

FUNCTIONAL TEST SYSTEM

GENERAL DESCRIPTION

It is a system of functional test of end production line. The refrigerators parked in a test zone, there are 2 or 3 probes of temperature, in the frigo and the freezer space. The test can last from 1 to 3 hours to second of the model, it records the temperatures and at the end of the test it gives an indication if the refrigerator works well. If interface the system to the PLC it is possible to send automatically the not working in the repair zone. The system creates the archives of the carried out tests, that it is possible see again or to interrogate for statistical calculations. The system is flexible and expandable, the MAREL srl has realized small systems with 80 refrigerators, until 800 refrigerators for one advanced every day production of 2000 pieces. Also the test software is made in order to satisfy all the requirements.

CHARACTERISTICS

- Low Cost and flexibility
- modular data Logger
- modular Program
- Survey of the ambient temperature
- Calibration of all the input current transducers
- Range of temperature 40°C +40°C
- Precision +/-0.5°C
- Sampling Time programming

COMPOSITION

- personal computer
- Laser printer
- Data Logger DL2000
- TEST software

OPTIONS

- Network connecting
- Software for automatic test

TEST SOFTWARE

The program is developed in order to work in Windows 2000 O.S. The main page on the display shows the synoptic of test, all the emplacements are independent and are represented from a rectangle. For every test the following information are visualized: time passed from the beginning of the test and time remaining to the end. Clicking with the mouse on an emplacement it is possible to see in real time the temperatures drawing. At the end of the established time the tests are closed automatically and the line correspondent to the test begins to flash in order to recall the attention of the technician. The active tests can anytime be concluded. The technical one manually slides the diagrams and decides the well working refrigerators. It is available a module software that decides automatically if the refrigerator is working or not. The program control 7 parameters of time and temperature, the detach and the reattachment of the thermostat. The operator can in any case change manually the result of the test. All the executed tests come saved in a date base, from which it is possible to see again the drawing and the test result. The possibility to calibrate every single input makes the proposed system one employable reliable instrument also for precision surveys. It is possible to connect in network the system to other repair and CSQ systems.