MOTOR CONTROL SOFT STARTERS

Soft Starter SMCV - SMCW

Motor control :
- Effcient reduction of torque and starting current

Incandescent or infrared lamp starting :
- Reduction of in rush current
- Increase in life expectancy

Transformer control (loaded) :
- Elimination of saturation current
- Improved control and protection

Whatever your application :
- Diagnosis of network, load and state of product
- Better balance of and less interference on starters (full control of the 3 phases!)
- Simple use faciliting implementation and adjustements
- As compact as an electronic contactor


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Product Reference	Pmax Motor 400VAC		Pmax Motor 230VAC		Max. Current AC53A		Specifications	Dimensions mm	Fig n°
	Y	D	Y	D	Max.	EN60947-4-2			
SMCV6080	7.5kW	13kW	4.3kW	7.5kW	16A	11.5A	Heatsink not provided	100 x 76 x 58.5	2
SMCV6110	11kW	19kW	6.4kW	11kW	25A	15.5A			
SMCV6150	15kW	26kW	8.6kW	15kW	30A	22.5A			
SMCW6020	2.5kW	4.3kW	1.4kW	2.5kW	5.6A	4A	Supplied with built-in heatsink	83 x 110 x 74	1
SMCW6080	7.5kW	13kW	4.3kW	7.5kW	16A	11.5A		83 x 110 x 155	3
SMCW6110	11kW	19kW	6.4kW	11kW	25A	15.5A		110 x 110 x 180	4
SMCW6150	15kW	26kW	8.6kW	15kW	30A	22.5A		110 x 141 x 180	5
SMCW6151	15kW	26kW	8.6kW	15kW	30A(AC53b)	22,5A(AC53b)	Ext. bypass required	83 x 110 x 74	1

Common characteristics	Rang of voltage and network frequency	Control	Diagnostic output	Operating Temperature	Insulation	Max section of wires
Values given at 40°C ambient	200 - 480VAC 40 - 65Hz	10 - 24VDC or contact	0 - 24V 1A AC/DC	-40 - +100°C	4kV	E=2.5mm² S=10mm²

The star assembly (Y) corresponds to in-line wired starter.
The delta assembly (D) corresponds to the starter wired in the triangle coupling of the motor.
Each channel is wired in series with a winding of the motor.

PHASE ANGLE CONTROLLERS

SG9 - SW9 - Reversing Switches

This relay is used to reverse the rotational direction of a motor.
The SW9 series is ready to use with heatsink and DIN rail mounting integrated.
They all come with LED and protection against simultaneous controls.


① **To be mounted on heatsink**


② **Ready to use**

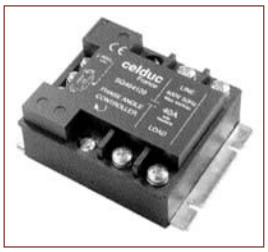

③

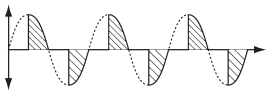
④ **= 2 without DIN rail**

Product Reference	Switching Current AC-53	Switching Voltage	Control Voltage	I²t	Protec.	Specifications	Dimensions mm	Fig n°
SG969100	3x6.6A	24-520VAC	10-30VDC	612A²s	reversing + time delay	3 phase switching	100 x 73.5 x 39.5	1
SG969300	3x8.5A	24-520VAC	12-30VDC	1500A²s		2 phase switching	100 x 73.5 x 39.5	1
SV969300	3x8.5A	24-520VAC	12-30VDC	1500A²s		2 phase switching	100 x 76 x 56.5	4
						IP20 enclosure		
SV969500	3x16A	24-550VAC	12-30VDC	5000A²s		2 phase switching	100 x 76 x 56.5	4
						IP20 enclosure		
SW960330	3x4.5A	24-550VAC	12-30VDC	1500A²s		2 phase switching	100 x 76 x 72	2
SW961230	3x8.5A	24-520VAC	12-30VDC	1500A²s		2 phase switching	83 x 90 x 155	3

Standard Entrax : 40mm. Avalable in 47.6mm (E suffix) : please contract us

SG4 Range - Phase Angle Controller



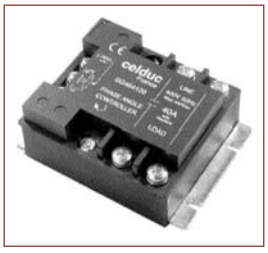


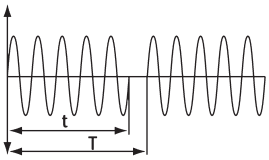
This relay is designed to proportionally vary the switching moment on a sinusoidal mains at an analog output thereby varying the RMS voltage at the terminals of the load. Application : light dimmer, heating regulation single phase variable speed control (vibrating feeders, etc).
Model with LED and RC and VDR network.

Product Reference	Switching Current	Switching Voltage	Control Voltage	Input R	I^2t	Dimensions mm
SG441020	10A	115-265VAC	0-10VDC	400 kΩ	72A²s	100 x 73.5 x 39.5
SG444020	40A	115-265VAC	0-10VDC	400 kΩ	1500A²s	
SG444120	40A	115-265VAC	Potentiometer	200 kΩ	1500A²s	
SG444420	40A	115-265VAC	4-20mA	250 Ω	1500A²s	
SG464020	40A	200-460VAC	0-10mA	400 kΩ	1500A²s	
SG464120	40A	200-460VAC	Potentiometer	200 kΩ	1500A²s	
SG464420	40A	200-460VAC	4-20mA	250 Ω	1500A²s	
SG468020	70A	200-460VAC	0-10VDC	400 kΩ	5000A²s	
SG468120	70A	200-460VAC	Potentiometer	200 kΩ	5000A²s	
SG468420	70A	200-460VAC	4-20mA	250 Ω	5000A²s	
SG469020	110A	200-460VAC	0-10VDC	400 kΩ	20000A²s	
SG469120	110A	200-460VAC	Potentiometer	200 kΩ	20000A²s	
SG469420	110A	200-460VAC	4-20mA	250 Ω	20000A²s	

These products should be mounted with heatsink in order to reach nominal current.

SG5 Range - Full Wave Pulse Controller





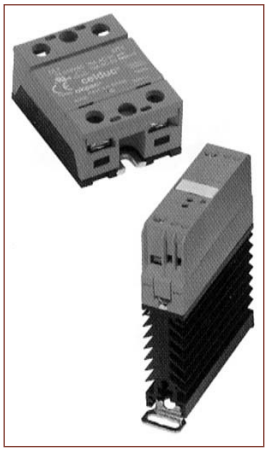
This relay has an analog input isolated from the mains to proportionally vary the cyclic operating ratio of a load (t/T). Control and mains are synchronous and output only has full periods. Models with LED and RC and VDR network protections.

Product Reference	Switching Current	Switching Voltage	Control Voltage	Input R	I^2t	Dimensions mm
SG541020	10A	230VAC	0-10VDC	250 Ω	72A²s	100 x 73.5 x 39.5
SG541120	10A	230VAC	Potentiometer	1 MΩ	72A²s	
SG541420	10A	230VAC	4-20mA	350 Ω	72A²s	
SG544020	40A	230VAC	0-10VDC	350 Ω	610A²s	
SG544120	40A	230VAC	Potentiometer	1 MΩ	610A²s	
SG564020	40A	400VAC	0-10V	250 Ω	610A²s	
SG564120	40A	400VAC	Potentiometer	1 MΩ	610A²s	
SG564420	40A	400VAC	4-20mA	350 Ω	610A²s	

For higher power ratings and three phase, ask for our application notes.
These products should be mounted on heatsink in order to reach nominal current.

PHASE ANGLE CONTROLLERS

SIx4 / SO4 Range - New Generation of Proportional Controllers



The controllers are based on a mirco-processor. This range is currently being completed.
This range comes in celpac® housing (ready to use) or in okpac® housing to be mounted on a heatsink.
The micro-processor Technology allows numerous functions :

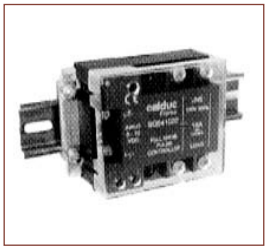
- Phase angle control
- Fast burst control
- Timers
- Full wave pulse control
- Soft-Starter
- Flashing relay

First models : Phase Angle Controllers

Product Reference	Switching Voltage	Switching Current	Control Voltage	Dimensions mm
SIL465000	160-450 VAC	32A	0-10V	22.5 x 80 x 116
SIM465000	160-450 VAC	32A	0-10V	45 x 80 x 116
SO445420	90-265 VAC	50A	4-20mA	45 x 58.2 x 27
SO465420	180-450 VAC	50A	4-20mA	45 x 58.2 x 27

For other functions : please contact us.

SWG5 Range - Single Phase Power Controller

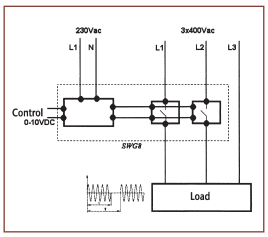


This range is based on the SG5 controllers. The SWG5 are fitted with heatsinks and DIN rail adaptors.
Main characteristics :

- Main voltage : 230 VAC, 50 or 60 Hz (400 VAC on request)
- Switching power : 2 Kw and 8 Kw
- Analogue input : 0 to 10 VDC (4-20 mA or 0 to SVDC or potentiometer on request)
- Applications : single phase heaters

Product Reference	Switching Power	Switching Voltage	Control Voltage	Input R	Dimensions mm
SWG50210	2kW	230VAC	0-10VDC	250 kΩ	100 x 74 x 56
SWG50810	8kW	230VAC	0-10VDC	250 kΩ	100 x 100 x 96

SWG8 Range - 3 Phase Power Controllers



This SWG8 controllers consist of a control unit (0 to 10 VDC input) and a power unit adapted to three phase load.
The control unit has got an analogue input isolated from the mains that can proportionally make the power vary on the load.
Main characteristics :

- Mains voltage : 400VAC
- Switching power : up to 80KW
- Analogue input : 0 to 10 VDC
- 2 phase switching
- 3 phase heaters

Product Reference	Switching Power	Switching Voltage	Control Voltage	Input R	Control Unit Dimensions mm	Power Unit Dimensions mm
SWG81510	15kW	400VAC	0-10VDC	250 kΩ	100 x 74 x 56	45 x 80 x 120
SWG82710	27kW					2x (83x110x130)
SWG83610	36kW					2x (110x110x154)
SWG84210	42kW					2x (110x110x154)
SWG84810	48kW					2x (110x110x154)
SWG86010	60kW					2x (110x110x154)
SWG88010	80kW					2x (110x145x154)