NICOMATIC

# NICOMATIC Test report summary

# CMM Family

# INSULATION RESISTANCE Test

CREATIVE
INTERCONNECT
SOLUTIONS

# I. Introduction

## A. Purpose

The CMM connectors' family are manufactured to meet or exceed the requirements of **MIL-DTL-55302G standard**.

## B. Scope

Measure the insulation resistance of CMM connectors equipped with LF and HP contacts.

The following data has been taken from NICOMATIC Qualification test report **QTR0808**.

## C. Conclusion

The CMM connectors' family are **qualified** regarding **INSULATION RESISTANCE** according to **MIL-DTL-55302G**.

LF & HP Contacts (all series): **Insulation resistance > 400 GΩ**

# II. Test Method and Requirements

## A. List of Test Samples

### *a. CMM 200 Series*

- 201Y50L – LF male contacts Straight PCB _ 13507
- 202Y50 – LF female contacts Straight PCB _ C14764

### *b. CMM 220 Series*

- 221V50FXX – LF male contacts 90° PCB _ 13507
- 222S50MXX – LF female crimp contacts _ C12468
- 222YL26MXX – LF male contacts Straight PCB _ C14810
- 221S26FXX – LF male crimp contacts _ 12969
- 221D00FXX-0008-3400CMM – HP30 male contacts 90° PCB _ 30-3400-CMM
- 222E00MXX-0008-4320 – HP30 female straight contacts on cable _ 30-4320
- 222Y08SXX-0004-4300CMM – HP30 + LF female contacts Straight PCB _ 30-4300-CMM + C14764
- 221S08FXX-0004-3308 – HP30 + LF male contacts Straight on cable _ 30-3308 + 12969
- 221S06FXX-0003-3320 – HP30 + LF male contacts Straight on cable _ 30-3320 + 12969
- 222S06MXX-0003-4308 – HP30 + LF female contacts Straight on cable _ 30-4308 + C12468

### c. *CMM 320 Series*

- 321C057FXX – LF male crimp contacts _ 12960
- 322C057MXX – LF female crimp contact _ C13064-P
- 321V096FXX – LF male contacts 90° PCB _ 13507
- 322Y096MXX – LF female contacts Straight PCB _ C14812
- 341D000FXX-0018-340014 – HP22 male contacts 90° PCB _ 22-3400-XX
- 342E000MXX-0018-4310 – HP22 female straight contacts on cable _ 22-4310
- 342D000MXX-0048-430014 – HP22 female contacts Straight PCB _ 22-4300-14
- 341E000FXX-0048-3310 – HP22 male straight contacts on cable _ 22-3310

## B. Requirements

According to **MIL-DTL-55302G** standard and **EIA-364-21C**:

**The initial insulation resistance shall be not less than 5,000 MΩ (5 GΩ).**

## C. Test Method and Results

Insulation resistance is measured separately between the closest adjacent contacts and between pins and hardware.

The same contact locations for a given connector are used each time the insulation resistance test is performed.

Test voltage applied is 500 V DC ± 10%.

| CMM equiped with | Insulation Resistance |
|---|---|
| LF contacts | **> 400 GΩ** |
| HP 22 contacts | **> 400 GΩ** |
| HP 30 contacts | **> 400 GΩ** |