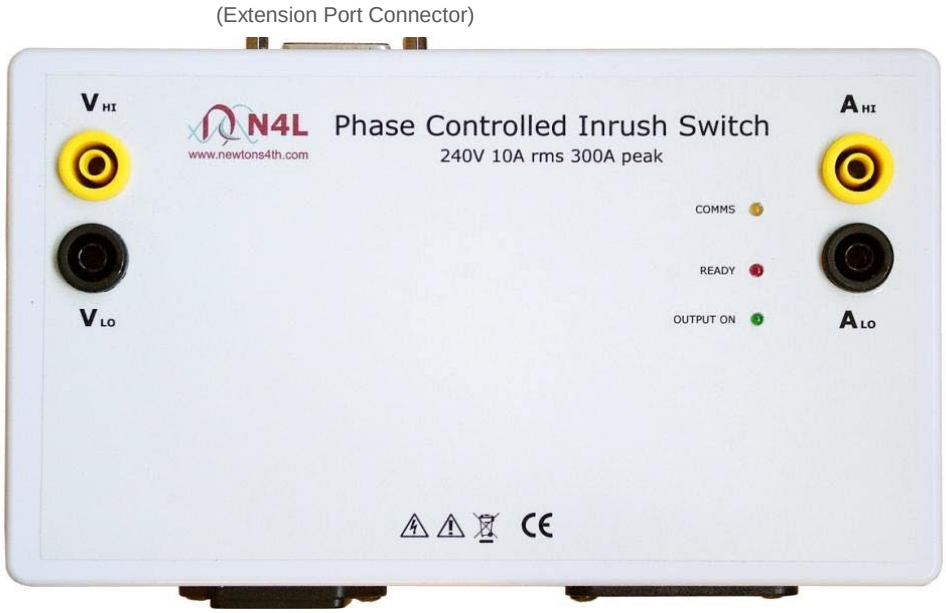
Newtons4th Ltd
office@newtons4th.com
www.newtons4th.com

Phase Controlled Inrush Switch

PCIS



Accessory for the PPA range to provide the precise measurement of inrush current on a single phase AC Load.

APPLICATION

When measuring the maximum inrush current taken by a load, it is necessary to switch on the supply at a specific point in the voltage cycle. The point at which maximum inrush current will be drawn is dependent upon the type of load being tested but usually, this is 90º or 270º for a capacitive load and 0º or 180º for an inductive load. It can also be useful to measure the inrush current at intermediate points between the maximum and minimum levels; therefore an ideal phase switching device allows the selection of phase angle at increments of 45º.

SOLUTION

The Phase Controlled Inrush Switch or PCIS incorporates precise phase control, solid state switching and communication with a PPA series power analyzer so that power can be applied to a DUT at a specific voltage phase angle that is selected from an application menu in the PPA analyzer.

OPERATION

The PCIS is placed between the DUT and a line supply via an IEC power inlet and an IEC shuttered outlet. The voltage and current measurement connections to the PPA are via standard 4mm safety leads and communication to the PPA is via an extension port lead that is supplied as standard with the PCIM.

SPECIFICATION

Switch on cycle modes:	Half Cycle, Single Cycle or Continuous – Selected on PPA		
Switch on phase offset:	0º to 315º in 45º steps - Selected on PPA		
Nominal voltage rating:	100-240Vrms	**Current rating:**	10Arms 300Apk
Input power:	IEC Socket	**Output power:**	IEC Shuttered Outlet
V / I connections:	4mm safety sockets	**PPA Interface:**	Extension port
Dimensions:	190 x 120 x 70 mm	**Weight:**	600 g