

# DEDICATED TO OWNERS AND MANAGING DIRECTORS...



## REVO TC

### CONTROL AND POWER IN ONE UNIT

Controller + Solid State Relay + Fuse & Fuse Holder = REVO TC

- The most compact Integrated Solution
- Temperature Controller with 4 Outputs and PID
- Designed for field-bus systems
- CE approved
- Significant reduction in wiring time

..buy **REVO TC** and you save money and space

### New **REVO TC** SSR + Temperature Controller

#### The Most Compact

- Integrated solution
- Temperature controller with 4 Output and PID
- Fuse & Fuse holder
- Solid state relay
- Current Transformer
- Single loop Integrity
- Dramatic reduction for wiring using multiple cable with connector
- Reduction of use space saving cabinet cost





# REVO TC family

The new REVO TC is an integrated solution that offers the following advantages:

- **Wiring & Labour Savings**  
An immediate cost saving in reduced labour of 2 hours by not connecting 11 wires per zone  
Each wire takes 11 mins when considering the following:
  - Schematic reading and understanding.
  - Distance and path measuring.
  - Wire cutting.
  - Wire strapping.
  - Wire labelling on two terminations.
  - Wire crimping.
  - Terminals block wiring.
  - Panel drilling.

Plus the actual material cost of 11 wires.

How much is the cost of one labour hour plus over-heads in your company?

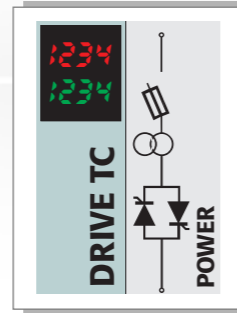
How many control zones do you use in one year?

Make your calculation and see how much you save in one year  
Is there really a decision to be made!

- A smaller system solution means less cabinet space required both on the front cabinet area and internally. Again you save money.
- Take the advantage of the single loop integrity, high fault tolerability and very easy maintenance.

## REVO TC 1PH-35-40A

- This integrated solution includes all you need for a complete control zone at 240-480-600V AC to drive a single phase load.
- Fuse & fuse holder.
- Solid state relay.
- Current transformer.
- Heater Break Alarm.
- Temperature Controller.



## REVO TC 2PH-30-35-40A

- This integrated solution includes all you need for a complete control zone at 480-600V AC to drive a three phase load in delta and star without neutral connection.
- 2 Off Fuse & fuse holder.
- 2 Off Solid state relay.
- 2 Off Current transformers.
- 1 Off Heater Break Alarm.
- 1 Off Temperature Controller.



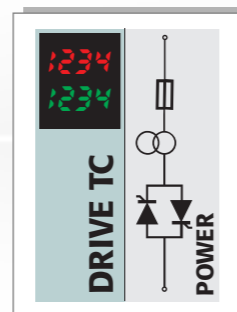
## REVO TC 3PH-30-35-40A

- This integrated solution includes all you need for a complete control zone at 480-600V AC to drive a three phase load in delta and star with neutral connection.
- 3 Off Fuse & fuse holder.
- 3 Off Solid state relay.
- 3 Off Current transformers.
- 1 Off Heater Break Alarm.
- 1 Off Temperature Controller.



## REVO TC 1PH-60-90-120-150-180-210A

- This integrated solution includes all you need for a complete control zone at 240-480-600V AC to drive a single phase load.
- Internal fixed fuse.
- Solid state relay.
- Current transformer.
- Heater Break Alarm.
- Temperature Controller.



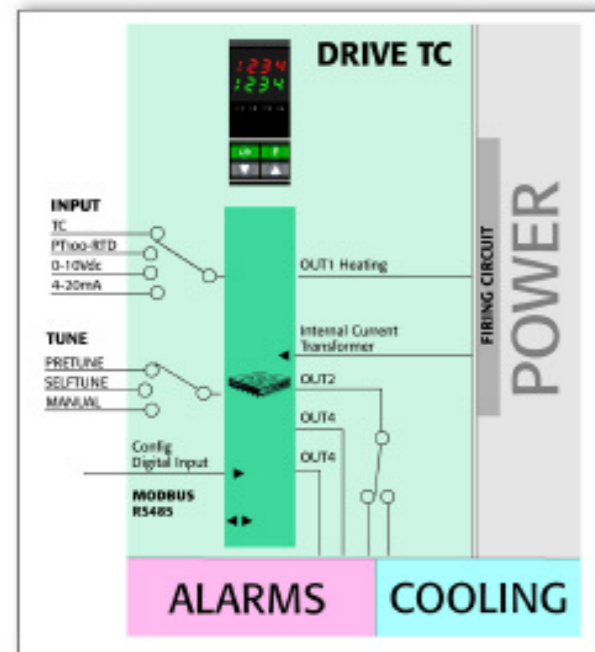
## REVO TC 2PH-60-90-120-150-180-210A

- This integrated solution includes all you need for a complete control zone at 480-600V AC to drive a three phase load in delta and star without neutral connection.
- 2 Off Internal fixed Fuses.
- 2 Off Solid state relay.
- 2 Off Current transformers.
- 1 Off Heater Break Alarm.
- 1 Off Temperature Controller.



## REVO TC 3PH-60-90-120-150-180-210A

- This integrated solution includes all you need for a complete control zone at 480-600V AC to drive a three phase load in delta and star with neutral connection.
- 3 Off Internal fixed Fuses.
- 3 Off Solid state relay.
- 3 Off Current transformers.
- 1 Off Heater Break Alarm.
- 1 Off Temperature Controller.





# REVO TC philosophy



- Labour for wiring reduced dramatically using multiple cable with connector.
- Reduction of used space, saving cabinet cost.
- Single loop integrity with easy local identification of the faulty zone.
- REVO TC up to 40A is normally used for plastics machinery.
- REVO TC over 60A in one, two and three phase versions is normally used in Furnaces.

## PID temperature controller with Pre Tune, Self Tune and Manual tuning

- 3 Off PID pallets to be enabled at programmed temperature.
- RS485 communication from 19200 to 57600 Baud Modbus RTU protocol.
- Dual Display to read PV, Set Point and load current.
- Auto/Manual bump less balances .
- Universal input for Thermocouples, RTD and linear Signal.
- Four configurable outputs Relay, SSR, 4:20mA and 0:10V.
- Cooling Output selection for Water, Oil or Ventilation.
- Programming port USB with CD Automation programming cable.



## REVO Thyristor unit

- The temperature controller can be connected with different sized REVO Thyristor units.
- If using SSR output from the controller use REVO S family.
- If using Analogue output from the controller use REVO M family.



## REVO TU Module

The REVO TU is a termination unit with the following capabilities:

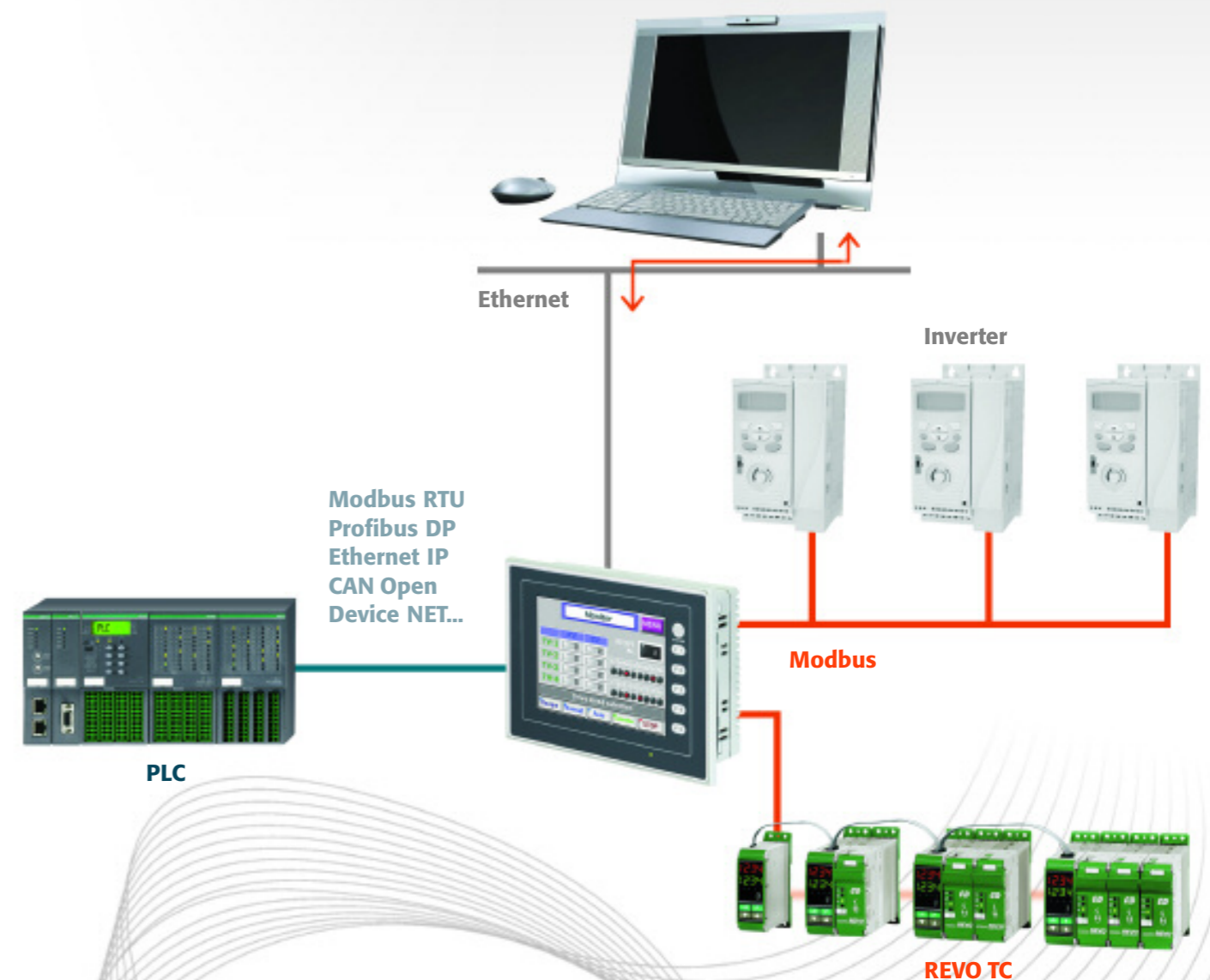
- Provides the power supply & RS485 comms (Modbus RTU) for up to a max. 14 REVO TC units
- Collects alarm & digital input status from all connected REVO TC units.
- Can switch on all REVO TC units at the same time using the internal Clock-Relay (date & time), ideal for a pre-heat warm-up function.



## TU-PB Gateway RS485 to ProfibusDP

TU PB is a Gateway able to connect Profibus DP Masters (Multiloop, PLC, DCS) to max 30 REVO TC. For more information see the documentation available on [www.cdautomation.com](http://www.cdautomation.com)

# System Architecture with REVO TC



## OPERATOR INTERFACES

### Monitouch

CD Automation offers a wide range of touch panels from 5 to 15".

Each panel size has the option of different application software:

- Managing temperature control.
- Profiling temperature control.
- Thermoforming and more.
- Datalogger.

All panels can be used as a gateway between different bus systems, for example: Modbus, Profibus DP, CanOPEN, Modbus TCP / Ethernet. Specific models also support memory cards & a USB port for external memory & printer.





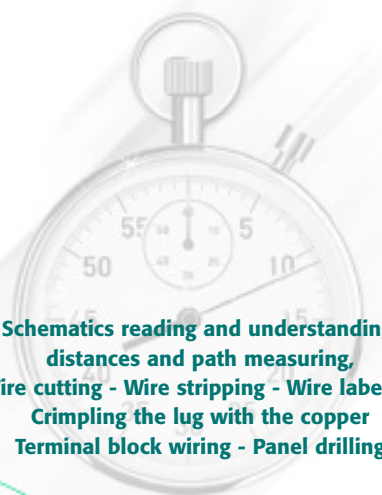
# The Wireless System REVO TC

Compare the new REVO TC to a traditional system and you save:

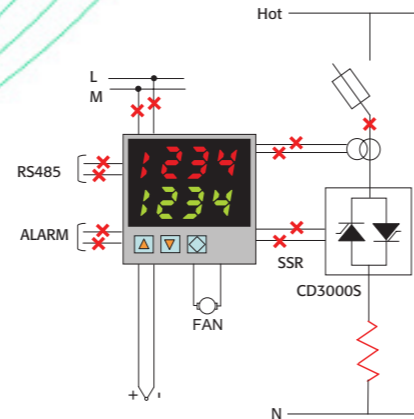
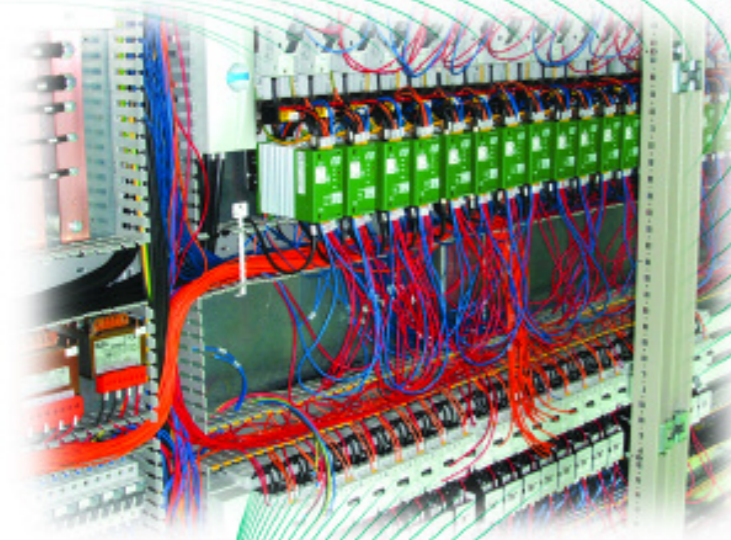
- 11 wires for each zone.
- Each zone takes 11 minutes (see the diagram).
- For each zone you save 11 wires x 11 minutes = 121 minutes in total.
- If you use discrete controllers you also avoid the panel cutting/drilling. That's another 15 minutes per controller.

That's a total time saved of 136 minutes for zone.

**So how many zones/loops do you sell in one year?**



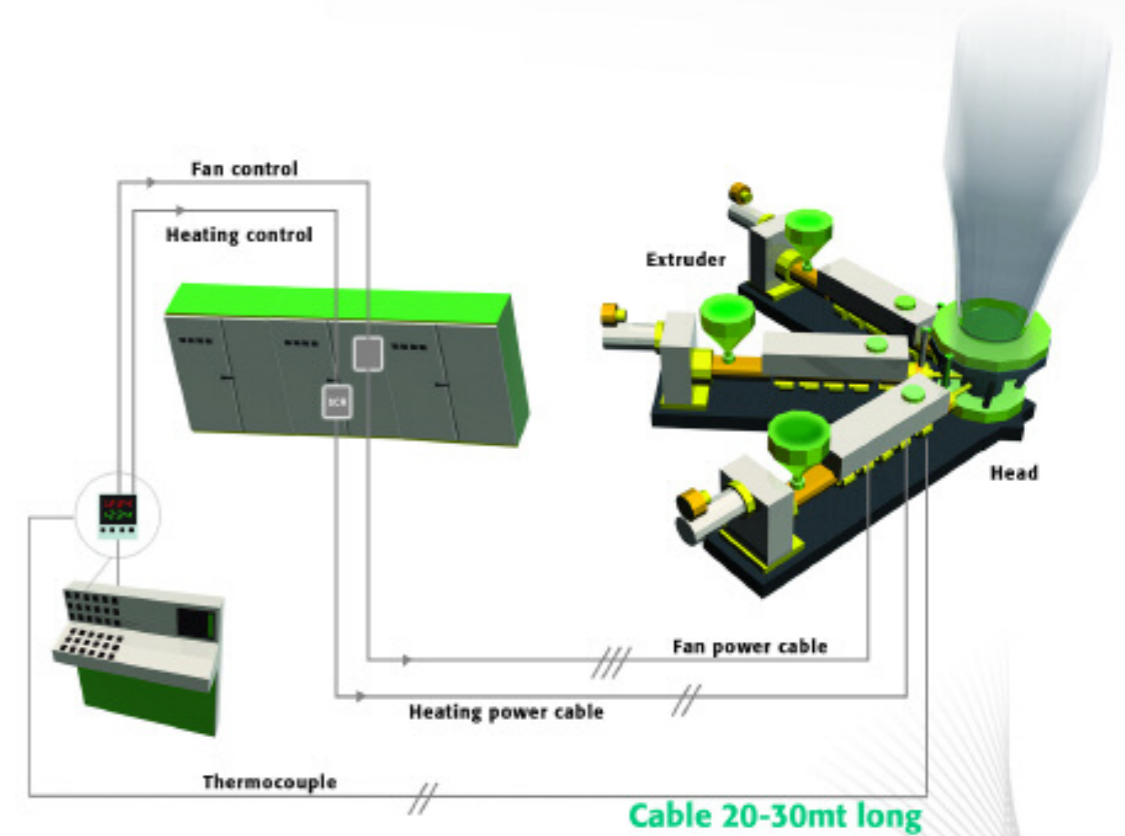
**Schematics reading and understanding,  
distances and path measuring,  
Wire cutting - Wire stripping - Wire labeling  
Crimping the lug with the copper  
Terminal block wiring - Panel drilling**



# Revo TC System

## Traditional system

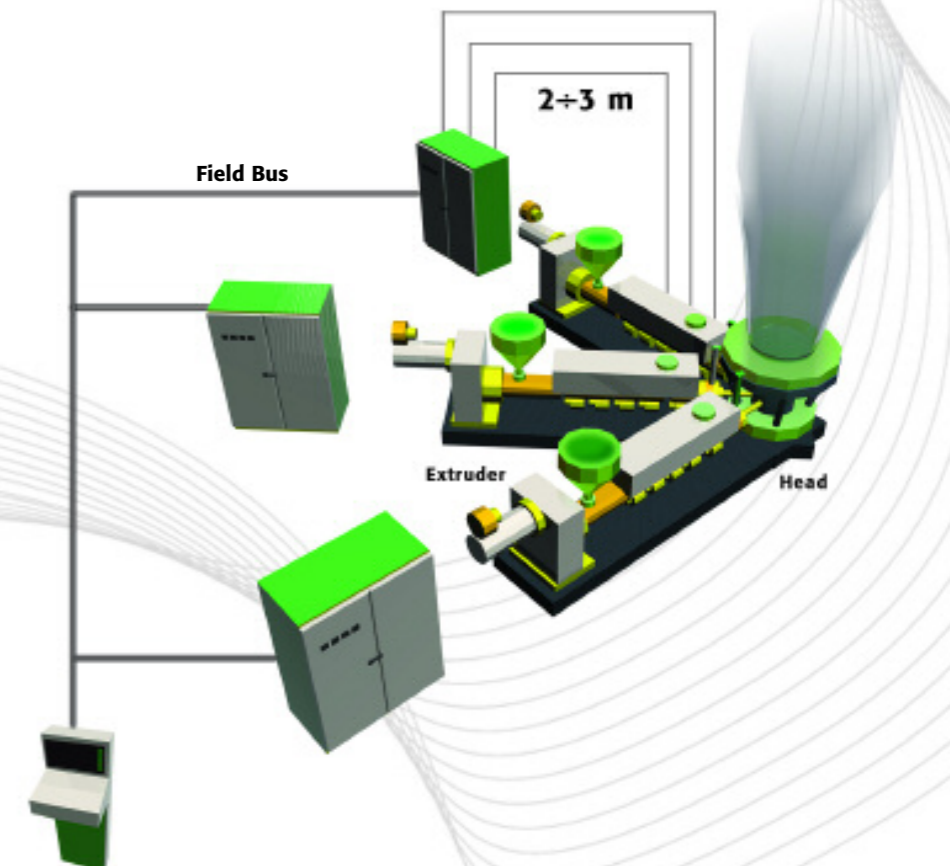
Today many machines adopt the traditional system layout as shown below:



## REVO TC System

As can be seen, the new REVO TC distributed hardware solution, will give crucial saving such as:

- Number of wires (cable and labour cost).
- Errors in wiring the machine.
- No wire channels.
- Cable length reduced by 80%.
- Cabinet's space reduced. Consider that each cabinet section saves 500Euro.
- The cabinet space used is a key factor. If the space of components used is doubled then the cabinet size is doubled.



**TRADITIONAL SYSTEM**



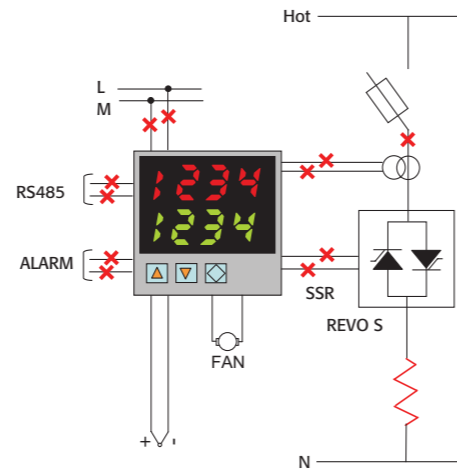
**SAME SYSTEM REVO TC**



# REVO TC CONTROLLER + THYRISTOR



SIZE SR9



## Technical Specification

- **Dimensions:** SR9 / SR10 / SR11/ SR15 / SR16 / SR17 See size at page 10-11 and dimensions at page 12-13
- **Load type:** Normal resistance with one or three phase loads
- **Inputs:** Thermocouple, PT100, 0:10V, 4:20mA
- **Firing mode:** Zero Crossing
- **Operating temperature:** 40°C without derating
- **Control mode:** PID temperature controller
- **Two output std and configurable. Output 3 see code. Output 4 Std No relay contact.**
- **RS485 port. RTU Modbus Protocol**
- **Comply with EMC and cUL (Pending)**
- **Data sheet:** More details on "REVO TC" bulletin

## Option

HB Heater Break Alarm including internal current transformer

REVO TC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>3</b> Phase Controlled	R	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>4,5,6</b> Phase Current 1PH/2PH/3PH																
<b>7</b> Max Voltage																
<b>8</b> Aux. Voltage supply																
<b>9</b> Input																
<b>10</b> Output 2																
<b>11</b> Output 3																
<b>12</b> Fuse & Option																
<b>13</b> Fan Option																
<b>14</b> Approvals																
<b>15</b> Manual																
<b>16</b> Version																

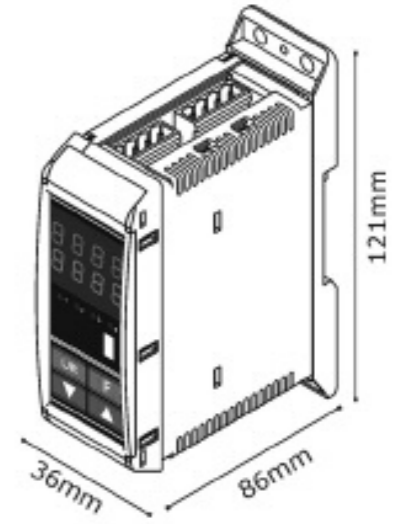
**LEGEND**  
 CT = Current Transformer  
 HB = Heater Break Alarm

- Note (1): Fixed fuses over 40A
- Note (2): The temperature controller can be mounted as an option on all CD automation Thyristor unit
- Note (3): Available on 2 - 3PH only
- Note (4): Available on RT1 only

# TCM TEMPERATURE CONTROLLER



SIZE SR11



## Technical Specification

- PID Temperature controller
- Automatic Tuning of PID parameters with Self Tune or Pretune procedure
- Manual setting when requested of PID parameters
- Three pallets of PID parameters can be enabled at programmed PV value
- Dual Display to read PV,Set Point ,Load current and all parameters
- Universal input for Thermocouple ,RTD and linear input
- Four configurable outputs as Relay,SSR,and 4:20mA
- Heating and Cooling controller with possibility to select the type of cooling for fan, water and oil
- RS485 communication from 19200 to 57600 Bauds Modbus RTU protocol
- The controller can be configured from front push button or via RS485 comm. or via USB port on front controller using CD Automation programming cable
- Auto/Manual with Bumpless Transfer facility
- Screw terminals as standard
- DIN rail mounting
- Dimensions Width: 36 Height: 121 Depth: 86

## Option

Flat cable and connectors for multiple controller system

TCM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>4</b> Input	T	C	M	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>5</b> Output 1 Main Control																
<b>6</b> Output 2 PID cooling or Alarm																
<b>7</b> Output 3																
<b>8</b> Output 4																
<b>9</b> Communication																
<b>10</b> Wiring System																
<b>11</b> Options																
<b>12</b> Auxiliary Voltage																
<b>13</b> Approvals																
<b>14</b> Manual																
<b>15</b> Version																

# REVO-PC

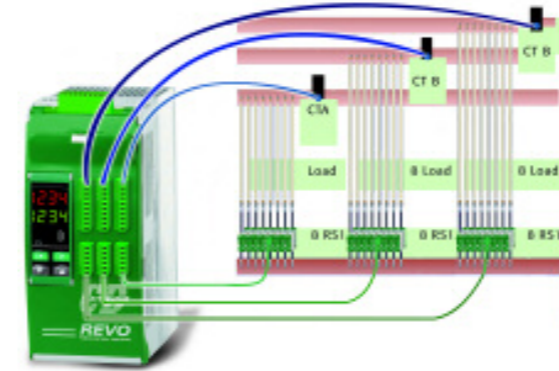
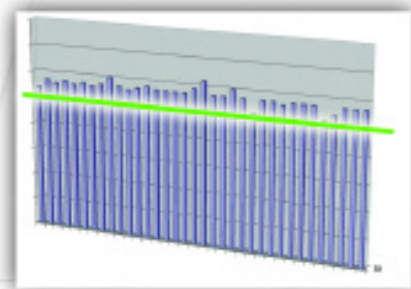
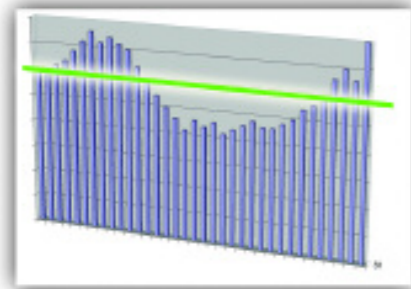
EVOLUTION IN POWER CONTROL

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

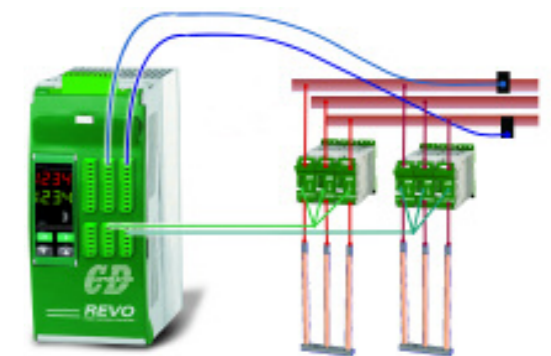
- Elimination of power overshoot (see graph below).
- Power factor close to one due to zero crossing firing.
- REVO-PC keeps your instantaneous power within the limit of your electricity supply contract.
- Prevents increases in energy supply tariffs imposed by your electricity supplier.
- Quick return on your investment.

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

- Simultaneous fast full wave control of
  - 8-16-24 REVO S - 1PH single phase units
  - 8 REVO S - 2PH/3PH for 3 phase loads
- Each loop's process information is managed independently.
  - Calculation of instant current and RMS Current and Power.
  - Calculation of load resistance with Heater Break Alarm.
  - Modbus Master, Modbus slave, Profibus DP, Modbus/TCP



APPLICATION WITH 8, 16 OR 24 SINGLE PHASE LOADS



APPLICATION WITH 8 THREE-PHASE LOADS

## Easy to start REVO-PC

Only few parameter are requested to start with REVO-PC:

- 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

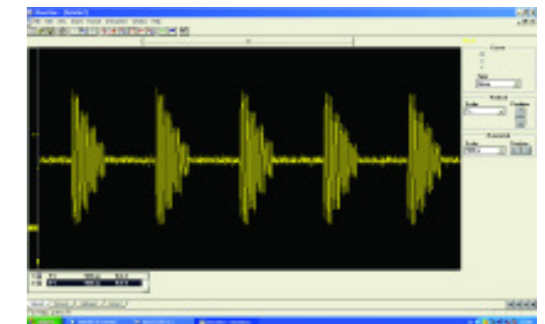
On all controlled zones, the Live Predictive Synchronization is automatic resulting in superior performance:

- 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.

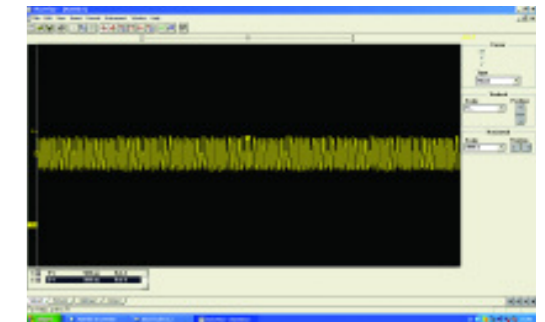
Synchronization selection is available for normal resistive loads or short infrared.

## 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.



WITHOUT POWER CONTROL OPTIMISATION



WITH POWER CONTROL OPTIMISATION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>REVO-PC</b>	R	P	C	-	-	-	-	-	-	-	-	-	-	0	0	0
<b>4,5 Channels</b>	<b>Description code</b>		<b>Numeric code</b>		<b>7 Communication</b>		<b>9 Firing</b>		<b>12 Manuals</b>							
	8 Channels (for 8 Off one phase unit)		0 8		Description code		Description code		Description code		Description code		Numeric code		Numeric code	
	16 Channels (for 16 Off one phase unit)		1 6		Ethernet		Half Cycle at 50% power demand		None		Italian Manual		1		0	
	24 Channels (for 24 Off one phase unit)		2 4		ModBus Slave		One Cycle at 50% power demand/ModBus		English Manual		German Manual		2		3	
	8 Channels for 2-3PH		3 8		ModBus Master				French Manual		French Manual		3		4	
					Profibus											
					Profinet											
<b>6 Current Sensor</b>	<b>Description code</b>		<b>Numeric code</b>		<b>8 Primary Voltage Aux. Transformer</b>		<b>10 Feed Back</b>		<b>11 Approvals</b>							
	50/0,05 A		1		Description code		Description code		Description code		Description code		Numeric code		Numeric code	
	100/0,05 A		2		Transformer 24V		No feed back		CE EMC		Version 1		1		1	
	150/0,005 A		3		90:130V		Power									
	200/0,05 A		4		170:265V											
	250/0,05A		5		230:345v											
	400/0,05A		6		300:530V											
	80070,05A		7		510:690V											
					600:760V											



# AUXILIARY UNITS



## CD-RS

Compact and smart communication converter. Input RS232. Output RS485 or 422. RS232 connection via a 9 pin connector on front of unit. RS485 or 422 via screw terminals. This converter can be used to interface a computer with CD Automation communicating Thyristor Units.

**Code:** CD-RS

For more informations see "CD-RS" bulletin



## FIELD BUS MODULES

**Code:** TU-RS485-PDP used to convert RS485 Modbus to Profibus DP

For more informations see "TU-RS485-PDP" bulletin

**Code:** TU-RS485-ETH used to convert RS485 Modbus to Ethernet

For more informations see "TU-RS485-ETH" bulletin



## CD KP-OPERATOR INTERFACE

The CD-KP is designed to be connected with CD 3000E and Multidrive via RS485 communications. The LED display will show Power, Voltage or Current values, all in engineering units. Any one of these variables can be selected and retransmitted via an isolated output (4-20mA or 0-10V). No need to open the cubicle door and stop the process, an RS485 connector on the front of the unit allows direct connection to a portable PC for easy configuration. In addition the display unit allows simple diagnostics of fault conditions.

For more informations see "CD-KP" bulletin



## HMI-KP OPERATOR INTERFACE

This unit is based on a monochrome touch panel and can be used to be interfaced up to 6 REVO Thyristor units. On front unit is possible to set or to read:

- Load Current in RMS value and Load Voltage
- Power delivered to the load and Power demand
- Digital input 1&2 Status
- SC = Short circuit on Thyristor
- HB = Partial or total load failure
- Local/Remot, Up/Down
- Trend of the selected variable Ex.Current Voltage
- Up Load and Down Load Thyristor unit configuration
- Language selection
- Dimensions : H=131 Width=174 Depth=44

More details on manual (see [www.cdautomation.com](http://www.cdautomation.com))



## CD EASY

This is a memory support tool that can be used by maintenance personnel on the shop floor. The user can copy the configuration of one Thyristor unit and paste it into another. The CD-EASY is very simple, with one push button to upload the configuration (Read) and another to download the stored configuration (Write). The CD-EASY can be used with CD 3000E and Multidrive Thyristor unit.

**Code:** CD-EASY



## INDICATORS

CD Automation have a range of indicators with or without RS485 communications and Modbus protocol

- CD1800** - a 48x96mm indicator 3 1/2 digit
- W 6100** - a 48x48mm indicator 4 digits with RS485 as option
- W 8010** - a 48x96mm indicator 4 digits with RS485 as option

Fully configurable microprocessor based indicators that can be connected to our Thyristor units.

**Code:** CD1800  
W6100  
W8010

For more informations are available bulletin for each type



## CONFIGURATION SOFTWARE

CD Automation Configurator Software is free of charge and can be downloaded from [www.cdautomation.com](http://www.cdautomation.com)

The thyristor unit leave the factory already configured but if is necessary to verify the configuration or to modify it is necessary to have the Configurator plus the Cable Kit.

**Code:** CCA cable + converter

There is one page very friendly named "Test Unit" from where without instruction is possible to communicate in intuitive mode.

Just clicking on what you need.

With CD-RS converter (see on left side) it's possible to communicate with the Thyristor unit without cable kit.

**Code:** CD-CONFIGURATOR



## CABLE KIT

The cable kit on left side is for universal use on CD Automation Thyristor unit including REVO and CD3000 Family's Type of connector and USB cable as described on the Manual.

The components of the Kit are:

- 2 USB cable
- 1 USB/TTL converter
- 1 adapter with 4 poles
- 1 adapter with 9 pin connector.

**Code:** CCA

## CURRENT TRANSFORMERS

Current Transformers has to be used when HB option has been selected  
1 Off Current Transformer with current => nominal current of Solid State Relay  
3 Off Current Transformer with current => nominal current of Solid State Relay

- Current Transformer 38x48x20: 25/0,05 **Code:** C T 2 5
- Current Transformer 38x48x20: 50/0,05 **Code:** C T 5 0
- Current Transformer 38x48x20: 100/0,05 **Code:** C T 1 0

## FAN

Fans with dimensions 92x92 mm and 120x120 mm are used with the units described above to increase their current rating.

The Standard voltage supply is 230V ac as an option is possible to have 110V.

- Fan 92x92 110V **Code:** F92x92-110V
- Fan 92x92 230V **Code:** F92x92-230V
- Fan 120x120 110V **Code:** F120x120-110V
- Fan 120x120 330V **Code:** F120x120-230V



# REVO IS A SYSTEM NOT JUST A PRODUCT

The innovative design of **REVO** Family has been done to satisfy system solutions and to do it has been considered following auxiliary units:



## ■ COPPER BAR

This picture show how it is possible to mount **REVO** on copper bars with Length 12:30 mm and thickness 5:10 mm

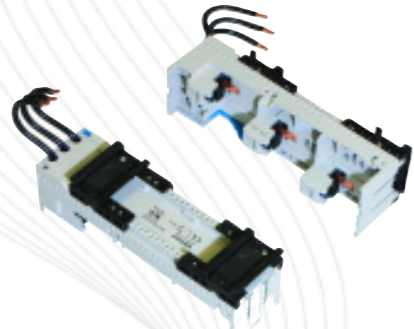
Lateral Support for 3 copper bars **Code:** SC3-30  
Lateral Support for 4 copper bars **Code:** SC4-30



## ■ BASE PLATE

Different type of base plate are available  
The Base Plate have 3 Off Screw terminals 16 mm

Width:	Length:	Code:
54	200	BP-54-200
72	200	BP-72-200
54	260	BP-54-260



## ■ CABINET

This is a cabinet under construction where is possible to see copper bars on all cabinet back panel.  
The structure represented is the best possible solution to have system coordination for high short circuit current.  
In addition is not necessary to wire power cables from Automatic circuit breaker to each thyristor units.  
The base plate are plug- in thus in case of fault it's possible to substitute a complete zone.



## ■ CABINET

This is the cabinet at the end of the mounting and wiring of 60 off temperature controll zones.  
The cabinet is very clean from mounting point of view.

## ■ BASE PLATE + ADAPTOR

How it's possible to see on original base plate, can be mounted an adaptor.

**CD Automation** has many of this adaptor for its product.  
This is an adaptor for **REVO-3PH** Thyristor unit.

**Code:** AD-Insert code REVO unit



## ■ ADAPTOR

This is an adaptor for **REVO** up to 210 A in different configuration like 1, 2 or 3 Phase Control.



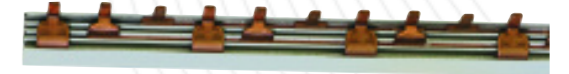
## ■ COPPER COMB - 3PH

This is a copper comb for three phase connections.  
This product is sold in pices of one meter.

To have IP20 is available a plastic protection that is supplied as standard with comb copper.

Pitch:36 Central connection:130A Side connection:80 A

**Code:** Comb-3PH-36



## ■ COPPER COMB - 1PH

This is a comb done with copper to make a multiple connection of **REVO-1PH** or **REVO SSR**.

This product is sold in pices of one meter.

To have IP20 is available a plastic protection that is supplied as standard with comb copper.

Pitch:36 Central connection:130A Side connection:80 A

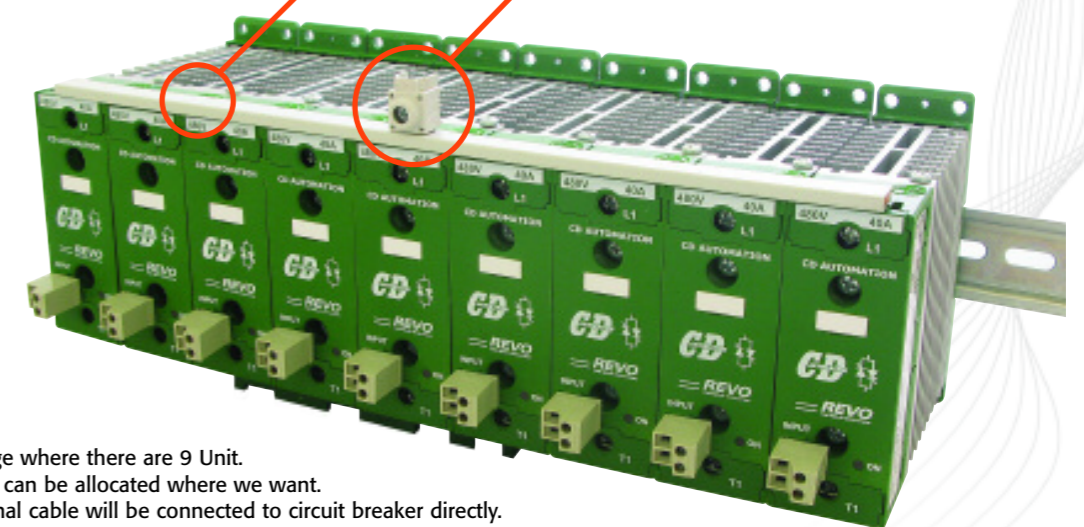
**Code:** Comb-1PH-36



## ■ SCREW TERMINAL

This is a screw terminal that can be mounted in each position of the copper comb above.

**Code:** ST16



## ■ PACKAGE

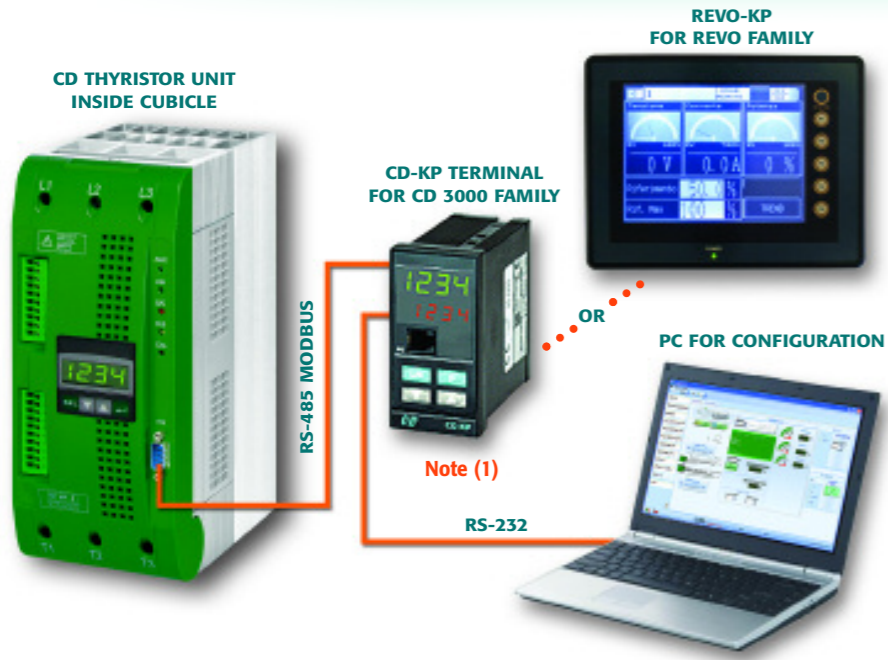
This is an example of package where there are 9 Unit.

One or more screw terminal can be allocated where we want.

From this terminal a traditional cable will be connected to circuit breaker directly.



# CD AUTOMATION KEYPAD FOR THYRISTOR UNIT



## General Description

- Local/Remote facility
- Set point ramp up/down
- Scroll selection of:  
Set point power  
Power read out  
Current  
Voltage
- Display indication for these parameters:  
Heater Break alarm SCR short circuit
- Retransmission (4-20mA or 0-10V) of one parameter: power, current or voltage.
- Dimensions 48x96x92mm (WxHxD)

CD-KP is designed to give two access levels.

- First Access Level: the operator is able to view the power, current and voltage levels as well as set the power when the CD-KP is in Local Mode. At this level the password function is disabled.

- Second Access Level: By connecting a PC to the RS232 port, located on the front of the CD-KP, it is possible to access all parameters of the CD Automation Thyristor Unit using the free downloadable Configuration Software. Configuration changes can be made interactively, without powering down the unit, removing the need to open the cabinet or to stop the process.

Note (1): CD-KP Terminal can be used with CD3000E and Multidrive only.



Our solution oriented web-site allows you to collect all information for your project without to getting up from your desk.

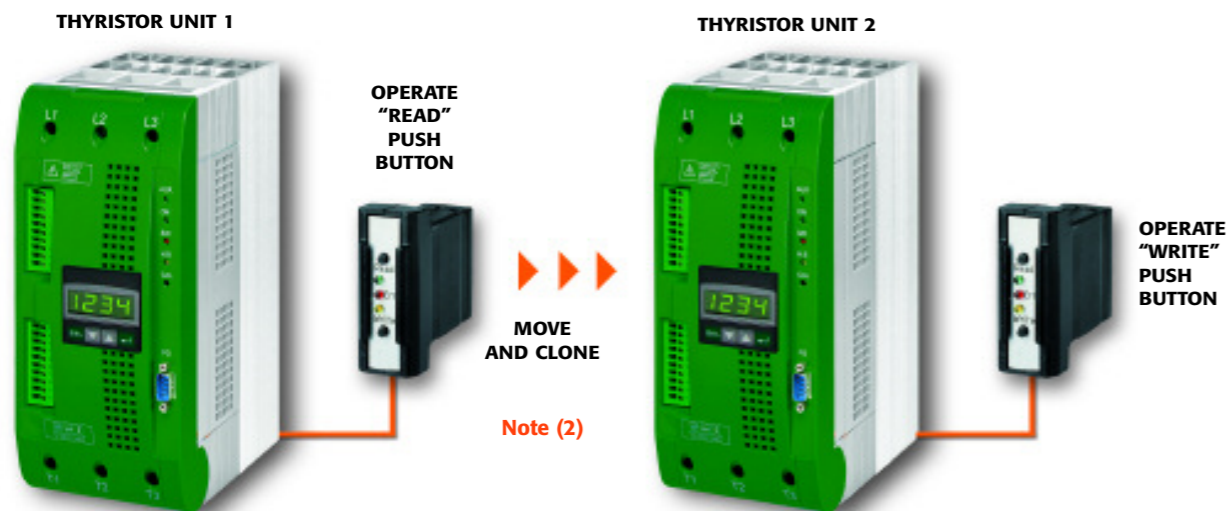
On our web-site you will find:

- Automatic selection of Thyristor Unit starting from your application.
- Technical bulletin of selected product including features and dimensions.
- Maintenance manual with electrical wiring.
- Free software tool to configure Thyristor Unit.
- Click and download suggested recipe for your application using CD Automation knowhow.
- Product quotation request form.

## CLONE FACILITY USING CD-EASY

CD-EASY is a Memory Support Tool used by maintenance personnel on the shop floor. The Clone Facility makes it possible to copy the configuration of one Thyristor Unit and paste it into another in a matter of seconds.

The CD-EASY can be loaded with the operating configuration of the standard unit and stored together with the system drawings in a convenient place, enabling unit reconfiguration within seconds if required.



Note (2): CD EASY be used with CD3000E and Multidrive

We guarantee your satisfaction and we help you to save time.

## REVO Family Configurator

- Easy to use with recipe facility. Each thyristor unit can be configured in a matter of seconds.
- Option to configure the firing mode on line without powering down the unit.
- Look for you application and download the configuration software.





## Fuse for all markets CE & cUL

Fuse for all markets CE & cUL

Model Fuse & Fuseholder Selection TAB	CD1000 REVO S-1PH REVO M-1PH REVO CL	REVO S - 2PH REVO M - 2PH	REVO S - 3PH REVO M - 3PH	CD3000E		MULTIDRIVE		
				CD3000E-2PH	CD3000E-3PH	MULTIDRIVE-1PH	MULTIDRIVE-2PH	MULTIDRIVE-3PH
Current	Spare fuses	Spare fuses	Spare fuses	Spare fuses	Spare fuses	Spare fuses	Spare fuses	Spare fuses
30A	FU1451/40A	FU1451/40A	FU1451/40A					
35A	FU1451/50A	FU1451/50A	FU1451/50A	FU63FE	FU63FE		FU63FE	FU63FE
40A	FU1451/50A	FU1451/50A	FU1451/50A					
45A				FU80FE	FU80FE		FU80FE	FU80FE
60A	FU100FE	FU100FE	FU100FE					
75A				FU100FE	FU100FE		FU100FE	FU100FE
90A	(CL)FU200FE(1) FU100FEE(2)	FU100FE	FU100FE					
100A				FU160FEE	FU2x80FE		FU160FEE	FU160FEE
120A	FU200FEE	FU200FEE	FU200FEE					
125A				FU200FEE	FU2x100FE		FU200FEE	FU200FEE
150A	FU200FEE	FU200FEE	FU200FEE	FUURB250 FU200FEE	FU2x100FE		FUURB250 FU200FEE	FUURB250 FU200FEE
180A	FUURB315	FUURB315	FUURB315					
200A				FUURB315				
210A	FUURB315	FUURB315	FUURB315					
225A			FUURB315		FUURB315 2xFU160FEE		FUURB315 2xFEE160	FUURB315 2xFEE160
280A	2xFUURB250	2xFUURB250		FUURB315			FUURB315 2xFEE160	
300A			FU450FMM		FU450FMM			FU450FMM
350A			FU550FMM		FU550FMM			FU550FMM
400A	FU550FMM	FU550FMM	FU550FMM	FU550FMM	FU550FMM		FU550FMM	FU550FMM
450A		2xFU315FM	FU700FMM	2xFU315FM	FU700FMM		2xFU315FM	FU700FMM
500A	FU700FMM	2xFU315FM	FU700FMM	2xFU315FMM	FU700FMM		2xFU315FM	FU700FMM
600A	2xFU450FMM	2xFU450FMM		2xFU450FMM			2xFU450FMM	
700A	2xFU450FMM	2xFU450FMM		2xFU450FMM			2xFU450FMM	
850A						2xFMM550	2xFMM550	2xFMM550
1000A						SIBA 1000A/690 2068132-1000	SIBA 1000A/690 2068132-1000	SIBA 1000A/690 2068132-1000
1500A						SIBA 1500A/690 2068132-1500	SIBA 1500A/690 2068132-1500	SIBA 1500A/690 2068132-1500
2000A						2 x SIBA 1000A/690 2 x 2068132-1000	2 x SIBA 1000A/690 2 x 2068132-1000	2 x SIBA 1000A/690 2 x 2068132-1000
2700A						2 x SIBA 1500A/690 2 x 2068132-1500	2 x SIBA 1500A/690 2 x 2068132-1500	2 x SIBA 1500A/690 2 x 2068132-1500

Note (1): FU200FE it's used on REVO CL only

Note (2): FU100FEE it's used on CD1000: REVO S-1PH, REVO M-1PH