

SIPROTEC 7UM516 Generator Protection Relay



Fig. 11/73 SIPROTEC 7UM516 generator protection relay

Description

The SIPROTEC 7UM516 is a numerical generator protection relay which is mainly used for larger generators units. In the majority of cases it is used in combination with other relays from the 7UM51 and 7UT51 series. In such combinations some functions can be used to provide a redundant generator protection systems.

Function overview

Protection functions

- Impedance protection (21)
- Out-of-step protection (78)
- Reverse-power protection (32R)
- Forward-power monitoring (32F)
- Unbalanced-load protection (46) (negative-sequence protection)
- Earth-fault protection (64)

Features

- Direct trip coupling (for separate protection equipment)
- Assignable output relays, LEDs and binary inputs
- Trip matrix for trip relays

Monitoring functions

- Trip circuit supervision
- Operational measured values
- Self-supervision of relay
- 30 event logs
- 8 fault logs
- 8 oscillographic fault records

Communication interfaces

- System interface
– IEC 60870-5-103 protocol

Hardware

- 8 binary inputs
- Binary outputs: 5 trip relays, 12 alarm relays

Front design

- PC front port for convenient relay setting
- 16 LEDs for local indication

Selection and ordering data

Description	Order No.
7UM516 generator protection relay	7UM516□-□□ A01-0□ A0
<i>Rated current at 50 to 60 Hz, 100 to 125 VAC</i>	
1 A	1
5 A	5
<i>Rated auxiliary voltage</i>	
24 V, 48 V DC	2
60 V, 110 V, 125 V DC	4
220 V, 250 V DC	5
<i>Unit design</i>	
For panel surface mounting	B
For panel flush mounting or cubicle mounting	C
For panel flush mounting or cubicle mounting, without glass cover	E
<i>Rear-side serial interface</i>	
Electrical (RS232)	B
Optical	C

Accessories

DIGSI 4

Software for configuration and operation of Siemens protection units running under MS Windows (version Windows 95 and higher) device templates, Comtrade Viewer, electronic manual included as well as "Getting started" manual on paper, connecting cables (copper)

Basis

Full version with license for 10 computers, on CD-ROM (authorization by serial number)

7XS5400-0AA00

Demo

Demo version on CD-ROM

7XS5401-0AA00

Professional

Complete version:

DIGSI 4 Basis and additionally SIGRA (fault record analysis), CFC Editor (Logic Editor), Display Editor (editor for default and control displays) and DIGSI 4 Remote (remote operation)

7XS5402-0AA00

SIGRA

(generally contained in DIGSI Professional, but can be ordered additionally)

Software for graphic visualization, analysis and evaluation of fault records.

Can also be used for fault records of devices of other manufacturers

(Comtrade format). Running under MS Windows 95/98/ME/NT/2000/XP Professional.

Incl. templates, electronic manual with license for 10 PCs.

Authorization by serial number. On CD-ROM.

7XS5410-0AA00

Connecting cable

Cable between PC/notebook (9-pin connector) and protection unit (25-pin connector)

7XV5100-2

or

Cable between PC/notebook (9-pin connector) and protection unit (9-pin connector)

7XV5100-4

Adaptor 9-/25-pin for 7XV5100-4 cable for protec. unit w. 25-pin connector (cable 7XV5100-4 and adaptor contained in DIGSI 4)

7XV5100-8H

Manual for 7UM516

English

C53000-G1176-C97-4