7SG15 MicroTAPP

Automatic Voltage Control

Document Release History

This document is issue 2012/05. The list of revisions up to and including this issue is:

Pre release

2012/05	Release of software revisions R9 and R18
2010/02	Document reformat due to rebrand

Software Revision History

Contents

1 Packaging

Relays are supplied in packaging designed to mechanically protect them while in both transit and storage.

This packaging should be recycled where systems exist, or disposed of in a manner which does not provide a threat to health or the environment. All laws and regulations specific to the country of disposal should be adhered to.

2 Unpacking, storage and handling

On receipt, remove the relay from the container in which it was received and inspect it for obvious damage. It is recommended that the relay modules are not removed from the case. To prevent the possible ingress of dirt, the sealed polythene bag should not be opened until the relay is to be used.

If damage has been sustained a claim should immediately be made against the carrier, also inform Reyrolle Protection and the nearest Reyrolle agent, using the Defect Report Form in the Maintenance section of this manual.

When not required for immediate use, the relay should be returned to its original carton and stored in a clean, dry place.

The relay contains static sensitive devices, these devices are susceptible to damage due to static discharge and for this reason it is essential that the correct handling procedure is followed.

The relay's electronic circuits are protected from damage by static discharge when the relay is housed in its case. When individual modules are withdrawn from the case, static handling procedures should be observed.

- Before removing the module from its case the operator must first ensure that he is at the same potential as the relay by touching the case.
- The module must not be handled by any of the module terminals on the rear of the chassis.
- Modules must be packed for transport in an anti-static container.
- Ensure that anyone else handling the modules is at the same potential.

As there are no user serviceable parts in any module, there should be no requirement to remove any component parts.

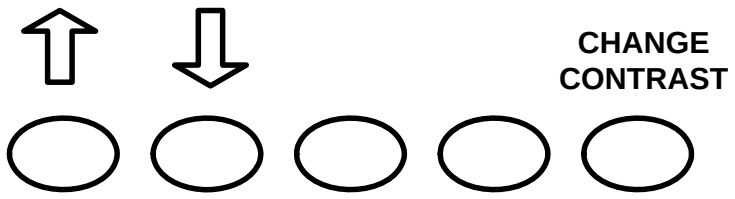
If any component parts have been removed or tampered with, then the guarantee will be invalidated. Reyrolle Protection reserve the right to charge for any subsequent repairs.

3 Recommended Mounting Position

The relay uses a liquid display (LCD) which is used in programming and or operation. The LCD has a viewing angle of ± 45º and is back lit. However, the best viewing position is at eye level, and this is particularly important when using the built-in instrumentation features.

If the LCD appears to be blank, but the Protection Healthy LED is correctly illuminated, the LCD contrast requires adjustment. To do this:

- Hold down the RIGHT-most key.
- Then hold either the LEFT-most key (contrast raise) or the SECOND LEFT-most key (contrast lower).



- Keep these keys pressed until the text “CHANGING CONTRAST” appears on the screen.
- This may take up to a minute. Keep watching the screen as the text will only flash up and it is easy to miss.
- You can then make small adjustments so the LCD reads correctly.

The relay should be mounted to allow the operator the best access to the relay functions.

4 Disposal

The Relay should be disposed of in a manner which does not provide a threat to health or the environment. All laws and regulations specific to the country of disposal should be adhered to.

The relays and protection systems manufactured under the Reyrolle brand currently do not come within the scope of either the European WEEE or RoHS directives as they are equipment making up a fixed installation.

5 External Connections

Application diagrams are provided elsewhere in this manual (refer to section 5).

External connections include the requirement for twisted pair cables connected between MicroTAPP control devices operating in a group. The control relay at each end of the loop of twisted pair cables require bus end resistors to be connected. These are provided inside every MicroTAPP relay but only need to be connected at both ends of the twisted pair interconnections (see section 1, Appendix C of this manual).

The twisted pair cable section must be earthed at one end only.

The twisted pair cable should be a single twisted pair overall shielded cable typically 22AWG (7 x 30) 0.35mm^2 conductors. Belden cable No 8761 or equivalent is recommended – available from RS Components.

6 Earthing

Terminal 15 of the PSU (Power Supply Unit) should be solidly earthed by a direct connection to the panel earth. The Relay case should be connected to terminal 15 of the PSU. It is normal practice to additionally 'daisy chain' together the case (safety) earths of all the Relays installed in a panel to prevent earth current loops posing a risk to personnel.

7 Relay Dimensions

The relay is supplied in an Epsilon case. Diagrams are provided elsewhere in this manual.

8 Fixings

8.1 Crimps

Amp Pidg or Plasti Grip Funnel entry ring tongue

Size	AMP Ref	Reyrolle Ref
0.25-1.6mm^2	342103	2109E11602
1.0-2.6mm^2	151758	2109E11264

8.2 Panel Fixing Screws

2-Kits – 2995G10046 each comprising:

- Screw M4 X10
  2106F14010 – 4 off
- Lock Washes
  2104F70040 – 4 off
- Nut M4
  2103F11040 – 4 off

8.3 Communications

Fibre optic connections – 4 per relay (Refer to section 4 – Communications Interface).

9 Ancillary Equipment

The relay can be interrogated locally or remotely by making connection to the fibre optic terminals on the rear of the relay or the RS232 port on the relay fascia.

For local interrogation a portable PC is required. The PC must be capable of running Microsoft Windows Version 3.1 or greater. Connection is made through a standard RS232 port on the PC. A standard straight-through (not cross-over) modem cable is required to connect from the PC to the 25 pin female D type connector on the front of the relay. If only a USB port is available on the PC, a suitable USB – RS232 converter must be used.

For remote communications more specialised equipment is required.

See the section on Communications for further information, and also see Report No. 690/0/01 on Relay Communications.

10 Precautions

When running fibre optic cable, the bending radius must not be more than 50mm.

If the fibre optic cables are anchored using cable ties, these ties must be hand tightened – under no circumstances should cable tie tension tools or cable tie pliers be used.