TECHNICAL FACTS
HIMAX OVERSPEED TRIP MODULE FOR TURBINES

HIMA SMART SAFETY.

The X-MIO 7/6 01 Overspeed Trip Module Completes the FlexSILon TMC Solution

All control, regulation, and monitoring functions for safe turbo operations are now unified in a single system, thus increasing functional safety and flexibility. Thanks to the quick reaction time of the HIMax overspeed protection module of under 20 milliseconds, the plant operator has also added benefits when purchasing turbine components.

Part Numbers

- 98 5010238: X-MIO 7/6 over-speed trip module (3 counter, 4 digital input, 5 digital output, 1 auxiliary contact, SIL 3)

Connector Boards:

- 98 5220179: X-CB 018 02
- 98 5220180: X-CB 018 04
- 98 5220181: X-CB 018 06
- 98 5220182: X-CB 018 07

Benefits

Technical Benefits

- Non-reactive and independent of the HIMax CPU
- Module has an individual operating system
- Reaction time of well under 20 milliseconds
- Connector boards for dual or triple redundancy
- Parameter setting using the SILworX engineering tool
- Complete HIMax diagnostic func-tionality available

Cost Benefits

- Engineering with reduced expense
- Less space needed in the switchgear cabinet and storage
- Comprehensible wiring
- Enables savings when purchasing turbine components

Safety Benefits

- A unified communication system less prone to error

Flexible Overspeed Trip Solutions for Customized Availability

Mono, double, or triple redundancy? Appropriate connector boards allow for the implementation of precisely the right solutions needed for applications governed by API 670. Two alternative wiring concepts further increase flexibility.

1.1 Screw terminals

MIO/MIO (as a higher-availability option)

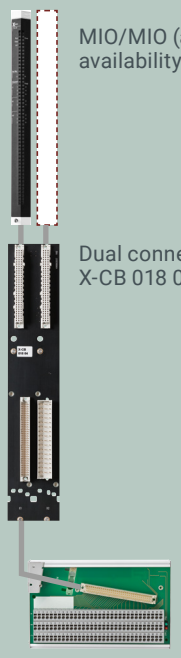
Dual connector board
X-CB 018 02

1.2 Redundant screw terminals

MIO/MIO/MIO

Triple connector board
X-CB 018 06

2.1 System cable



MIO/MIO (as a higher-availability option)

Dual connector board
X-CB 018 04

X-FTA

2.2 Redundant system cable connection

MIO/MIO/MIO

Triple connector board
X-CB 018 07

X-FTA

Engineering Tool

- SILworX V5.x

Hardware Features

- Mounted on the HIMax baseplate
- Redundant operation possible
- 3 safety related speed inputs (counter, SIL 3)
- 4 digital inputs
- 5 digital outputs, 3A, with freely programmable user-specific test functions
- 1 auxiliary contact for alarm

Safety System

- Nonstop safety system

HIMax®

Standards/Certificates

- Applications can be implemented according to API 670/VGB R103M
- SIL 3 according IEC 61508