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TFAB-DIGIO-2oo3

field output module for triple redundant digital outputs, with hardware 2oo3 voting



Functional Safety
TÜVRheinland CERTIFIED
www.tuv.com ID 0600000000

SIL3

The TFAB-DIGIO-2oo3 (Triple redundant Field Assembly Board) is used as hardware voter for TMR systems.

Each redundant digital output controls one forcibly guided safety relay with multiple contacts. These contacts implement a hardwired 2-out-of-3 logic. 10 output channels are available per TFAB.

Diagnostics on the digital output cards automatically read back the status information.

Technical data

- Three forcibly guided safety relays per output are wired in 2-out-of-3 logic. 10 output channels available per TFAB.
- the open-contact of each relay is read back for continuous monitoring
- the state of both power supply fuses is read back for monitoring

- redundant power supply: 20 ... 29 V
- redundant input current at 24 VDC: 1A
- max. ripple of power supply: < 150mV

- switching operations
  DC1 3A 24VDC: 1.000.000
  DC1 6A 24VDC: 350.000
- max. rated switch capacity:
  24VDC / 6A
  230VAC / 6A
- response time typically 15ms
- drop-out time typically 4ms

- dimensions (LxWxH): 352x128x66 mm
- weight: 1.6kg

- operating temperature range: -20°C ... 70°C
- relative humidity: 10 ... 90%, non-condensing

- shelf life: unlimited

applied standards:

IEC 61508, EN ISO 13849, IEC 62061, IEC 61511, IEC 61131-2, EN 50178, EN 50155, EN 50156, IEC 61326, EN 54, EN 50130, EN 298, EN 61373, NFPA 72

DATASHEET