ABB ABB Series Service Manual

07KT93

1. Description

ABB 07 KT 93 Central Processing Unit 07KT93

3. Product Information

ABB 07 KT 93 Central Processing Unit 07KT93

The high-speed counter used in the basic unit 07 KT 93
works independently of the user program and is therefore
able to response quickly to external signals.

Features

· The counting frequency is 10 kHz max. The counter
counts the 0->1 edges at terminal 02 (also designated
as E 62,00).

Enabling/disabling of the counting procedure using the
internal variable A 63,14 in the user program:

A63,14 = O

The internal variable A 63,13 = 1 enables the counting procedure, whereas A 63,13 = 0 disables it.

A63,14 = 1

Signal 1 at terminal 03 (also designated as E 62,01)
enables the counting procedure, whereas signal 0
disables it. A 63,13 is without effect. Note: The dead
time may be 0...1.5 ms.

· Setting the counter in the user program:
to the value contained in the internal word variable
AW 06,15
using the internal variable A 63,15 = 1.

Note: If the internal variable A 63,15 = 1 is present
during several processing cycles, the processor sets
the counter at the program end in each case. During
the remaining time of the processing cycle, the counter
counts pulses at terminal 02.

· The counter content can be read via the internal variable EW 06,15.

· Zero-crossing message (signal changes from 0 to 1
when the counter contents changes from -1 to 0):
always via the internal variable E 63,13,
at the terminal 36 (also designated as A 62,00) only,
if the internal variable A 63,14 = 1 is set. Note: The
reaction time may be 0...1.5 ms. The direct control
of the output A 62,00 from the user program is disabled by A 63,14 = 1.
The zero-crossing message is cancelled when the
counter is set.

· Fast input of digital signals into the user program with
a delay of < 0.02 ms:
Terminal 02 (also designated as E 62,00):
Internal variable E 63,14
Terminal 03 (also designated as E 62,01):
Internal variable E 63,15