🛃 DIGSI V3.34				
<u>Substation</u> <u>F</u> eeder De <u>v</u> ice	Dialog Options Help			
[] 년 🛃 🖻 😤 범	C DIGSI state	F2		
	<u>M</u> odem	→ F		
	DIGSI	<u>R</u> equest for Mod	dification	
	De <u>v</u> ice	▶ <u>U</u> ser		
	DI <u>C</u> OMM	Change Password	rd	
		D <u>O</u> S-DIGSI		
		<u>A</u> ccess Privilege	B	
R Us	ser Password Reque	st 🗙		
Password:	***			
	[thbreaken]	LUKa		
	ADDrechen			
Mueller Kl.	bb_substation	feeder 1	7\$\$521	V1.3x 005

Installation of Modems MT2834 with DIGSI V3

Input of the User Password

🞜 DIGSI V3.34					
<u>Substation</u> <u>Feeder</u> De <u>v</u> ice <u>D</u>	ialog <u>O</u> ptions <u>H</u> elp				
D 🗲 🚔 📭 😤 🗳	C DIGSI state F2	2			
	<u>M</u> odem	Diffice Modem			
	<u>D</u> IGSI	<u>C</u> onnection			
	De <u>v</u> ice	<u>Substation Moden</u>	ì		
	DI <u>C</u> OMM				
Mueller Kl.	bb_substation	feeder 1	7\$\$521	V1.3×	005 P

Choose the "Office Modem" Then select "New Modem"



Create Substation Modem MT2834 with DIGSI V3

A	New substation modem
Modem name	Preset
– Modem settin Initialization:	gs
AT&FX3&D0\$	SB2400\$MB2400&E0&E3&E12&E14E1Q2S0=1&W
Password Callback:	Acknowledge:
– PC-Interface –	
COM-Port:	● COM1 ○ COM2 ○ COM3 ○ COM4
Format:	O 8, E, 1 (11 Bit) • 8, N, 1 (10 Bit)
Baudrate:	2400
ОК	Abbrechen Initialize <u>R</u> ead out <u>H</u> ilfe

- Choose a name as you like under "Modem name"
- Choose "Presettings" "S MT2834 /9600 Bd"
- Change "Initialisation"

AT&FX3&D0\$SB2400\$MB2400&E0&E3&E12&E14E1Q2S0=1&W

Description of the commands:

- AT AT-command follows
- &F load factory settings
- X3 Calling from private exchange
- &D0 control signal DTR is ignored as not supported by protection device

\$SB2400 fixed Baud rate to the protection device

\$MB2400 fixed Baud rate at the connecting line

- &Exx error correction and data compression are switched off
- E1 Echo off in data mode
- Q2 Echo off in command mode
- S0=1 Pick-up call after first ring tone
- &W Settings are stored in non-volatile memory
- Choose "COM-Port"
- Set "Format" at "8,N,1 (10 Bit)"
- Choose "Baud rate" 2400" Baud
- The DIL-switch in **both modems** must be set as follows:

UP																
DOWN																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Side view of the modem MT2834xx

- Connect Substation modem with a standard modem cable and switch on
- Initialise by selecting the button "Initialise"
- Connect Substation modem telephone outlet and AMS
- Ready!



B	Ne	w office modem	
Modem name		Preset	
bb_protection		S MT2834 960	0 Bd 🗾
- Modem settin	gs		
Dial:	ATD	Autom. answer on:	ATS0=1
Dial mode:	ATT	Autom. answer off:	ATS0=0
Hang up:	ATH	Echo:	ATE1
Break:	+++	Result codes:	ATQ0V1
other:	AT&FX3&D2\$SB96	00&E0&E3&E12&E14&SF18	\$0
- PC-Interface - COM-Port:			
Format:	0 8. F. 1 (11 Bit)	• 8. N. 1 (10 Bit)	
Baudrate:	9600 •		
ОК	Abbrechen	tialize <u>R</u> ead out	<u>H</u> ilfe

Create Office Modem MT2834 with DIGSI V3

- Choose a name as you like under "Input Modem name"
- Choose "Presettings" "S MT2834 /9600 Bd"
- Change "Initialisation"
- AT&FX3&D2\$\$B9600&E0&E3&E12&E14&\$F1&\$S0
 - Description of the commands:
 - AT AT-command follows
 - &F load factory settings
 - X3 Calling from private exchange
 - &D2 asking for control signal DTR
 - \$SB9600 fixed Baud rate to the protection device
 - &Exx error correction and data compression are switched off

&SF1

&S0

- Choose "COM-Port"
- set format at "8,N,1 (10 Bit)"
- choose "Baud rate" 9600"
- The DIL-switch in **both modems** must be set as follows:

UP																
DOWN																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Side view of the modem MT2834xx

- Connect Office modem with a standard modem cable and switch on
- The Office modem will be initialised with each call.
- Ready!

	Modify - Substat	tion
Substation Substation name Substation address	bb_substation	IX Modem IX Channel multiple×er □ Star Coupler
Modem configuration -		
Phone number	1234567	
Office modem	bb_protection	▼ <u>E</u> dit
Substation modem	bb_protection	▼ E <u>d</u> it
Channel multiplexer c	onfiguration	
Control	7XV55	<u> </u>
ОК	Abbrechen	Hilfe

Create a Substation in DIGSI V3

- Input of a Substation name
- Input of a Substation address
- Mark "Modem"
- Mark "Channel multiplexer"
- Input of the Phone number
- Choose "Office modem" from the list
- Choose "Substation modem" from the list
- Finish with "OK"

💼 New	- Enter feeder
Feeder name	Feeder 1
Feeder address	002 💌
OK Abl	brechen <u>H</u> ilfe

Input of a new Feeder (name and address)

1	New - Enter protection devi	ice
Device name	7SS521 U1.1x 7SS521 U1.2x 7SS521 U1.3x 7SU512 U1.0x* 7SU512 U1.0x* 7SU511 U1.0x* 7SU512 U1.0x* 7SU512 U1.0x* 7UM511 U1.00* 7UM51 Povice name 7UM51 Device name 7UM51 Povice name	OK Abbrechen New - Enter protection device 7SJ602 U3.0x OK 7SJ602 U3.0x OK 7SK520 U3.0x* OK 7SK520 U4.0x* Abbrechen 7SK520 U4.1x* Abbrechen
Ordering Code Channel	7SS52 2	TSS521 U1.2x TSS521 U1.3x TSU512 U1.0x* TSU600 U3.0x TUM511 U1.00* TUM511 U2.00*
	Device address Ordering Code Channel	009 7SS521*****11C*1 <u>C</u> at. # 3

Apply new devices

- Choose the Device name •
- Choose the free Device address
- Complete the Ordering codeChoose the Channel for AMS



B	Modify - Substa	tion
Substation Substation name Substation address	bb_substation	⊠ Modem ⊠ Channel multiple×er □ Star Coupler
- Modem configuration -		
Phone number	1234567	
Office modem	bb_protection	▼ <u>E</u> dit
Substation modem	bb_protection	► Edit
- Channel multiple×er co	onfiguration	
Control	Terminal-Window	_
ОК	Abbrechen	<u>H</u> ilfe

Create AMS 7XV5550 with DIGSI V3 in the Terminal-Window

Under "Substation change" choose "Terminal-Window"

	Dialog	
Γ	Dialog mode	
	 with protection device direct with protection device via: 	
	☐ Modem Channel multiple×er ☐ Star Coupler	
	OK Abbrechen <u>H</u> ilfe	

Open a dialog with any device via Channel multiplexer. Finish with ${\ensuremath{,} OK}\xspace$



₽	Select channel-multiplexer	
	Select channel-multiplexer	
	Aktiver MiniSternKoppler 7XV5550-0AA00	_
	Kanaele 1 (0) 2 (1) 3 (2) 4 (4) 5 (5) 6 (0) 7 (0)	
	1 Operation Language English 2 Parameter anzeigen/aendern 3 Parameter auf Voreinstellung zuruecksetzen	
	4 Parameter speichern 5 Parametrierung verlassen	
	Active MiniStarCoupler 7XV5550-0AA00	
4	Channels 1 (0) 2 (1) 3 (2) 4 (4) 5 (5) 6 (0) 7 (0)	
	1 Bedlensprache Deutsch 2 Show/Change Current Settings	
<u>R</u> eady	3 Set Default Settings	
	4 Save Parameter 5 Ouit Configuration Mode	
		-
	x	Þ
	<u>R</u> eady Abbrec	hen

First of all there will be an empty window. The conformance of the following steps is strongly recommended:

- Switch off AMS.
- Connect PC with DIGSI-cable 7XV5100-4 to RS232-interface of the AMS (X1).
- Switch the S2/1 (upper switch) in "ON" position
- Switch on AMS. The connection will be with 9600 Baud and 8N1.

Now there is a menu in the window.

- Input of "1" will change the language.
- Input of "2" will show the actually settings.





					Select chan	nel-mul	tiplex	er		
A	ctive Min	niStarC	oupler	7XU55	50-0AA00					-
CI	hannels '	1 (1) 2	2 (2) 3	(3) 4	(4) 5 (5)	6 (0)	7 (0)		
1	Bediens	prache	Deutsch	ı						
2	Show/Cha	ange Cu	irrent S	Settin	gs					
3	Set Defa	ault Se	ttings							
4	Save Par	rameter								
5	Quit Con	nfigura	ition Mc	ode						
н.	atou[aoo	Chan	David	Data	TimeOut	Licht	Dina	An <i>c</i> u		
	literface	unan. 4	Bauu	DALA	1100000	LIGHT	PING	HIISW.		
		1	2400	0112	15.00.00	NO	-	-		
2		2	2400	8E I	05:00:00	NO	-			
3		3	2400	8E I 0E4	05:00:00	NO	_			
4		4	2400	0E I 0E 4	05.00.00	NO				
2	(DS10E)	2	2400		02.00.00	NU	-	-		
7	(83402)	0	2400	0111	00.00.00		NO	UES		
í g	(NSZSZ) Rack to	Main h	2400	0111	00.00.00		nu	TES		
ľ	Dack CO	natu r	ienu							
Ľ										•
4										Þ
	Readv								Abbre	chen
	,									

The picture above shows the recommended settings for the channels.

- Interface 1 Settings for 7SS52 Central Unit
- Interface 2-5 Settings for 7SS52 Bay Units
- Interface 6 not connected

Interface 7 Settings for Modem / PC

How to set the AMS is described in the manual 7XV5550. Store the settings and finish the parameterisation.

Close the Terminal-window with two times "Cancel" and ignore the error reports.

Important: After parameterisation it is necessary to switch off the S2/1 switch!



	Modify - Substa	tion			
Substation Substation name Substation address	bb_substation	⊠ Modem ⊠ Channel multiple×er □ Star Coupler			
Modem configuration -					
Phone number	1234567				
Office modem	bb_protection	▼ <u>E</u> dit			
Substation modem	bb_protection	▼ E <u>d</u> it			
Channel multiple×er configuration					
Control	7XV55	•			
ОК	Abbrechen	<u>H</u> ilfe			

Establishing a connection to a Bay Unit

Under "Substation change" Channel multiplexer control change into "7XV55"

#		Dialog	
– Dialog	, mode —		
O wi	th file		
O wi	th protection	device direct	
• wi	th protection	device via:	
×	Modem		
×	Channel mu	ltiplexer	
	Star Couple	r	
ОК		Abbrechen	Hilfe

Select the desired Bay Unit and for the dialog mode via modem and channel multiplexer.



B	Building modem connection	
AT&FX3&D2\$ OK ATD7950 Connect 24	SB9600&E0&E3&E12&E14&SF1&S0TE1Q0U1S0=1 00	
	Select channel-multiple×er Port	
	PAUSE''1000''	^
4	SEND"\r" PAUSE"1000"	
<u>R</u> etry	SEND"\r" Pause"1000" Waitfor"Local" or "Remote"	
	REMOTE> >>WAITFOR: REMOTE FOUND>>	
	SEND''&PORT&'' Pause''100''	
	SEND"\r" PAUSE"2000" WAITFOR"BYE"	
	•	
	<u>H</u> etry	Abbrechen

The connection will be established.

The channel of the AMS will be switched and the connection to the Bay Unit is automatically made.

DIGSI V3.34
Connecting
Please wait a moment !
Cancel

Have fun!

Settings in DIGSI V2.95 01 for remote control via modem MT2834 (2400 Bd 8N1) and Active Mini Starcoupler (AMS) 7XV5550

TIGSI DIGSI	
Auto 💽 🔛 🛍 🔂 😰 📇 🗛	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG>303632-Directory: C:\BB_MODEMProt. relay.: 78852 U1.72Substation: Substation 1Relay's ID: 4711Sub-unit:In dialogue.:W/ modemFree disk space: (C: 1217.937 MByte)[C:ANL002.DIR]	
SUB-UNIT RELAY'S ID TEL-NUMBER PORT NR.> 110 kU 0815 009114337950 1	
cursor cursor take delete pocket- hardcopy help return left 1 right 2 over 3 char 4 calcul. 5 6 7	8

Input of Name, Relay's ID, Phone number and Port NR. of the AMS.

🚮 DIGSI 💦 👘 🖓 👘 🖓 👘 🖓 👘 🖓 👘 🖓 👘	
Auto 💽 🖽 🛍 🔂 🚰 🗃 🗛	
<pre></pre>	
Prot. relay: 78852 V1.72 Substation: Substation 1 Relay's ID: 0815 Sub-unit: 110 kV	
In dialogue: w/ modem Free disk space: (C: 1213.938 MByte) -[C:\DIG295E1\DIGSI.MEN]	
EXIT DIGSI	
SELECT/CREATE A DIRECTORY	
SELECT/CREATE A SUB-UNIT	
MODE OF DIALOGUE (WITH A FILE, MODEM OR A RELAY) SETTING BAUDRATE	
MODIFYING, DELETING, COPYING PERIPHERAL SELECTION	
CHANGE MODEM CONFIGURATION REPLICA OF THE OPERATOR PANEL	
MARSHALLING RELAY / BINARY INPUT / LEDs EDITOR FOR INFORMATION/COMMENTS	
cursor cursor start pocket- hardcopy help return up 1 down 2 3 4 calcul. 5 6 7	8

Choose "Peripheral Selection"



III DIGSI CALANDARI MANANA	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG	300288
Prot. relay.: 78852 V1.72 Substation: Substation 1	
MODE OF DIALOGUE with a File	
SELECT THE TYPE OF PLOTTER: HARDCOPY HP PRINTER (150 d) PLOTTER INTERFACE SELECTION: PRINTER INTERFACE LPT1	pi)
SELECT THE TYPE OF PRINTER HP PAINTJET PRINTER TYPE OF CHARACTERS SMALL PRINT	
PRINTER INTERFACE SELECTION: PRINTER INTERFACE LPT1	
TYPE OF SCREEN: COLOUR	
CONNECTION TO RELAY	
MAX. MESSAGE GAP	
Connection Modem with	
Telefonnumber for dial back: 09114338292 Prefix dial string f.modem: ATX3DT	
previous next change pocket- hardcopy hel setting 1 setting 2 setting 3 4 calcul. 5 6	p <mark>return</mark> 7 8

Set Max. Message Gap onto "200" Select Baud rate "2400" Connection via "Modem+AMS+Relay" Accept the remaining presettings... (see picture above)

🖬 DIGSI 🔐 🖬 🖬 🖬 🖬 🖬 🖬 🚛 🔤	×
- <digsi ag="" eusu-020718="" siemens="" u2.95.01=""></digsi>	
Relay's ID: 0815 In dialogue: W/ modem Free disk space: (C: 1213.938 MByte)	
SELECT/CREATE A DIRECTORY SELECT/CREATE A SUBSTATION	
SELECT/CREATE A SUB-UNIT PROTECTION DIALOGUE MODE OF DIALOGUE (WITH A FILE, MODEM OR A RELAY)	
SETTING BAUDRATE MODIFYING, DELETING, COPYING DEDUCTION	
CHANGE MODEM CONFIGURATION REPLICA OF THE OPERATOR PANEL	
MARSHALLING RELAY / BINARY INPUT / LEDs EDITOR FOR INFORMATION/COMMENTS	
cursor cursor start pocket- hardcopy help return up 1 down 2 3 4 calcul. 5 6 7	8

Select "Change Modem Configuration"



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Auto 💽 🖂 🛍 🔂 😭 📅 🗛	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG> 303576- Directory: C:\BB_MODEM Prot. relay.: 78552 U1.72 Substation: Substation 1 Relay's ID: 0815 Sub-unit: 110 kU In dialogue.: w/ modem In dialogue.: w/ modem Free disk space: (C: 1213.938 MByte) IC:\DIG295E1\DIGSI.MEN] - <c:\dig295e1\digmemcemcemcemcemcemcemcemcemcemcemcemcemc< th=""><th></th></c:\dig295e1\digmemcemcemcemcemcemcemcemcemcemcemcemcemc<>	
delete take delete pocket-hardcopy help return content 1 2 over 3 char 4 calcul, 5 6 7	8

Input of the Modem Initialising strings (AT&FX3)

AT&FX3&D0\$SB2400&E0&E3&E12&E14&SF1&S0

Important !! save with "take over 3"

🖬 DIGSI 💦 👘 🖓 👘 👘 👘 👘 👘 👘 👘 👘	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG>	
Prot. relay.: 78852 U1.72 Substation: Substation 1 Relay's ID: 0815 Sub-unit: 110 kU	
In dialogue: M/ modem Free disk space: (C: 1213.938 MByte) IC:\DIG295E1\DIGSI.MEN]	
EXIT DIGSI	
SELECT/CREATE A DIRECTORY	
SELECT/CREATE A SUB-UNIT	
MODE OF DIALOGUE (WITH A FILE, MODEM OR A RELAY)	
MODIFYING, DELETING, COPYING PERIPHERAL, SELECTION	
CHANGE MODEM CONFIGURATION REPLICA OF THE OPERATOR PANEL	
MARSHALLING RELAY / BINARY INPUT / LEDs EDITOR FOR INFORMATION/COMMENTS	
cursor cursor start pocket- hardcopy help return up 1 down 2 3 4 calcul. 5 6 7	1 8

Select Mode of Dialog "with Modem"



🖬 DIGSI 💦 👘 🖓 👘 👘 👘 👘 👘 👘 👘 👘	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG> Directory: C:\BB_MODEM Prot. relay.:: 78552 U1.72 Substation:: Substation 1	
Relay's ID: 0815 Sub-unit: 110 k0 In dialogue: w/ moden Free disk space: (C: 1213.875 MByte) [C:\DIG295E1\DIGSI.MEN]	
EXIT DIGSI SELECT/CREATE A DIRECTORY	
SELECT/CREATE A SUBSTATION SELECT/CREATE A SUB-UNIT PROTECTION DIALOGUE	
MODE OF DIALOGUE (WITH A FILE, MODEM OR A RELAY) SETTING BAUDRATE MODIFYING, DELETING, COPYING	
PERIPHERAL SELECTION CHANGE MODEM CONFIGURATION REPLICA OF THE OPERATOR PANEL	
MARSHALLING RELAY / BINARY INPUT / LEDS EDITOR FOR INFORMATION/COMMENTS	
cursor cursor start pocket- hardcopy help return up 1 down 2 3 4 calcul. 5 6 7	8

Start the Protection Dialogue

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Auto 💽 []] 🖻 🛍 🔂 💣 📅 🗛	
CDIGSIU2.95.01EUSU-020718SIEMENS AG>3156Directory:C:\BB_MODEMProt.relay.:7SS52U1.72Substation:Substation 1Relay's ID:0815Sub-unit:110 kUIn dialogue:w/ modemFree disk space:(C: 1217.937 MByte)IC:ANL002TR.DATI	40
<modem></modem>	
left 1 right 2 over 3 char 4 calcul. 5 6 7	urn 8

Confirm (or change) the phone number

ATX3DT< complete phone number >



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Auto 💽 🗈 🖻 🔂 💣 🗗 🔺	
<pre></pre>	04
1	
cursor cursor take delete pocket- hardcopy help ret left 1 right 2 over 3 char 4 calcul. 5 6 7	urn 8

Confirm (or change) the Channel number of the AMS In these application **"1**".

📕 DIGSI	Ľ
Auto 💽 🖾 🛍 🔂 💕 🚰 🗛	
- <digsi ag="" eusu-020718="" siemens="" u2.95.01=""></digsi>	
Prot. relay: 78852 V1.72 Substation: Substation 1 Relay's ID: 0815 Sub-unit 110 kV	
In dialogue: <mark>w/ modem</mark> Free disk space: (C: 1213.875 MByte) [C:ANL002TR.DAT]	
OK	
S:ATX3DT009114337950 ATX3DT009114337950	
ESC - Escape	

The dialling procedure may be checked in a "Report" window.



DIGSI DIGSI DI CALLER	
Auto 💽 🗔 🖻 🔂 😭 📅 🗛	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG> Directory: C:\BB_MODEM Prot. relay.: 7SS52 U1.72 Substation: Substation 1 Relay's ID: 0815 Sub-unit: 110 kU In dialogue.:: w/ modem Free disk space: (C: 1213.875 MI IC:ANL00201.INT]	309504 Byte>
1703 *** Reading of data in progress	***

If the modem connection has been established, the connection to the device is automatically made.

DIGSI	
Auto 💽 🛄 🛍 🔂 🚰 📇 🗛	
CDIGSI U2.95.01 EUSU-020718 SIEMENS AG>	712
Prot. relay.: 78852 V1.72 Substation: Substation 1 Relay's ID - 0815 Sub-unit - 110 M	
In dialogue: w/ modem Free disk space: (C: 1213.875 MByte)	
(Medem \	
S : BYE	
DEMOTEN	
S:+++	
2-HIH0	

Hang up procedure after remote control.

Have fun!

