

PREMIUM SERIES





CUSTOM-MADE

Wall-Mounted Multi-Functional Power Controllers

- Power Control for different kinds of loads in the same enclosure.
- Stage Power Controller with architectural capabilities.Architectural Power Controller with emergency capabilities.
- Compatibility with a large range of architectural control panels.
- Leading edge dimmers in power range from 1380W up to 5750W per channel.
- Three basic models with 3 to 48 channel capacity.

The PREMIUM Wall-Mounted Multi-Functional Power Controllers are developed, designed, and manufactured by ELECTRON SA.

The PREMIUM Controllers are designed not as simple dimmers, but as power control systems of multiple channels. Thus, they have features that make them ideal to use as stage power controllers, as architectural controllers, or both.

To be more precise, ELECTRON SA has developed independent Power Units with 1-4 channels, 6A-25A per channel, for different loads. More specifically, the Power Units are provided as Leading Edge Dimmers, Trailing Edge Dimmers, Relay Switches, Fluorescent Controllers, Sine Wave Dimmers, LED Drivers and DALI Drivers. ELECTRON SA offers a variety of types of Power Units with different channels, output loads etc.

Given the above, the PREMIUM are custom-made Wall-Mounted Multi-Functional Power Controllers. Every PREMIUM Controller is manufactured with Power Units according to the specific requirements of an application and its exact installation needs. Therefore, a PREMIUM Controller may incorporate, for instance, leading edge dimmers, relay switches and fluorescent controllers to meet particular lighting specifications.

This means that the PREMIUM Controllers are designed and developed in order to have control of an installation from one only PREMIUM enclosure, eliminating the need of having many different devices for controlling different loads.

The PREMIUM Series consists of three different models depending on the configuration (number and capacity) of Power Units in the same enclosure.

- Premium 79 is supplied with 12 Power Units,
- Premium 68 is supplied with 6 Power Units,
- Premium 37 is supplied with 3 Power Units.

Thus, the PREMIUM Controllers are manufactured to provide great flexibility to meet your own control needs.



PREMIUM SERIES



NEW POWER UNITS WITH HYBRID RELAY SWITCHES FOR PREMIUM 79-68-37 DIMMERS

The new HYBRID RELAY SWITCH technology protects the relays contacts from sparks created upon their activation and deactivation. Activating and pausing states are been handled by a Triac, which means that they occur on every zero cross of the AC power supply. In this way, both the high surge currents and the high voltage spikes are been reduced at the maximum possible level, while in the active state (ON state) the thermal losses are been reduced since the whole current is running through the relay.

Features - Technical specifications.

- Maximum contact protection on relay's activation and deactivation.
- Capable of withstanding high inrush currents up to 250A
- Output activation always at zero cross of AC power supply.
- Output deactivation always at zero output current.
- Load protection against high surge currents.
- Connection capability of resistive, capacitive and inductive loads.
- No high voltage spikes when switching off inductive loads.
- Multiple choices in power and channels per unit.
- Negligible heat losses.
- Can be placed in all models, (37,68 and 79), of PREMIUM family.

The new Power Units with HYBRID RELAY SWITCHES are available in the following versions:

- 1. 4 x 6A. 1 pole relay.
- 4 x 6A. 2 pole relay.
- 3. 3 x 10A. 1 pole relay.
 4. 3 x 10A. 2 pole relay.
- 5. 2 x 16A. 1 pole relay.
- 6. 2 x 16A. 2 pole relay.
- 7. 4x16A. 1 pole relay. (Only for Premium 37)



PREMIUM 79-68-37 SERIES Of Multifunctional Custom Made Power Controllers **NEW POWER UNITS WITH TRAILINIG EDGE DIMMERS for:**

- LED lamps dimmable with Trailing Edge dimmers
- CFLs and electronic transformers for Trailing Edge dimming
- Designed and manufactured by ELECTRON SA



Available versions:

- Premium 79 with 24 channels x 6A per channel
- Premium 79 with 36 channels x 4A per channel
- Premium 79 with 48 channels x 3A per channel



Available versions:

Premium 68 with 12 channels x 6A per channel

- √ Trailing edge dimmers
- √ Leading edge dimmers √ HF fluorescent controllers
- √ Relay switches

Available versions:



- Premium 37 with 12 channels x 3A per channel
- Premium 37 with 9 channels x 4A per channel
- Premium 37 with 6 channels x 6A per channel

NOTE: You can have different power units that control different types of loads in the same Premium!

Thus, one Premium can have Trailing edge dimmers, Leading edge dimmers, HF fluorescent controllers (1/10V) and relay switches, in the same enclosure!





PREMIUM 68 PREMIUM 37







The PREMIUM Controllers can accept data from analogue inputs, from the build-in control panel, and from the digital DMX-512 signal. Each of the analogue inputs can operate in one of the following six modes: 0/+10V, 0/+5V Contact normal open, Contact normal closed, Easy Net, Push Button Switches. Thus, you can connect to the PREMIUM Controllers the MICON E and BS Control Panels of ELECTRON SA, simple faders, dry contacts, motion detectors, push buttons, cinema projectors (using the cinema adaptor of ELECTRON SA) and other. Each analogue input can be programmed to activate a scene, user chaser, factory chaser or channel.

When connecting the PREMIUM Controllers to a DMX-512 Control Desk, the user may disable all or some of the analogue inputs and, thus, deactivate the architectural control panels. The DMX-512 input is totally controlled allowing the user to select the start address or the DMX address for each channel independently, and to program the DMX address in many channels simultaneously so as to increase the power of a control channel.

The PREMIUM Series can be connected to the Emergency power supply and can be activated through a dry contact, in which case the PREMIUM allows the operation of a pre-programmed single scene, thus avoiding the overloading of uninterrupted power supply.

The PREMIUM Controllers are available with MCBs, MCBs P+N, RCBOs, main switch, RCCB, three phase and single phase power supply, and Delta $(230V \sim 3/PE)$.

 ${\tt ELECTRON\,S.A.\ produces\,17\,models\,of\,the\,PREMIUM\,68\,\&\,37\,Series\,with\,different\,specifications.}$

PREMIUM 68 SERIES



PREMIUM 37 SERIES



PREMIUM 68 PREMIUM 37

FEATURES OF PREMIUM 37 & 68 SERIES

AVAILABLE VERSIONS:

- Trailing Edge dimmers
- Leading Edge dimmers
- Relay switches
- HF Fluorescent controllers
- Power rating from 6A to 25A per channel

FEATURES

- Stage and / or architectural operation.
- DMX-512 input.
- Independent DMX address for each channel.
- Soft Patch for DMX channels.
- Programmable DMX assigns. Each DMX channel can be programmed to activate a channel or a scene or a user chaser or a factory chaser.
- 12 fully programmable analogue inputs.
- Soft Patch for analogue inputs.
- Programmable analogue input assigns. Each analogue input can be programmed to activate a channel or a scene or a user chaser or a factory chaser.
- Six programmable operating modes for each analogue input (0/+10V, 0/+5V, Contact normal open, Contact normal closed, Easy Net, Push Button).
- Programmable Blocking function for each analogue input. Each analogue input can be blocked by a programmable DMX channel, if present.
- Control capability from all E and BS Series of architectural control panels by Electron S.A. (page 24 25).
- Control capability from simple faders, dry contacts, motion defectors, cinema projectors (using the cinema adaptor of page 24), push button switches (like legrand).
- Individual configuration of power units in the same enclosure.
- 24 programmable scenes with fade in/out (Osec-59min and 59,9sec.)
- 12 user chasers with programmable fade in/out (Osec-59,9sec.), speed rate (0,05sec-59,99sec.) and dimmer level.
- 12 factory chasers with programmable fade in/out (0sec-59,9sec.), speed rate (0,05sec-59,99sec.) and dimmer level.
- Programmable preheat level per channel.
- Programmable soft start per channel.
- Programmable channel fade in/out (0sec-59,9sec.) per channel.
- Law selection per channel: linear, incandescent, switch (with selectable switch over point from 5-95% of the fader scale).
- Programmable behaviour on DMX signal loss (Blackout or hold of last DMX data packet or go to scene 24).
- Programmable maximum output level per channel.
- Two programmable function keys that can be assigned as Panic and Fire alarm buttons.
- LCD display and keyboard on the front panel for easy programming.
- Password protected.
- Automatic power control to prevent over-heating.
- MCB protection for each channel (MCBs P+N are available as extra).
- Main Switch 3P+N or RCCB are available as extra.
- Three phase power supply (Single phase power supply upon request).
- Delta models available upon request.

Dimensions in mm (WxHxD):
PREMIUM 37: 346x550x110
PREMIUM 68: 380x900x120

Coming Soon: Sine Wave Controllers LED Drivers DALI Drivers







ORDERING INFORMATION FOR PREMIUM 68 & 37 SERIES OF WALL MOUTED MULTIFUNCTIONAL POWER CONTROLLERS

ORDERING INFORMATION FOR PREMIUM SERIES

MODEL	Channel Confi- guration Code		Device Option Code	Power Unit 1 Code	Power Unit 2 Code	Power Unit 3 Code	Power Unit 4 Code	Power Unit 5 Code	Power Unit 6 Code
P37	Х	-	X	Х	Х	Х			
P68	X	-	X	Х	X	X	X	X	X

PREMIUM 68 PREMIUM 37

PREMIUM 68 CHANNEL CONFIGURATION CODES

	CHANNEL			POWER UNITS CHAI	NNELS X CAPACITY		
CODE	CONFIGURATION	1	2	3	4	5	6
1	6x25A	1x25A	1x25A	1x25A	1x25A	1x25A	1x25A
2	4x25A + 2x16A/6A + 3x10A/4A	1x25A	1x25A	1x25A	1x25A	2x16A/6A	3x10A/4A
3	3x25A + 6x16A/6A	1x25A	1x25A	1x25A	2x16A/6A	2x16A/6A	2x16A/6A
4	12x16A/6A	2x16A/6A	2x16A/6A	2x16A/6A	2x16A/6A	2x16A/6A	2x16A/6A
5	3x25A + 9X10A/4A	1x25A	1x25A	1x25A	3x10A/4A	3x10A/4A	3x10A/4A
6	12x10A	2x10A	2x10A	2x10A	2x10A	2x10A	2x10A

PREMIUM 37 CHANNEL CONFIGURATION CODES

CODI	CHANNEL	POWER UNITS CHANNELS X CAPACITY				
СОБ	CONFIGURATION	1	2	3		
1	3x25A	1x25A	1x25A	1x25A		
2	6x16A/6A	2x16A/6A	2x16A/6A	2x16A/6A		
3	1x25A + 2x16A/6A + 3x10A/4A	1x25A	2x16A/6A	3x10A/4A		
4	2x25A + 4x6A/3A	1x25A	1x25A	4x6A/3A		
5	9x10A/4A	3x10A/4A	3x10A/4A	3x10A/4A		
6	1x25A + 8x6A/3A	1x25A	4x6A/3A	4x6A/3A		
7	2x16A/6A + 3x10A/4A + 4x6A/3A	2x16A/6A	3x10A/4A	4x6A/3A		
8	12x6A/3A	4x6A/3A	4x6A/3A	4x6A/3A		
9	12x16A only relay 1P & HF 1P	4x16A	4x16A	4x16A		
Α	6x25A or 32A only relay 1P, HF 1P	2x25A/32A	2x25A/32A	2x25A/32A		
В	6x10A	2x10A	2x10A	2x10A		
С	12x10A only relay 1P & HF 1P	4x10A	4x10A	4x10A		

Ordering code example 1: P372-1555.

Premium 37 with three phase star power supply, one pole MCBs, 6x16A leading edge triac dimmers with rise time $50\mu s$.

Ordering code example 2: P685-4444CGN.

Premium 68 with three phase star power supply, P+N MCBs, four pole main switch, 3x25A leading edge thyristor dimmers with rise time 200µs, 3x10A leading edge triac dimmers with rise time 100µs, 3x10A Fluorescent controller with one pole relay and 3x10A one pole relay switch.

Channel configurations and capacities of Premium models cannot be changed. You must find the appropriate power unit for the load type you need, with the same channel X capacity, indicated in channel configuration tables. For example, the codes corresponding to 2x16A are 5, 6, 7, 8, 9, A, E, F, E and E.

Note 2: The HF Fluorescent and Relay switch Power Units should always be installed last in the

DEVICE OPTIONS CODES

CODE	DESCRIPTION	CODE	DESCRIPTION
1	One pole MCBs (Three Phase Star)	D	Two pole MCBs (Three Phase Delta)
2	P+N MCBs (Three Phase Star)	E	Two pole MCBs / 3P main switch (Three Ph. Delta)
3	One pole MCBs / Four pole main switch (Three Phase Star)	F	P+N RCBOs (Three Phase Star)
4	P+N MCBs / Four pole main switch (Three Phase Star)	G	P+N RCBOs / Four pole main switch (Three Phase Star)
5	One pole MCBs / RCD (30mA) (Three Phase Star)	Н	P+N RCBOs / Four pole main MCB (Three Phase Star)
6	P+N MCBs / RCD (30mA) (Three Phase Star)	1	Two pole MCBs (10kA) / RCD (30mA) (Three Ph. Delta)
7	One pole MCBs (Single Phase)	J	One pole MCBs / RCD (30mA) / By-pass (Three Phase Star)
8	P+N MCBs (Single Phase)	K	One pole MCBs / 4P Main Sw. / By-pass (Three Phase Star)
9	One pole MCBs / Four pole main switch (Single Phase)	L	One pole MCBs / By-pass (Three Phase Star)
Α	P+N MCBs / Four pole main switch (Single Phase)	M	One pole MCBs / 4P Main MCB. (Three Phase Star)
В	One pole MCBs / RCD (30mA) (Single Phase)	N	One pole MCBs / 4P Main Sw / RCD (30mA) (Three Phase Star)
С	P+N MCBs / RCD (30mA) (Single Phase)		

POWER UNITS CODES

CODE	DESCRIPTION	CODE	DESCRIPTION
1	1x25A leading edge Triac Dimmer. R.t=100µs	R	4x16A One pole Relay switch
2	1x25A leading edge Triac Dimmer. R.t=200µs	S	2x25A One pole Relay switch
3	1x25A leading edge Thyristor Dimmer. R.t=100µs	T	2x32A One pole Relay switch
4	1x25A leading edge Thyristor Dimmer. R.t=200µs	U	2x10A leading edge Triac Dimmer. R.t=50µs (PLE310)
5	2x16A leading edge Triac Dimmer. R.t=50µs	V	2x10A leading edge Triac Dimmer. R.t=100µs (PLE310)
6	2x16A leading edge Triac Dimmer. R.t=100µs	W	2x10A leading edge Triac Dimmer. R.t=200µs (PLE216)
7	2x16A leading edge Triac Dimmer. R.t=200µs	X	2x10A leading edge Thyristor Dimmer. R.t=50µs (PLE216)
8	2x16A leading edge Thyristor Dimmer. R.t=50µs	Υ	2x10A leading edge Thyristor Dimmer. R.t=100µs (PLE216)
9	2x16A leading edge Thyristor Dimmer. R.t=100µs	Z	2x10A leading edge Thyristor Dimmer. R.t=200µs (PLE216)
Α	2x16A leading edge Thyristor Dimmer. R.t=200µs	01	2x10A HF Fluorescent Controller. One pole relay
В	3x10A leading edge Triac Dimmer. R.t=50µs	02	2x10A HF Fluorescent Controller. Two pole relay
С	3x10A leading edge Triac Dimmer. R.t=100µs	03	2x10A One pole Relay switch
D	4x6A leading edge Triac Dimmer. R.t=100µs	04	2x10A Two pole Relay switch
Е	2x16A HF Fluorescent controller. One pole relay	05	4x10A leading edge Triac Dimmer. R.t=50µs (PLE410)
F	2x16A HF Fluorescent controller. Two pole relay	06	4x10A HF Fluorescent controller. One pole relay
G	3x10A HF Fluorescent controller. One pole relay	07	4x10A One pole Relay switch
Н	3x10A HF Fluorescent controller. Two pole relay	08	4x3A Trailing Edge dimmer
- 1	4x6A HF Fluorescent controller. One pole relay	09	3x4A Trailing Edge dimmer
J	4x6A HF Fluorescent controller. Two pole relay	OB	2x6A Trailing Edge dimmer
K	4x16A HF Fluorescent controller. One pole relay	0C	2x16A One pole Hybrid Relay switch
L	2x16A One pole Relay switch	0D	2x16A Two pole Hybrid Relay switch
M	2x16A Two pole Relay switch	OE	3x10A One pole Hybrid Relay switch
N	3x10A One pole Relay switch	OF	3x10A Two pole Hybrid Relay switch
0	3x10A Two pole Relay switch	0G	4x6A One pole Hybrid Relay switch
Р	4x6A One pole Relay switch	OH	4x6A Two pole Hybrid Relay switch
Q	4x6A Two pole Relay switch	OI	4x16A One pole Hybrid Relay switch