Tautech

Total Solution

Station Alarms Panel Vega SAP

OPERATIONAL TESTING PROCEDURE

The test procedures described herein pre-suppose earlier comprehensive factory acceptance testing of the individual system components and these procedures, while confirming basic operation, will essentially prove the correct integration of the main alarms installation components and interconnections.

The importance of these tests can not be over stressed since, unless these are completed successfully, there is no evidence that the individual components will operate as a system to meet the essential alarms functionality as intended.

All device connections to the Vega are indicated on the Connection Diagram Vega SAP xxx released with the product.

VISUAL INSTALLATION CHECK POINTS

A.1 Confirm correct physical placement and alignment of the surface enclosures for the alarm system enclosure inside of the equipment shelter in accordance with the relevant equipment layout data pack particular to the type of installation.

A.2 Do a critical visual inspection of all the wiring connections considering polarisation of plug connections and integrity of screw terminal connections. Refer to the data pack where necessary.

A.3 Confirm polarity of screw connections to smoke detectors and motion detectors since it will affect correct operation of these systems.

A.4 Similarly, confirm security of the auxiliary DC power supply connections from the DC distribution facility to the Vega and verify that the correct polarity is observed.

A.5 Verify correctness and security of plug-in or IDF type connections of alarms outputs to BTS or similar.

A.6 Confirm earthing connection to the Vega enclosure.

A.7 Verify that all the necessary documentation for Vega system is included in the shelter / site file records.

OPERATIONAL TESTS

This procedure applies to the Vega in basic configuration that is, without optional processor module.

Since this in situ test will lead to intermittent generation of alarms, arrangement need to be in place to be in test mode where the alarms could possibly be received so to prevent possible confusion at the receiving end.

B.1 With the DC supply to the Vega established, confirm the green LED ON indication on the unit.

B.2 Establish communication with the (local or remote) network supervisory function to be able to confirm the connected alarm function status indication at the receiving end. In the absence of such a facility the alarm outputs from the Vega can be confirmed locally by means of simple continuity testing or by way of a custom digital alarms test unit. Always observe CE (Collector/Emitter) polarity on the alarm outputs when connecting to test equipment. In this respect refer to documentation and identification marking on PCB.

B.3 The integral detectors such as smoke detector/movement sensor and door switch are factory tested and need not be routinely retested. Door switch travel/alignment and actuation by the door of the shelter has to be positively confirmed however.

B.4 Individual alarms are to be confirmed on a one-by-one basis by way of simulating the failure conditions that will lead to an alarm indication for verification:

B.4.1 Generate each of the DC power system alarms in turn and confirm correct indication to the supervisory system;

B.4.2 Generate each of the CCU alarms in turn and confirm correct indication to the supervisory system. If the Vega and related cable connections were in place at the time of the above, CCU operational testing this test can be completed through to supervisory system level as a single exercise;

B.4.3 Generate each of the station alarms as required by operating the door (not only door switch), establishing movement sensing and smoke detector activation and confirm correct indication to the supervisory system in turn;

B.4.4 Generate each of the field alarms as required by switching stand-by diesel generating plant, driving fuel low indication etc according to site specifics and confirm correct indication to the supervisory system;

B.4.5 Generate at the source device or by simulation each of the spare and future alarms at the IDF and confirming correct indication through to the supervisory system.

B.5 Re-confirm that all disturbed connections are secure and that plug connections are inserted fully home.

B.6 Finally, perform a System Reset operation on the supervisory system to clear all alarms ready for commercial operation.

Normal Operational acceptance testing will be complete at this stage.

ADVANCED TESTING

Advanced testing or configuration of the Vega with Processor Module is possible by way of the Windows based Vega Configuration Application. (See separate Application Document 403).

TEST EQUIPMENT

The following power supplies and test equipment are required to perform the above Operational Testing:

C.1 DC power installation complete or alternatively temporary 24 / 48V DC source as required of 1A capacity;

C.2 Multi-meter type continuity tester;

C.3 Smoke detector activation canister (if required);

C.4 Expert support from product suppliers such as DC power system or diesel stand-by to be able to drive alarm conditions from source for verification;

C.5 Comprehensive documentation;

C.6 Optional:
Test Termial / Notebook PC and Vega Configuraton Application.

End

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