

40A DC UPS Battery Controller

Catalog Number - ICO-PSUPS40

General Description

This is a Din-rail mounted uninterruptable power supply suitable for installation with SoftPLC Hardbooks, Web Studio HMI's, I/O, and Gatecraft products.

A UPS is strongly recommended for SoftPLC Systems not only for power protection, but also where power-loss conditions require safe shut-down. A UPS also allows the SoftPLC CPU to automatically save logic modifications and start-up where it left off when power is resumed (retentive memory.)



Features

- ◆ Parallel connections to DC BUS
- ◆ Suitable for 24V systems up to 40A
- ◆ Can be installed on DIN Rail TS-35/7.5 or 15
- ◆ Built in battery test function
- ◆ Battery polarity protection
- ◆ Relay contact signal output and LED indicator for DC BUS OK, Battery Fail, and Battery Discharge
- ◆ Cooling by free air convection

General

- ◆ **MTBF:** 161.9K hrs. min
MIL-HDBK-217F (25°C)
- ◆ **Dimensions (WxHxD):**
55.5x125.2x100mm
- ◆ **Packing:**
0.55Kg; 20pcs/12Kg/1.1CUFT

Safety & EMC

- ◆ **Withstand Voltage: Terminal-Chassis**
0.5K VAC
- ◆ **Withstand Voltage Relay Contacts-Terminal:**
0.5K VAC
- ◆ **Isolation Resistance Terminal-Chassis:**
>100M Ohms/500VDC 25°C, 70% RH
- ◆ **EMI Conduction & Radiation:**
Compliance to EN55022 (CISPR22)
Class B
- ◆ **EMI Immunity:** Compliance to
EN61000-4-2, 3, 4, 5, 6, 8, ENV50204,
heavy industrial level, criteria A

Environment

- ◆ **Working Temp:** -20 ~ +70°C
- ◆ **Working Humidity:** 20 ~ 90%RH
- ◆ **Storage Temp:** -20 ~ +85°C
- ◆ **Storage Humidity:** 10 ~ 95 RH
- ◆ **Component Vibration:**
10 ~ 500Hz, 2G 10min./1cycle, 60min.
each along X, Y, Z axes
- ◆ **Mounting Vibration:**
Compliance to IEC60068-2-6

Specifications

DC Input / DC BUS

DC Voltage (Typ.)	24 ~ 29V	Rated Current	40A
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Battery Input / Output

Voltage Range	21 ~ 29V	Current Range	0 ~ 40A
Charge Current (Typ.)	0 ~ 6A 2A 30W		
External Battery (Typ.)	80mVp-pUse (2) SoftPLC Cat. No. ICO-PSBP412		

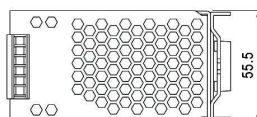
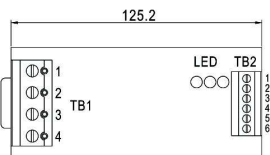
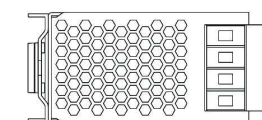
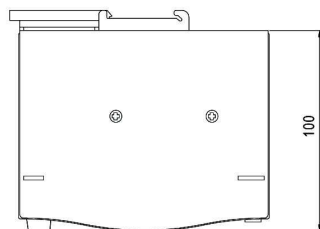
Relay Control Function

Relay Contacts Rating (max.)	30VDC, 1A		
DC BUS OK LED Green	Short when DC voltage is between 21~29V ($\pm 3\%$)		
	ON = DC BUS OK OFF = DC BUS Fail		
Battery Fail ² LED Red	Short when battery failure is observed through the battery test functions		
	ON = Battery over-discharge warning or battery broken OFF = Battery OK		
Battery Discharge LED Yellow	Short when battery is discharge condition		
	ON = Battery discharging OFF = Battery NOT discharging or discharging current , <2.0A		

NOTES:

1. All parameters NOT specifically mentioned are measured at rated load and 25°C of ambient temperature.
2. Every 25 seconds, unit will send out test signal through "Battery Fail" relay contact and LED indicator once the battery is fail.

■ Mechanical Specification Unit:mm



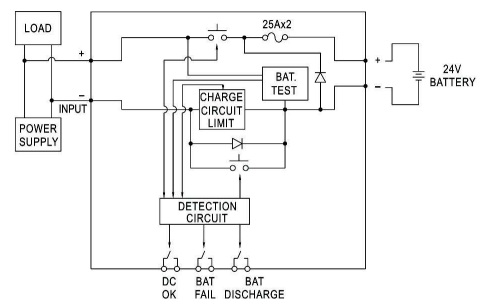
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	BATTERY INPUT +
2	BATTERY INPUT -
3	DC INPUT -
4	DC INPUT +

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1	BAT DISC 1
2	BAT DISC 2
3	BAT FAIL 1
4	BAT FAIL 2
5	DC OK 1
6	DC OK 2

■ Block Diagram



■ Derating Curve

