EAV94279

ATV310 - Communication Parameters

▲ DANGER

UNINTENDED EQUIPMENT OPERATION

Read and understand this document, the User Manual and Modbus Manual before installing or operating the drive

Any changes made to the parameter settings must be performed by qualified personnel.

Failure to follow these instructions will result in death or serious injury

▲ WARNING

OSS OF CONTROL

The designer of any control scheme must

- consider the potential failure modes of control paths and, for certain critical control functions,
- provide a means to achieve a safe state during and after a path failure.

Examples of critical control functions are emergency stop and overtravel stop.

Separate or redundant control paths must be provided for critical control functions.

System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link. (see note a.) Failure to follow these instructions can result in death, serious injury, or equipment damage.

Note a.: For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems."

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

EXPLANATORY NOTE

This Excel file is for reference only . Refer to both the User Manual and the Modbus Communication Manual for full information. This Excel file can be used to carry out searches (e.g. parameter address and format) and sort operations.

The columns include the following criteria:

Code: Language-independent, this allows a rapid search in the User Manual, which includes an index of parameter codes. Additional information can be found in the Modbus Communication Manual.

Name: Parameter designation

Logic address: Address for the Modbus messaging are in decimal and hexadecimal (preceded by 16#) format. To optimize Modbus messaging performance, two addresses are given for the control word (CMD) and the status word (ETA). The addresses annotated "speed" are for use in rpm; the addresses annotated "frequency" are for use in Hz.

Link: For WORD type parameters, a dynamic link opens the description of a bit register or a listing. Listings are common to several parameters; only one part is valid for a given parameter. Refer to both the User Manual and the Modbus Communication Manual to determine the valid values. If an invalid value is written to a configuration parameter, the drive will indicate a fault (F032).

Category: Defines the role of the parameter, for example: Command parameter, Status parameter, etc.

Access: Read and write options:

R: Read only

R/W: Read and write

R/WS: Read and write (write only possible when the drive is not in RUN mode).

It is not possible to write these parameters in "5-Operation enabled" or "6-Quick stop active" states.

If the parameter is written in the "4-Switched on" state, transition 10 to "2-Switch on disabled" is activated.

WORD (bit register): Word where each bit represents a command or a state WORD (listing): Word where each value represents a possible choice for a configuration or state INT: Signed integer

UINT: Unsigned integer DINT: Signed double integer UDINT: Unsigned double integer

Units: Physical unit and multiplier

Factory setting: Value of the parameter set at the factory.

Range: Possible values

Display: Parameter name displayed on the graphic display terminal, in square brackets [---], and parameter code displayed by the 7-segment digits on the integrated display terminal, in round brackets (---).

Menu: Indicates the menus or menus where the parameter is located. Menu name displayed on the graphic display terminal, in square brackets [---], and menu code displayed by the 7-segment digits on the integrated display terminal, in round brackets (---)

Order: Gives the initial storage order of the parameter in the file, from 1 to n. This makes it possible, after sorting operations, to put this file back in its initial order by sorting the column in ascending order.