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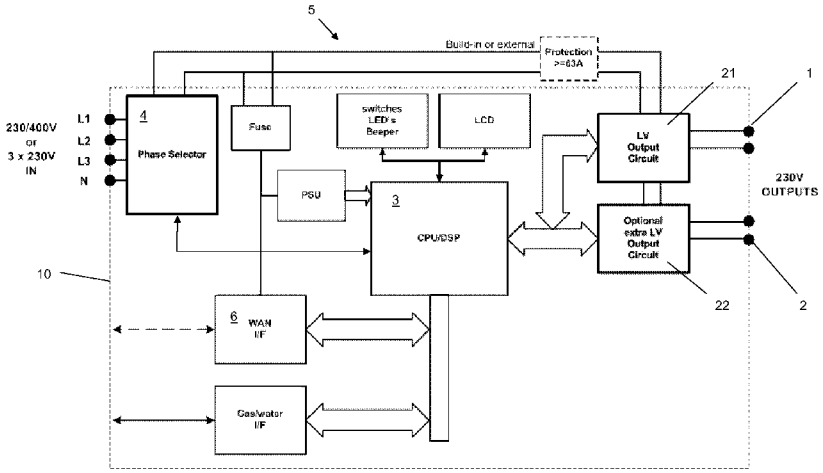


FIG. 1

(57) Abstract: Smart metering device (10) for connecting an end user mains network to a multiple phase power distribution network and monitoring consumption on the end user mains network, comprising: inputs (L1, L2, L3) for connecting the smart metering device (10) to multiple phases of the multiple phase power distribution network; single phase low voltage outputs (1, 2) for connecting the end user mains network to the smart metering device (10); a power circuit (5) between the inputs (L1, L2, L3) and the low voltage outputs (1, 2); a modem (6) for receiving control messages sent from a communication server associated with the power distribution network; a controller (3) communicatively connected to the modem (6) for controlling switching operations in the smart metering device (10) in response to the control messages; and a phase selector (4) communicatively coupled with the controller (3) and comprising input switches for switching the low voltage outputs (1, 2) between different sets of the inputs (L1, L2, L3) each set corresponding to one of the multiple phases of the multiple phase power distribution network.

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