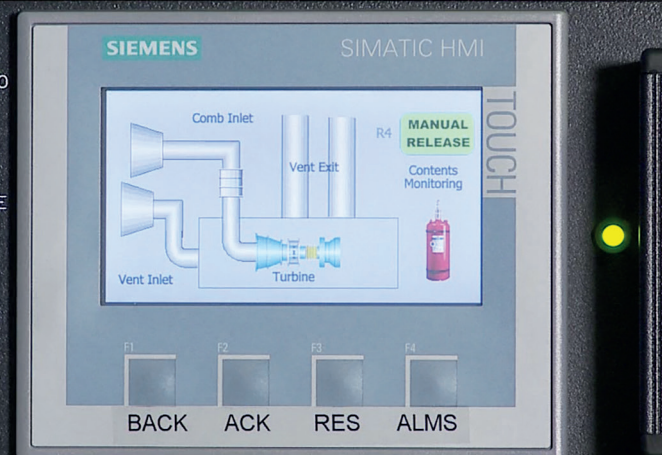


**tyco / R4**

Fire & Gas Detection / Protection System

ISOL  
MAN AUTO  
OFF  
CO2  
RELEASE  
OFF  
INHIBIT  
PERM



# Global Strength

Local Expertise. At your service.

**Tyco R4** Fire Detection/Protection System is a **SIL2 compliant** PLC based solution primarily aimed at – but not limited to – the turbine protection market.

## What is Tyco R4? What are its features?

The emphasis behind the design of Tyco R4 System was to mimic the fit, form and function of the now obsolete Tyco Fire R3 Turbine Protection System whilst providing an up-to-date solution using state of the art technology.

Tyco R4 System utilises the industry recognised Siemens S7 range of PLC hardware and incorporates a 7" touch screen HMI into the front fascia plate of the main system rack.

Tyco R4 System has been designed to be easily expandable and configurable via the use of additional Remote IO (RIO) drop racks.

- SIL2 compliant hardware & software configuration
- Like for like design with existing R3 Turbine Protection Systems (where applicable)
- State of the art industry recognised PLC hardware
- Provides IO for complete fire & gas detection and fire protection system cause & effects
- Capable of interfacing with both new and legacy fire & gas field devices
- Greater operator interface via front fascia mounted touch screen HMI
- Highly customisable and expandable
- Optional remote monitoring via inbuilt web server
- A large array of communication protocols, should 3rd party interfaces be required

### Our full spectrum of safety & asset integrity solutions

- Fire & Gas Detection/Alarm
- Detection & Control
- Portable Gas Detection
- Interface Engineering
- Safety Products
- Fire Protection Systems
- Fire Safety Maintenance
- Deluge Verification
- Environmental/HVAC
- Descaling
- Audio Communications
- Fiscal Metering
- Wellhead and Hydraulic Process Control
- Security and Surveillance

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[www.johnsoncontrols.co.uk](http://www.johnsoncontrols.co.uk)

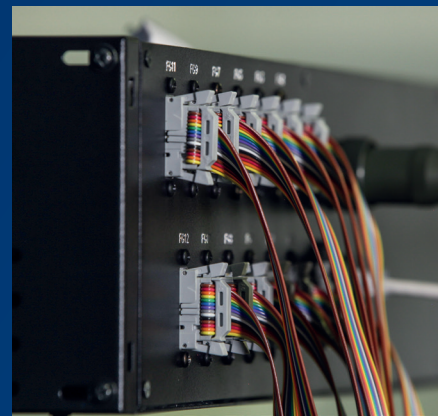


# Tyco R4 Fire & Gas Detection/ Protection System



Johnson Controls (JCI) combine **expertise and experience in design and engineering** manufacturing with proven technology for customised **Safety Related Systems**.

## Tyco R4 comparison with the R3



### Fit

- 19" rack mountable
- 3U rack height for single rack system
- Expandable via additional 3U drop racks
- 14 way plug & ribbon connection to termination boards for field connections
- 24VDC operation

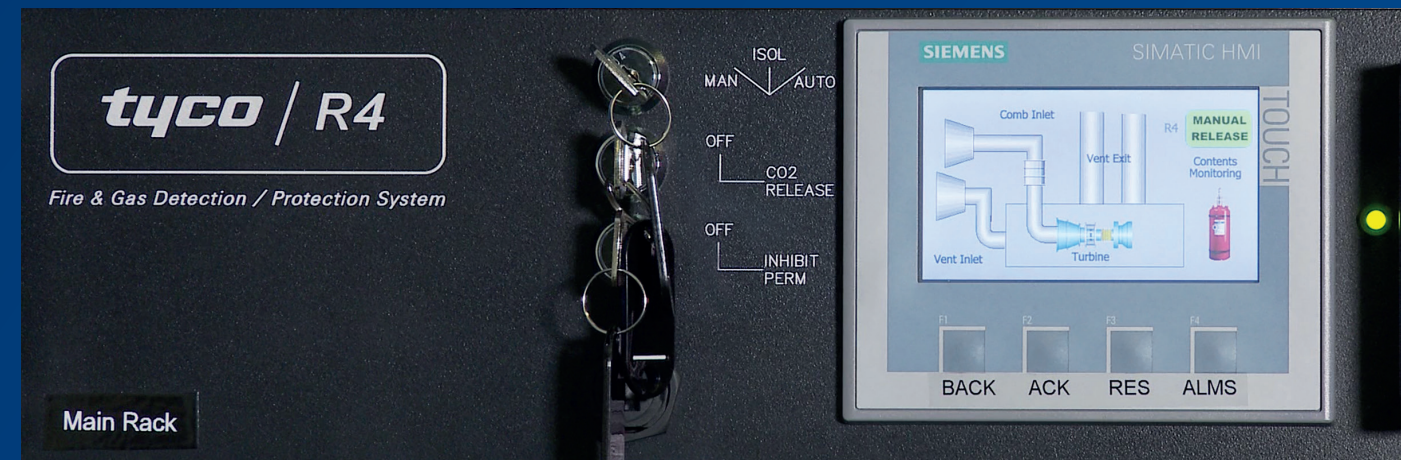
### Form

- Compatibility with existing field wiring and field resistor values
- Fault monitoring
- Interface to turbine control module (TCM) via hardwired IO
- Large range of modules to fit customer detection/protection requirements
- Fascia mounted key switches for selection of release mode, inhibit permissive and extinguishant release

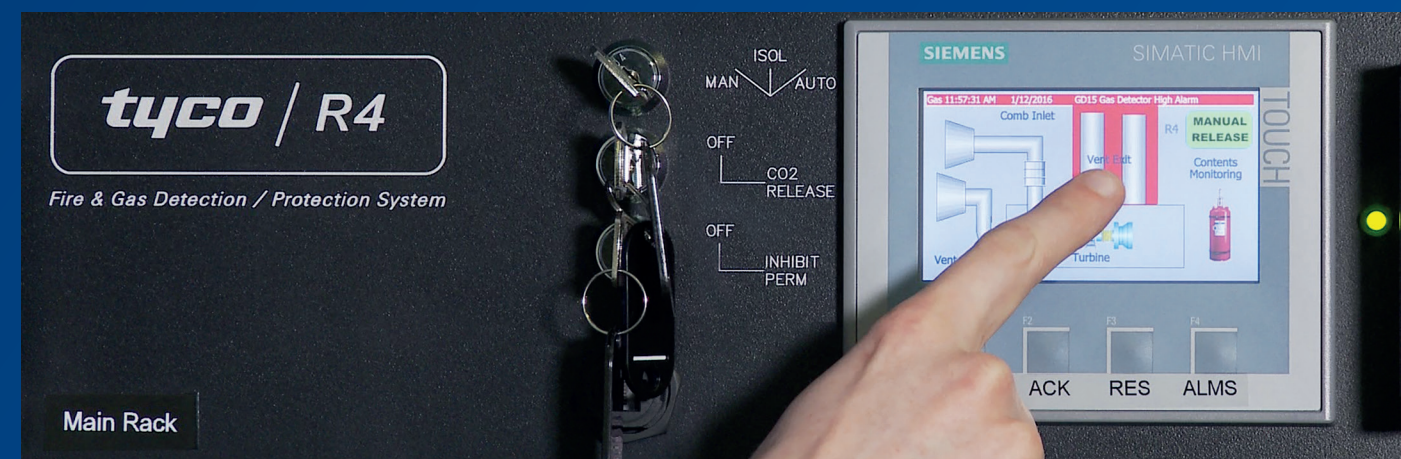
### Function

- Fully configurable cause & effects
- Ability to control and monitor a wide array of fire detection and fire protection IO
- Individual identification of fire and gas field device status
- Ease of maintenance based on modular design

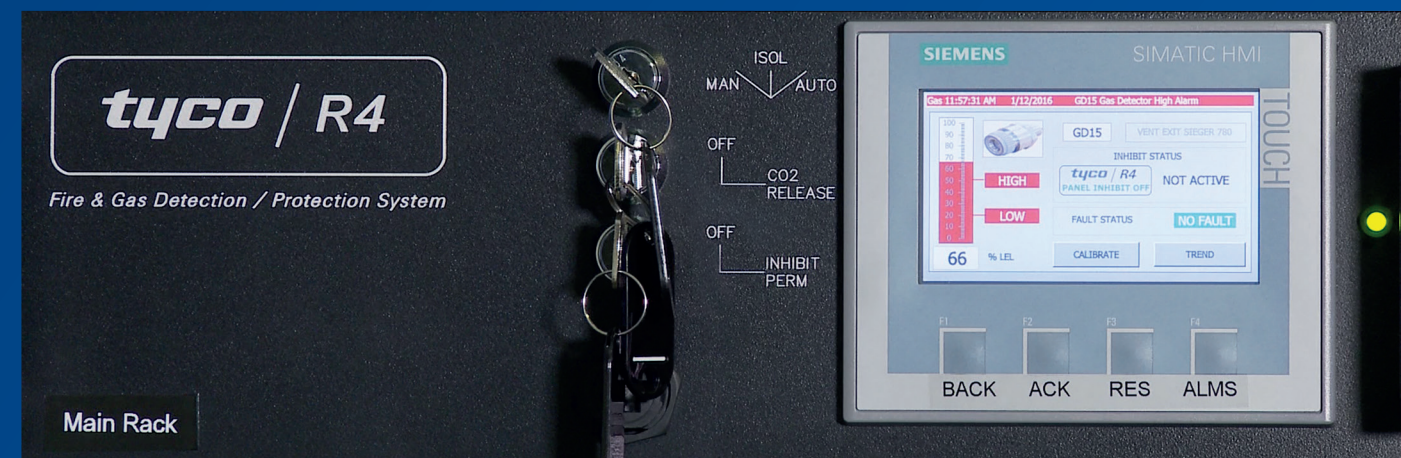
Greater operator interface via front fascia mounted touch screen HMI.



This HMI will provide individual graphical representations of the various fire zones along with individual status screens for each fire & gas field devices.



Fascia mounted key switches for selection of release mode, inhibit permissive and extinguishant release.



## Detection and Control Capabilities

JCI have a large installed system base throughout the UK and the World supplying major Power Generation, Chemical and Oil & Gas companies, through both UK and international contractors as well as directly to the end users. This is based on both hardwired, programmable electronic and addressable detection systems.

- Front End Engineering Design (FEED)
- Project Management
- Project Engineering Design
- Procurement/Materials Handling
- Software Configuration
- Mechanical Assembly/Wiring
- Internal/Client/Integrated Testing
- Packing and Delivery Services
- Through Life Service and Support
- Decommissioning



With JCI's large range of own market leading products and no bounds in working with systems and solutions from any manufacturer/supplier, JCI is well positioned to deliver efficient and competitively priced large fire & gas field devices systems and packages.

- Addressable Detection Systems
- PLC Based Safety Systems
- Conventional Detection Systems
- Smoke/Heat/CO Detection
- Flame Detection
- Gas Detection (Point, LOS, Toxic, Acoustic)
- Manual Call Points/Push Buttons
- HSSD Systems (VESDA)
- Annunciation Devices (Sounders/Beacons)
- Oil Mist Detection