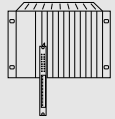# APPLICATION PROGRAM MEMORY MODULES,
EE32 - 16 KBYTE EEPROM, 16 KBYTE RAM
PLC SYSTEMS
MULTICONTROL COMPONENTS

A6

EE32

- EEPROM/RAM Application Program Memory Module for Type A CPUs

- 16 KByte EEPROM + 16 KByte RAM for 4.7 K Instructions

- Standard Module for Program Development and Nonvolatile Storage of Application Programs

- Fast and Simple Programming

- No Deletion Required

ORDER DATA

ECEE32-0	EEPROM/RAM Application Program Memory Module, 16 KByte EEPROM, 16 KByte RAM for 4.7 K Instructions
ECEE32MP-0[1]	Combination of Network Capable On-line Interface Module with Modem Interface and Application Program Memory Module (16 KByte EEPROM, 16 KByte RAM for 4.7 K Instructions)

TECHNICAL DATA	EE32
Used with	CP30, CP32, CP40, NTCP33
Memory Capacity and Method	16 KByte EEPROM + 16 KByte RAM
Programming	In processor module with a command from the Programming Device
Delete	-
Security	Write Protect Switch protects against accidentally overwriting a program
Status LED	PGM LED (Programming indicator)
Documentation	Hardware Manual MULTICONTROL
German	MAHWMULTI-0
English	MAHWMULTI-E
French	MAHWMULTI-F
Italian	MAHWMULTI-I
Spanish	MAHWMULTI-S

Downloading an Application Program

When an application program is transferred from the programming device to the processor module (RUN), this program is loaded to RAM in the EE32 and started whether another program is stored in the EEPROM or not.

Programming the EEPROM Memory

By giving the "F1 PROGRAM" command from the EEPROM menu of the programming device, the processor module is abandoned in order to copy the application program from EE32 RAM to the EEPROM. During the EEPROM programming, the programming LED is lit. Programming the EEPROM can also be done when an application program is still running. After the programming procedure is finished, the write protect switch (WE/WP) is to be set to WP (Write Protected). This ensures that the program will not be accidentally overwritten from EEPROM memory. EEPROM memory is not deleted, it is simply overwritten with a new program.

Uninterrupted Application Program Transferal

An application program can be downloaded into the RAM of the EE32 with the programming command "XFER" and without any influence on the program running in the EEPROM. The program in RAM and the one in the EEPROM can be switched between with a command on the programming device. The switch is made synchronous to the program cycle.

Loading Application Programs from the EE32 Module

Application programs can be loaded back to the programming device from the EE32 module. This can also be done with the application program running. A program which has been reloaded from the EE32 module can still be run but it no longer has any comments, ladder diagram pictures or symbols.

Power-On Behavior

A finished program must be stored in the EEPROM when the PLC system is powered on with CPUs. If a complete runnable program is not stored in the EEPROM, the status LED lights and the CPU remains in HALT state until a program is transferred from the programming device.

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[1] The combination of network capable on-line interface module with modem interface and application program memory module is described in section A7 "PLC Programming / On-line Networks and Modem Diagnosis".