

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

CDS4 - TECHNICAL SPECIFICATIONS

DESCRIPTION	CDS4 - 12/90	CDS4 - 24/30	CDS4 - 24/45	CDS4 - 24/60
Part Number	SEEL013541-1A	SEEL031480	SEEL013542-1A	SEEL013552-1A
Model	12V/90A	24V/30A	24V/45A	24V/60A
INPUT				
Voltage	From 90 to 265 VAC single-phase			
Frequency	From 47 to 65 Hz			
Input current 230/115Vac	6.0/16.0A	4.4/8.7A	6.0/16.0A	9.0/20.0A
Power factor	1			
Efficiency	87 % typical	92,8% en 240 VAC et 91 % en 120VAC	87 % typical	
Fuses	2x20A/250 V - 6,3x32	LITTELFUSE (326015P, 0326015.MXP)	2X20A/250 V - 6,3x32	2x25A/250 V - 6,3x32
OUTPUT				
Current	90A	30A	45A	60A
Number of outputs	3 positive outputs - 1 negative pole	4 positive outputs - 1 negative pole	3 positive outputs - 1 negative pole	
	Each output can be used on its own and draws the nominal current from the charger			
Battery type	Select IU or IUoU using internal switches (factory setting)			
Floating voltage	13.8VDC	27.6VCC		
Ripple	< 1% peak to peak	< 2% peak to peak	< 1% peak to peak	
Automotive type fuse	4 x 30A/32V	2 x 30A/32V	2 x 30A/32V	3 x 25A/32V
Alarm board	Low battery (+BAT1) alarm and « charger fault » with dry contacts	No	Low battery (+BAT1) alarm and « charger fault » with dry contacts	
Communication	Isolated Bus CAN by default	Option	Isolated Bus CAN by default	
ENVIRONMENT				
Cooling	Temperature and current controlled ventilation	without ventilation	Temperature and current controlled ventilation	Temperature and current controlled ventilation
Sound level	< 50 dB at 1 m	0dB	< 50 dB at 1 m	< 50 dB at 1 m
Operating temperature	From -20 to +50 °C – Derating above 50° - Derating from 40°C for 24/30			
Storage temperature	From -20 to +70 °C			
Relative humidity	Up to 96% without condensation			
PCB protection	Tropicalized (water repellent varnish)			
Protection factor	IP23	IP 22	IP23	
PRESENTATION				
Housing	Painted Aluminium			
Dimensions (lhp mm)	270 x 360 x 130	195 x 288 x 105	270 x 360 x 130	
Weight	6.8Kg	3,5Kg	6.8Kg	
Wall mounting	4 screws M5 or M6			
NORMS				
Security / CE / CEM	EN 60335-2-29 / EN 61204 – 3			
PROTECTION				
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				
Temperature probe	Voltage compensation : -18mV/°C	Voltage compensation : -36mV/°C		
Touch screen display	2.4'' colour display remote (except 24/30 integrated)			
Remote control	Isolated on/off remote control			

DESCRIPTION	CDS4 - 24/80	CDS4 - 24/100	CDS4 - 48/30
Part Number	SEEL013562-1A	SEEL013572-1A	SEEL013554-1A
Model	24V/80A	24V/100A	48V/30A
INPUT			
Voltage	From 90 to 265 VAC single-phase		
Frequency	From 47 to 65 Hz automatic		
Input current 230/115Vac	11.0/20.0A	15.0/30.0A	9.0/20.0A
Power factor	1		
Efficiency	87% typical		
Fuses	2x25A/250 - 6,3x32	2 x 32A/250V - 6,3x32	2 x 25A/250V - 6,3x32
OUTPUT			
Current	80A	100A	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		
Battery type	Lead acid by default - Can be configured for all types (internal switch configuration)		
Floating voltage	27.6 VDC		55.2VDC
Regulation	< 1%		
Ripple	< 1% peak to peak		
Automotive type fuse	4 x 25A/32V	4 x 30A/32V	2 x 20A/80V
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	< 50dB at 1m		
Operating temperature	From -20°C to +50°C, Derating above 50°C. Automatic switch off above 60 °C Automatic restart when temperature decreases		
Storage temperature	From -20°C to +70°C		
Relative humidity	Up to 95% without condensation		
PCB protection	Tropicalized (water repellent varnish)		
Protection factor	IP23		
PRESENTATION			
Housing	Painted Aluminium		
Dimensions (lhp mm)	270 x 360 x 130	270 x 410 x 130	270 x 360 x 130
Weight	6.8kg	9.0kg	6.8kg
Wall mounting	4 x M6 screws – (Mounting kit with screws)		
NORMS			
Security / CE / CEM Marking	EN60335-2-29 / EN 61204-3		
PROTECTION			
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			
Temperature probe	Voltage compensation -36 mV/°C		Voltage compensation -72 mV/°C
Touch screen display	2.4’’ colour display integrated or remote		
Remote control	Isolated on/off remote control		