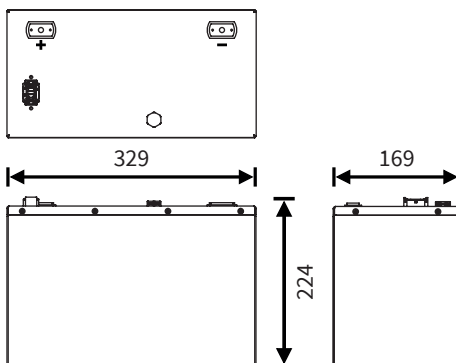


CLF 40-48

Cyclic Lithium battery (6000 cycles)

Dimensions (mm)



Certifications



*: Certification pending

Standard terminal



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

Nominal voltage	51.2 V
Nominal capacity (25°C)	40.0 Ah
Nominal capacity (0°C)	≥36.8 Ah
Nominal capacity (-10°C)	≥33.6 Ah
Internal resistance	≤10mΩ (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	58.4 V
Max. charge current	20 A
Max. constant discharge current	40 A
Max. pulse discharge current	75 A (Max. 30 sec)
Energy	5Hr: 2048Wh
Cut-off voltage	40.0 V
Communication	CAN-bus (250kb/s) & RS485
CAN-bus connector	Amphenol ATM08-08S
Standard terminal	Insert M8 (5.5 Nm torque)
Housing material	Anti Corrosion Coated Steel (ACCS)
Dimensions Length	329 mm
Dimensions Width	169 mm
Dimensions Height	224 mm (213mm ex. CAN-bus connector)
Approximate Weight	20.0 kg

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

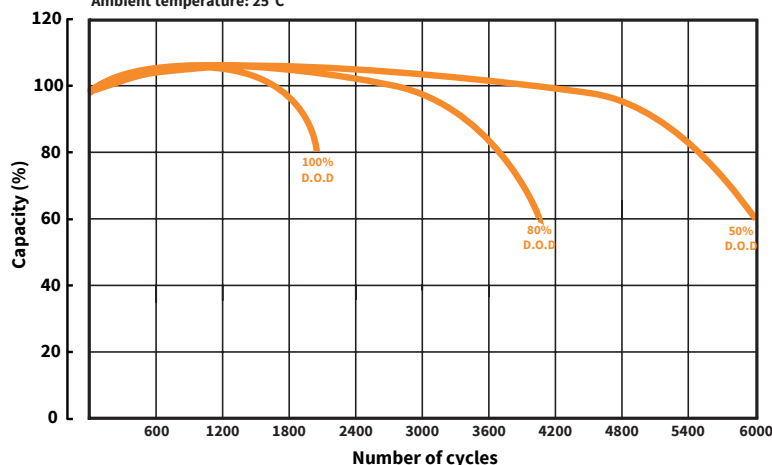
Recommended

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.

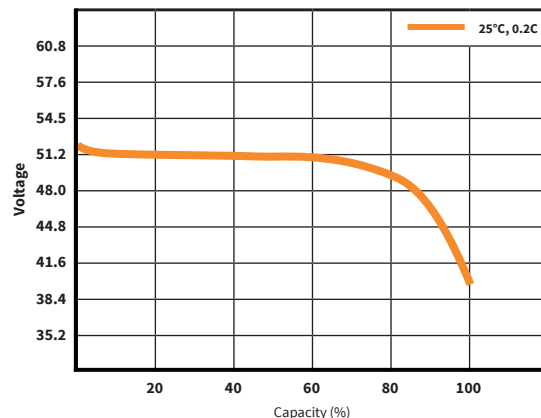
Cellpower offers various intelligent battery chargers, as well as battery testers, battery monitors and battery guards. All designed to easily monitor the battery quality and make sure the battery remains in the best condition possible.

Cycle service life in relation to depth of discharge

Testing conditions: Discharge current 0.5C, charge 0.5C
Ambient temperature: 25°C



Discharge characteristics



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 high-quality and reliable battery system.



Battery Management System (BMS) data

Charging voltage	56.8V ~ 58.4C CC/CV
Balancing current	50-75mA
Communication consumption	≤20mA
Standard mode consumption	≤10mA
Powerdown mode	≤100μA
Max. continuous charge current	40A
Max. continuous discharge current	40A
High voltage protection	60.8V ±0.1V
High voltage delay time	3 Sec
High voltage recovery	56.0V ±0.1V
Low voltage protection	40.0V ±0.1V
Low voltage delay time	3 Sec
Low voltage recovery	44.0V ±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
Pin 4	48Vdc-
Pin 5	48Vdc+
Pin 6	RS485A
Pin 7	RS485B
Pin 8	GND
Recommended specifications output cable	≥ 4x0,75mm ² Shielded & twisted cable type