# TS958 and TS970
## Digital Control Systems for Industrial Doors

- ■ **Limit switch setting from ground level**
- ■ **Programmable Door Maintenance Indicator**
- ■ **Plug connections between control panel and drive unit**
- ■ **Load monitoring in the open direction** (sectional doors only)
- ■ **Digital display of door status and/or fault diagnostic**
- ■ **Operations cycle counter (non re-settable)**
- ■ **Certified to BS EN 12453**

## Digital Features

For use with the Guthrie Douglas range of drives incorporating digital limits (DES) the TS958 and TS970 allow easy and rapid setting of limit switch positions and door parameters from ground level. With the introduction of digital limits both the TS958 and TS970 have the facility to monitor the load on the door in the open direction. This feature on certain designs of door prevents objects or persons being accidentally lifted as well as preventing people intentionally riding on a door when opening.

As with the other Guthrie Douglas controls the TS958 and TS970 now include as standard a programmable door maintenance indicator. This allows the installer to set a maintenance interval to suit the door and its application of between 1000 to 99000 operations on completion of which the control will tell the customer that the door needs servicing.

## Simplifying on-site installation

The drive motor and limits are connected to the TS control by plug-in protected cable (supplied separately, length 3, 5, 7, 9 or 13m). The spiral cable for connecting the TS control to slack-wire, pedestrian door switches and safety edge (TS970 only) is also supplied

with plug-in connections. Unnecessary callbacks are minimised as the customer can now read back the doors status using the digital display, which is visible through the new enclosure lid. If a return visit is required then door adjustments can be carried out without accessing the drive unit therefore negating the need for expensive access equipment. In the case of the TS970 some door adjustments can be carried out automatically for instance re-adjustment of the close limit to allow for cable stretch and/or for changes in finished floor level.

## Enclosure

The purpose built enclosure with a fully protected printed-circuit board meets the IP65 class for dust and

moisture protection. The enclosure has pre-drilled entries and flexible feet for mounting on uneven surfaces and incorporates open, close and stop buttons with the provision for installing a key switch and/or latching stop button if required.

## Meeting the Standards

The TS958 and TS970 meet the requirements of the BS EN 12453 and the introduction of a programmable maintenance indicator further enhances the safety regime for the user. According to whether the intended users are trained or not and whether the door is in a public area or not, determines the degree of safety required.
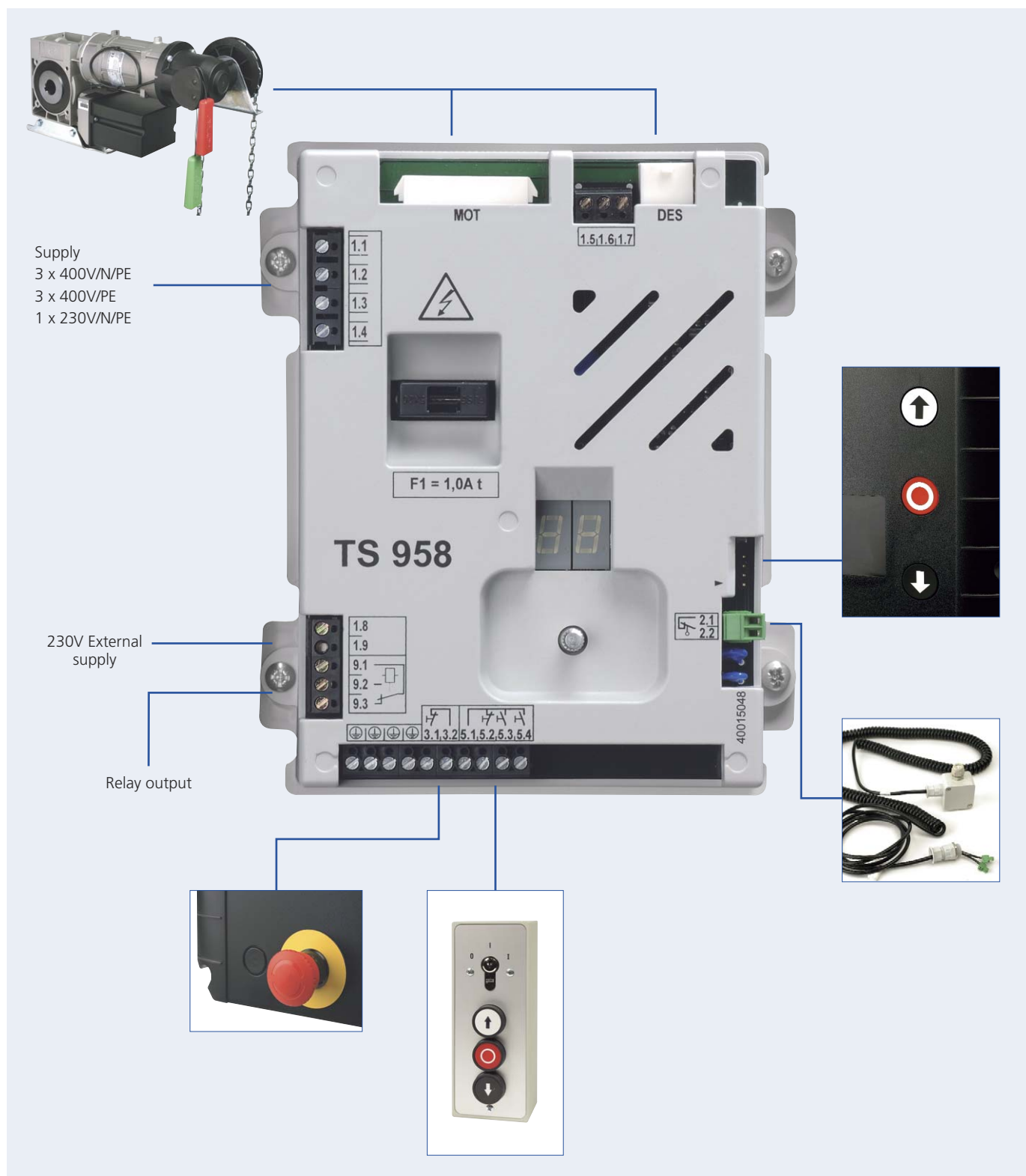
| Door User | Control Unit | Obligatory Accessories | Function |
|---|---|---|---|
| Trained user only Not in a public area | TS958 In sight of door | N/A | Impulse Open Hold to run Close |
| Trained user In a public area | TS958 In sight of door | Key Switch on/off | Impulse Open Hold to run Close |
| Trained user In a public area | TS970 In sight of door | Safety Edge | Impulse Open Impulse Closed |
| General Public | TS970 In/out of sight of door | Safety Edge and Photo Beam | Impulse Open Impulse Closed |

Note: Doors that can lift a person require additional safety devices

**Guthrie Douglas**

# Control Panel TS958

## The features of the TS958 control include:

- Limit switch and door parameter setting from ground level
- Programmable Door Maintenance Indicator, which can be selected to either display only or display and change the door operation when service is due
- Load monitoring in the open direction

- Digital display of door status and/or fault diagnostic
- Operations cycle counter (non re-settable)
- Three selectable door functions
- Connection for a plug-in spiral cable for cable break or slack wire switches or pass door switch on sectional doors

Supply
3 x 400V/N/PE
3 x 400V/PE
1 x 230V/N/PE

MOT

DES

1.5 1.6 1.7

1.1
1.2
1.3
1.4

F1 = 1,0A t

TS 958

2.1
2.2

40015048

230V External supply

1.8
1.9
9.1
9.2
9.3

3.1 3.2  5.1 5.2 5.3 5.4

Relay output

## The TS970 control incorporates all the features of the TS958, plus:

- Programmable Door Maintenance Indicator with three response modes including the option for the service due function to be overridden the once to allow a further 500 cycles
- Automatic adjustment for changes in floor level and/or cable stretch
- 1 to 240 second variable timed closing
- Automatic recognition of the safety edge type (contact, pressure switch or Fraba optical type)

- Function to prevent unintentional activation of the photo beam, for example by the safety edge spiral cable allowing the photo beam to be mounted as close to the door or guide as possible
- Last 2 faults memorised
- The use of digital limits allows the operation of the drive to be constantly monitored and to be stopped if the drive is stalled or overloaded
- Selectable Part open facility
- Option for a built in loop detector

MOT

DES     COM

1.5 1.6 1.7

Supply
3 x 400V/N/PE
3 x 400V/PE
1 x 230V/N/PE

1.1
1.2
1.3
1.4

F1 = 1,0A t

TS 970

2.1
2.2
2.3
2.4
2.5

230V External
supply

1.8
1.9
9.1
9.2
9.3

3.1 3.2   4.1 4.2   5.1 5.2 5.3 5.4   24V GND   6.1 6.2   7.1 7.2   8.1 8.2

40014804

24V
External
Supply

## Accessories for use with Control Panels

**GE23029/030**
Protected cable (3m)

**GE23029/050**
Protected cable (5m)

**GE23029/070**
Protected cable (7m)

**GE23029/090**
Protected cable (9m)

**GE23029/130**
Protected cable (13m)

**KSR4P**
Fraba safety edge kit (<6m)

**KSR4P/10**
Fraba safety edge kit (<10m)

**KSR6P***
Wireless Safety Edge Kit (<6m)

**KSR6P/10**
Wireless Safety Edge Kit (<10m)

**GF10045**
Edge profile, roller shutters

**GF10050**
Bump stop for roller shutters

**GF10085**
Edge profile, sectional doors

**GF10095**
Bump stop for sectional doors

**GF10100**
Edge profile, high speed doors

**GF10110**
Bump stop for high speed doors

**GF40594**  Mounting rail 3m

**GF/AC2001**  Draw wire (7m)

**VR/R2E**
Receiver 433MHz, 2 Channel rolling code

**VR/TF2E***
Key-fob transmitter 2 Channel 433MHz

**VR/TF4E***
Key-fob transmitter 4 Channel 433MHz

**VR/TW4E***
Transmitter 4 Channel 433MHz

**VR/60733***
Vehicle mounted transmitter, 1 Channel 433MHz

**VR/60734**
Vehicle mounted transmitter, 2 Channel 433MHz

**GE46390***
Pull switch, for wall or ceiling mounting with 2.5m chain

**ELS 145FH**
Shoot bolt interlock switch

**GE34615***
Panel mounted latching stop button

**GE34616***
Panel mounted key switch

**JAPZ4-IR**
Remote Key Switch with 3 push buttons

**IFALCONXL**
Industrial motion sensor (3.5m high)

**IFALCON***
Industrial motion sensor (<7m high)

**ICONDOR**
Motion and presence sensor (<6m high)

**IREMOTE***
Remote control setting

**PES135/6***
Polarised reflex photo-beam (<6m range)

**PES135/9**
Polarised reflex photo-beam (<9m range)

**PES132/20**
Through-beam sender and receiver (<20m range)

**GE301955***
Traffic indicator assembly, red and green

*ILLUSTRATED

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