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In compliance with:

CEN ISO 13849-1:2015

Safety of machinery, safety related parts of control systems

Part 1: general principles of design

MTTFd DAE Series

B10d rating based on the calculated assumptions below is:-

= 26,400 cycles

Calculation data assumptions (CEN ISO 13849-1:2015. Annex C):

= Performance Level b (CEN ISO 13849-1. Table 2)

■ Safety Integrity Level 1 (CEN ISO 13849-1. Table 3)

■ MTTFd denotation HIGH (CEN ISO 13849-1. Table 4)

tcycle, mean time between two successive cycles 3600 seconds (1 cycle per hour)

hop, mean operation in hours per day 1 shift x 8 hours.

dop, mean operation in days per year 220 days.

 $nop = (dop \times hop \times 3600) / tcycle$ 1760 mean annual operations

B10d no. cycles until 10% of components fail dangerously 26,400 cycles

 $MTTFd = B10d / (0.1 \times nop)$ 150 years

 $\lambda d = (0.1 \times nop) / (B10d)$ 7.61 E-07 per operating hour

Neal Partridge

Head of Compliance

Da Catalan

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