FLOODED

NATIONWIDE BATTERY

MARINE | GOLF | INDUSTRIAL | AUTO | SPECIAL APPLICATIONS | SOLAR

LEAD-CALCIUM BATTERY

# KCR-19

# KCR SERIES

- Voltage: 2V
- Reserve Capacity: 738 Ah@8hr rate to 1.75VPC @ 77F
- Weight: 143 lbs (64.9 kg)
- Length: 8.53 in (217 mm)
- Width: 10.44 in (265 mm)
- Height: 18.25 in (464 mm)
- Positive Thickness: 0.312in (7.90mm)
- Negative Thickness: 0.210in (5.30mm)
- Separator: Microporous with fibrous glass mat
- Container: Thermoplastic, transparent (SAN)
- Cover: High-Impact, flame retardant UL 94-V0; ASTM D-635 self-extinguishing
- Recommended Float Voltage: 2.20-2.25 VPC
- Terminals: Two, 1-inch (25 mm) square copper-inserted posts with 2 thru-holes

EVERY BATTERY 100% CAPACITY TESTED

## FOR SWITCHGEAR & CONTROL APPLICATIONS

C&D Technologies flooded batteries are engineered to provide superior performance and reliability over the life of the product. These batteries are designed using proprietary techniques and quality components and materials for reduced maintenance and extended battery life.

C&D TECHNOLOGIES

C&D TECHNOLOGIES

MODEL **KCR-19**
VOLTAGE **2V**
CAPACITY **738Ah @ hr to 1.75VPC**
CONTAINER **Thermoplastic, transparent (SAN)**
COVER **Flame-retardant, tongue-and-groove seal. UL 94-V0; ASTM D-635 self-extinguishing**
BATTERY TYPE **Lead-Calcium**

## 2V

## PRODUCT + PHYSICAL SPECIFICATIONS

| Serie | Model | Voltage | Cell(s) | Terminal Quantity | Dimensions [C] Inches (mm) | | | Weight Lbs. (kg) |
|---|---|---|---|---|---|---|---|---|
| | | | | | Length | Width | Height [F] | |
| **KCR** | **KCR-19** | **2** | **1** | 2 | **8.53 (217)** | **10.44 (265)** | **18.25 (464)** | **143 (64.9)** |

## ELECTRICAL SPECIFICATIONS

| VPC | Ah @ 8hr Rate | NOMINAL RATE @ 77F (+25C) IN 1.215 SPECIFIC GRAVITY (INCLUDES CONNECTION DROP) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | AMPERES | | | | | | | |
| | | 1 MIN | 15 MIN | 30 MIN | 1 HR | 1.5 HR | 3 HR | 4 HR | 8 HR |
| 1.75 | 738 | 948 | 664 | 519 | 377 | 302 | 195 | 159 | 92 |
| 1.78 | 717 | 812 | 596 | 474 | 350 | 283 | 185 | 152 | 89 |
| 1.81 | 697 | 677 | 526 | 429 | 323 | 264 | 176 | 145 | 87 |

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NATIONWIDE BATTERY

## **CHARGING** INSTRUCTIONS

| Charger Voltage Settings (at 77°F/25°C) | | | | | |
|---|---|---|---|---|---|
| System Voltage | 2V | 4V | 24V | 48V | 125V |
| Bulk / Equalize Charge | 2.35 | 4.70 | 28.20 | 56.40 | 141.00 |
| Float Charge | 2.25 | 4.50 | 27.00 | 54.00 | 135.00 |
| High Voltage Alarm | 2.45 | 4.90 | 29.40 | 58.80 | 147.00 |
| Low Voltage Alarm | 1.75 | 3.50 | 21.00 | 42.00 | 105.00 |

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

## **CHARGING TEMPERATURE** COMPENSATION

| Add | Subtract |
|---|---|
| 0.005 volt per cell for every 1°C below 25°C<br>0.0028 volt per cell for every 1°F below 77°F | 0.005 volt per cell for every 1°C above 25°C<br>0.0028 volt per cell for every 1°F above 77°F |

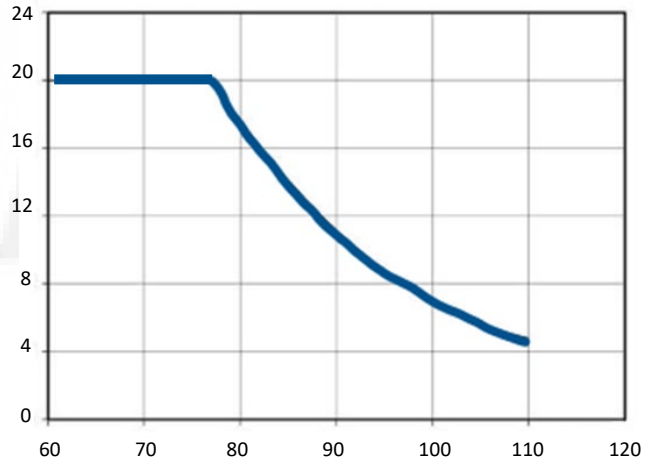
## **OPERATIONAL** DATA

| Operating Temperature | Self Discharge |
|---|---|
| Reccomended operating temperature range 60F (15 C) – 90F (32 C)<br>Limit Operating Range 32F (0 C) – 120F (49 C) | Less than 3% per month depending on storage temperature conditions |

## **STATE OF CHARGE** MEASURE OF OPEN-CIRCUIT VOLTAGE

| Percentage Charge | Cell | Specific Gravity |
|---|---|---|
| 100 | 2.06 - 2.08 | 1.210 - 1.220 |
| 75 | 2.03 – 2.04 | 1.185 -1.195 |
| 50 | 2.00 – 2.01 | 1.160 – 1.170 |
| 25 | 1.97 – 1.98 | 1.135 – 1.145 |
| 0 | 1.95 or less | 1.110 – 1.120 |

### BATTERY LIFE v AMBIENT TEMPERATURE

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NATIONWIDE BATTERY

# KCR Lead-Calcium Battery

## FOR SWITCHGEAR & CONTROL APPLICATIONS

Capacities from 192 to 824 Ampere-hours

C&D Technologies flooded batteries are engineered to provide superior perfor-mance and reliability over the life of the product. These batteries are designed using proprietary techniques and quality components and materials for reduced maintenance and extended battery life.

## FEATURES & BENEFITS

- Electrical testing to 100% capacity on every battery string prior to shipping assures performance of every battery string upon delivery
- Long life positive plates cast with a proprietary process and high-purity alloy
- 20 year environmental and seismic qualification
- Computer-controlled charging results in consistently formed plates for reliable performance out of the box (no cycling required in the field)
- Suspended positive plates permit free growth without pressure on jar and cover

## SAFE OPERATION

- Flame-retardant covers enhance battery plant safety with self-extinguishing properties, LOI>32%, UL 94V-0
- Low-evaporation, flame-arrester vent to extend watering intervals and prevent external sparks from reacting with the hydrogen inside the cell

## COST SAVINGS

- Transparent container allows visual inspection of plates
- Soft rubber post seal minimizes stress on post reducing maintenance requirements
- Computer controlled heli-arc welded post seals result in consistent and reliable seals for less maintenance and longer product life

## APPLICATIONS

- Electric Power Generation Facilities
- Nuclear Power Plants
- Electric Utility Substations
- Emergency Systems
- Manufacturing Facilities
  - Assembly Lines
  - Process Controls
- Petrochemical processing plants
- Pipelines

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LEAD RETURN RECYCLE