

- CE and cUL<sup>®</sup> marked
- 100K KA Short Circuit Current (SCCR) Tested
- Internal Fuse on complete product range
- OLED Display for easy Diagnostic & Configuration
- All Firing & Control Mode Types Known
- RS485 Std and most popular Field Bus available
- Wi Fi Communication
- APP for communication via Apple or Android™
- Remote Service via our APP Free of Charge

**CD AUTOMATION**

**POWERED BY INNOVATION**

# REVO

THE THYRISTOR EVOLUTION  
From 3,5 to 2100A



**We are delivering Real Cost Benefits**



[www.cdautomation.com](http://www.cdautomation.com)

General Catalog 2018

Release n.1



Our facility in Legnano for thyristor unit production

CD Automation was founded in 1987 with the clear strategy of becoming a leading supplier of quality industrial automation products to the Italian market. Key to this success was the formation of a sales team educated from a strong technical background. The philosophy was simple; provide product & application experts able to work in partnership with the customer to find the right solution.

In 1990 CD Automation began its development of thyristor power controllers and quickly became the world wide market leader in using microprocessor based technology including RS485 communication.



CD Automation now boasts the most comprehensive power control device range on the market today.

The extensive range is capable of accurately controlling a wide spectrum of electrical loads up to 2500 kW, from simple single-phase heaters up to complex high temperature-coefficient three-phase load.

### Technical Service

CD Automation has invested heavily in computerised testing equipment & state-of-the-art production equipment.

All products are individually tested including full functional, to improve quality and product reliability.

Our help desk service is available 10 hours per day with ex-stock delivery for spare parts.

Remote service via Internet is also available for thyristor units with REVO C with Wi-Fi communication and all the most popular FieldBus.

CD Automation configuration APP for both Apple and Android system available free of charge.





Our facility in Cantalupo for IGBT unit production and motor soft starters



Our facility in Ajmer, for production dedicated to India.



Our facility in East Sussex, England.

# CD AUTOMATION PRODUCTS CATALOG

## REVO S FAMILY from 3,5 to 800A

- The family is available in 1-2-3 phase Units
- Nominal Voltage 480-600-690V
- Input: SSR or Analog Inputs
- Firing: Burst Firing (Fast Zero Crossing)
- Heater Break: Alarm to diagnostic Partial or Total Load Failure and Thyristor Short Circuit
- Its features are able to satisfy the simple application where the communication is not required
- Fuse and Fuse Holder up to 40A
- Fixed Fuses from 60 to 800A
- Internal Fuses reduce your labor and dimension of cabinet
- 100 KA Short Circuit Current (SCCR) Tested
- CE and cUL approved see pages 12-13
- **SAVE MONEY!** Use REVO S, a real added value product

• Voltage Supply 480-600-690V  
 • Internal Fuse on product range 30 to 800A  
 • 100KA Short Circuit Current (SCCR) up to 600V  
 • SSR and Analog Input  
 • Zero Crossing & Burst Firing  
 • HB Alarm to Diagnostic Partial Load Failure  
 • CE EMC and cUL<sup>®</sup> listed  
**CD AUTOMATION**  
**POWERED BY INNOVATION**

**REVO S**  
THE THYRISTOR EVOLUTION

**We are delivering Real Cost Benefits**

[www.cdautomation.com](http://www.cdautomation.com)  
 Revo S Catalog 2018  
 Release n.1

[www.cdautomation.com/REVO-S-Catalog](http://www.cdautomation.com/REVO-S-Catalog)

• Internal Fuses on complete range 30 to 800A  
 • 100KA Short Circuit Current (SCCR) up to 600V  
 • Voltage Supply 480-600-690V  
 • OLED Display for easy Diagnostic & Configuration  
 • All Firing & Control Mode available  
 • Wi Fi and all popular Field Bus available  
 • APP for communication via Apple or Android™  
 • Remote Service  
 • CE EMC and cUL<sup>®</sup> approved  
**CD AUTOMATION**  
**POWERED BY INNOVATION**

**REVO C**  
THE CONNECTING UNIT

**Innovation in Power Control**

[www.cdautomation.com](http://www.cdautomation.com)  
 Revo C Catalog 2018  
 Release n.1

[www.cdautomation.com/REVO-C-Catalog](http://www.cdautomation.com/REVO-C-Catalog)

## REVO C CONNECT A REAL UNIVERSAL UNIT from 30 to 800A

- REVO C is a communicating family with following main features
- Capability to drive 1 phase or 3 phase loads using 1-2 or 3 leg
- Nominal Voltage 480-600-690V
- 100 KA Short Circuit Current (SCCR) Tested
- Fuse and Fuse Holder up to 40A
- Fixed Fuses from 60 to 800A
- Internal Fuses reduce your labor and dimension of cabinet
- All the most popular FieldBus mounted on internal unit board
- Proprietary APP to communicate with Apple and Android Smartphone system
- Download it from Google market or Apple store free of charge
- All input signal selectable via PC or OLED display
- All Firing types selectable with capability to switch from one firing to another one while the unit is controlling Power to the load
- All Control Mode / Feed Back selectable while the unit is working
- CE and cUL approved see pages 12-13

REMOTE SERVICE from our desk to customer Thyristor unit in the field and you will never be alone!

## CUSTOM FAMILY from 1100 to 2100A

- The family is available in 1-2-3 phase Units
- It can be seen as an extension of REVO S Family from 1100A to 2100A
- Nominal Voltage 480-600-690V
- Universal Unit for input & Firing Mode
- Integrated Semiconductor Fuses with Microswitch for fuse failure as Std
- Two thermal switch to diagnostic or to stop the unit in case of Heat Sink overtemperature due to high temperature inside the cabinet
- Fully configurable via frontal Key Pad
- Read out of Voltage Current and Power with HB Alarm to diagnostic partial or total load failure (Optional)
- Removable of complete phase by front unit
- Aluminium modular structure and copper treated against oxidation



[www.cdautomation.com/CUSTOM-Catalog](http://www.cdautomation.com/CUSTOM-Catalog)



## MULTIDRIVE FULL DIGITAL UNIVERSAL THYRISTOR

- MULTIDRIVE is a unit based on a very powerful dedicated micro configurable via serial communication port for all inputs, firing modes, control modes and loads types
- Suitable to drive resistive, inductive, transformer and complex loads requiring current limit and power control mode
- Frontal Key Pad standard to configure all the internal functions and parameters
- Four configurable Analog outputs
- Six Digital input
- Four relay output
- Universal Input signal with automatic zero/span calibration.
- Universal Firing modes, customer configurable via Key Pad or communication port as Burst Firing and Phase Angle
- Universal Feed Back Mode V; I; VxI and external
- Soft Start can be used in addition to Burst Firing and Phase Angle
- Unbalanced load and Heater Break Alarm
- RS 485 port. Modbus Std and other Field Bus as Option
- Comply with EMC and cUL approval
- IP20 Protection

[www.cdautomation.com/MULTIDRIVE-Catalog](http://www.cdautomation.com/MULTIDRIVE-Catalog)

## MULTICHANNEL Thyristor units

Designed specifically for industrial multi-zone applications, REVO PN can be configured to control between 4 and 24 channels/zones. Typically each zone is sized for 25A but by using the front panel connector, loads of up to 210A can be connected. Important power control functionality is offered by REVO PN including:

- Elimination of power overshoot
- Power factor maintained close to 1
- Keeps your instantaneous power within the limits of your electricity supply contract
- Stay connected with the most popular Field Bus protocols
- Eliminate use of PLC output modules by using comms for Power to CPU connections
- Alarm notification per zone of heater break and thyristor short circuit
- Product footprint for 24 zone package 60% less than using standard thyristor stacks
- Dramatic savings with less wiring & smaller cabinet enclosures
- REVO PN's considered design not only helps you save start-up costs but ensures you keep on saving money throughout the products lifetime.



**REVO PN**  
POWER NETWORK

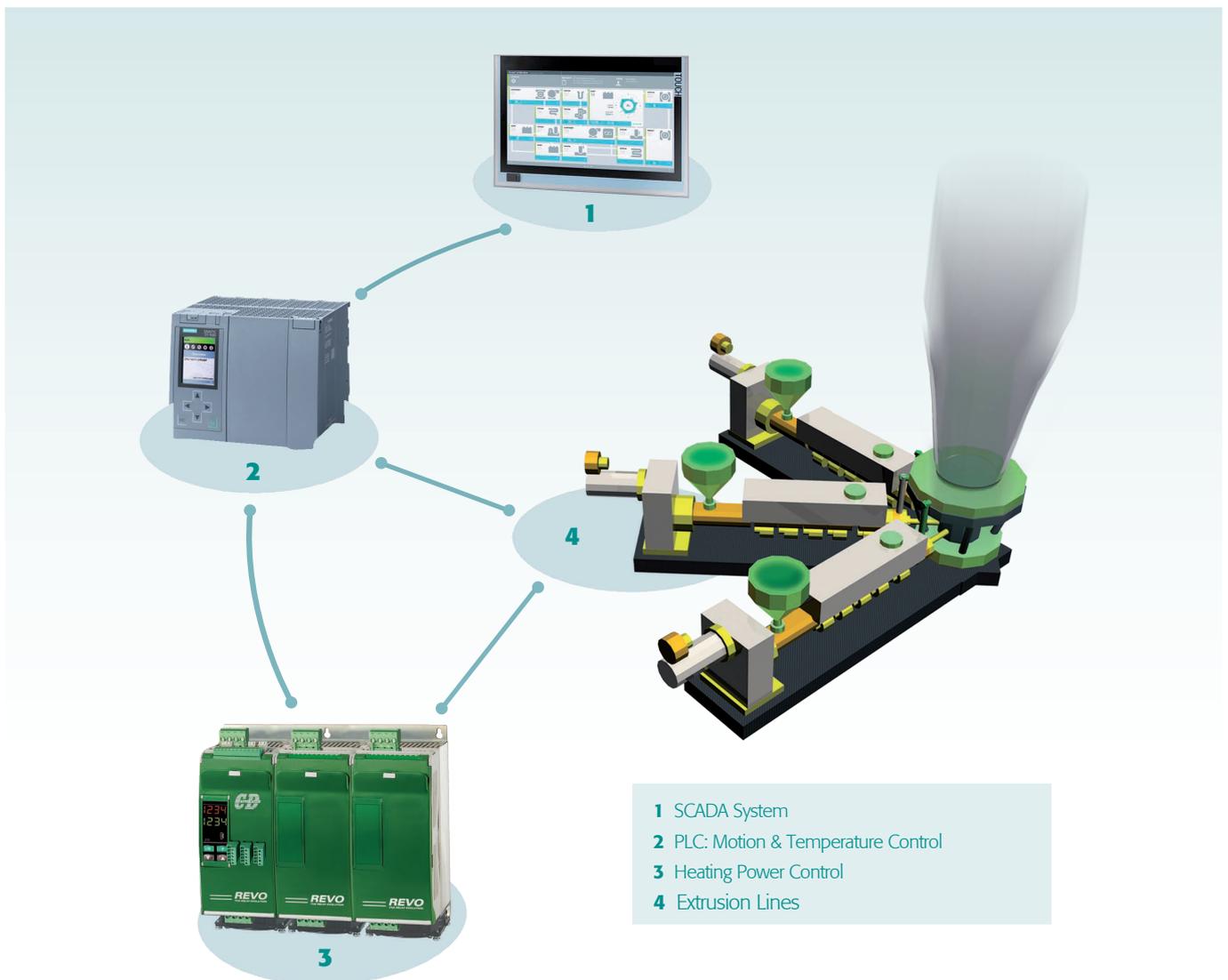
- Multi Channel Power Control
- Suitable to comm. with PLC & Multiloop
- Dedicated to solve applications
- Space & wiring reduction
- Most popular Field Bus available

CD AUTOMATION  
POWERED BY INNOVATION

**Multi-Channel SCR Power Controller**  
Suitable to control Electric Heaters  
and IR Lamps in Industrial Heating Systems

www.cdautomation.com  
REVO PN Catalog 2018  
Release n.1

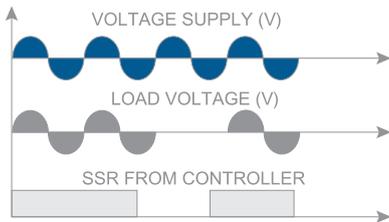
[www.cdautomation.com/REVO-PN-Catalog](http://www.cdautomation.com/REVO-PN-Catalog)



# GLOSSARY

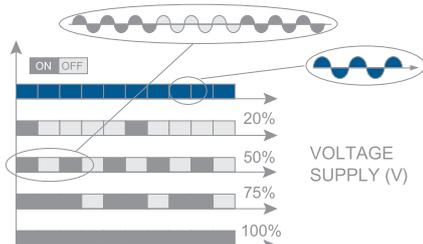
## ZERO CROSSING ZC

ZC firing mode is used with the logic output from a temperature controller and so the thyristor operates like a contactor. The cycle time is performed by the temperature controller. Zero Crossing minimizes interferences as the thyristor unit switches ON-OFF at zero voltage.



## BURST FIRING BF

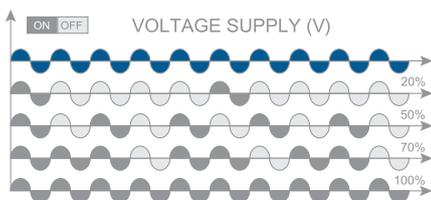
This firing is performed digitally within the thyristor unit at zero volts, producing no EMC interferences. Analogue input is necessary for BF and the number of complete cycles must be specified for 50% power demand. This value can be between 1 and 255 complete cycles, determining the speed of firing. When 1 is specified, the firing mode becomes Single Cycle (SC).



Soft Start + Burst Firing now available as an option.

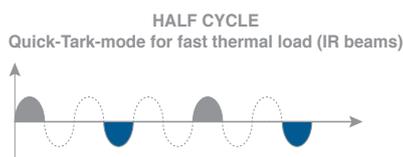
## SINGLE CYCLE SC

SC is the fastest zero crossing switching method. At 50% input signal, one cycle is ON and one cycle is OFF. At 75%, 3 cycles are ON and one cycle is OFF. If power demand is 76% the unit performs the same as for 75% but every time the unit switches ON the microprocessor divides 76/75 and memorises the ratio. When the sum is one the unit delivers one cycle more to the load. With this firing it is necessary to have analogue input.



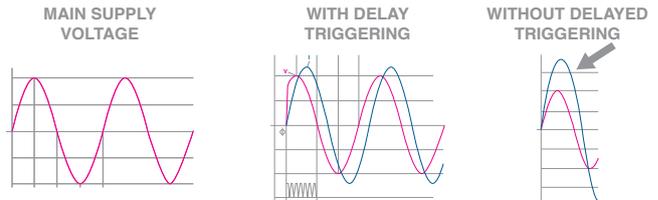
## HALF CYCLE

This is a super Fast Firing used with short infrared elements to avoid flickering and harmonic generated by Phase Angle Firing.



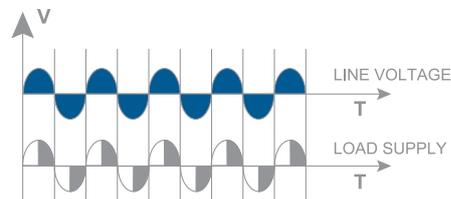
## DELAYED TRIGGERING DT

Used to switch the primary coil of transformers when coupled with normal resistive loads (not cold resistance) on the secondary, DT prevents the inrush current when zero voltage (ON-OFF) is used to switch the primary. The thyristor unit switches OFF when the load voltage is negative and switches ON only when positive with a pre-set delay for the first half cycle.



## PHASE ANGLE PA

PA controls the power to the load by allowing the thyristor to conduct for part of the AC supply cycle only. The more power required, the more the conduction angle is advanced until virtually the whole cycle is conducting for 100% power. The load power can be adjusted from 0 to 100% as a function of the analogue input signal, normally determined by a temperature controller or potentiometer, PA is normally used with inductive loads.



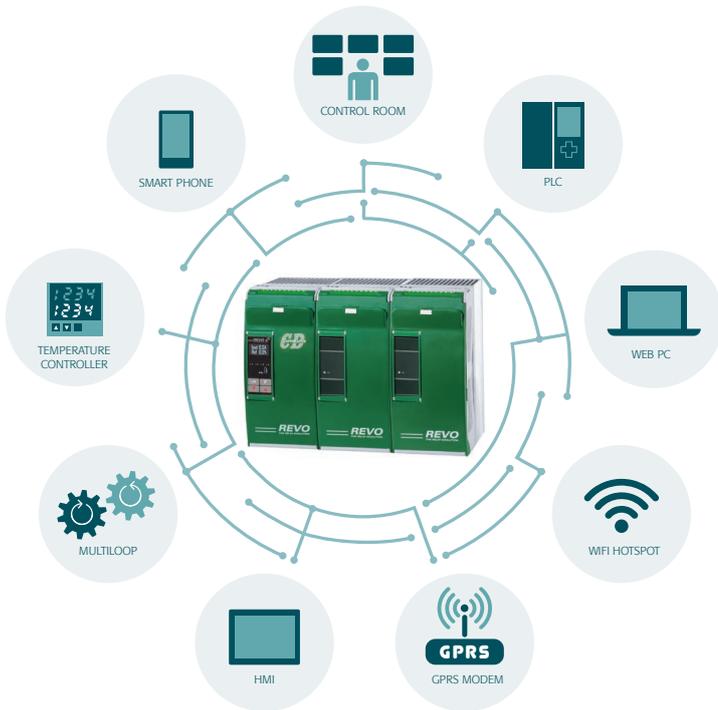
## FEEDBACK/CONTROL MODE

Supply voltage fluctuations changes the power to the load. To overcome this effect the voltage supplied to the load is measured and compared with the power demand from the controller. The error signal is used to automatically hold the power at the value requested.

Three types of control mode are available:

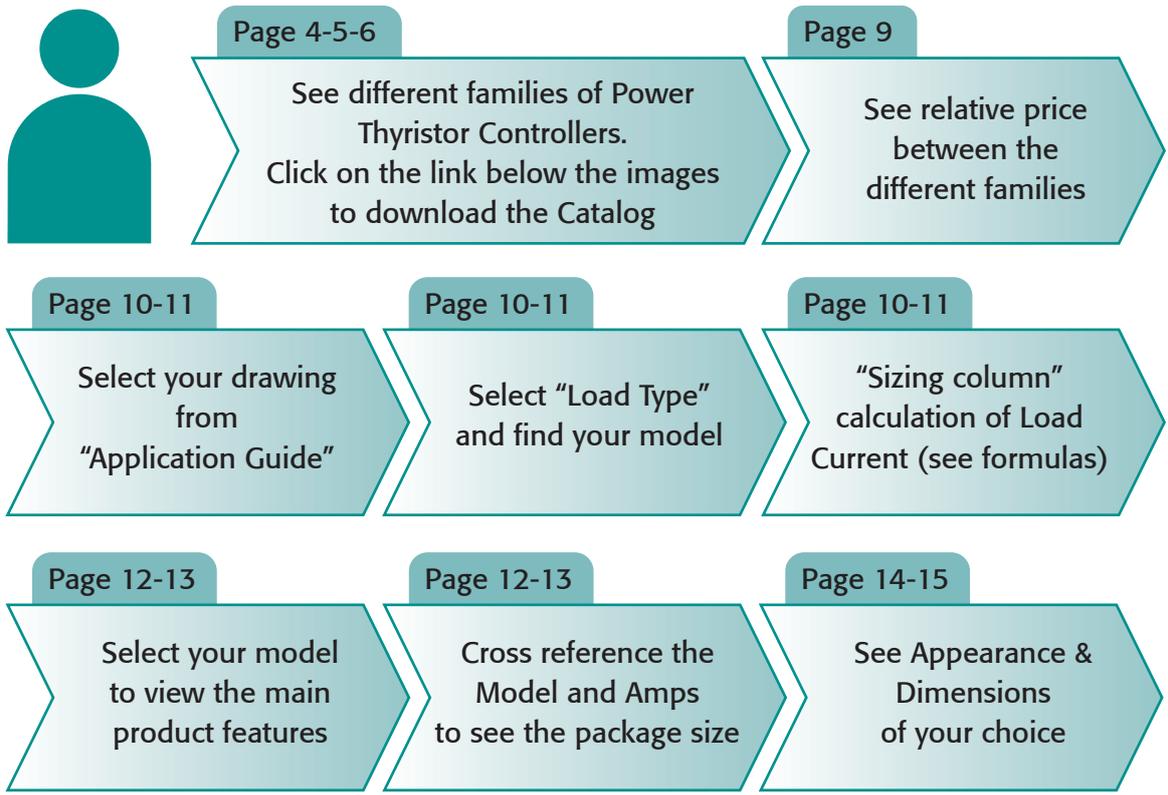
- Voltage Control Mode, where the input signal is proportional to the voltage output (voltage f/b).
- Current Control Mode, where the input signal is proportional to the current output (current f/b).
- Power Control Mode, where the input signal is proportional to the power output (power f/b).
- As an option it is possible to transfer control mode from voltage to power via a simple digital command.

# CONNECTIVITY AND CONFIGURATION



READ	WRITE
Set Point	Set Point
Alarm	Configuration Parameters
Voltage	
Power	
Current	
Heater Break Alarm	
SCR Short Circuit Alarm	

# HOW TO USE THE GENERAL CATALOG



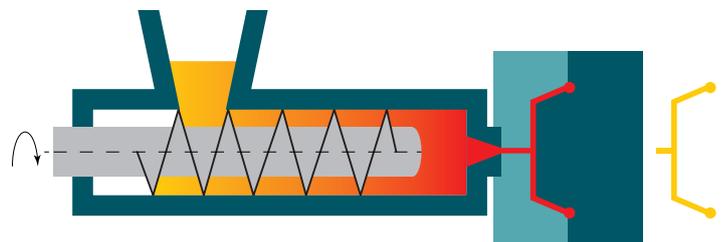
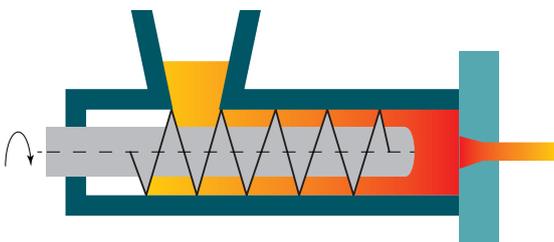
A dynamic selection of Product is available [here](#)

# SELLING PRICE VS FEATURES

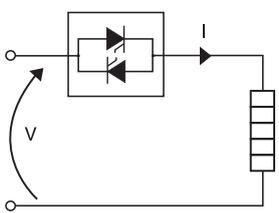
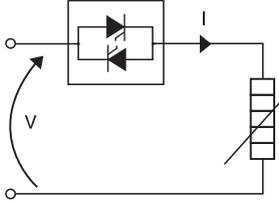
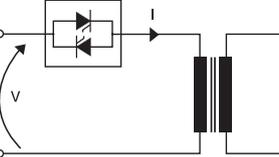
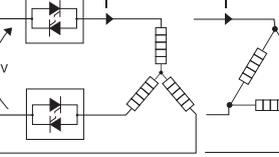
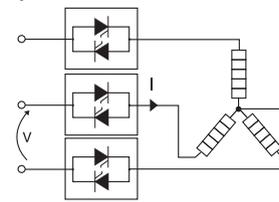
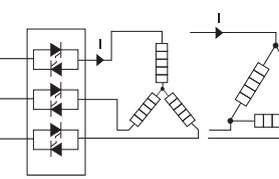
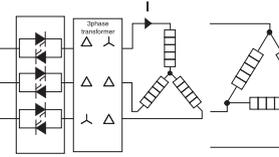
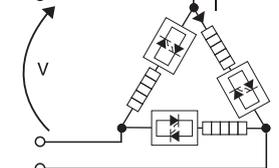


## APPLICATIONS

- PLASTIC: Extrusion, Injection Molding, Vulcanization, Forming
- GLASS: Feeder, Windscreen Bombing, Float Plant
- SEMICONDUCTOR: Crystal Pulling, Spreading Furnaces
- AUTOMOTIVE: Paint Drying, Polymerization
- HEAT TREATMENT: Sintering, Vacuum Furnaces
- MATERIAL TEST: Climatic Chamber, Shock Chambers
- LIFE SCIENCES: Sterilization, Laboratory Furnaces
- FOOD & BEVERAGE: Sterilization, Cooking, Drying System



# APPLICATION GUIDE FOR THYRISTOR UNIT SELECTION

APPLICATION GUIDE	LOAD TYPE	MODEL	CURRENT RANGE	N. OF UNITS	PHASE CTRL
	Normal resistance infrared medium and long waveform	Revo SSR	It depends on heat sink	1	1
	Quartz lamp infrared short waveform	Revo S 1PH Custom 1PH	30-800A 300-2100A	1	1
	Molibdenum, Tungstenum, Superkanthal, Platinum,	Revo C 1PH	35-800A	1	1
	Silicon carbide elements	Revo S 1PH Revo C 1PH	30-800A 35-800A	1	1
	Transformers coupled with normal resistance	Revo C 1PH	35-800A	1	1
	Transformers coupled with cold resistances (Kanthal® super)	Revo C 1PH	35-800A	1	1
	Normal Resistance	Revo S 2PH	30-800A	1	2
		Revo C 2PH Multidrive 2PH	30-800A 35-2100	1	2
	Normal Resistance	Revo S 3PH	30-500A	1	3
		Revo C 3PH	30-800A	1	3
		Custom 3PH	300-2100A	1	3
	Silicon carbide elements	Revo C 3PH Multidrive 3PH	60-800A 35-2100A	1	3
	Molibdenum, Tungstenum, Kantal® Super, Platinum, Quartz lamp infrared short waveform	Revo C 3PH Multidrive 3PH	60-800A 35-2100A	1	3
	Three phase transformer	Revo C 3PH	60-800A	1	3
		Multidrive 3PH	35-2100A	1	3
	Three phase normal load resistance with open delta connection	Revo S 3PH	30-500A	1	3
		Revo C 1PH	35-800A	3	3
		Custom 3PH	300-2100A	1	3
	Cold resistance	Revo C 1PH	35-800A	3	3

CONTROL MODE: V = Voltage feedback V<sup>2</sup> = Square voltage feedback



SUGGESTED FIRING MODE FOR YOUR APPLICATIONS						OTHER FEATURES				SIZING		NOTE	
ZC	HC	SC	BF	BF Simplified	S+BF	DT	PA	CL	Control	V	I		
•										V	$\frac{P}{V}$	For general resistance applications with low variations in temperature and age. For low inertia loads use Single Cycle (SC) or Phase Angle (PA). For Infrared Short it's also available Half Cycle that is a very Fast Firing	
•				•									
•				•									
	•	•					•		V <sup>2</sup>	V	$\frac{P}{V}$	These resistances change with temperature but have low variations with age. Starting current with cold elements can be 16 times nominal current (superkanthal). Infrared lamp short waveform can reach 8 time nominal current.	
							•	•	I <sup>2</sup>				
			•				•		V to Vxl	V	$\frac{P}{V}$	These resistances change value with temperature and age and value at the end of element life is 4 times the initial value. Constant power regulation is necessary with V to Vxl Transfer.	
						•			Vxl	V	$\frac{P}{V \cos \phi}$	Transformers and inductors have inrush current on start up. Phase Angle plus Soft Start and current limit are required. To switch the transformer ON-OFF, use DT firing that will automatically switch ON-OFF when current value is at zero.	
							•	•	I <sup>2</sup>	V	$\frac{P}{V \cos \phi}$	Use Phase Angle + Current Limit	
•				•						V	$\frac{P}{1.73V}$	Revo S - Multidrive - Revo C 2PH are suitable to control resistive loads with delta or star connection without neutral.	
			•						Vxl	V	$\frac{P}{1.73V}$		
•				•						Vxl	$\frac{V}{1.73}$	$\frac{P}{1.73V}$	Three phase load with star plus neutral connection must be controlled on the three phases.
			•										
•				•						V	$\frac{P}{1.73V}$	On three phase silicon carbide elements Vxl feedback is suggested to have a constant power control. This is necessary to compensate resistance change with temperature and age. Resistance value at the end of element life is 4 times the original value. With Revo C use BF firing and Power Limit. These resistances change with temperature but have low variations with age. Start up current with cold elements can be many times the nominal current value. In this case it is necessary to use Phase Angle + Current Limit.	
			•				•	•	I <sup>2</sup>				
							•	•	I <sup>2</sup>				
							•	•	I <sup>2</sup>	V	$\frac{P}{1.73V \cos \phi}$	Three phase Multidrive and Revo C are specially designed to drive three phase transformers coupled on secondary with normal or special resistive loads.	
							•	•	I <sup>2</sup>				
•				•			•	•	I <sup>2</sup>	V	$\frac{P}{3V}$	Open delta can be driven by three phase unit.	
•				•			•	•	I <sup>2</sup>				
							•	•	I <sup>2</sup>	V	$\frac{P}{3V}$		

Vxl = Power feedback I = Current feedback Firing = BF Simplified 4-8-16 Cycles at 50% Power Demand with Analog Input only

# FEATURES COMPARISON

DESCRIPTION		BASIC PRODUCTS WITHOUT COMMUNICATION				
		REVO S 1PH	REVO S 2PH	REVO S 3PH	CUSTOM 1PH	CUSTOM 2PH
		RS1	RS2	RS3	C1	C2
MAIN VOLT.	Max voltage 480V	●	●	●	●	●
	Max voltage 600V	●	●	●	●	●
	Max voltage 690V (1)	●	●	●	●	●
LOAD TYPE	Single phase	●			●	
	3 phase load star no neutral or delta		●	●		●
	3 phase load star with neutral			●		
	3 phase load open delta			●		
INPUT	SSR 4:30VDC	●	●	●	●	●
	4:20 mA	○	○	○	○	○
	0:10 Vdc	○	○	○	○	○
	Potentiometer	○	○	○	○	○
FIRING	Zero crossing	●	●	●	●	●
	Half Cycle					
	Single Cycle					
	Burst firing					
	Burst firing simplified 4-8-16 Cycles at 50% (2)	●	●	●	●	●
	Delayed triggering					
	Phase Angle					
CONTROL MODE	Soft Start					
	No Feed Back	●	●	●	●	●
	Voltage					
	Voltage Square					
	Current					
	Current Square					
	Power Vxl					
	Transfer from V to Vxl or I to Vxl					
OPTION	Current limit					
	Heater break Alarm HB	○	○	○	○	○
	Logging					
	Totalizer (Energy)					
TOOLS	Phone APP (Free of charge)					
	PC Configurator Software (Line analyzer Free of Charge)					
COMM.	WiFi					
	N°1 Modbus® RTU					
	N°2 Modbus® RTU					
	N°1 Profibus DP + N°1 Modbus® RTU					
	N°1 Profinet® + N°1 Modbus® RTU					
	N°1 Modbus® TCP + N°1 Modbus® RTU					
CURRENT	<b>DESCRIPTION</b>	<b>REVO S 1PH</b>	<b>REVO S 2PH</b>	<b>REVO S 3PH</b>	<b>CUSTOM 1PH</b>	<b>CUSTOM 2PH</b>
	<b>SIZE / Approval</b>	<b>SIZE / Approval</b>	<b>SIZE / Approval</b>	<b>SIZE / Approval</b>	<b>SIZE / Approval</b>	<b>SIZE / Approval</b>
	30	SR3-SR6/CE-cUL	SR4-SR7/CE-cUL	SR5-SR8/CE-cUL		
	35	SR3-SR6/CE-cUL	SR4-SR7/CE-cUL	SR5-SR8/CE-cUL		
	40	SR3-SR6/CE-cUL	SR4-SR7/CE-cUL	SR5-SR8/CE-cUL		
	45					
	60	SR12/CE-cUL (3)	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (3)		
	75		F/SR15/cUL	F/SR16/cUL		
	90	F/SR15/CE-cUL (3)	F/SR15/CE (3)	F/SR17/CE (3)		
	100					
	120	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL		
	125					
	150	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)		
	180	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)		
	210	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)		
	225					
	275					
	300	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL		F/S15/CE
	350			F/S14/CE-cUL		
	400	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL		
	450		F/S14/CE-cUL	F/S14/CE-cUL		F/S16/CE
	500	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL		
	600	F/S12/CE-cUL	F/S14/CE-cUL		F/S15/CE	F/S16/CE
	700	F/S12/CE-cUL	F/S14/CE-cUL			
800	F/S15/CE	F/S16/CE	F/S17/CE	F/S15/CE	F/S16/CE	
1100				F/SR18/CE	F/SR19/CE	
1400				F/SR21/CE	F/SR22/CE	
1600				F/SR21/CE	F/SR22/CE	
1800				F/SR21/CE	F/SR22/CE	
2100				F/SR21/CE	F/SR22/CE	

● STANDARD ○ OPTION SIZE See next page F Fan Air Cooling; nothing before SIZE: Natural Air Cooling (1) cUL® Approval is for Voltage ≤ 600V

UNIVERSAL THYRISTOR UNITS FULLY CONFIGURATION WITH COMMUNICATION							
CUSTOM 3PH	REVO C 1PH	REVO C 2PH	REVO C 3PH	MULTIDRIVE 1PH	MULTIDRIVE 2PH	MULTIDRIVE 3PH	DESCRIPTION
C3	RC1	RC2	RC3	M1	M2	M3	CODE
•	•	•	•	•	•	•	MAIN VOLT.
•	•	•	•	•	•	•	
•	•	•	•	•	•	•	
	•			•			LOAD TYPE
•		•	•		•	•	
•	• (5)		•				
•	•	•	•	•	•	•	INPUT
○	•	•	•	•	•	•	
○	•	•	•	•	•	•	
○	•	•	•	•	•	•	
•	•	•	•	•	•	•	FIRING
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CUSTOM 3PH	REVO C 1PH	REVO C 2PH	REVO C 3PH	MULTIDRIVE 1PH	MULTIDRIVE 2PH	MULTIDRIVE 3PH	DESCRIPTION
SIZE / Approval	SIZE / Approval	SIZE / Approval	SIZE / Approval	SIZE / Approval	SIZE / Approval	SIZE / Approval	CURRENT
	SR9/CE-cUL	SR10/CE-cUL	SR11/CE-cUL				30
	SR9/CE-cUL	SR10/CE-cUL	SR11/CE-cUL			F/S13/CE-cUL	35
	SR9/CE-cUL	SR10/CE-cUL	SR11/CE-cUL				40
					F/S13/CE-cUL	F/S13/CE-cUL	45
	SR12/CE-cUL (3)	SR13/CE-cUL (3)	SR14/CE-cUL (3)				60
					F/S13/CE-cUL	F/S13/CE-cUL	75
	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (3)	F/SR17/CE-cUL (3)				90
					F/S13/CE-cUL	F/S13/CE-cUL	100
	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)				120
					F/S13/CE-cUL	F/S13/CE-cUL	125
	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)		F/S13/CE-cUL	F/S13/CE-cUL	150
	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)		F/S13/CE-cUL	F/S13/CE-cUL	180
	F/SR15/CE-cUL (3)	F/SR16/CE-cUL (4)	F/SR17/CE-cUL (4)				210
					F/S13/CE-cUL	F/S13/CE-cUL	225
					F/S14/CE-cUL		275
F/S16/CE	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL			F/S14/CE-cUL	300
						F/S14/CE-cUL	350
	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL		F/S14/CE-cUL	F/S14/CE-cUL	400
		F/S14/CE-cUL	F/S14/CE-cUL		F/S14/CE-cUL	F/S14/CE-cUL	450
	F/S12/CE-cUL	F/S14/CE-cUL	F/S14/CE-cUL		F/S14/CE-cUL	F/S14/CE-cUL	500
F/S17/CE	F/S12/CE-cUL	F/S14/CE-cUL	F/S17/CE		F/S14/CE-cUL		600
	F/S12/CE-cUL	F/S14/CE-cUL	F/S17/CE		F/S14/CE-cUL		700
F/S17/CE	F/S15/CE	F/S16/CE	F/S17/CE			F/S17/CE	800
F/SR20/CE				F/SR18/CE	F/SR19/CE	F/SR20/CE	1100
F/SR23/CE				F/SR21/CE	F/SR22/CE	F/SR23/CE	1400
F/SR23/CE				F/SR21/CE	F/SR22/CE	F/SR23/CE	1600
F/SR23/CE				F/SR21/CE	F/SR22/CE	F/SR23/CE	1800
F/SR23/CE				F/SR21/CE	F/SR22/CE	F/SR23/CE	2100

(2) It's possible just using Analog Input Ex. 4:20mA (3) SIZE 11 at 690V (no cUL®) (4) SIZE 13 at 690V (no cUL®) (5) Use n° 3 1PH units

# SIZE AND DIMENSIONS



**SR0** H 97 x W 36 x D 32 - 0,12kg.



**SR1** H 97 x W 36 x D 92 - 0,29kg.



**SR2** H 121 x W 36 x D 87 - 0,27kg.



**SR3** H 121 x W 36 x D 125 - 0,44kg.



**SR4** H 121 x W 72 x D 125 - 0,88kg.



**SR5** H 121 x W 108 x D 125 - 1,32kg.



**SR6** H 121 x W 36 x D 185 - 0,61kg.



**SR7** H 121 x W 72 x D 185 - 1,22kg.



**SR8** H 121 x W 108 x D 185 - 1,83kg.



**SR9** H 121 x W 72 x D 185 - 1,15kg.



**SR10** H 121 x W 108 x D 185 - 1,76kg.



**SR11** H 121 x W 144 x D 185 - 2,4kg.



**SR12** H 269 x W 93 x D 170 - 3,4kg.  
**SR15** H 273 x W 93 x D 170 - 3,6kg.



**SR13** H 269 x W 186 x D 170 - 6,8kg.  
**SR16** H 273 x W 186 x D 170 - 7,0kg.



**SR14** H 269 x W 279 x D 170 - 10,2kg.  
**SR17** H 273 x W 279 x D 170 - 10,6kg.



**S11** H 440 x W 137x D 270 - 10,5kg.



**S12** H 520 x W 137 x D 270 - 15kg.



**S13/S14** H 440/520 x W 262 x D 270 - 18/22kg.



**SR15** H 560 x W 137x D 270 - 10,5kg.



**SR16** H 560 x W 275 x D 270 - 21kg.



**SR17** H 560 x W 411 x D 270 - 31,5kg.



**SR18** H 550 x W 329 x D 347 - 27kg.



**SR19** H 550 x W 523 x D 347 - 49kg.



**SR20** H 550 x W 717 x D 347 - 72kg.



**SR21** H 640 x W 329 x D 347 - 32/40kg.



**SR22** H 640 x W 523 x D 347 - 59/75kg.



**SR23** H 640 x W 717 x D 347 - 86/110kg.

**NOTES:**

From SR9 to SR17 The thyristor unit are represented with OLED Display Std for REVO C family

The REVO S Family have a blind frontal unit.

OLED Digital Display is available to read Voltage, Current and Power HB alarm has been selected.

Sizes from 18 to 23 represented MULTIDRIVE Family.

CUSTOM Family have same dimensions but without plastic IP20 that are available as option.

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