

150A



FROM 300 to 800A

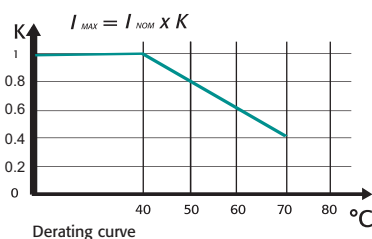


GENERAL DESCRIPTION

- 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 and 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 Heater 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
- Common setting command can be given to many units and in a matter of second, the tuning is done, also by a non expert operator

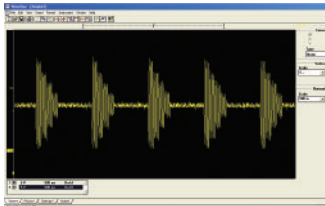
HOW TO ADD POWER LOAD MANAGMENT AND FEATURES TO YOUR SIMPLE UNITS



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
- Instantaneous 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

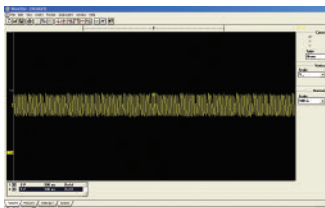


WITHOUT POWER CONTROL OPTIMISATION

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.



WITH POWER CONTROL OPTIMISATION

Smart power limitation

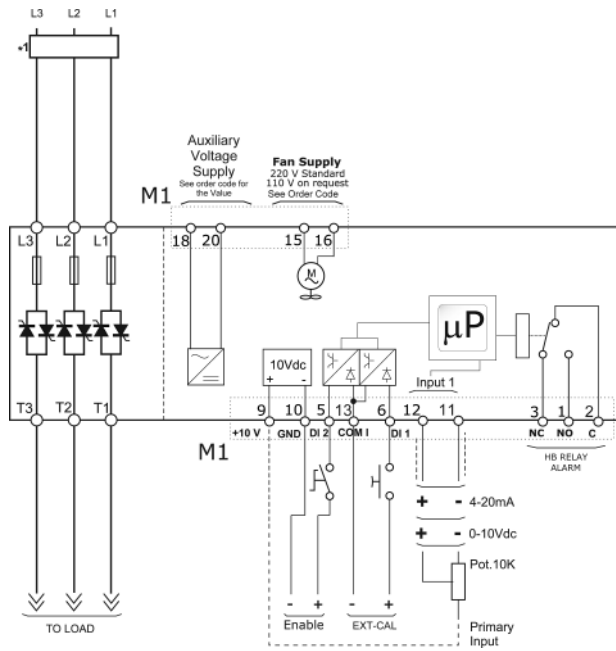
- Smart power limitation works together with synchronization. If this function is enabled, REVO-PC makes a live calculation of power at each period and generates the output values for the next period. If the calculated power is below the power limit value, the previous values remain with each channel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

APPLICATIONS AND FOCUS ON:

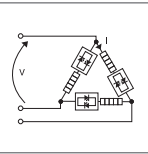
- Infrared lamp.
- Fournaces.
- Dryers
- Petrochemical
- Autoclaves.
- Chemical
- Climatic chambers

WIRING CONNECTION CUSTOM 3PH from 150A to 800A

CUSTOM 3PH from 150 to 800A

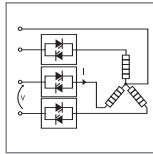


LOAD TYPE



OPEN DELTA
Resistive or
Infrared Lamps
Long and
medium waves

LOAD TYPE

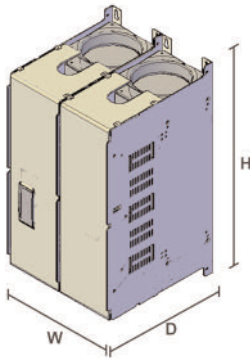


STAR with neutral
Resistive or
Infrared Lamps
Long and
medium waves

NOTE

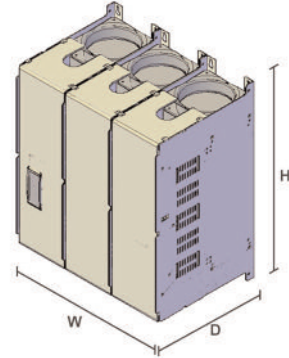
- (1) • A suitable device must ensure that the unit can be electrically isolated from the supply, this allows the qualified people to work in safety.
 - The user installation must be protecting by electromagnetic circuit breaker or by fuse isolator. The semiconductor fuses are classified for UL as supplementar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

DIMENSION AND FIXING HOLES



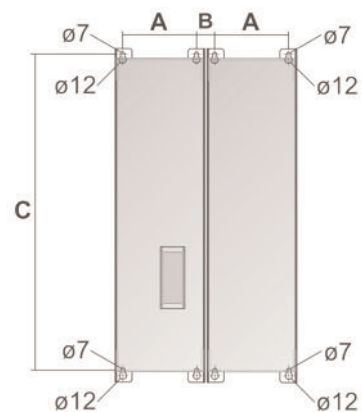
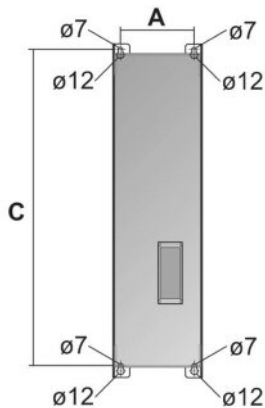
W 260 mm. - H 478 mm. - D 274 mm. - kg. 27

150A



W 390 mm. - H 478 mm. - D 274 mm. - kg. 44

300A to 800A



OUTPUT FEATURES (POWER DEVICE)

Current A	Voltage range (V)	Ripetitive peak reverse voltage (480V) (600V)		Latching current (mAeff)	Max peak one cycle (10msec.)	Leakage current (mAeff)	I ² T 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

ORDERING CODES CUSTOM 3PH

CUSTOM 3PH		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CUSTOM 3PH		C	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4, 5, 6 Current		8 Control Mode		10 Firing		13 Fan Voltage		11 Control Mode		12 Fuse & Option		14 Approvals		15 Manual		16 Version	
Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code	Description code	Numeric code
150A	0 1 5 0	90:130V (3)	1	Zero Crossing ZC	Z	No Fan 110V	1	Open Loop	0	Fixed Fuses Standard	F	Fan 220V Standard	2	None	0	Std with Fuse	1
300A	0 3 0 0	170:265V (3)	2	Burst Firing		Italian Manual	1			Fixed Fuses + CT	Y			English Manual	2		
550A	0 5 5 0	300:530V (3)	5	4 Cycles On at 50% Power Demand	4 (2)	German Manual	3			Fixed Fuses + CT + HB	H			French Manual	4		
800A	0 8 0 0	510:690V (3)	6	8 Cycles On at 50% Power Demand	8 (2)												
7 Max Voltage		9 Input															
Description code	Numeric code	Description code	Numeric code														
480V	4	SSR	S														
600V	6	0:10V dc	V														
690A	7	4:20mA	A														

LEGEND

IF = Internal Fixed Fuse

CT = Current Transformer

HB = Heater Break Alarm

Note (2): Available with Analog input only

Note (1): Load voltage must be included in Selected Auxiliary Voltage Range for units > 210A

