

Deep cycling with full recovery from deep discharge.

The RDG12-40 is a 12 V, 40 Ah (10-hour rate) GEL Deep Cycle lead-acid battery from the Rekoser Deep Gel series. It measures 197 × 165 × 170 mm and weighs 13 kg, with F14 terminals. It stores 480 Wh and delivers up to 400 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 **RKG12-40**.

Nominal Voltage	12 V
Capacity (25°C)	40 Ah (C10)
Energy	480 Wh
Weight	13 kg
Terminal	F14
Dimensions	197 × 165 × 170 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)

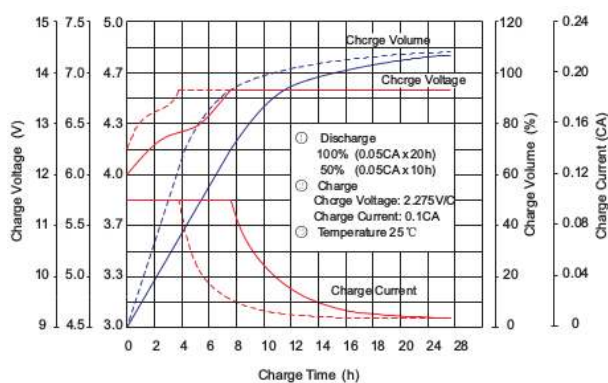
Constant Discharge Ratings (A) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	62.9A	56.4A	51.4A	36.1A	23.3A	10.3A	6.93A	3.9A	2.05A
10.80 V	73.5A	62.6A	56.4A	38.2A	24.4A	10.7A	7.1A	4A	2.1A
10.50 V	83.1A	68.9A	60.4A	40A	25.2A	10.9A	7.27A	4.08A	2.14A
10.20 V	95.6A	74.1A	65.1A	41.4A	25.7A	11.1A	7.37A	4.14A	2.18A
10.02 V	107A	81.6A	68.9A	43A	26.3A	11.2A	7.42A	4.19A	2.23A
9.60 V	120A	88.5A	73.1A	45A	27A	11.3A	7.53A	4.24A	2.28A

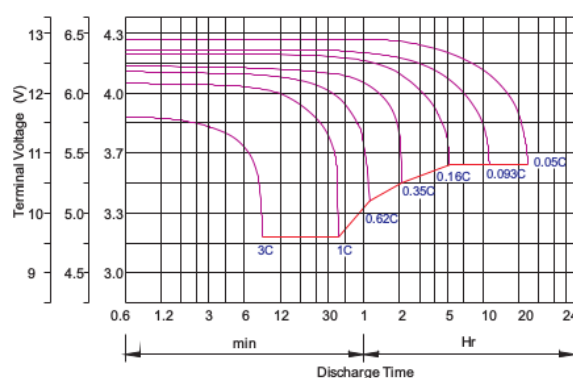
Constant Discharge Ratings (W) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	118W	107W	98.1W	69.5W	45.2W	20.3W	13.7W	7.79W	4.12W
10.80 V	136W	118W	107W	72.9W	46.8W	20.8W	13.9W	7.95W	4.19W
10.50 V	152W	128W	113W	75.5W	47.9W	21W	14.2W	8.04W	4.24W
10.20 V	173W	136W	121W	77.6W	48.6W	21.2W	14.2W	8.09W	4.3W
10.02 V	191W	148W	127W	80W	49.4W	21.3W	14.3W	8.14W	4.36W
9.60 V	211W	159W	133W	83.2W	50.4W	21.4W	14.3W	8.19W	4.43W

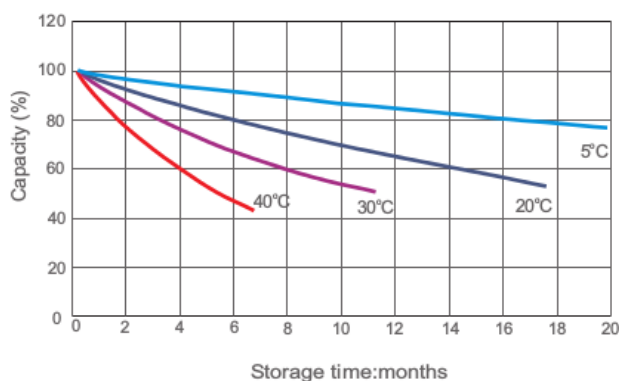
CHARGE CHARACTERISTICS



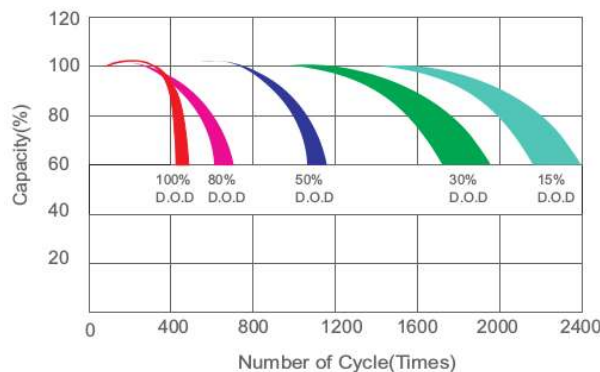
DISCHARGE CHARACTERISTIC 25oC



SELF DISCHARGE CHARACTERISTICS



LIFE CHARACTERISTIC OF CYCLIC USE



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25°C)	40 Ah (C10), 42 Ah (C20)
Energy	480 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	10 A
Max. Discharge Current	400 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 RDG12-40** 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:

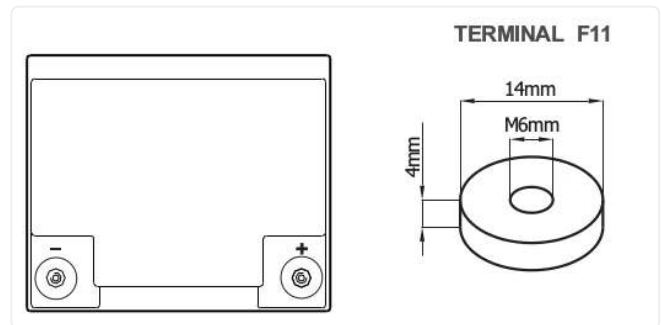
Length: 197 mm

Width: 165 mm

Height: 170 mm

Total Height: 170 mm

Weight: 13 kg



2. TERMINAL CONFIGURATION (F14)

Terminals: Ensure your system's connectors match the F14 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 10 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

RDG12-26 (12 V · 26 Ah) · **RDG12-50** (12 V · 50 Ah) · [See all RDG series models](#)

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