

DECLARATION OF CONFORMITY MANUFACTURER DECLARATION



As manufacturer

PR electronics A/S Lerbakken 10 DK-8410 Rønde

hereby declares that the following product:

Type: 9116
Product Version: All versions

is suitable for the use in systems up to Performance Level "d" according to ISO-13849, if the appropriate instructions are observed.

The reliability data summarized in the following table are the result of a hardware assessment according to IEC-61508 carried out on the 9116. The hardware assessment consists of an FMEDA done by Exida (report PR9116 06-03-19 R024 V2R1), updated with calculations of reliability data according to ISO-13849, using Exida FMEDA Tool V6.5.8.

Operating Mode:	Description:	PFHd: [1/h]	Resulting PL:	MTTFd: [years]
3-wire Pt100 Aout	Resistance / RTD temperature / TC temperature Inputs, Current Output	3.96E-07	d	288
3-wire Pt100 Relay	Resistance / RTD temperature / TC temperature Inputs, Relay Output	2.92E-07	d	391
Current Aout	Current Input, Current Output	5.96E-07	d	191
Current Relay	Current Input, Relay Output	3.81E-07	d	299
Voltage Aout	Voltage Input, Current Output	5.36E-07	d	213
Voltage Relay	Voltage Input, Relay Output	4.28E-07	d	267

The calculated values are valid only within the useful lifetime.

For the Current Outputs, the useful lifetime is 20 years.

For the Relay Outputs, the useful lifetime is the shortest of 20 years and the time when the maximum limit of 100,000 switching cycles of the relay are exceeded.

Roende, 8 March 2019

Stig Lindemann, CTO Manufacturer's signature