

TEMCO CONTROLS LTD.

4416 South Parkside Court, Spokane, Washington, USA 99223 Tel: (214) 306-6069 Fax: (206) 350 0330



CE - DECLARATION OF CONFORMITY

According to ISO 17025 and EN 45001

Manufacturer's Name: Temco Controls

Manufacturer's Address: 4416 South Parkside Court

Spokane, Washington, USA, 99223



Declares that the product (s):

Product Name: Pressure Sensor

Model Numbers: PS-1/PS-8/PS-100/PS-250

Product Options: All

Conforms to the following Product Specifications:

| Emission | | | | | | |
|----------------------------------|-----------------------------------|-------------------|-----------|--|--|--|
| Performed Test Item | Normative References | Test Performed | Deviation | | | |
| Conducted disturbance at mains | EN 60730-1:2011 | Yes | No | | | |
| terminals and | CISPR 22: 2008 Class B | | | | | |
| telecommunication ports | | | | | | |
| Radiated disturbance | EN 60730-1:2011 | Yes | No | | | |
| | CISPR 22: 2008 Class B | | | | | |
| Harmonic current emissions | EN 61000-3-2:2006+A1:2009+A2:2009 | Yes | No | | | |
| Voltage fluctuations and flicker | EN 61000-3-3:2008 | Yes | No | | | |

| Immunity | | | | | | | |
|---------------------------------------|---------------------------|-------------------|-----------|--|--|--|--|
| Performed Test Item | Normative References | Test Performed | Deviation | | | | |
| Electrostatic discharge | EN 61000-4-2:2009 | Yes | No | | | | |
| Radio-frequency electromagnetic field | EN 61000-4-3:2006+A1:2009 | Yes | No | | | | |
| Electrical fast transients | EN 61000-4-4:2012 | Yes | No | | | | |
| Surges | EN 61000-4-5:2006 | Yes | No | | | | |
| Radio-frequency continuous conducted | EN 61000-4-6:2009 | Yes | No | | | | |
| Power frequency magnetic field | EN 61000-4-8:2010 | Yes | No | | | | |
| Voltage dips and interruptions | EN 61000-4-11:2004 | Yes | No | | | | |

Electrostatic discharge:

| Test Site | TR3 | Date of Test | 2013.12.03 |
|---------------------|---|---------------|----------------|
| EUT | CO2 Sensor with Humidity/Temp sensor | Test Voltage | AC 230V / 50Hz |
| Temperature | 23°C | Humidity | 44%RH |
| Barometric Pressure | 101kPa | Test Engineer | Make |
| Test Mode | Mode 1: Normal operation | - | |

| | Air Discharge | | | | | | | | |
|---------------|---------------|------|------|-------|------|------|-------------|--------|--|
| Test Location | | | Test | Level | | | Observation | Result | |
| lest Location | +2kV | -2kV | +4kV | -4kV | +8kV | -8kV | Observation | Result | |
| 1 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 2 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 3 | Α | A | Α | Α | Α | Α | Note | Pass | |
| 4 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 5 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 6 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 7 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 10 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 11 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 12 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 13 | Α | A | Α | Α | Α | Α | Note | Pass | |
| 14 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 15 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 16 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 17 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 18 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 19 | Α | Α | Α | Α | Α | Α | Note | Pass | |
| 20 | Α | Α | Α | Α | Α | Α | Note | Pass | |

| Contact Discharge | | | | | | |
|-------------------|------------|------|-------------|--------|--|--|
| Test Location | Test Level | | Observation | Result | | |
| lest Location | +4kV | -4kV | Observation | Result | | |
| 8 | Α | Α | Note | Pass | | |
| 9 | Α | Α | Note | Pass | | |

| Horizontal Coupling | | | | | | | |
|---------------------|------------|------|-------------|---------|--|--|--|
| Test Location | Test Level | | Observation | Daniell | | | |
| lest Location | +4kV | -4kV | Observation | Result | | | |
| Front | Α | Α | Note | Pass | | | |
| Rear | Α | Α | Note | Pass | | | |
| Left | Α | Α | Note | Pass | | | |
| Right | Α | Α | Note | Pass | | | |

| Vertical Coupling | | | | | | | |
|-------------------|------|------------|-------------|--------|--|--|--|
| Test Location | Test | Test Level | | Result | | | |
| lest Location | +4kV | -4kV | Observation | Result | | | |
| Front | Α | Α | Note | Pass | | | |
| Rear | Α | Α | Note | Pass | | | |
| Left | Α | Α | Note | Pass | | | |
| Right | Α | Α | Note | Pass | | | |

NOTE: There was no change compared with initial operation during the test.

• Radio-frequency electromagnetic field

Test Specification according to EMC Standard EN 61000-4-3

| Test Site | AC4 | Date of Test | 2013.12.03 | |
|---------------------|--------------------------|---------------|----------------|--|
| EUT | CO2 Sensor with | Teet Voltage | AC 230V / 50Hz | |
| | Humidity/Temp sensor | Test Voltage | | |
| Temperature | 23°C | Humidity | 43%RH | |
| Barometric Pressure | 101kPa | Test Engineer | Jane | |
| Test Mode | Mode 1: Normal operation | | | |

| Frequency | Polarity | Position | Field Strength | Test Result | Observation | Result |
|-----------|------------|----------|----------------|-------------|-------------|--------|
| (MHz) | Folanty | Position | (V/m) | Criterion | Observation | resuit |
| 80-1000 | Horizontal | Front | 3 | Α | Note | Pass |
| 80-1000 | Vertical | Front | 3 | Α | Note | Pass |
| 80-1000 | Horizontal | Rear | 3 | Α | Note | Pass |
| 80-1000 | Vertical | Rear | 3 | Α | Note | Pass |
| 80-1000 | Horizontal | Left | 3 | Α | Note | Pass |
| 80-1000 | Vertical | Left | 3 | Α | Note | Pass |
| 80-1000 | Horizontal | Right | 3 | Α | Note | Pass |
| 80-1000 | Vertical | Right | 3 | Α | Note | Pass |
| 1400-2000 | Horizontal | Front | 3 | Α | Note | Pass |
| 1400-2000 | Vertical | Front | 3 | Α | Note | Pass |
| 1400-2000 | Horizontal | Rear | 3 | Α | Note | Pass |
| 1400-2000 | Vertical | Rear | 3 | Α | Note | Pass |
| 1400-2000 | Horizontal | Left | 3 | Α | Note | Pass |
| 1400-2000 | Vertical | Left | 3 | Α | Note | Pass |
| 1400-2000 | Horizontal | Right | 3 | Α | Note | Pass |
| 1400-2000 | Vertical | Right | 3 | Α | Note | Pass |
| 2000-2700 | Horizontal | Front | 1 | Α | Note | Pass |
| 2000-2700 | Vertical | Front | 1 | Α | Note | Pass |
| 2000-2700 | Horizontal | Rear | 1 | Α | Note | Pass |
| 2000-2700 | Vertical | Rear | 1 | Α | Note | Pass |
| 2000-2700 | Horizontal | Left | 1 | Α | Note | Pass |
| 2000-2700 | Vertical | Left | 1 | Α | Note | Pass |
| 2000-2700 | Horizontal | Right | 1 | Α | Note | Pass |
| 2000-2700 | Vertical | Right | 1 | Α | Note | Pass |

NOTE: There was no change compared with initial operation during the test.

• Electrostatic fast transients

Test Specification according to EMC Standard EN 61000-4-4

| Test Site | TR2 | Date of Test | 2013.12.03 | |
|---------------------|--------------------------|---------------|----------------|--|
| EUT | CO2 Sensor with | Test Voltage | AC 230V / 50Hz | |
| | Humidity/Temp sensor | rest voltage | | |
| Temperature | 24°C | Humidity | 43%RH | |
| Barometric Pressure | 101kPa | Test Engineer | Jane | |
| Test Mode | Mode 1: Normal operation | | | |

| In | Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz) | | | | | | | |
|--------------|--|------------|------------------|-----------|--------------|-------------|--------|--|
| Inject | Dolority | Test Level | Test Duration | Inject | Test Result | Observation | Result | |
| Line | Polarity | (kV) | (second) | Method | Criterion | Observation | Result | |
| L | + | 1 | 60 | Direct | Α | Note | Pass | |
| L | - | 1 | 60 | Direct | Α | Note | Pass | |
| N | + | 1 | 60 | Direct | Α | Note | Pass | |
| N | - | 1 | 60 | Direct | Α | Note | Pass | |
| L+N | + | 1 | 60 | Direct | Α | Note | Pass | |
| L+N | - | 1 | 60 | Direct | Α | Note | Pass | |
| Signal ports | and tele | communica | tion ports (Tr/T | h: 5/50ns | , Repetition | Frequency: | 5kHz) | |
| Inject | Polarity | Test Level | Test Duration | Inject | Test Result | Observation | Result | |
| Line | Polatity | (kV) | (second) | Method | Criterion | Observation | Result | |
| LAN | + | 0.5 | 60 | Clamp | Α | Note | Pass | |
| LAN | - | 0.5 | 60 | Clamp | Α | Note | Pass | |

NOTE: There was no change compared with initial operation during the test.

Surges

Test Specification according to EMC Standard EN 61000-4-5

| Test Site | TR2 | Date of Test | 2013.12.03 |
|---------------------|---|---------------|----------------|
| IEUT | CO2 Sensor with Humidity/Temp sensor | Test Voltage | AC 230V / 50Hz |
| Temperature | 24°C | Humidity | 44%RH |
| Barometric Pressure | 101kPa | Test Engineer | Jane |
| Test Mode | Mode 1: Normal operation | | |

| Inject Line | Polarity | Angle (degree) | Test Level (kV) | Test Interval (second) | Test Result Criterion | Observation | Result |
|----------------|----------|-------------------|--------------------|---------------------------|--------------------------|-------------|--------|
| L+N | + | 0 | 0.5 | 60 | Α | Note | Pass |
| L+N | - | 0 | 0.5 | 60 | Α | Note | Pass |
| L+N | + | 90 | 0.5 | 60 | Α | Note | Pass |
| L+N | - | 90 | 0.5 | 60 | Α | Note | Pass |
| L+N | + | 180 | 0.5 | 60 | Α | Note | Pass |
| L+N | - | 180 | 0.5 | 60 | Α | Note | Pass |
| L+N | + | 270 | 0.5 | 60 | Α | Note | Pass |
| L+N | - | 270 | 0.5 | 60 | Α | Note | Pass |

NOTE: There was no change compared with initial operation during the test.

• Radio frequency continuous conducted

Test Specification according to EMC Standard EN 61000-4-6

| Test Site | TR2 | Date of Test | 2013.12.03 |
|---------------------|---|---------------|----------------|
| EUT | CO2 Sensor with Humidity/Temp sensor | Test Voltage | AC 230V / 50Hz |
| Temperature | 22°C | Humidity | 44%RH |
| Barometric Pressure | 101kPa | Test Engineer | Jane |
| Test Mode | Mode 1: Normal operation | | |

| Frequency (MHz) | Inject Voltage (V) | Inject Ports | Inject Method | Test Result Criterion | Observation | Result |
|--------------------|-----------------------|--------------|---------------|--------------------------|-------------|--------|
| 0.15-80 | 3 | AC Mains | CDN | Α | Note | Pass |
| 0.15-80 | 3 | LAN | CDN | Α | Note | Pass |

NOTE: There was no change compared with initial operation during the test.

Supplementary Information

The product(s) here with comply with the requirements of the EMC Directive 89/336/EEC. The product(s) were tested in a typical configuration.

Note: The product is tested, but not officially certified, to be compliant with FCC CFR47 Part 15 and ETSI EN 300 328 rev. 1.8.1.



FCC Compliance Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Industry Canada Compliance Statement

ICES-003 This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations Cet appareil numérique de la Classe A Respecte toutes les exigences du Règlement sur le matérial brouiller du Canada

Maurice Duteau General Manager