

VersaMax Micro PLC Backup Battery

June 2003

GFK-2016

Product Information

This is an optional backup battery for 23-point and 28-point VersaMax Micro PLC CPUs. Its purpose is to protect the RAM memory contents of the PLC when the PLC power supply is removed or turned off. It also backs up the CPU's real-time clock.

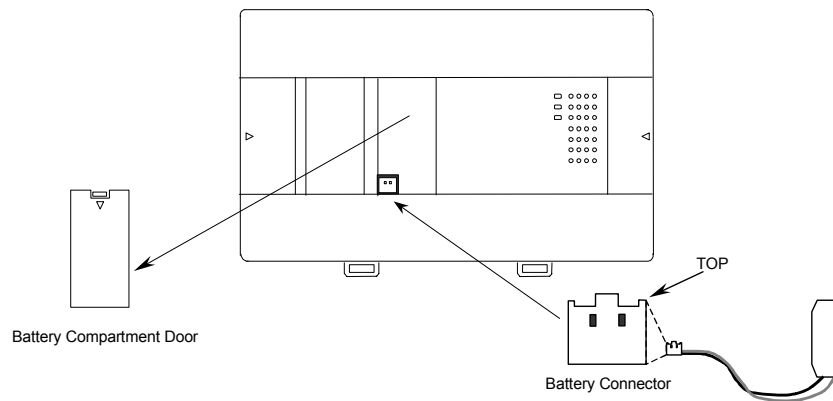
| | | |
|---|--|---|
| IC200ACC414 | Nominal Voltage 3.6 vdc @ 790 mAh | |
| Battery shelf life, not installed | Up to 5 years typical at 30 °C Up to 3 years typical at 55 °C | |
| Backup time with battery installed, Micro PLC continuously powered down | For units with serial number before 07000069274 | For units with serial number after 07000069274 |
| | 13 months minimum at 70 °C 30 months minimum at 20 °C | 19 months minimum at 70 °C 121 months minimum at 20 °C |

CPU Battery Consumption Data

| | Battery Consumption Per hour (Micro with a serial number before 07000069274) | Battery Consumption Per hour (Micro with a serial number after 07000069274) |
|-----------|--|---|
| Power ON | 30 micro Amps | 3 micro Amps |
| Power OFF | 83 micro Amps @ 70C | 56 micro Amps @ 70C |
| | 36 micro Amps @ 20C | 9 micro Amps @ 20C |

Installing the Battery

The battery installs in the front of the Micro PLC as shown below.



Important: Be sure that power to the Micro PLC is turned off before installing or replacing the battery.

1. Remove the battery compartment door.
2. Insert the battery plug into the connector at the bottom of the battery compartment.
3. Press it in until it clicks. Do not force the connection – the plug is keyed to prevent accidentally installing the battery in a reverse polarity.
4. Tuck in the wires and snap the battery holder on to the VersaMax Micro.

Caution

Battery may explode if mistreated.

Do not recharge, disassemble, heat above 100 deg.C (212 deg.F) or incinerate.

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Material Safety Datasheet

This information may be used to comply with OSHA Hazard Communication Standard, 29 CFR 1950. 1200. Standard must be consulted for specific requirements. The information below is a reproduction of the material safety data sheet provided by the battery vendor.

| | | | |
|---|--|----------------------|---------------------|
| Battery Type: Lithium Thionyl Chloride battery | | | |
| Manufacturer | | | |
| Hitachi Maxell, Ltd. | | | |
| Address: 5 Takumidai Ono-shi, Hyogo 675-1322, Japan | Emergency Telephone Number: 0794-63-8051 | | |
| | Telephone Number for Information: 0794-63-8054 | | |
| | Date Prepared: March 27, 2002 | | |
| Hazardous Ingredients / Identity Information | | | |
| <i>Hazardous Component</i> | % | | |
| Thionyl Chloride (SOCl ₂) | 35 wt% | | |
| Lithium Tetrachloroaluminate (LiAlCl ₄) | 5 wt % | | |
| Lithium (Li) | 3 wt % | | |
| Physical / Chemical Characteristics | | | |
| Boiling Point: n/a | Specific Gravity H ₂ O = 1): n/a | | |
| Vapor Pressure (mm Hg.): n/a | Melting Point: n/a | | |
| Vapor Density (Air = 1): n/a | Evaporation Rate (Butyl Acetate = 1): n/a | | |
| Solubility in Water: n/a | | | |
| Appearance and Odor: n/a | | | |
| Fire and Explosion Hazard Data | | | |
| Flash Point (method used): n/a | Flammable Limits: n/a | | |
| Extinguishing media: Extinguisher of alkaline metal fire | | | |
| Special Fire Fighting Procedures: No water | | | |
| Unusual Fire and Explosion Hazards: Release of SO ₂ , H ₂ , and HCl if opened | | | |
| Reactivity Data | | | |
| Stability: Stable | Conditions to Avoid: | | |
| Incompatibility (materials to avoid): Internal contents with water | | | |
| Hazardous decomposition or byproducts: SO ₂ , H ₂ , HCl | | | |
| Hazardous Polymerization: Will not occur | Conditions to Avoid: Exposure to internal materials | | |
| Health Hazard Data | | | |
| Routes of Entry : n/a | Inhalation: Yes | Skin: Yes | Ingestion: Yes |
| Health Hazards (acute and chronic): Corrosive liquid causes burns harmful if inhaled | | | |
| Carcinogenicity: n/a | NTP: n/a | IARC Monographs: n/a | OSHA Regulated: n/a |
| Signs and Symptoms of Exposure: n/a | | | |
| Medical Conditions Generally Aggravated by Exposure: n/a | | | |
| Precautions for Safe Handling and Use | | | |
| Steps to be taken in case material is released or spilled | Get full protective equipment. Put on acid-resistant gloves, goggles and coveralls. Nitrile rubber gloves and coveralls made with Nitrile rubber impregnated fabric would be recommended. Wear acid-resistant gas mask or a gas mask with acid gas cartridge. Use large container filled with oil, vermiculite or soda ash (Na ₂ CO ₃) to contain battery chemicals. Ventilate the contaminated area. | | |
| Waste Disposal Method | Bury in landfill in accordance with appropriate federal, state, and local regulations | | |
| Precautions to be taken in Handling and Storing | The following is specified by UL warning: Fire, Explosion, and Severe Burn Hazard. Do not Recharge, Disassemble, Heat above 212F, Incinerate, or Expose Contents to Water. | | |
| Other Precautions | Technician Only Replaceable | | |
| Control Measures | | | |
| Respiratory Protection: n/a | | | |
| Ventilation | Local Exhaust: n/a | Special: n/a | |
| | Mechanical (general): n/a | Other: n/a | |
| Protective Gloves: n/a | Eye Protection: n/a | | |
| Other Protective Clothing or Equipment: n/a | Work/Hygenic Practices | | |