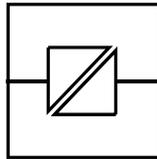
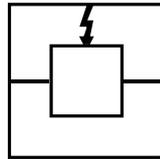


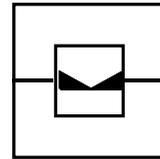
**TD-32 B**



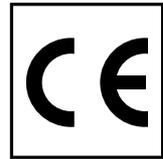
Galvanic Isolation



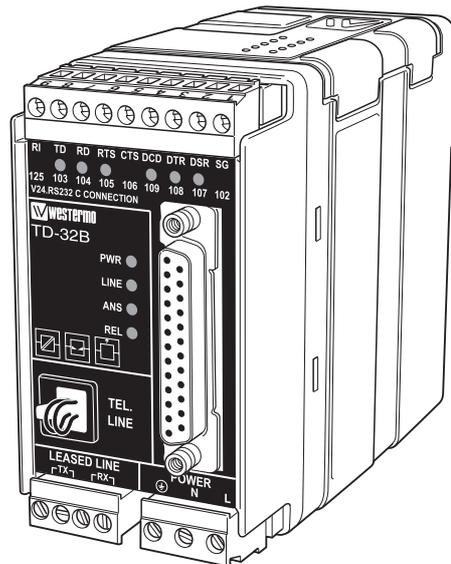
Transient Protection



Balanced Transmission



CE Approved



**This appendix describes how to set V.34 modulation on the TD-32 B**

## General

In order to make the settings below, the modem must be connected to a terminal program.

It is important that the dipswitch setting of switch 5 is set to "Use saved parameters" (all switches on block 5 set to OFF).

## Command settings

Use the AT-command "AT+MS" to control the modulation technique on the line. This command selects the modulation and optionally, enables or disables automode and specifies the lowest and highest receiving and/or transmitting rates. The format of the command is:

```
AT+MS=<carrier>,<automode>,<min_tx_rate>,<max_tx_rate>,<min_rx_rate>,<max_rx_rate>
```

Where:

<carrier> = V34

<automode> = 1 or 0 (enable or disable)

all min or max rates for V34 speeds = 33 600, 31 200, 28 800, 26 400, 24 000, 21 600, 19 200, 16 800, 14 400, 12 000, 9 600, 7 200, 4 800 or 2 400.

All sub-parameters after <carrier> are optional. Which means that a command string with only carrier is valid. If no max and min rates are specified, the default values are set.

## Reporting supported options.

The modem can send a string of information to the DTE consisting of supported options using the following command:

```
AT+MS=?
```

## For listing current configuration:

```
AT+MS?
```

The settings made with this command can be saved with the AT&W command. If the settings not are saved, they will be lost after a power OFF or after a software reset (ATZ).

**NOTE** The default line modulation is V.32bis (14 400 bit/s) which means that if the factory default command (AT&F) is send to the modem, the line modulation will be reset to V32bis.

## Dial-up connections example:

To set V34 modulation at 33600 bit/s with automode set initiate the modem with the following command(s):

```
AT+MS=V34,1 ; sets modulation to V.34  
AT&W0 ; save settings
```

All functionality on the dipswitches can be optionally set except switch 5 which must be set to "Use saved settings" (all set to OFF).

## Least Line connections example:

To set V34 modulation at 28 800 bit/s with automode enabled, initiate the modem with the following command(s):

```
AT+MS=V34,1,2 400,28 800,2 400,28 800 ; sets modulation to V.34 max to 28 800  
and min to 2 400  
AT&W0 ; save settings
```

Power off the modem and set the dipswitches to Least Line operation.

All functionality on the dipswitches can be optionally set except switch 5 which must be set to "Use saved settings" (all set to OFF).



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