

Amendment to Sentry safety relays Original instructions

BSR10 Used in Low Demand Applications



Functional Safety Data BSR10

Parameters acc. to IEC 61508	Values
Device type	A
Mode of operation	Low Demand Mode or High Demand Mode
HFT	1
SIL	3
Safety function	Output relays in OFF state when input is de-energized
λs	2603,4 FIT
λ_{dd}	284,72 FIT
λ _{du}	2,88 FIT
λ_{tot}	2891 FIT
β	2%
β _d	1%
SFF	99,9 %
MTTF _d	397 years
MTTF	39 years
PFH	3,0 x 10 ⁻⁹ 1/h
PFD_{avg} for $T_{proof} = 3$ year	5,2 x 10 ⁻⁶
Response time at deactivation	< 20 ms
Life Time	20 years

The function of the devices has to be checked within the proof test interval (T_{proof}).

HFT=1, two channel structure internally, λ -values is stated per channel.