



# OEM Electronics Pty Ltd.

## Leasam 3PS3 - Three Phase Soft Starter V2.1

### OVERVIEW

The Leasam 3PS3 Soft Starter is designed to reduce the inrush current on each phase of the air conditioner Compressor (up to 13.5HP or 36kW) to below the 45 Amps per phase to comply with the Australian Energy Authority requirements. This requirement is due to the potential interference that can be generated, affecting both the owners of the equipment and neighboring consumers. This interference is predominantly “light flicker” but extends to interruption of computers and other electronic devices. The Leasam Soft Starter uses a combination of new technologies to ensure reliable performance at a reduced start current. The on-board LED indicate the current status of operation for service personell.

Operation Mode	On-board LED Indication
At first Power Up	One blink per second for 10 seconds
Ready to Start	LED Off
Phase Rotation / Loss Fault	Three blinks, delay, three blinks, delay, etc.
After Starting - see below	
Anti-cycle Protection after a start	ONE BLINK PER SECOND FOR 50 seconds
Compressor Run after anti-cycle	LED OFF
Compressor fails to start	Two blinks, delay, two blinks, delay, etc.
Phase Low / Rotation Fault	Three blinks, delay, three blinks, delay, for 50secs.
Phase Loss	Four blinks, delay, four blinks, delay, for 50secs.

### GENERAL INFORMATION

We recommend a 4mm squared cable to be adopted at all times. If the cable run is longer than 25 meters or the LRA current of the Compressor is over 110 Amps, we recommend 6mm cable should be used.

### 3PS3 TROUBLE SHOOTING

On first application of Mains Power, the LED will blink to indicate the initial 10 second delay and then turn OFF to indicate the unit is ready to start.

If Compressor does not start and the LED giving bursts of 2 blinks.

- 1) Compressor current of each phase has not dropped to below 31 Amps within 0.5 seconds.
- 2) Check the mains voltage drop and cable size. Reset after 4 minutes.

If Compressor does not start and the LED giving bursts of 3 blinks.

Phase Rotation Incorrect, Phase Lost or Low i.e. less than 195V.

If Compressor Stops and the LED gives bursts of 4 blinks.

Less than 50% current was detected in one phase.



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### SPECIFICATION

Operation Voltage	220Vac ~ 240Vac
Power Frequency	50Hz
Start Signal	220Vac ~ 240Vac +/- 10%
Operation Indication	LED
Maximum Operating Voltage	264 Vac
Minimum Operating Voltage	204 Vac
Maximum Compressor LRA	118 Amps per phase
Maximum Compressor Run Current	27.5 Amps
Maximum Operating Frequency	12 timers per hour
Initial Delay Time	10 seconds
Anti-Cycle Protection Time	50 seconds
Trip Protection Time	50 seconds
Maximum Soft Start Time	0.5 second
Maximum Soft Start Current	45 Amps at 240Vac per phase
Power Consumption	Approx ~ 7VA at voltage rating
Ambient Temperature	Operation: - 10°C ~ 50°C
Ambient Humidity	Operation: 35% to 85% non condensing
Recommended Wire Size	4.0mm sq minimum for compressor and incoming mains 1.5mm sq for control signals
Size	172mm x 116mm x 65mm
Weight	Approx 700g
Mounting Holes	M4 x 4 (106mm x 162mm spacing) + 3 M4 supports
Warranty	12 months (Limited to return & repair or replace)

