



### **ELECTRICAL SAFETY**

The monitor must be mounted in its protective enclosure as supplied. This enclosure is made of conductive material, it must be earthed.

The power circuits connected to the monitor should be suitably fused. A supply current fuse of 1 A is adequate. Input current max 5 mA at 230 V ac.

The monitor is suitable for single phase 230 V max operation. On no account should 3 phase, 415 V, connections be made to the unit.

### **EMC REQUIREMENTS**

#### **General**

To be sure that the JTL products comply with the EMC requirements, the installation instructions supplied with the product must be adhered to.

#### **Earth connection**

Earth connections must be copper or aluminium to earth. Steel plates, trunking, armouring forming part of the earth system are not acceptable.

### **CABLE INSTALLATION REQUIREMENTS**

When installing monitors into equipment it is essential that the following requirements are observed:

#### **Cable Segregation**

Connections are divided in to two groups:

- (i) Power
- (ii) Signal

It is essential that the cable connections to these groups be segregated.

## **Signal Cables**

Low voltage signals should be run in multicore cable to minimise EMC problems and to avoid any confusion with power cables during installation or subsequently.

Signal cables should have a minimum insulation voltage of 250 V ac.

Signal cables must have a minimum cross section of 0.2 mm and be flexible with a minimum of 7 strands.

Telephone cable is not permitted under any circumstances.

JTL manufacture cables for all DIN connectors in various lengths to the above standards.

No signal cable should be run in trunking with power cables.

## **Power and Cables**

Flexible cables connected to JTL screw connectors should be bootlace ferruled with the correct ferrule using an appropriate crimp tool.

## **High Voltage Testing**

No JTL monitors should be connected in circuit during high voltage "flash" testing.

## **Cable Installation Within Equipment**

Within the equipment separation must occur with a minimum of 150 mm between parallel runs of power and signal cables. These must not be run in common trunking.

## **External Cables to Site Wiring**

A minimum spacing of 350 mm must be maintained between parallel runs of power and signal cables. These must not be run in common trunking.

Where separation of 350 mm is not possible the signal cable should be screened and run in conduit or separate section steel trunking.

## **STATUTORY WIRING REGULATIONS**

Installation should comply with the current statutory wiring regulations.

## **ADDITIONAL INFORMATION**

Further information on installation requirements and cabling is available in the JTL Installation Practice Manual available on request.