

# 7SG164 Ohmega 400 Series

Distance Protection Relays

## Document Release History

This document is issue 2010/02. The list of revisions up to and including this issue is:  
Pre release

2010/02	Document reformat due to rebrand

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# 1 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 the local Siemens office, 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 When individual modules are withdrawn from the case, static handling procedures should be observed.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. Siemens reserve the right to charge for any subsequent repairs.

## 2 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  $\pm 45^\circ$  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.

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

## 3 Relay Dimensions

The relay is supplied in an Epsilon case 16. Diagrams are provided elsewhere in this manual.

## 4 Fixings

### 4.1 Crimps

AMP PIDG or Plasti Grip Funnel entry ring tongue

Size	AMP Ref
0.25-1.6mm <sup>2</sup>	342103
1.0-2.6mm <sup>2</sup>	151758

### 4.2 Panel Fixing Screws

2-Kits – 2995G10046 each comprising:

- Screw M4 X10  
2106F14010 – 4 off
- Lock Washes

2104F70040 – 4 off

- Nut M4  
2103F11040 – 4 off

## 4.3 Communications

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

## 5 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 Ver 3.1 or greater, and it must have a standard RS232 port. A standard data cable is required to connect from the PC to the 25 pin female D type connector on the front of the relay. 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.

## 6 Precautions

When running fibre optic cable, the bending radius must not be less than the minimum radius specified by the cable manufacturer.

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.