

# Declaration of Reliability

We manufacturer

**CARLO GAVAZZI INDUSTRI A/S,**  
Over Hadstenvej 40, DK-8370 Hadsten, Denmark. Tel. +45 89606100 - Fax +45 89606222

declare that the MTTF value of the product(s)

**CA18EAxxxBPxxIO**

(followed by suffixes)

is(are) calculated according to:

EN ISO 13849-1:2008

Safety of machinery. Safety-related parts of control systems.  
General principles for design Part count method (Annex D.1)  
MTTFd data of electrical components (typical and worst case)

SN 29500

at operative temperature of 40°C,

## MTTF Calculation

	<b>MTTF</b>	<b>MTTF<sub>d</sub></b>	<b>MTTF<sub>d</sub> * worst case</b>
	[years]	[years]	[years]
<i>Calculation Formula</i>	$\frac{1}{\sum_1^n \frac{1}{MTTF_n}}$	$MTTF \times 2$	$\frac{MTTF \times 2}{10}$
<i>Result</i>	<b>572,9</b>	<b>1145,8</b>	<b>114,6</b>

\*with safety factor 10

### Manufacturer

Place/date

Hadsten, Feb 27<sup>st</sup>, 2020

Signature  
Name



Kent Sørensen  
(R&D Manager)

Notes:

This Manufacturer's Declaration of Reliability is not to be intended as a product guarantee.

Manufacturer's point of contact: UAB Carlo Gavazzi Industri Kaunas, Raudondvario Pl.101 Kaunas, LT-47184 Lithuania

