



(13)

# SCHEDULE

(14)

## Certificate Number PF08CERT0803

(15) Description of Equipment

The isolated barrier is used for intrinsic safety applications. It transfers digital signals from a hazardous area to a safe area. The proximity sensor or switch controls a form C change-over relay contact for the safe area load. Error conditions are signaled by LEDs or by collective error message output, if using the Power Rail System.

Ambient temperature range: -40°C to +70°C

Electrical data:

Supply voltage (Power Rail or terminals 14+,15-)	19...30 V DC		
Maximum safe voltage Um	253V AC or 125V DC		
Maximum contact loading of relay outputs (terminals 7,8,9 resp. 10,11,12)	250V AC	126.5V AC	40V DC
	2A	4A	2A
	500VA	500VA	80W
	cos φ ≥ 0.7		
Maximum safe voltage Um	253V AC		
Collective Error Messaging (Powerrail contact PR4)			
Maximum safe voltage Um	40V DC		
Input (terminals 1+,2+,3- or 4+, 5+, 6-)	U <sub>0</sub> = 10.5V, I <sub>0</sub> = 13mA, P <sub>0</sub> = 34mW C <sub>i</sub> = 0, L <sub>i</sub> = 0		

If both input circuits of the KFD2-SR2-Ex2.W are interconnected, the addition of the current has to be considered.

Maximal permissible external capacitance C<sub>0</sub> and inductance L<sub>0</sub>:

Group	Capacitance	Inductance
IIC	2.41µF	210mH
IIB	16.8µF	840mH
IIA	75µF	1H

The above parameters apply when one of the two conditions below is met:

- The total L<sub>i</sub> of the external circuit (excluding the cable) is < 1% of the L<sub>0</sub> value or

- The total C<sub>i</sub> of the external circuit (excluding the cable) is < 1% of the C<sub>0</sub> value.

The above parameters are reduced to 50% when both of the two conditions below are met:

- the total L<sub>i</sub> of the external circuit (excluding the cable) > 1% of the L<sub>0</sub> value and

- the total C<sub>i</sub> of the external circuit (excluding the cable) > 1% of the C<sub>0</sub> value.

Note: the reduced capacitance of the external circuit (including cable) shall not be greater than 1µF for I, IIA, IIB and 600nF for IIC.

(16) Test report

The examination and test results are recorded in the confidential report: 16-0493PF-14B

(17) Specific Conditions of Use

None.

(18) Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.