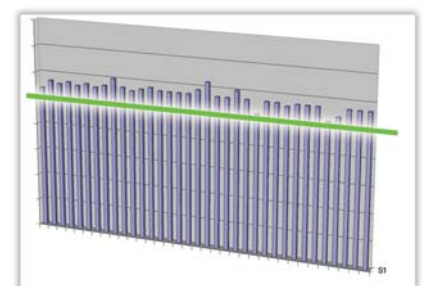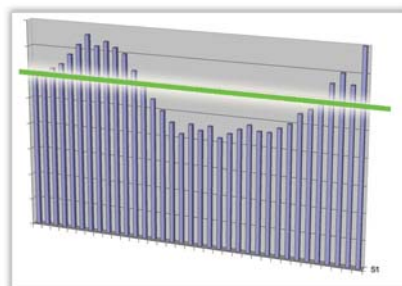## GENERAL DESCRIPTION

REVO PC was designed specifically to manage multizone systems. This powerful unit, with its unique algorithm,will minimize your energy costs by controlling sychronization and power limit of each zone. Benefits include:

- Each loop's process information is managed independently.
    - Calculation of instant current and RMS Voltage, Current and Power.
    - Calculation of load resistance with Heater Break Alarm.
    - Modbus Master, Modbus slave, Profilbus DP, Modbus/TCP, Can-Open

- Elimination of power overshoot (see graph below).

- Power factor close to one due to zero crossing firing.

- **REVO-PC** keeps your instantaneous power within the limit of your electricity supply contract.

- Prevents increases in energy supply tariffs imposed by your electricity supplier.

- Quick return on your investment.
  This powerful unit with high performance micro can drive simple thyristor unit Revo S with zero crossing firing.
  By using the REVO PC, simple thyristor units can be used reducing the overall financial investment.

- Simultaneous fast full wave control of
  8-16-24 REVO S - 1PH
  8-16-24 REVO S - 2PH/3PH for 3 phase loads
  8-16-24 REVO S - 2PH/3PH for 3 phase load with current calculation for each phase.

- Simultaneous fast full wave control of
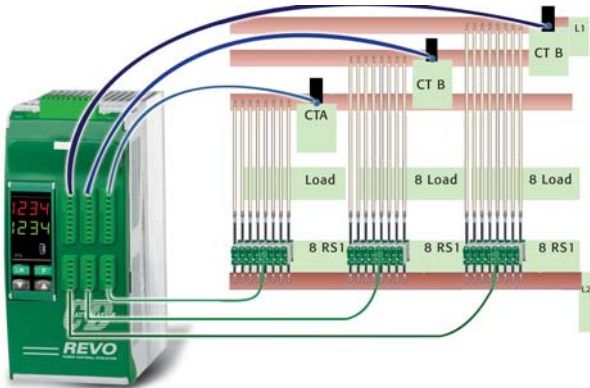 8-16-24 CD3000E-2PH; Multidrive-2PH
  8-16-24 CD3000E-3PH; Multidrive-3PH

	1	2	3	4	5		6	7	8	9	10	11	12	13	14	15	16
REVO-PC	R	P	C	_	_	-	_	_	_	0	0	0	0	0	0	0	0

4,5	Channels
Description code	**Numeric code**
8 Channels	0 8
16 Channels	1 6
24 Channels	2 4

6	Current Sensor
Description code	**Numeric code**
N. 1 CS 200 Amps	1
N. 2 CS 200 Amps	2
N. 3 CS 200 Amps	3
N. 1 CS 400 Amps	4
N. 2 CS 400 Amps	5
N. 3 CS 400 Amps	6
N. 1 CS 600 Amps	7
N. 2 CS 600 Amps	8
N. 3 CS 600 Amps	9

7	Communication
Description code	**Numeric code**
Ethernet	1
ModBus Slave	2
ModBus Master	3
Profibus	4
Profinet	5
CANopen	6
EtherCAT	7

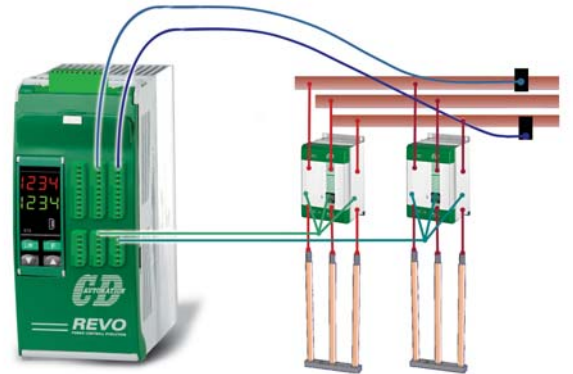| 8	Transformer
Description code	**Numeric code**
Transformer 24V	1

OPTION'S FEATURES AND SPECIAL DETAILS

EASY TO START REVO-PC

APPLICATION WITH 8, 16 OR 24 SINGLE PHASE LOADS

APPLICATION WITH 8, 16 OR 24 THREE-PHASE LOADS

- Set the operative current of the heater zone.
- Set the Total Power Limit.
- Set the Power of each zone

The REVO-PC strategy is easy to implement. Do the same operation with a competitor's load management system and the operator must learn up to 15 pages of the manual and understand up to five models of synchronization.

SYNCHRONIZATION

On all controlled zones, the Live Predictive Synchronization is automatic resulting in superior performance:

- Total current is equal to a sinusoidal wave form.
- Power factor > 0,9.
- Instantaneous current close to average value.
- Cancellation of harmonics.
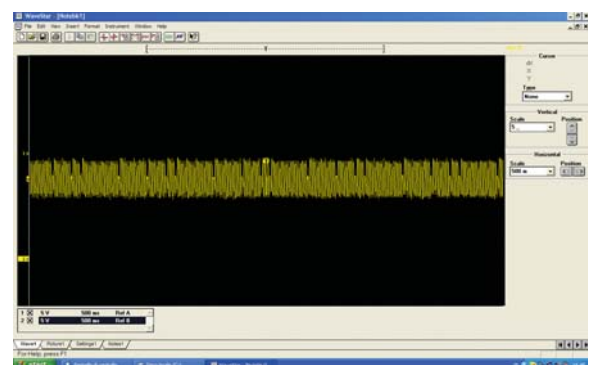- Power saving by harmonic reduction.
- Flickering effect removed.

Synchronization selection is available for normal resistive loads or short infrared.
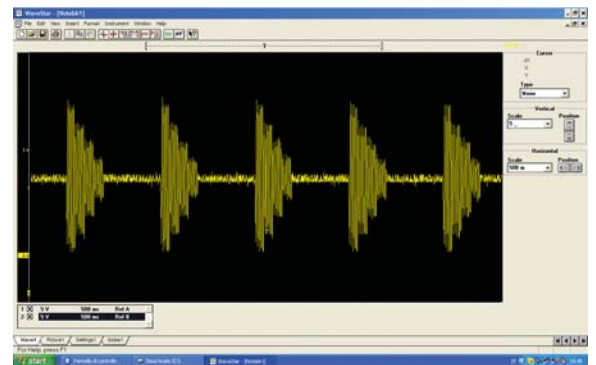
WITHOUT POWER CONTROL OPTIMISATION

SMART POWER LIMITATION

- Smart power limitation works together with synchronization. If this function is enabled, REVO-PC makes a live calculation of power at each period and generates the output values for the next period.

- If the calculated power is below the power limit value, the previous values remain with each channel using full power.

- If the power is above the power limit value, the setpoint of each channel is reduced proportionally to restrict power overshoot. This function significantly reduces disturbances on the main network compared to a full power system, preventing any increase in energy tariffs imposed by the electricity supplier.

- This function can be activated/deactivated and the limit value changed at any time.

WITH POWER CONTROL OPTIMISATION