SPECIFICATIONS

DESCRIPTION	CDS4 - 24/45	CDS4 - 24/60	CDS4 - 24/80	CDS4 - 24/100	
Part Number	SEEL013542-1A	SEEL013552-1A	SEEL013562-1A	SEEL013572-1A	
Model	24V/45A	24V/60A	24V/80A	24V/100A	
INPUT	·				
Voltage	From 90 to 265 VAC single-phase				
Frequency	From 47 to 65 Hz				
Input current 230/115Vac	6,0/16,0A	9,0/20.0 A	11.0/20.0 A	15.0/30.0A	
Power factor		<u> </u>	1		
Efficiency		87 % typical			
Fuses				2x32A/250 V - 6,3x32	
OUTPUT					
Current	45A	60A	80A	100A	
Number of outputs	3 positive outputs - 1 negative pole Each output can be used on its own and draws the nominal current from the charger			t from the charger	
Charging curve	Selec	Select IU or IUoU using internal switches (factory setting)			
Battery type	Lead acid by defau	ult - Can be configured	l for all types (internal swi	itch configuration)	
Floating voltage			,6 Vdc		
Regulation	< 1% before output diode and fuse				
Ripple	< 1% peak to peak				
Automotive type fuse	2 x 30A/32V	3 x 25A/32V	4 x 25A/32V	4 x 30A/32V	
Alarm board	Low battery (+BAT1) alarm and « charger fault » with dry contacts				
Communication	Isolated Bus CAN by default				
ENVIRONMENT					
Cooling	Temperature and current controlled ventilation				
Sound level	< 50 dB at 1 m				
Operating temperature	From -20 to +50 °C — Derating above 50°C Automatic switch off above 60 °C Automatic restart when temperature decreases				
Storage temperature	From -20 to +70 °C				
<u> </u>	Up to 96% without condensation				
Relative humidity					
Relative humidity PCB protection		Up to 96% with			
		Up to 96% with Tropicalized (wat	nout condensation		
PCB protection		Up to 96% with Tropicalized (wat	nout condensation ter repellent varnish)		
PCB protection Protection factor		Up to 96% with Tropicalized (wat	nout condensation ter repellent varnish)		
PCB protection Protection factor PRESENTATION		Up to 96% with Tropicalized (wat	nout condensation ter repellent varnish)	270 x 410 x 130	
PCB protection Protection factor PRESENTATION Housing		Up to 96% with Tropicalized (wat Painted	nout condensation ter repellent varnish)	270 x 410 x 130 9.0kg	
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm)		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg	nout condensation ter repellent varnish)		
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg	nout condensation ter repellent varnish) IP23 Aluminium		
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Me	nout condensation ter repellent varnish) IP23 Aluminium		
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Me	nout condensation ter repellent varnish) IP23 Aluminium ounting kit with screws)		
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS Security / CE / CEM Marking PROTECTION Against: in	nput surges by varistor (not ort circuit; overheating by a	Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Mo EN 60335-2-2	nout condensation ter repellent varnish) IP23 Aluminium Dunting kit with screws) 29 / EN 61204 - 3 (); polarity reversal by fuse	9.0kg	
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS Security / CE / CEM Marking PROTECTION Against: in		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Mo EN 60335-2-2	nout condensation ter repellent varnish) IP23 Aluminium Dunting kit with screws) 29 / EN 61204 - 3 (); polarity reversal by fuse	9.0kg	
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS Security / CE / CEM Marking PROTECTION Against: in output sho		Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Mo EN 60335-2-2 covered by warranty automatic charger swi	nout condensation ter repellent varnish) IP23 Aluminium Dunting kit with screws) 29 / EN 61204 - 3 (); polarity reversal by fuse	9.0kg	
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS Security / CE / CEM Marking PROTECTION Against: in output sho	ort circuit; overheating by a	Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Me EN 60335-2-2 covered by warranty automatic charger swi Voltage c -36	nout condensation ter repellent varnish) IP23 Aluminium Ounting kit with screws) 29 / EN 61204 - 3 (); polarity reversal by fuse tch off (automatic restart ompensation	9.0kg	
PCB protection Protection factor PRESENTATION Housing Dimensions (Ihd mm) Weight Wall mounting NORMS Security / CE / CEM Marking PROTECTION Against: in output sho	ort circuit; overheating by a	Up to 96% with Tropicalized (wat Painted 270 x 360 x 130 6,8 kg 4 x M6 screws – (Mo EN 60335-2-2 c covered by warranty automatic charger swi Voltage c -36 1 ammeter: voltage m	nout condensation ter repellent varnish) IP23 Aluminium ounting kit with screws) 29 / EN 61204 - 3); polarity reversal by fuse tch off (automatic restart ompensation mV/°C	9.0kg	

CDS4 - TECHNICAL SPECIFICATIONS

DESCRIPTION	CDS4 - 12/90	CDS4 - 48/30				
Part Number	SEEL013541-1A	SEEL013554-1A				
Model	12V/90A	48V/30A				
INPUT						
Voltage	From 90 to 265 VAC single-phase					
Frequency	From 47 to 65 Hz					
Input current 230/115Vac	6,0/16,0A	9.0/20.0A				
Power factor	1					
Efficiency	87% typical					
Fuses	2 x 20A 250V 6,3x32 2 x 25A 250V (6,3x32) (F1/F2)					
OUTPUT						
Current	90A	30A				
Number of outputs	3 positive outputs - 1 negative pole Each output can be used on its own and draws the nominal current from the charger					
Charging curve	Select IU or IUoU using internal switches (factory setting)					
	Lead acid by default - Can be configured for all types					
Battery type	(internal switch configuration)					
Floating voltage	13Vdc 55,2 VDC for Lead sealed battery (factory setting)					
Regulation	<1% bef	ore output diode and fuse				
Ripple		< 1% peak to peak				
Automotive type fuse	4 x 30A/32V 2 x 20A/80V					
Alarm board		rm and «charger fault » with dry contacts				
Communication	Isolat	ed Bus CAN by default				
ENVIRONMENT						
Cooling	Temperature a	Temperature and current controlled ventilation				
Sound level		< 50 dB at 1 m				
	From -20 to +50 °C – Derating above 50°C					
Operating temperature	Automatic switch off above 60 °C					
Character to many anatoms	Automatic restart when temperature decreases					
Storage temperature	From -20 to +70 °C					
Relative humidity PCB protection	Up to 96% without condensation					
Protection factor	Tropicalized (water repellent varnish) IP23					
PRESENTATION		IFZ3				
		Isintad Aluminium				
Housing Dimensions (Ihd mm)	Painted Aluminium					
Weight	270 x 360 x 130 mm 6.8kg					
Wall mounting	4 x M6 screws – (Mounting kit with screws)					
STANDARDS	1 4 × MIO SCIEW	5 (Modifing Mc With Sciews)				
Security / CE / CEM Marking	EN 603	225_2_20 / FN 61204 - 3				
	EN 60335-2-29 / EN 61204 - 3					
	PROTECTION Assistant assessment of the second discount of the second					
Against: input surges by varistor (not covered by warranty); polarity reversal by fuse; output short circuit; overheating by automatic charger switch off (automatic restart)						
OPTION	OPTION					
Temperature probe	Voltage compensation -18 mV/°C	Output voltage compensation: 72mV/°C				
	Up-to 3 voltmeters and 1 ammeter:					
Analog & digital displays	voltage measurement of each	1 ammeter: charger current				
	battery and charger current					
Touch screen display	2.4" colour display integrated or remote					
Remote control	Isolated on/off remote control					