Lithium Battery

CLF 60-24



Typical applications

- High power electric vehicles
- Mobility scooters
- Electric wheelchairs
- AGV
- Medical equipment
- Solar energy
- Golf trolleys
- Electric boating
- Cleaning machines

Features

- Active BMS protection
- CAN-bus & RS485
- Lithium LiFePO4 technology
- Maintenance free
- Durable ACCS housing
- Parallel connection only
- Produced under ISO 9001 & ISO 14001

Compared to AGM

- **10x** Better cyclic performance
- **3x** Faster charging
- Just 30% of the weight
- Just 50% of the size
- Better suited for high current / high drain applications
- Lower costs per cycle
- Longer travel range

Cyclic Lithium battery (6000 cycles)

Dimensions (mm)	Certifications	
	Standard terminal M6 Insert	
Nominal voltage	25.6 V	
Nominal capacity (25°C)	60.0 Ah	
Nominal capacity (0°C)	≥55.2 Ah	
Nominal capacity (-10°C)	≥50.4 Ah	
Internal resistance	≤N/AmΩ (fully charged)	
Self discharge	less than 3% per month	
Charge temperature range	0°C ~ 55°C	
Discharge temperature range	-20°C ~ 55°C	
Charge voltage	29.2 V	
Max. charge current	30 A	
Max. constant discharge current	80 A	
Max. pulse discharge current	150 A (Max. 30 sec)	
Energy	5Hr: 1536Wh	
Cut-off voltage	20.0 V	
Communication	CAN-bus (250kb/s) & RS485	
CAN-bus connector	Amphenol ATM08-08S	
Standard terminal	Insert M6 (5.5 Nm torque)	
Housing material	Anti Corrosion Coated Steel (ACCS)	
Dimensions Length	259 mm	
Dimensions Width	169 mm	
Dimensions Height 219 mm (208mm ex. CAN-bus conn		
Approximate Weight	15.0 kg	

Recommended

Having the right battery is often just the beginning. Optimal use of a battery requires having a good battery charger, so that the user can be sure that their battery is always optimally charged and has maximum lifespan.

Cellpower offers various intelligent battery chargers, as well as battery testers, battery monitors and battery guards. All designed to easily monitor the battery quality and make sure the battery remains in the best condition possible.



Recommended for CLF 60-24: CCL battery charger

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Cycle service life in relation to depth of discharge

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Models available

Model	Voltage	Capacity (Ah)	Dimensions (mm)	Weight (kg)
CLF 40-24	24	40	197x165x172	9.7
CLF 60-24	24	60	259x169x219	15.0
CLF 80-24	24	80	329x169x224	20.0
CLF 40-48	48	40	329x169x224	20.0

Cellpower family

Cellpower supplies a broad range of reliable AGM, GEL and Lithium batteries. Each product series has its own unique characteristics, so that there is a suitable battery for every application with its associated specific usage profile. Combined with the right Cellpower battery accessories, you are able to assemble a highquality and reliable battery system.



Discharge characteristics



Battery Management System (BMS) data

Charging voltage	28.4V ~ 29.2C CC/CV		
Balancing current	50-75mA		
Communication consumption	≤20mA		
Standard mode consumption	≤10mA		
Powerdown mode	≤100µA		
Max. continuous charge current	80A		
Max. continuous discharge current	80A		
High voltage protection	30.4V ±0.1V		
High voltage delay time	3 Sec		
High voltage recovery	28.0V ±0.1V		
Low voltage protection	20.0V ±0.1V		
Low voltage delay time	3 Sec		
Low voltage recovery	22.0V ±0.1V		
Overcurrent protection	200A		
Overcurrent delay time	3 sec		
Overcurrent recovery mode	Disconnect load, auto recovery		
Short-circuit protection	200-600uS		
Short-circuit recovery mode	Disconnect load, auto recovery		
Overtemperature protection cell	65°C		
Overtemperature protection BMS	80°C, 1 measuring point		
Protection circuit (MOSFET)	≤10mΩ		
Operating temperature range	-20°C ~ 70°C		

CAN-bus connector output			
CAN-bus output connector type	Amphenol ATM08-08S (male)		
	Pin 1	CAN-High	
	Pin 2	CAN-Low	
	Pin 3	CAN_Termination	
Bin law out output	Pin 4	24Vdc-	
	Pin 5	24Vdc+	
	Pin 6	RS485A	
	Pin 7	RS485B	
	Pin 8	GND	
Becommended specifications output sable	≥ 4x0,75mm ²		
Recommended specifications output cable	Shielded & twisted cable type		