SCS HYBRID

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SCS HYBRID

This presentation describes a My Home implementation for automation and alarm systems that are powered by batteries charged using solar cells and power supplies only when needed. The charge condition of the batteries are constantly monitored by dedicated solar charge controllers to guarantee operation of the SCS bus during long black out times and periods of poor sun exposure. The alarm system (3500 GSM) records the alarm power supply change of status. An hour meter counts the time the automation power supply is on.

SCS HYBRID ?

Powered by:

- AC Electricity
  (Managed by battery regulators)

- DC Battery
  (Charged by Solar Cells on sunny days and power supplies when needed)

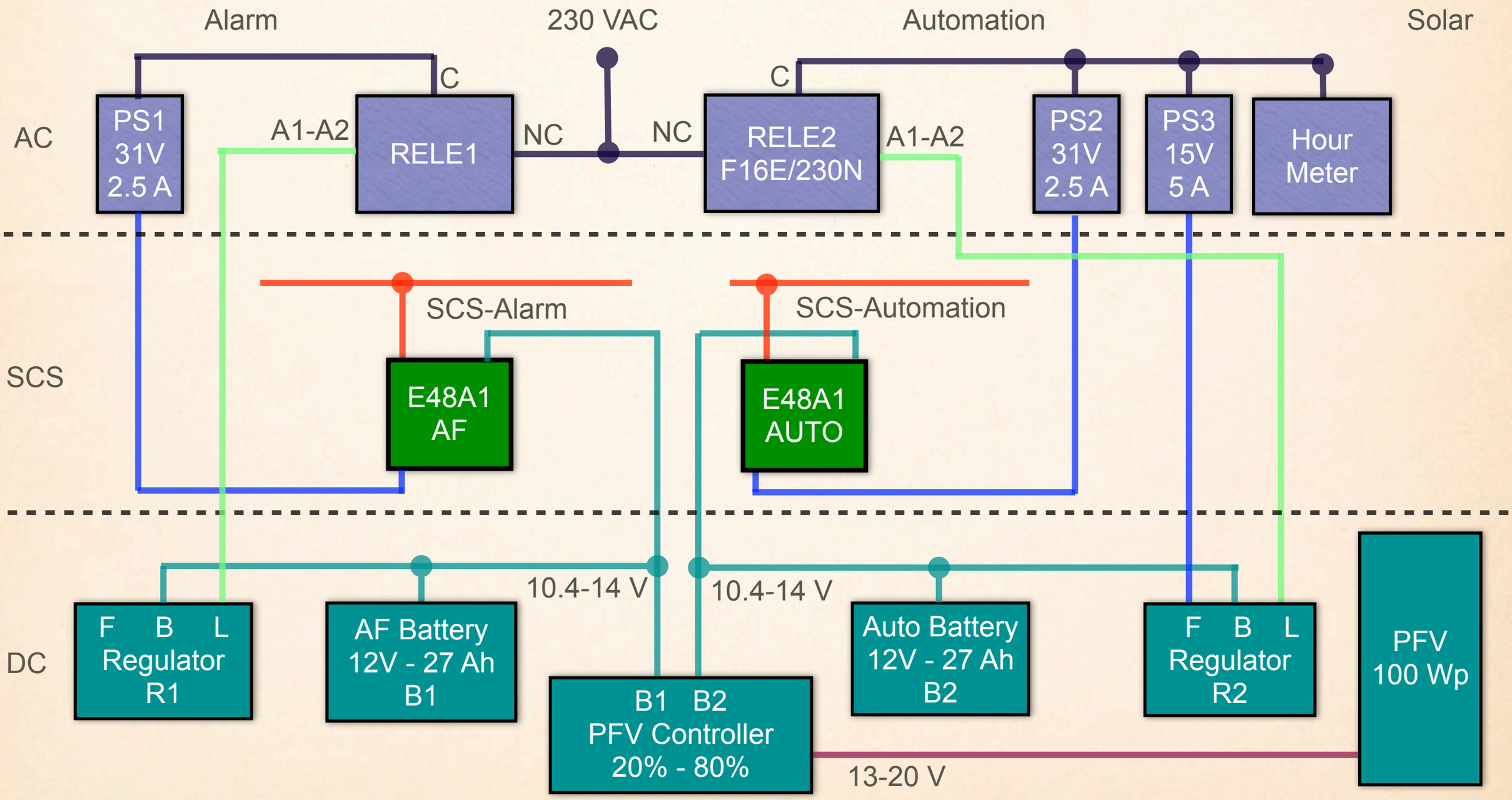
SCS HYBRID

VAC: 230 V Power Supplies, Relays

SCS: 28 VDC Security, Automation, Sensors

VDC: 12VDC Solar Cells Panel & Battery Regulators

SCS HYBRID



CHARGING PRIORITY

- Alarm System
  Current 200 mA (15% of total current)

- Automation System
  Current 1.3 A (85% of total current)

- Priority #1, 10% for battery_1 and 90% for battery_2

- Priority #2, 20% for battery_1 and 80% for battery_2

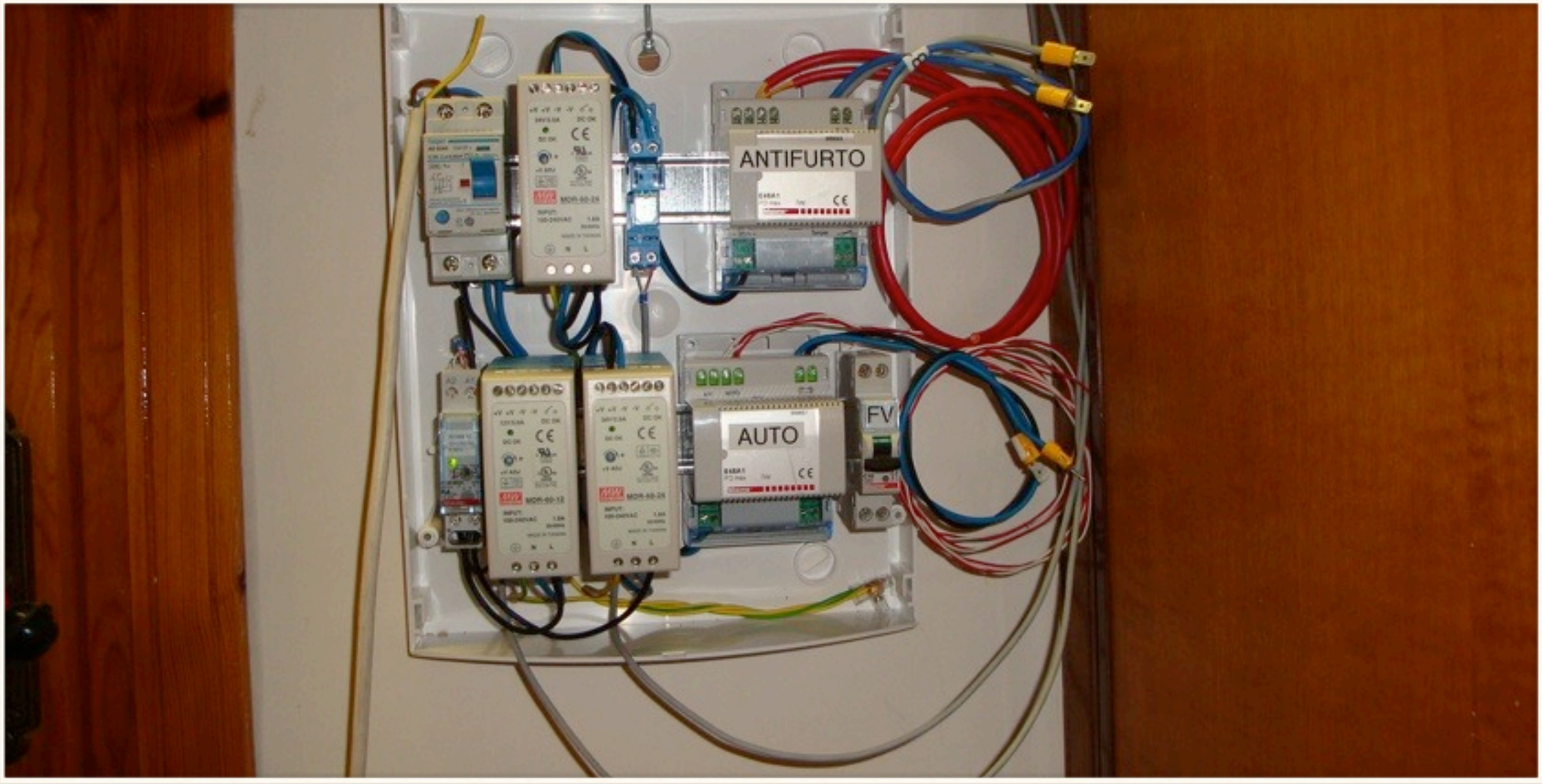
REGULATORS & RELAYS

- Relay Closed (Normally Closed Contact)
  It turns ON the power supplies when battery voltages are low
  (Battery Voltage < 10.5 VDC)

- Relay Open (Normally Closed Contact)
  Il turns OFF the power supplies when battery are charged
  (Battery Voltage > 12.6 VDC)

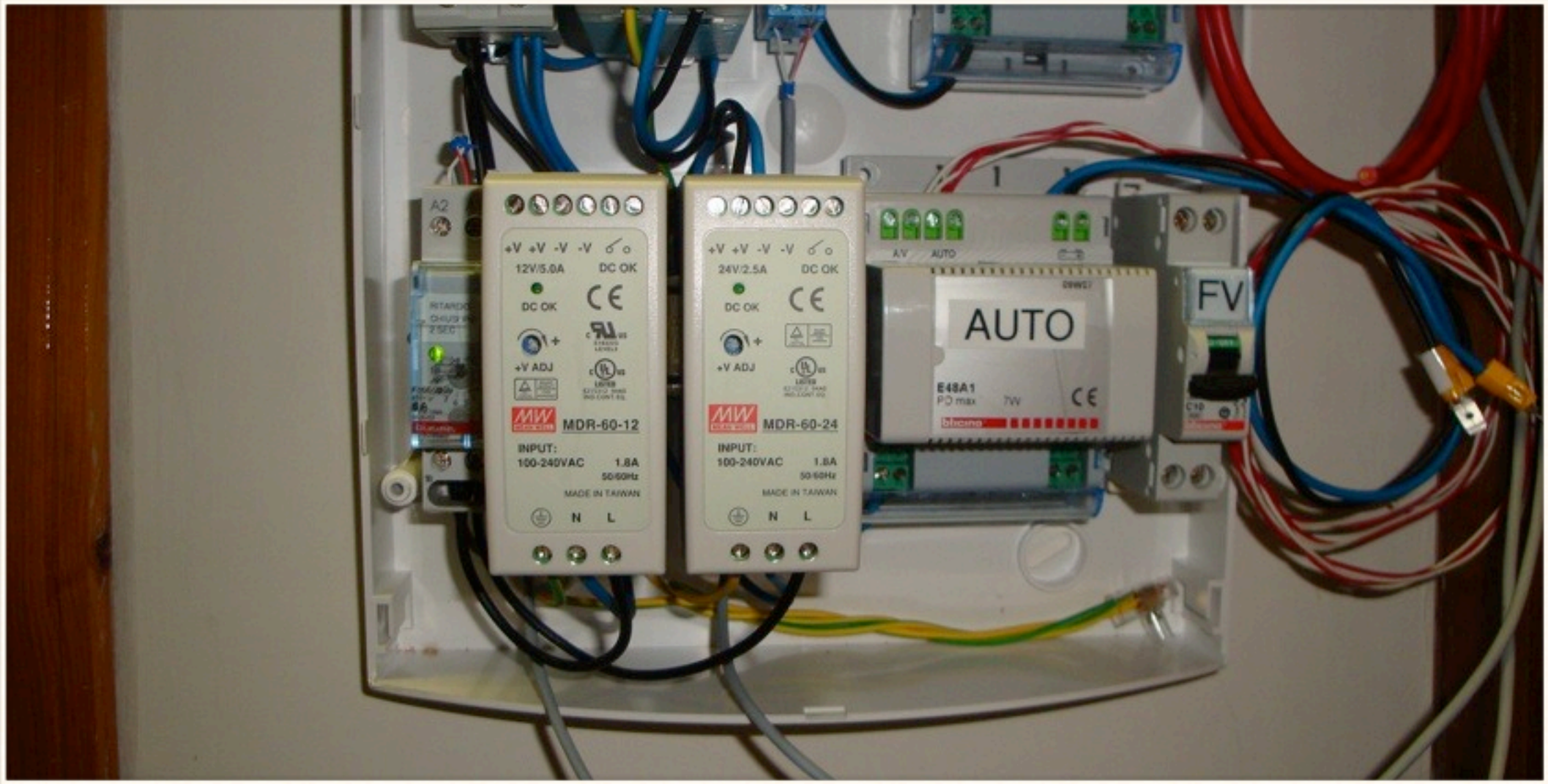
HYBRID IMPLEMENTATION

Power Supplies, Relays, and Accessories (E48A1)



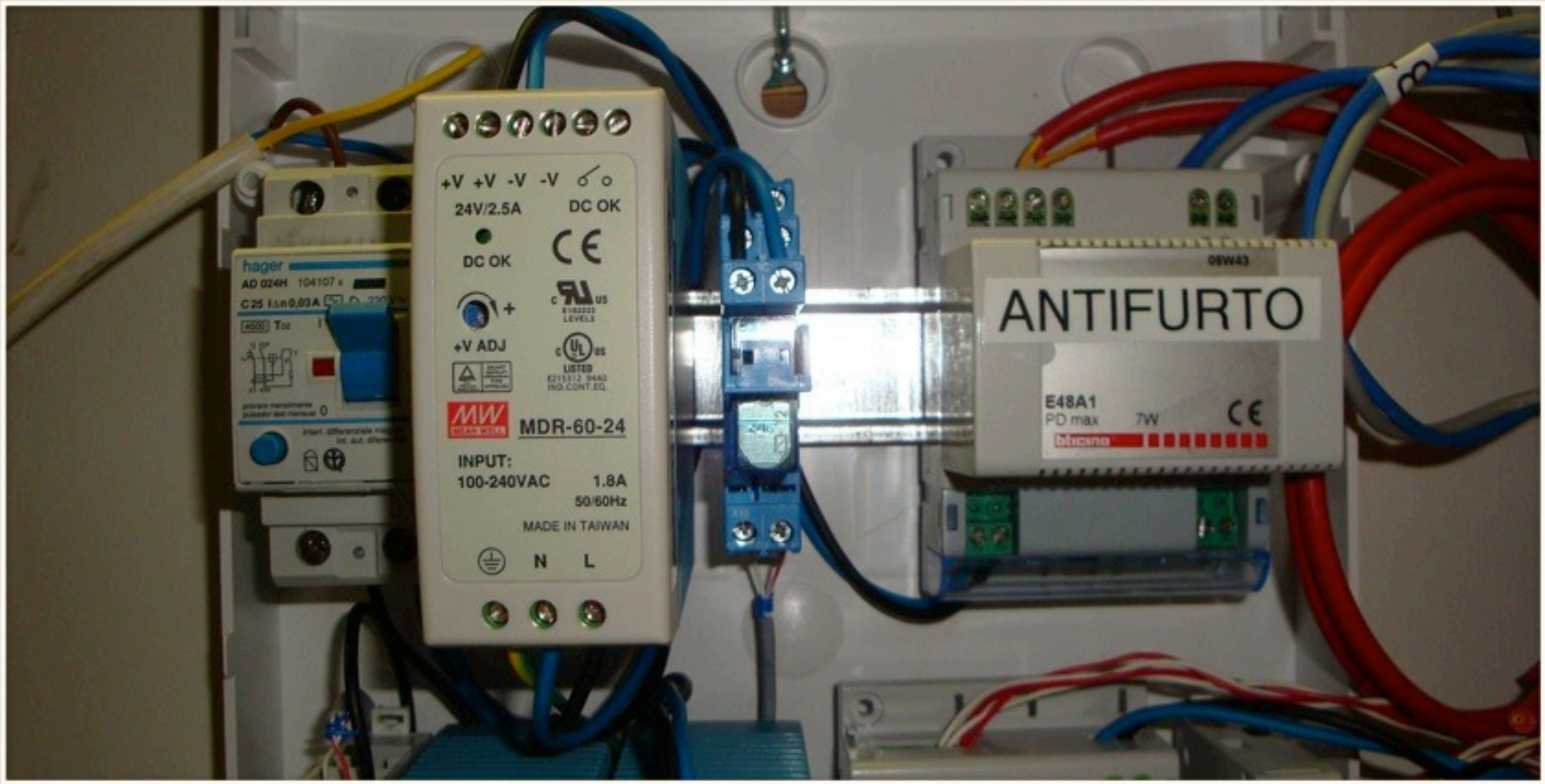
SCS POWER SUPPLIES

SCS-Automation Power Supply



SCS POWER SUPPLIES

SCS-Alarm Power Supply



SCS HYBRID V3.1

SCS Poer Supplies & Solar Charge Controllers

POWER SUPPLIES

BATTERIES REGULATORS

Solar Charge Controllers