In compliance with:

**CEN ISO 13849-1:2015**

Safety of machinery, safety related parts of control systems Part
1: general principles of design

**MTTFd SCP+ Series**

B10d rating based on the calculated assumptions below is:-

$= 1,100,000 \text{ cycles}$


≡ **Performance Level d (CEN ISO 13849-1. Table 2)**
≡ **Safety Integrity Level 2 (CEN ISO 13849-1. Table 3)**
≡ **MTTFd denotation HIGH (CEN ISO 13849-1. Table 4)**

$t_{cycle}$, mean time between two successive cycles 3600 seconds (1 cycle per hour)

$h_{op}$, mean operation in hours per day 1 shift x 8 hours.

$d_{op}$, mean operation in days per year 220 days.

$\Pi_{op} = (d_{op} \times h_{op} \times 3600) / t_{cycle}$ 1760 mean annual operations

B10d no. cycles until 10% of components fail dangerously 1,100,000 cycles

MTTFd = $B10d / (0.1 \times \Pi_{op})$ 6250 years

$\lambda = (0.1 \times \Pi_{op}) / (B10d \times 220 \times 8)$ 9.09 E-08 per operating hour

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