150*A*



FROM 300 to 800A



GENERAL DESCRIPTION

- Revo S has been specifically designed for OEM. This product can be customized
- These simple units can be connected with REVO PC to manage multizone system this minimize your energy cost by controlling synchronization aand power limit on each zone
- All circuit board, fuses and Thyristor can be inspected just opening front door
- Input signal: SSR, Analog as an option
- Zero Crossing, Burst Firing available at 4, 8 or 16 Cycles at 50% Power demand
- Electronic circuit fully isolated from power with constant current drain on input.
- Heater Break alarm option to diagnose partial or total load failure and Thyristor Short circuit
- Internal fixed fuses are standard
- Current transformer integrated (with Heather Break option)
- Special design for Heat sink with very high dissipation value
- Comply with EMC, cUL (pending)
- Panel Mounting
- IP20 Protection available as option

TECHNICAL SPECIFICATION

Voltage power supply 24V minimum to 480V, 600V On request

Voltage Frequency 50 or 60 Hz no setting needed from 47 to 70 Hz

Nominal Current 150A, 300A, 550A, 800A

 Input Signal
 SSR
 4:30Vdc
 5mA Max (On ≥ 4Vdc Off ≤ 1Vdc);

Voltage input 0:10Vdc impedance 15 K ohm; Current input 0:20/4:20mA impedance 100 Ohm;

Firing Zero Crossing, Burst Firing with analog input signal only

Auxiliary Voltage Supply 90:130Vac 8VA Max

170:265Vac 8VA Max (Standard)

230:345Vac 8VA Max

300:530Vac 8VA Max (Standard)

510:690Vac 8VA Max

Heather Break Alarm Microprocessor based with automatic setting Digital Input, Relay Output 0,5A at 110V (option)

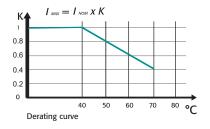
Mounting Panel Mounting

Operating Temperature 40 °C without derating. Over this temperature see below derating curve

Storage temperature -25 °C to 70 °C Max

Altitude Over 1000 m of altitude reduce the nominal current of 2% for each 100m

Humidity From 5 to 95% without condense and ice



OPTION'S FEATURES AND SPECIAL DETAILS

HEATER BREAK ALARM HB

ON FRONT CABINET



FEW SECOND TO SET AND CALIBRATE ALL THE UNITS

- Microprocessor based circuit
- Capacity to diagnose the failure of one Resistance over five in parallel
- Load failure alarm with LED indication on front unit
- Thyristor short circuit alarm with LED indication on front unit
- Alarm output with free voltage relay contact
- Alarm reset function and possibility to auto reset if the alarm disappear
- Built in Current transformer when heather Break option has been selected
- Self Setting via external command or push button on front unit
- Commom setting command can be given to many units and in a matter of second, the tuning is done, also by a non expert operator

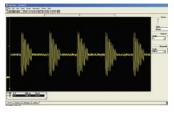
HOW TO ADD POWER LOAD MANAGMENT AND FEATURES TO YOUR SIMPLE UNITS



APPLICATION WITH 8, 16 OR 24 THREE-PHASE LOADS

Use REVO-PC and you can add these Features

- Communication with different field bus
- Reading of current Voltage and Power
- Istantaneus power very close to average value, no pick power
- Power factor close to one no harmonics
- Prevents increase in energy supply tariffs imposed by your electricity supplier



WITHOUT POWER CONTROL OPTI-MISATION

Synchronization

On all controlled zones, REVO-PC 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.
- Flickering effect removed.

TOTAL STATE OF THE STATE OF THE

WITH POWER CONTROL OPTIMISA-TION

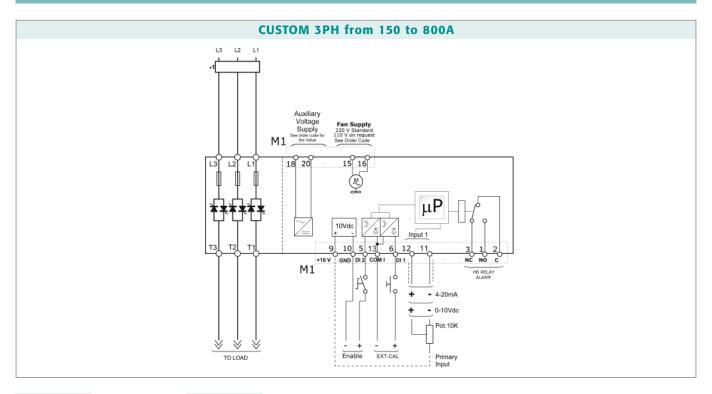
Smart power limitation

- 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.

APPLICATIONS AND FOCUS ON:

- Infrared lamp.Autoclaves.
- Fournaces.Chemical
- Dryers
- Climatic chambers
- Petrochemical

WIRING CONNECTION CUSTOM 3PH from 150A to 800A



LOAD TYPE



OPEN DELTA Resistive or Infrared Lamps Long and medium waves

LOAD TYPE

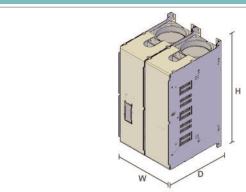


STAR with neutral Resistive or Infrared Lamps Long and medium waves

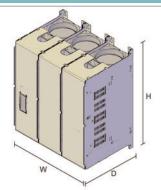
NOTE

- (1) A suitable device must ensure that the unit can be electrically isolated from the supply, this allows the qualified people to work in safety.
 - The user installation must be protecting by electromagnetic circuit breaker or by fuse isolator. The semiconductor fuses are classified for UL as supplementar protection for semiconductor.
- (2) The heat-sink must be connected to the earth.

DIMENSION AND FIXING HOLES



W 260 mm. - H 478 mm. - D 274 mm. - kg. 27



W 390 mm. - H 478 mm. - D 274 mm. - kg. 44 **300A to 800A**

07 A Ø7 Ø12 Ø12 Ø7 Ø7 Ø12 Ø12

Ø7 A B A Ø7 Ø12 Ø12 Ø12

OUTPU	FEATUR	RES (POW	ER DEVICE)							
Current A	Voltage range (V)	Ripetitive peak reverse voltage (480V) (600V)		Latching current (mAeff)	Max peak one cycle (10msec.)	Leakage current (mAeff)	I2T value for fusing tp=10msec.	Frequency range (Hz)	Power loss I=Inom (W)	Isolation Voltage Vac
150A	24÷600V	1200	1600	300	4800	15	108000	47÷70	810	2500
300A	24÷600V	1200	1600	300	5250	15	128000	47÷70	1080	2500
400A	24÷600V	1400	1600	200	8000	15	306000	47÷70	1440	2500
550A	24÷600V	1400	1600	1000	17800	15	1027000	47÷70	1620	2500
800A	24÷600V	1400	1600	1000	17800	15	1027000	47÷70	1800	2500

Fan Specification	
Supply: 230V Standard	Input Power 17W
Supply: 115V Option	Input Power 14W

ORDERIN	G CODES (CUST	OM ₃	PH_														
		1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16
CUSTOM 3PH			3	_		_	_	-	_	_		_		_	_	_	_	_
4, 5, 6 Current		8	8 Control Mode				10		Firi	iring			13 Fan Vo			ltage		
Description code	Description code Numeric code		Description code Num			umeric o	ode	Description code			Nun	Numeric code		Description code		de	Numeric code	
150A				90:130V (3)			1		Zero Crossing ZC			Z		No Fan 110V			1	
300A	300A 0 3 0 0		170:265V (3)			2		Burst Firing						No Fan 110V 1 Fan 220V Standard 2 14 Approvals Description code CE EMC 0 15 Manual				2
550A	550A 0 5 5 0		300:530V (3)			5		4 Cycles On at 50%								_	-	
800A 0 8 0 0		510:690V (3)				6		Power Demand			-	4 (2)	_	14	vals			
			600:760V (3)			7		Burst Firing					Description code		de	Numeric code		
7 Max Voltage							8 Cycles On at 50% Power Demand				8 (2)		CE EMC			C)	
Description code	Description code Numeric code		9 Input				Burst Firing											
480V			Description code		N	Numeric code		16 Cycles On at 50%					15 Man			ual		
600V	6	_	SSR			S		Power Demand		6 <mark>(2)</mark>			Description co		ode Numeric cod		ic code	
690A	7	0:10V dc				<u>V</u>								None			0	
			4:20mA			Α		11 Control			Mod	е		Italian Manual 1				I
GEND								Des	cription	code	Nun	neric cod	e		sh Manu		2	
E = Internal Fixed Fuse								Open Loop 0					German Manual French Manual			3		
Current Transfor														Frenc	cn Manu	lai	4	+
B = Heater Break Alarm								12 Fuse & Option						16 Version				
lote (2): Available with Analog input only								Description code		Nun	neric cod	e	Description code		de	Numeri	ic code	
lote (1): Load voltage must be included in Selected Auxiliary Voltage Range for units > 210A								Fixed Fuses Standard F			F		Std	with Fus	e	1	1	
								Fixed Fuses + CT Y Fixed Fuses + CT + HB H			_] _							
								Fixed I	uses +	CT + HB		Н						

