SIEMENS

Operating Instructions

Current Monitoring Relays

CE **7UG0**
IEC 60947-5-1

7UG0821..

7UG0831..

Please read and understand these instructions before installing, operating, or maintaining the equipment.

DANGER
Hazardous voltage can cause death or serious injury.
Disconnect power before working on equipment.

CAUTION
Reliable functioning of the equipment is only ensured with certified components.
Overvoltage category II
(Refer IEC 60947-1)

NOTICE
This product has been designed for environment A. Use of this product in environment B may cause unwanted electromagnetic disturbances in which case the user may require to take adequate mitigation measures.

Technical Data

Designation	7UG0 821-1AB20	7UG0 822-1AD20	7UG0 831-1AB20	7UG0 832-1AD20
Control voltage	110V AC	230V AC	110V AC	230V AC
Designation	Digital Current Monitoring relay - 1ph		Digital Current Monitoring relay - 3ph	
Supply Network	240V AC 1Φ - 2W		240V / 415V AC 1Φ - 2W, 3Φ - 3W, 3Φ - 4W	
CT (External) Settings: **CT Primary -** **CT Secondary -**	 1A - 999A / 5A - 999A 1A / 5A (Selectable)		 1A - 999A / 5A - 999A 1A / 5A (Selectable)	
Trip modes	Under Current : 0 - 999A (0 to 100% of CT Primary Setting) Over Current : 0.5A - 1.19kA (10% to 120% of CT Primary Setting)		Under Current : 0 - 999A (0 to 100% of CT Primary Setting) Over Current : 0.5A - 1.19kA (10% to 120% of CT Primary Setting) Current Assymetry (5% - 99.9%)	
Trip Time delay	0 - 99.9 sec		0 - 99.9 sec	
Operating temperature	0 to 50°C		0 to 50°C	

	7UG0 8...
	0.5 Nm
 Solid	1 x (0.75... 2.5) mm² 2 x 0.5 to 2 x 1.5 mm²
 Stranded with end sleeve	1 x (0.5... 2.5) mm² 2 x (0.5... 1.5) mm²

LED Indication Chart		
Various conditions	Power "ON" LED	"R1" LED
No Fault	ON	OFF
Trip	ON	ON

Terminal Connections

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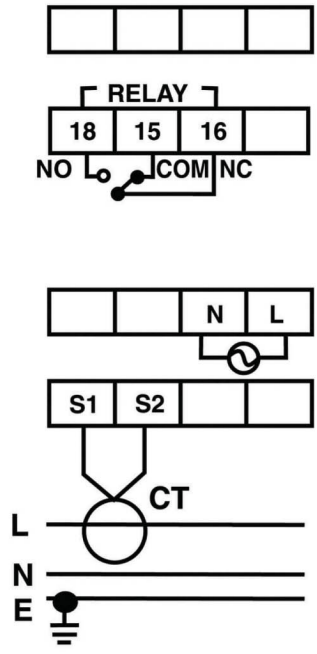
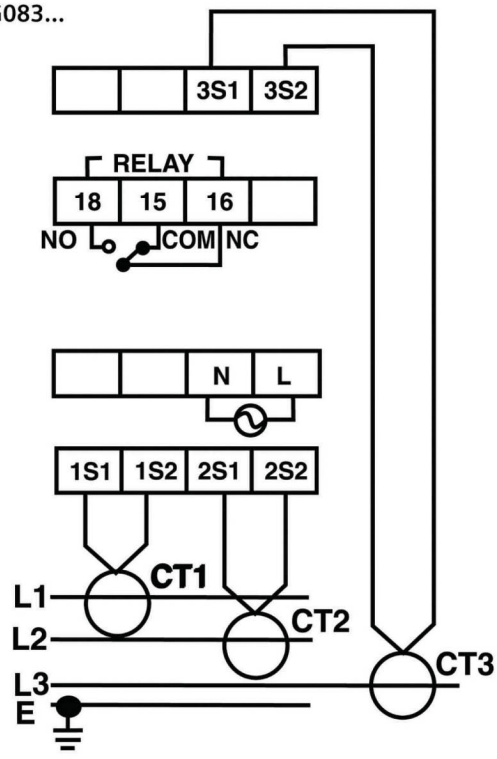


7UG083...



Dimensional drawings

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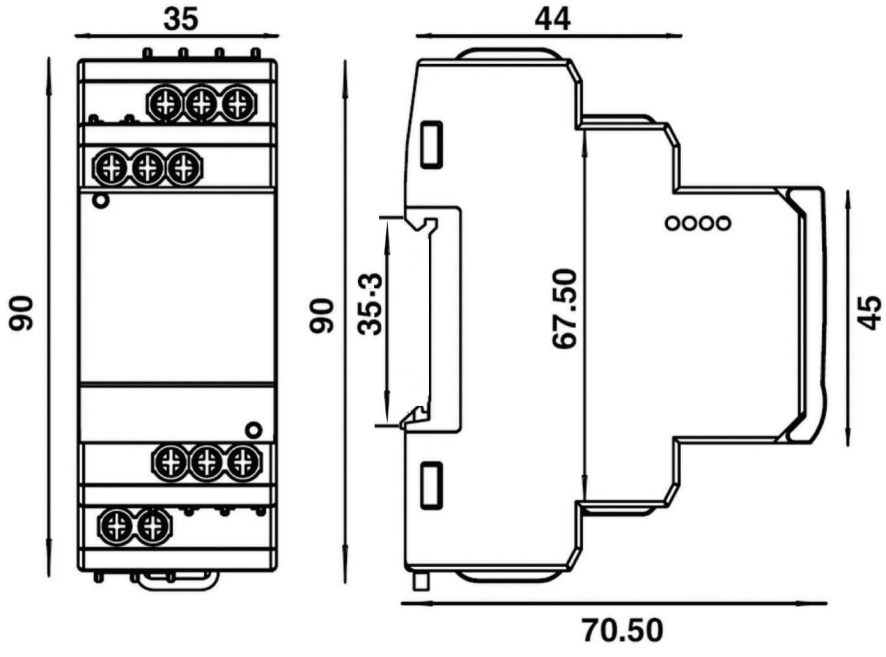
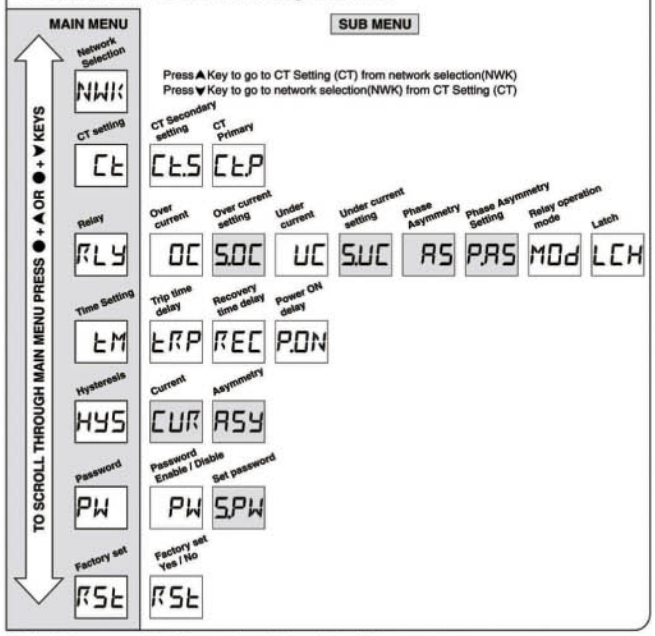


Menu Guide 7UG082... & 7UG083...

CONFIGURATION MENU

Press ▲+▼ for 3sec. to enter or exit configuration menu.



Note : 1) Appearance of shaded menus dependant on selection of other parameters
2) Network selection & phase asymmetry setting not applicable for 900CPR-1

SUB MENU

Network selection (NWK)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
NWK	Network selection	3P3	1P2 / 3P3 / 3P4	Not applicable for 900CPR-1

Time Setting (TM)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
TRP	Trip time delay	3.0	0.0 - 99.9s	
REC	Recovery time	0.5	0.0 - 99.9s	
P.ON	Power ON delay	5.0	0.5 - 99.9s	

Hysteresis (HYS)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
CUR	Hysteresis for current	0.5	0.1 - 99.9A	
ASY	Hysteresis for Asymmetry.	2.0	2 – 20%	Not prompted for 1P2 network selection (not applicable for 900CPR-1)

Password (PW)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
PW	Password	dIS	ENB / DIS	Enable / Disable password protection option
S.PW	Set password	000	000-999	Will be prompted only when Password option is enabled

NOTE : PW option will be asked when the user enter the config. menu if PW option is enabled in the config menu and the user has to enter the password which he has set in the S.PW (set password) option.

Factory set (RST)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
RST	Reset (Factory set)	NO	YES / NO	

CT setting (CT)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
CT.S	CT Secondary setting	5	1A / 5A	
CT.P	CT Primary	100	5 - 999A (If CT.S is 5A) 1 - 999A (If CT.S is 1A)	

Relay (RLY)		Press ▲ to enter sub menu from main menu		
Press ▲or ▼ to scroll through sub menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
OC	Over current	ON	ON / OFF	
S.OC	Over current setting	110	0.5A - 1.19kA 10-120% of CT Primary setting	This option will be prompted only when OC option is made ON in config. menu. OC setting cannot go below the UC setting. e.g. If UC is 50A, OC setting cannot go below 50A
UC	Under current	OFF	ON / OFF	
S.UC	Under current setting	50.0	0 – 999A 0-100% of CT Primary setting	This option will be prompted only when UC option is made ON in config. menu. UC setting cannot go above the OC setting. e.g. If OC is 100A, UC setting will be limited till 100A only.
AS	Phase Asymmetry	ON	ON / OFF	Not prompted for 1P2 network selection (not applicable for 900CPR-1)
P.AS	Phase Asymmetry Setting	10.0	5.0 - 99.9%	This option will be prompted only when AS option is made ON. Not prompted for 1P2 network selection (not applicable for 900CPR-1)
Mod	Relay operation mode	OFF	ON / OFF	ON : NC OFF : NO
LCH	Latch	OFF	ON / OFF	If Latch is ON, user has to reset the unit manually when fault is removed

TRIP VALUE SETTING **Press ▲ key for 3 sec. to enter or exit Trip Value Setting menu :**

Press ▲or ▼ to scroll through main menu		Press ● + ▲or ● + ▼ to change parameter value		
DISPLAY (For 1sec)	**DESCRIPTION**	**DEFAULT VALUE**	**RANGE**	**CONDITION**
LCK	LOCK	YES	YES / NO	This option will be prompted first when the user enters the trip setting menu. User has to set NO after which he can access the trip setting menu.
S.OC	Over current setting	110	0.5A - 1.19kA 10-120% of CT Primary setting	This option will be prompted only when OC option is made ON in config. menu. OC setting cannot go below the UC setting. e.g. If UC is 50A, OC setting cannot go below 50A
S.UC	Under current setting	50.0	0 – 999A 0-100% of CT Primary setting	This option will be prompted only when UC option is made ON in config. menu. UC setting cannot go above the OC setting. e.g. If OC is 100A, UC setting will be limited till 100A only.
TRP	Trip time delay	3.0	0.0 - 99.9s	
LCK	LOCK	NO	YES / NO, (In this option if YES is selected by the user, then whenever the user enters the Trip Value Setting, initially LOCK option will be prompted. The user will have to set NO after which he can access the trip setting menu. If the user wants to disable LOCK option, he can set NO when LOCK option is prompted after TR2 option.)	

ONLINE KEYS	Individual parameters can be viewed with every press of ▼ keys.

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PARAMETER	**SYMBOL**
Current (R phase)	L1 A
Current (Y phase)	L2 A
Current (B phase)	L3 A
Phase Asymmetry	As

Note : 1) Phase Asymmetry not displayed for 1P2 network selection.
2) Only one phase current will be displayed for 1P2 network selection.

TRIP INDICATION	Trip Indication on press of ▲ key : Trip value will be displayed till the key is pressed.
RESET	Press ● key for 3sec. to reset manually

Master Password : 753

Disposal

Siemens product are environment friendly, which predominantly consist of recyclable materials.

For disposals we recommend disassembling and separation into following materials:

METALS: Segregate into Ferrous & Non Ferrous types for recycling through authorised dealer.

PLASTICS: Segregate as per material type for recycling through authorised dealer. Because of the long lifetime of Siemens products the disposal guidelines may be replaced by other national regulations when taking the product out of service.

The local customer care service is available at any time to answer disposal-related questions

Customer Care Toll free no. 1800 209 0987 Email: ics.india@siemens.com

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