NICD · SERIES RNC

RNC Series – Nickel-Cadmium

Extreme reliability in harsh conditions. The railway and industrial standard.

Rekoser fibre-structure Nickel-Cadmium battery. It withstands very high charge and discharge currents with a low nominal capacity and requires no electrolyte replacement. Extreme reliability in harsh temperature and vibration conditions: the railway, substation and industrial telecom standard.

MODELS
4

NOMINAL VOLTAGE
1.2 V, 12 V

CAPACITY
120–715 Ah

DESIGN LIFE
20 years

WARRANTY
2 years

Key features

Fibre structure: Fibre nickel-cadmium electrodes

High currents: Very high charge and discharge rates

No topping up: No electrolyte replacement needed

Harsh conditions: Withstands temperature and vibration

Applications

Electrical Substations
Backup systems for control, switching, and protection equipment in high and medium voltage electrical substations.

Telecommunications and Base Stations
Critical backup for network infrastructures and mobile base stations in remote locations with extreme weather conditions.

Railway Signaling and Infrastructure
Uninterruptible power supply systems for traffic control, signaling, and safety in tunnels and railway infrastructures.

RNC series models

Each model links to its datasheet with discharge tables, dimensions and charge parameters. Rated capacity at 25 °C; C20 = 20-hour rate.

Model	Nominal Voltage	Capacity	Length (mm)	Width (mm)	Height (mm)	Weight (kgs)
RNC1.2-120 (formerly RKF1.2-120)	1.2 V	120 Ah (C5)	165	105	300	8.5
RNC12-300 (formerly RKF12-300)	12 V	296 Ah (C5)	115	194	309	10.6
RNC12-400 (formerly RKF12-400)	12 V	407 Ah (C5)	155	198	309	14.1
RNC12-700 (formerly RKF12-700)	12 V	715 Ah (C5)	202	209	405	25.2

Construction

Component	Material
Container	ABS/PP
Cover	ABS/PP
Electrolyte	Potassium Hydroxide
Negative	Cadmium
Positive	Nickel oxide-hydroxide
Safety Valve	Rubber
Terminal	Nickel-Clad Steel

RNC1.2-120

SERIES RNC · NICKEL-CADMIUM

Extreme reliability in harsh conditions. The railway and industrial standard.

The RNC1.2-120 is a 1.2 V, 120 Ah (5-hour rate) NiCd battery from the Rekoser Nickel-Cadmium series. It measures 165 × 105 × 300 mm and weighs 8.5 kg. It stores 144 Wh. Extreme reliability in harsh conditions. The railway and industrial standard. Typical applications: Electrical Substations, Telecommunications and Base Stations and Railway Signaling and Infrastructure.

Formerly **RKF1.2-120**.

Nominal Voltage	**1.2 V**
Capacity (25ºC)	**120 Ah (C5)**
Energy	**144 Wh**
Weight	**8.5 kg**
Dimensions	**165 × 105 × 300 mm**

MAIN ADVANTAGES

- ✓ **Fibre structure:** Fibre nickel-cadmium electrodes
- ✓ **High currents:** Very high charge and discharge rates
- ✓ **No topping up:** No electrolyte replacement needed
- ✓ **Harsh conditions:** Withstands temperature and vibration

20 YEARS LONG LIFE DESIGN **2 YEARS** **WARRANTY**

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

MAIN APPLICATIONS

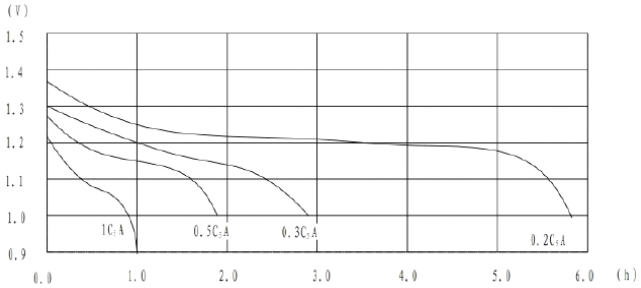
- ELECTRICAL SUBSTATIONS
- TELECOMMUNICATIONS AND BASE STATIONS
- RAILWAY SIGNALING AND INFRASTRUCTURE

GRAPHICS (25°C)

Constant Discharge Ratings (A) at 25ºC

F.V / Time	1SEC	5SEC	1MIN	1.5MIN	5MIN	1HR
1.14 V	714A	667A	443A	378A	332A	109A
1.10 V	776A	738A	573A	465A	352A	85A
1.0 V	1025A	978A	842A	635A	518A	116A

DISCHARGE CHARACTERISTIC 25ºC



SPECIFICATIONS

Nominal Voltage	1.2 V
Capacity (25ºC)	120 Ah (C5)
Energy	144 Wh
Charge Voltage (25°C)	Cycle use: 1.0-1.2V Float use: 1.38V +-0.01V
Internal Resistance	0.36 mΩ
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS/PP
Cover	ABS/PP
Electrolyte	Potassium Hydroxide
Negative	Cadmium
Positive	Nickel oxide-hydroxide
Safety Valve	Rubber
Terminal	Nickel-Clad Steel

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RNC1.2-120** 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: 165 mm

Width: 105 mm

Height: 300 mm

Total Height: 345 mm

Weight: 8.5 kg

2. TERMINALS AND POLARITY

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

3. CHARGE PARAMETERS

Cycle use: 1.0-1.2V

Float use: 1.38V +-0.01V

4. SAFETY AND STORAGE

Maintenance: Fibre structure: no electrolyte replacement needed.

Electrolyte: It is alkaline: do not use tools or utensils used with lead batteries.

Position: Always upright.

Storage: Store in a cool and dry place.

NEARBY MODELS

See all RNC series models

Specialized Technical Support

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

RNC12-300

SERIES RNC · NICKEL-CADMIUM

Extreme reliability in harsh conditions. The railway and industrial standard.

The RNC12-300 is a 12 V, 296 Ah (5-hour rate) NiCd battery from the Rekoser Nickel-Cadmium series. It measures 115 × 194 × 309 mm and weighs 10.6 kg. It stores 3.55 kWh. Extreme reliability in harsh conditions. The railway and industrial standard. Typical applications: Electrical Substations, Telecommunications and Base Stations and Railway Signaling and Infrastructure.

Formerly **RKF12-300**.

Nominal Voltage	**12 V**
Capacity (25ºC)	**296 Ah (C5)**
Energy	**3552 Wh**
Weight	**10.6 kg**
Dimensions	**115 × 194 × 309 mm**

MAIN ADVANTAGES

- ✓ **Fibre structure:** Fibre nickel-cadmium electrodes
- ✓ **High currents:** Very high charge and discharge rates
- ✓ **No topping up:** No electrolyte replacement needed
- ✓ **Harsh conditions:** Withstands temperature and vibration

20 YEARS LONG LIFE DESIGN **2 YEARS** **WARRANTY**

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

MAIN APPLICATIONS

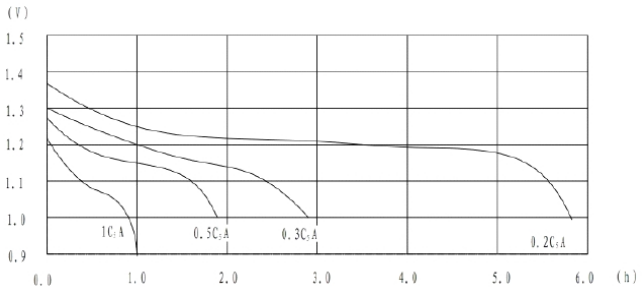
- ELECTRICAL SUBSTATIONS
- TELECOMMUNICATIONS AND BASE STATIONS
- RAILWAY SIGNALING AND INFRASTRUCTURE

GRAPHICS (25°C)

Constant Discharge Ratings (A) at 25ºC

F.V / Time	1SEC	5SEC	1MIN	5MIN	30MIN	1HR	3HR	5HR	10HR
1.14 V	552A	516A	429A	319A	170A	153A	74.1A	47.8A	25.3A
1.10 V	595A	562A	493A	402A	217A	190A	86.8A	55.2A	29.6A
1.05 V	630A	609A	552A	482A	254A	221A	92.6A	57.6A	30.8A
1.00 V	699A	677A	626A	569A	297A	248A	96.2A	59.2A	31.6A

DISCHARGE CHARACTERISTIC 25ºC



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25ºC)	296 Ah (C5)
Energy	3552 Wh
Cell number	10
Charge Voltage (25°C)	Cycle use: 1.0-1.2V Float use: 1.38V +-0.01V
Internal Resistance	0.36 mΩ
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS/PP
Cover	ABS/PP
Electrolyte	Potassium Hydroxide
Negative	Cadmium
Positive	Nickel oxide-hydroxide
Safety Valve	Rubber
Terminal	Nickel-Clad Steel

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RNC12-300** 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: 115 mm

Width: 194 mm

Height: 309 mm

Total Height: 309 mm

Weight: 10.6 kg

2. TERMINALS AND POLARITY

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

3. CHARGE PARAMETERS

Cycle use: 1.0-1.2V

Float use: 1.38V +-0.01V

4. SAFETY AND STORAGE

Maintenance: Fibre structure: no electrolyte replacement needed.

Electrolyte: It is alkaline: do not use tools or utensils used with lead batteries.

Position: Always upright.

Storage: Store in a cool and dry place.

NEARBY MODELS

RNC12-400 (12 V · 407 Ah) · See all RNC series models

Specialized Technical Support

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

RNC12-400

SERIES RNC · NICKEL-CADMIUM

Extreme reliability in harsh conditions. The railway and industrial standard.

The RNC12-400 is a 12 V, 407 Ah (5-hour rate) NiCd battery from the Rekoser Nickel-Cadmium series. It measures 155 × 198 × 309 mm and weighs 14.1 kg. It stores 4.88 kWh. Extreme reliability in harsh conditions. The railway and industrial standard. Typical applications: Electrical Substations, Telecommunications and Base Stations and Railway Signaling and Infrastructure.

Formerly **RKF12-400**.

Nominal Voltage	12 V
Capacity (25ºC)	407 Ah (C5)
Energy	4884 Wh
Weight	14.1 kg
Dimensions	155 × 198 × 309 mm

MAIN ADVANTAGES

- ✓ **Fibre structure:** Fibre nickel-cadmium electrodes
- ✓ **High currents:** Very high charge and discharge rates
- ✓ **No topping up:** No electrolyte replacement needed
- ✓ **Harsh conditions:** Withstands temperature and vibration

20 YEARS LONG LIFE DESIGN **2 YEARS** **WARRANTY**

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

MAIN APPLICATIONS

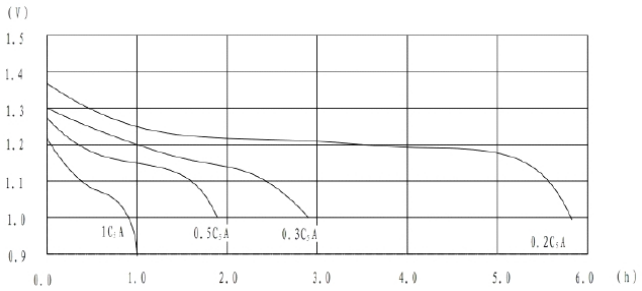
- ELECTRICAL SUBSTATIONS
- TELECOMMUNICATIONS AND BASE STATIONS
- RAILWAY SIGNALING AND INFRASTRUCTURE

GRAPHICS (25°C)

Constant Discharge Ratings (A) at 25ºC

F.V / Time	1SEC	5SEC	1MIN	5MIN	30MIN	1HR	3HR	5HR	10HR
1.14 V	760A	709A	589A	438A	234A	210A	102A	65.7A	34.7A
1.10 V	818A	772A	678A	553A	298A	262A	119A	76A	40.7A
1.05 V	866A	837A	759A	663A	350A	305A	127A	79.2A	42.3A
1.00 V	961A	930A	860A	782A	408A	342A	132A	81.4A	43.4A

DISCHARGE CHARACTERISTIC 25ºC



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25ºC)	407 Ah (C5)
Energy	4884 Wh
Cell number	10
Charge Voltage (25°C)	Cycle use: 1.0-1.2V Float use: 1.38V +-0.01V
Internal Resistance	0.36 mΩ
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS/PP
Cover	ABS/PP
Electrolyte	Potassium Hydroxide
Negative	Cadmium
Positive	Nickel oxide-hydroxide
Safety Valve	Rubber
Terminal	Nickel-Clad Steel

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RNC12-400** 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: 155 mm

Width: 198 mm

Height: 309 mm

Total Height: 309 mm

Weight: 14.1 kg

2. TERMINALS AND POLARITY

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

3. CHARGE PARAMETERS

Cycle use: 1.0-1.2V

Float use: 1.38V +-0.01V

4. SAFETY AND STORAGE

Maintenance: Fibre structure: no electrolyte replacement needed.

Electrolyte: It is alkaline: do not use tools or utensils used with lead batteries.

Position: Always upright.

Storage: Store in a cool and dry place.

NEARBY MODELS

RNC12-300 (12 V · 296 Ah) · **RNC12-700** (12 V · 715 Ah) · See all RNC series models

Specialized Technical Support

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

RNC12-700

SERIES RNC · NICKEL-CADMIUM

Extreme reliability in harsh conditions. The railway and industrial standard.

The RNC12-700 is a 12 V, 715 Ah (5-hour rate) NiCd battery from the Rekoser Nickel-Cadmium series. It measures 202 × 209 × 405 mm and weighs 25.2 kg. It stores 8.58 kWh. Extreme reliability in harsh conditions. The railway and industrial standard. Typical applications: Electrical Substations, Telecommunications and Base Stations and Railway Signaling and Infrastructure.

Formerly **RKF12-700**.

Nominal Voltage	12 V
Capacity (25ºC)	715 Ah (C5)
Energy	8580 Wh
Weight	25.2 kg
Dimensions	202 × 209 × 405 mm

MAIN ADVANTAGES

- ✓ **Fibre structure:** Fibre nickel-cadmium electrodes
- ✓ **High currents:** Very high charge and discharge rates
- ✓ **No topping up:** No electrolyte replacement needed
- ✓ **Harsh conditions:** Withstands temperature and vibration

20 YEARS LONG LIFE DESIGN **2 YEARS** **WARRANTY**

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

MAIN APPLICATIONS

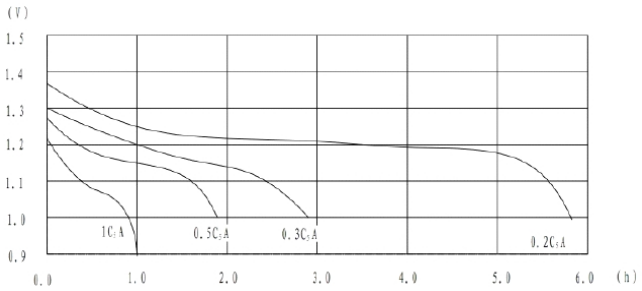
- ELECTRICAL SUBSTATIONS
- TELECOMMUNICATIONS AND BASE STATIONS
- RAILWAY SIGNALING AND INFRASTRUCTURE

GRAPHICS (25°C)

Constant Discharge Ratings (A) at 25ºC

F.V / Time	1SEC	5SEC	1MIN	5MIN	30MIN	1HR	3HR	5HR	10HR
1.14 V	1216A	1095A	922A	696A	415A	377A	213A	140A	71.3A
1.10 V	1565A	1367A	1086A	842A	507A	459A	228A	142A	72.9A
1.05 V	1829A	1578A	1289A	1029A	615A	544A	235A	143A	73.8A
1.00 V	2263A	1907A	1505A	1212A	704A	596A	236A	143A	74A

DISCHARGE CHARACTERISTIC 25ºC



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25ºC)	715 Ah (C5)
Energy	8580 Wh
Cell number	10
Charge Voltage (25°C)	Cycle use: 1.0-1.2V Float use: 1.38V +-0.01V
Internal Resistance	0.36 mΩ
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS/PP
Cover	ABS/PP
Electrolyte	Potassium Hydroxide
Negative	Cadmium
Positive	Nickel oxide-hydroxide
Safety Valve	Rubber
Terminal	Nickel-Clad Steel

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RNC12-700** 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: 202 mm

Width: 209 mm

Height: 405 mm

Total Height: 405 mm

Weight: 25.2 kg

2. TERMINALS AND POLARITY

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

3. CHARGE PARAMETERS

Cycle use: 1.0-1.2V

Float use: 1.38V +-0.01V

4. SAFETY AND STORAGE

Maintenance: Fibre structure: no electrolyte replacement needed.

Electrolyte: It is alkaline: do not use tools or utensils used with lead batteries.

Position: Always upright.

Storage: Store in a cool and dry place.

NEARBY MODELS

RNC12-400 (12 V · 407 Ah) · See all RNC series models

Specialized Technical Support

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