

Deep cycling with full recovery from deep discharge.

The RDG12-180 is a 12 V, 180 Ah (10-hour rate) GEL Deep Cycle lead-acid battery from the Rekoser Deep Gel series. It measures 530 × 207 × 218 mm and weighs 53 kg, with F12 terminals. It stores 2.16 kWh and delivers up to 800 A. Deep cycling with full recovery from deep discharge. Typical applications: Solar/Wind Energy Systems, Electrical Substations, Telecommunications and Base Stations and UPS and Data Centers.

Formerly **RKG12-180**.

Nominal Voltage	12 V
Capacity (25°C)	180 Ah (C10)
Energy	2160 Wh
Weight	53 kg
Terminal	F12
Dimensions	530 × 207 × 218 mm

MAIN ADVANTAGES

- ✓ **Recovery:** Superior performance after deep discharges
- ✓ **Stable:** Low electrolyte stratification
- ✓ **Longevity:** Excellent cycle life in harsh conditions
- ✓ **Gel Tech:** Thixotropic gel electrolyte

12
YEARS

LONG LIFE DESIGN

* EUROBAT CLASSIFICATION: 10-12 Years (High Performance).

2
YEARS

WARRANTY

* Subject to charge and temperature parameters stipulated in this datasheet.

MAIN APPLICATIONS



**SOLAR/WIND ENERGY
SYSTEMS**



ELECTRICAL SUBSTATIONS



**TELECOMMUNICATIONS
AND BASE STATIONS**



UPS AND DATA CENTERS

QUALITY STANDARDS

CE CERTIFIED

ISO 9001 / 14001

IEC61427

IEC 60896-21/22

YD/T1360

BS6290 part 4

GRAPHICS (25°C)

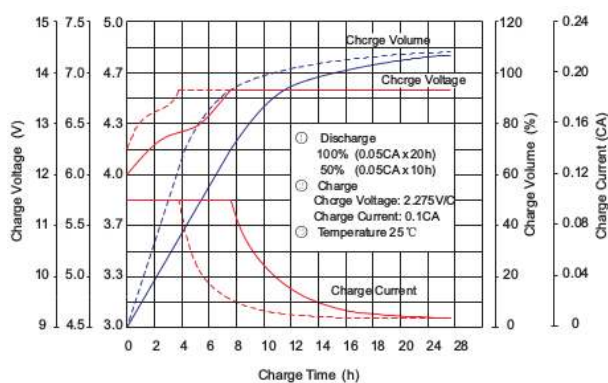
Constant Discharge Ratings (A) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	283A	254A	231A	162A	105A	46.5A	31.2A	17.5A	9.23A
10.80 V	331A	282A	254A	172A	110A	48.1A	31.9A	18A	9.45A
10.50 V	374A	310A	272A	180A	113A	49A	32.7A	18.4A	9.63A
10.20 V	430A	334A	293A	186A	116A	49.8A	33.1A	18.6A	9.82A
10.02 V	482A	367A	310A	194A	118A	50.4A	33.4A	18.8A	10A
9.60 V	540A	398A	329A	203A	122A	51A	33.9A	19.1A	10.3A

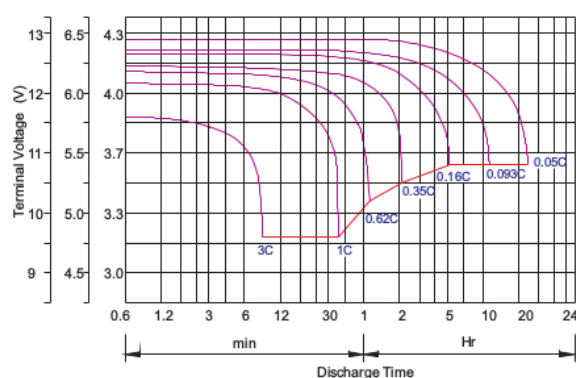
Constant Discharge Ratings (W) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	533W	482W	442W	313W	203W	91.3W	61.7W	35W	18.5W
10.80 V	612W	529W	480W	328W	211W	93.6W	62.7W	35.8W	18.9W
10.50 V	684W	575W	510W	340W	216W	94.6W	63.7W	36.2W	19.1W
10.20 V	776W	612W	543W	349W	219W	95.3W	64W	36.4W	19.3W
10.02 V	859W	667W	570W	360W	222W	95.8W	64.1W	36.6W	19.6W
9.60 V	951W	716W	600W	375W	227W	96.3W	64.5W	36.9W	19.9W

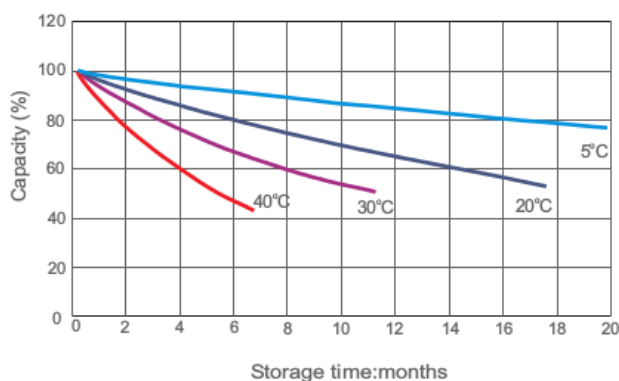
CHARGE CHARACTERISTICS



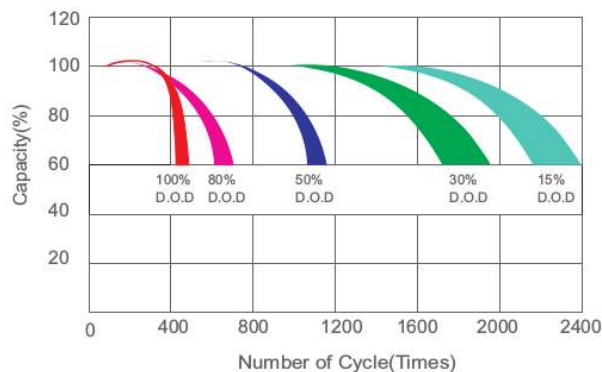
DISCHARGE CHARACTERISTIC 25oC



SELF DISCHARGE CHARACTERISTICS



LIFE CHARACTERISTIC OF CYCLIC USE



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25°C)	180 Ah (C10)
Energy	2160 Wh
Cell number	6
Charge Voltage (25°C)	Cycle use: 14.6-14.8V (-30mV/C), max. Current 2.1A Float use: 13.6-13.8V (-20mV/C)
Max. Charge Current	25 A
Max. Discharge Current	800 A
Internal Resistance	25 mΩ
Self Discharge	3 % of capacity per month at 20 °C
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS (Flame Retardant Optional)
Cover	ABS (Flame Retardant Optional)
Electrolyte	Sulphuric acid
Negative	Lead
Positive	Lead dioxide
Safety Valve	Rubber
Sealant	Epoxy Resin
Separator	Fibre Glass
Terminal	Copper

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RDG12-180** battery, follow these assembly and connection guidelines.

1. SPACE AND DIMENSION VERIFICATION

Before proceeding, ensure the receptacle or cabinet of your equipment complies with the unit's physical measurements:

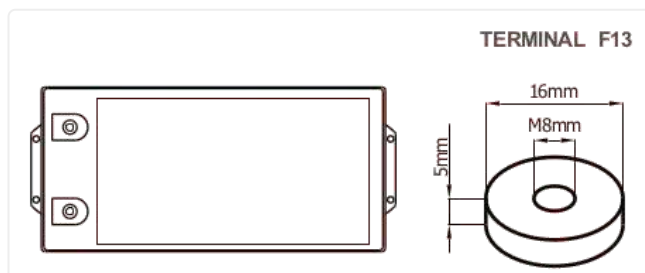
Length: 530 mm

Width: 207 mm

Height: 218 mm

Total Height: 222 mm

Weight: 53 kg



2. TERMINAL CONFIGURATION (F12)

Terminals: Ensure your system's connectors match the F12 type to prevent electrical arcing.

Polarity: Check the positive and negative markings on the battery before connecting, to prevent short circuits.

3. CHARGE PARAMETERS

Cycle use: 14.6-14.8V (-30mV/C), max. Current 2.1A

Float use: 13.6-13.8V (-20mV/C)

Maximum Current: Do not exceed 25 A of charge.

4. SAFETY AND STORAGE

Maintenance: Sealed gel battery, maintenance-free and leak-proof.

Charging: Keep to the stated charge voltage: gel is sensitive to overcharging.

Cycling: Recharge fully after every discharge; never leave it discharged.

Storage: Store charged, in a cool and dry place, and recharge periodically.

NEARBY MODELS

RDG12-150 (12 V · 150 Ah) · **RDG12-200** (12 V · 200 Ah) · [See all RDG series models](#)

The same battery in other series: **RFG12-180** (RFG Series – Front Terminal Deep Gel)

Specialized Technical Support

<https://rekoser.com> | +34 958 04 29 73