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Schedule

TYPE EXAMINATION CERTIFICATE No.

UL 23 ATEX 3065X Rev. 1

[15]

Description of Product:

The isolated barriers supply power to solenoids, LEDs and audible alarms located in a hazardous area. These devices are controlled with a loop powered signal or a bus powered logic signal. The devices are immune to the test pulses of various control systems. The devices simulate a minimum load at the input. The minimum load can be activated and de-activated. The line fault transparency function can display a line fault in the field by a change in impedance at the switching input of the solenoid driver. Line fault is indicated by a red LED and output via the fault indication.

The devices are designed to be installed in the non-hazardous area or in areas requiring EPL Gc equipment. The hazardous area circuit is galvanically isolated from the non-hazardous area circuit.

Type designation:

KCD0-SD3-Ex#.1545*

KCD2-SLD-Ex#.1545*

Where:

"#" = "1" or "2" depending on the number of channels

"" = ".SP" and/or "-Y" followed by numeric signs (e.g. -Y1). This "" is optional and is used to describe different versions of a module.

These differences do not affect intrinsic safety.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015 .

Temperature range:

-40°C ≤ Ta ≤ +70°C (may be changed to any temperature range within these limits.)

Electrical data

Safe Area Connections:

KCD2-SLD-Ex*

Power Supply:

| | |
|--------------------|--|
| Connection | Terminals 9(+) and 10(-) resp. Power Rail contacts |
| Rated Voltage: | 18 ...30 V DC |
| Maximum Voltage Um | 250 V |

Collective error messaging:

| | |
|--------------------|------------------------|
| Connection: | Power Rail contact PR4 |
| Maximum Voltage Um | 250 V |

Inputs:

| | |
|--------------------|---|
| Connection: | Terminals 5(+), 6(-) for Channel 1 and Terminals 7(+), 8(-) for Channel 2 |
| Rated Voltage: | 0...30 V DC |
| Maximum Voltage Um | 250 V |

Outputs:

| | |
|----------------|---|
| Connection: | Terminals 1(+), 2(-) for Channel 1 and Terminals 3(+), 4(-) for Channel 2 |
| Rated Current: | 0...52mA |
| Rated Voltage | 0...25.3V |

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KCD0-SD3-Ex*

Inputs:

| | |
|--------------------|---|
| Connection | Terminals 5(+), 6(-) for Channel 1 and Terminals 7(+), 8(-) for Channel 2 |
| Rated Voltage: | 0...30 V DC |
| Maximum Voltage Um | 250 V |

Outputs:

| | |
|----------------|---|
| Connection: | Terminals 1(+), 2(-) for Channel 1 and Terminals 3(+), 4(-) for Channel 2 |
| Rated Current: | 0...52mA |
| Rated Voltage | 0...25.3V |

Routine tests:

None

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

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Specific Conditions of use:

- The device must be installed and operated only in an environment of overvoltage category II (or better) according to EN/IEC 60664-1.
- The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to EN/IEC 60664-1.
- The device must be installed and operated only in surrounding enclosures that:
 - comply with the requirements for surrounding enclosures according to EN IEC 60079-0, and
 - are rated with the degree of protection IP54 according to EN IEC 60529.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.