

AUTOMATIC AC TRANSFER SWITCH

Eliminate the need to manually switch your power source between inverter and generator. It automatically senses generator AC power and switches the output between inverter and generator accordingly.

Take the hassle out of wiring a changeover switch between inverter and generator. Have this option fitted to your LS series inverter to simplify your power system wiring. Simply connect the generator to the hardwire terminals its that easy!

Features

- Available exclusively to the new LS series from 800W to 5500W models
- No Break changeover time of 0.01 second (< half a cycle)
- Double pole contactor switching both active and neutral
- Minimise and simplify system wiring

System Block Diagram



Installation of system components and associated interconnecting wiring, should be performed by qualified and licensed personnel only.

Ordering Codes

Option K = Automatic AC transfer switch for 800W to 1500W models. Option KX = Automatic AC transfer switch with On Delay Timer and Voltage Interlock for 2000W to 5500W Models.



On Delay Timer and Voltage Interlock Module

This module is available with the automatic AC transfer switch option, for the LS series sinewave inverters from 2000W to 5500W models. It offers further protection to connected appliances from generator voltage fluctuations and ensures a cleaner and more stable AC supply.

Upon the starting of a generator, it's output voltage will rise and stabilise as the generator speed increases and stabilises. Once the generator voltage is within the required limits the ON delay timer provides a short delay before switching the generator power to the output. This ensures the generator is warmed up and the output voltage is stable. The generator output voltage is continuously monitored and if it is outside the set limits the transfer switch will switch back to inverter. This prevents brown outs due to low voltage and over voltage surges, which can harm appliances.

On Delay Timer – ensures the generator has warmed up and the output voltage is stable before the transfer switches, switches to generator.

Voltage Interlock – monitors the generator output voltage and if too high or too low the transfer switch will switch back to inverter output until the generator output restabilises.

Versatile – selectable voltage levels and time delay.

Note: *Highly recommended for generators with large fly wheels, that ramp up and down slowly at start up and shut down.*

Settings are adjustable via DIP switches located inside the Generator Input Junction Box.

ENSURE POWER IS DISCONNECTED BEFORE ADJUSTING DIP SWITCHES. To be adjusted by qualified personnel only!



Available for LS series inverters from 2000W to 5500W models.





Ton = On Delay timer is selectable at 30 or 120 seconds. V low = Low voltage cut out is selectable between 190-220Vac V high = Over voltage cut out is selectable between 260-270Vac Bypass ON = Disable Voltage Interlock and Timer operation Bypass OFF = Normal Voltage Interlock and Timer operation

Factory Settings are ON Delay = 30 sec, V low = 200Vac, V high = 270Vac, Bypass = OFF

Dir Switch Settings							
Switch 1	Switch 2	Switch 3	Switch 4	Switch 6	Parameter		
ON					Ton = 30 seconds		
OFF					Ton = 120 seconds		
	ON				V high =260Vac		
	OFF				V high =270Vac		
		ON	ON		V low = 220 Vac		
		ON	OFF		V low =210Vac		
		OFF	ON		V low =200Vac		
		OFF	OFF		V low =190Vac		
				ON	Bypass		
				OFF	Normal Timer Mode		

DIP Switch Settings

Mode Indicator LED

There is a red Indicator LED directly above the dip switches that turns ON and flashes according to the mode of the timer module.

LED	MODE
OFF	No AC input present
Fast flash	AC input voltage out of range
Slow flash	AC input voltage OK and delay timer ON- 1 flash per second
<u>O</u> N	AC input switched through to output