



Two-Way PLC Interface

230VAC -
50 Hz



Product number : TW7223

Key Features

Designed for OEMs where the controller manufacturer implements their applications using X10 PLC control

Benefits

The Two-way PLC Interface (TW7223E) has been designed for controller manufacturers to implement X10 PLC control.

The functionality of the PLC control is decided by the manufacturer and implemented in the controller panel.

The document « X10 protocol for OEM controller» defines the interface protocol that a manufacturer will need for implementing X10 control.

With a control panel which has been designed to interface with X10 PLC, the installation is simple. Just connect the flying lead to the 230V power supply, connect the telephone cable to both the RJ11 socket on the XM10 and the control panel with the cable provided.

There is a red LED lamp on the TW7223E which is ON to indicate power. It will flash when X10 signals are being received or transmitted.

Technical data

- Supply voltage: 230V +10% -15% 50 Hz
- Ambient temperature:
 - 10° C to + 40° C (operation)
 - 20° C to + 70° C (storage)

DC CHARACTERISTICS

Serial data input:

- Min. logic «1»:
4 V input will sink approx 2,5 mA
- Max. logic «1»:
20 V input will sink approx 18 mA
- Max. logic «0»:
0.8 V will sink approx 0,1 mA
(Voltages and currents with respect to terminal 2)
- Note: this output is an open collector transistor. Therefore, the logic «1» voltage is quoted as a reference for defining the output leakage current. An output pullup resistor is required to generate a logic level. The pullup can be returned to any voltage up to 20 V with respect to terminal 2.

AC characteristics:

- HF output to AC power line:
60 mW average into 5W
- Conforms to Class 116 of EN50065-1:
load (2,5 V pk-pk instant.)
- Carrier frequency: 120 kHz \pm 2 kHz
- Max. phase delay between 0 crossing point of AC power line and 0 crossing detect output (either transition): 100 msec
- Max. allowable delay between transitions on 0 crossing detect output and serial data input «0» - «1» transition: 50 msec
- Max. delay between serial input envelope «0» - «1» transition and carrier burst reaching 90 %: 50 msec
- Width of X10 envelope :
1 ms +100 msec -50msec
- Isolation voltage :
4 kV rms 50Hz for 1 min.
- Approvals: CE Mark