



Fatek – FB series PLC

Driver documentation

Connect
Ideas.
Shape
solutions.



Table of contents

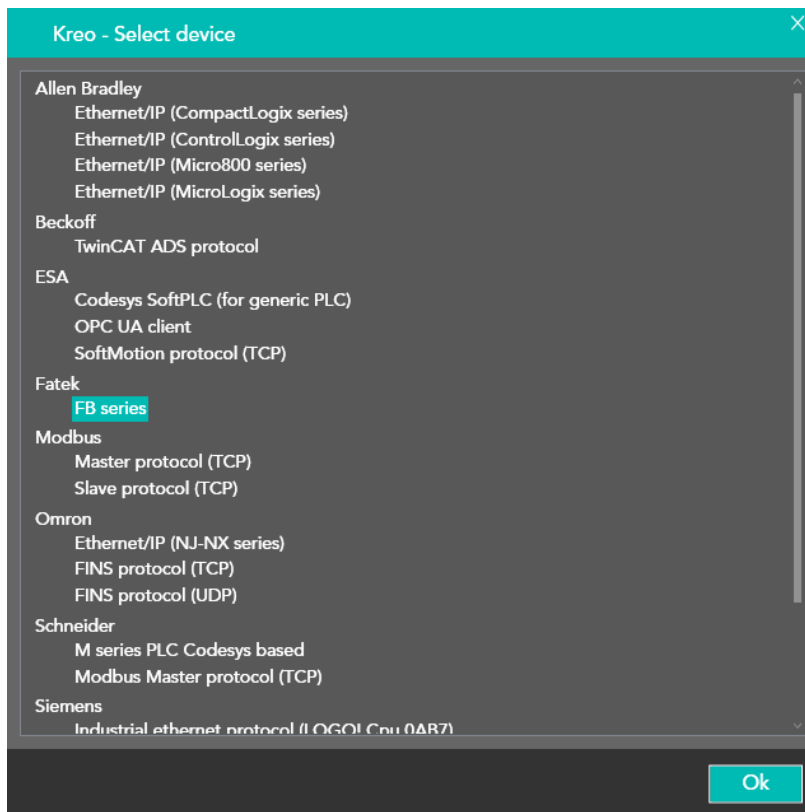
Document description	3
Driver selection	3
Communication parameters	4
Tag definition	7
Memory areas	8
Error code	9



Document description

This document is dedicated to the programming and the functionalities of the Fatek PLC FB series.

Driver selection

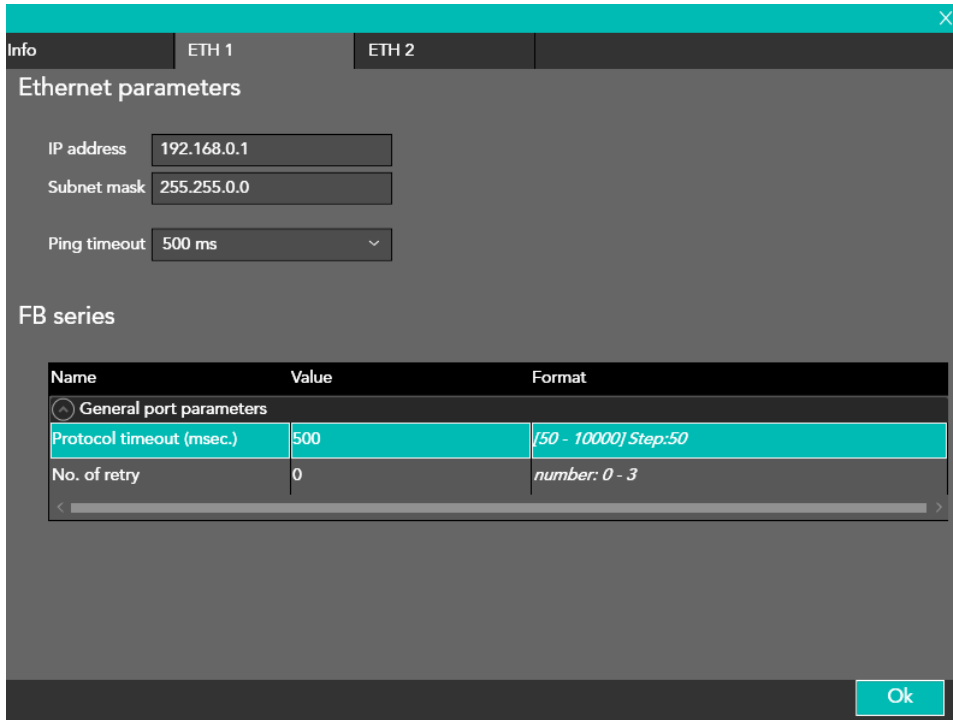


Select the FB series driver (Folder Fatek) in the Kreo HMI driver portfolio.



Communication parameters

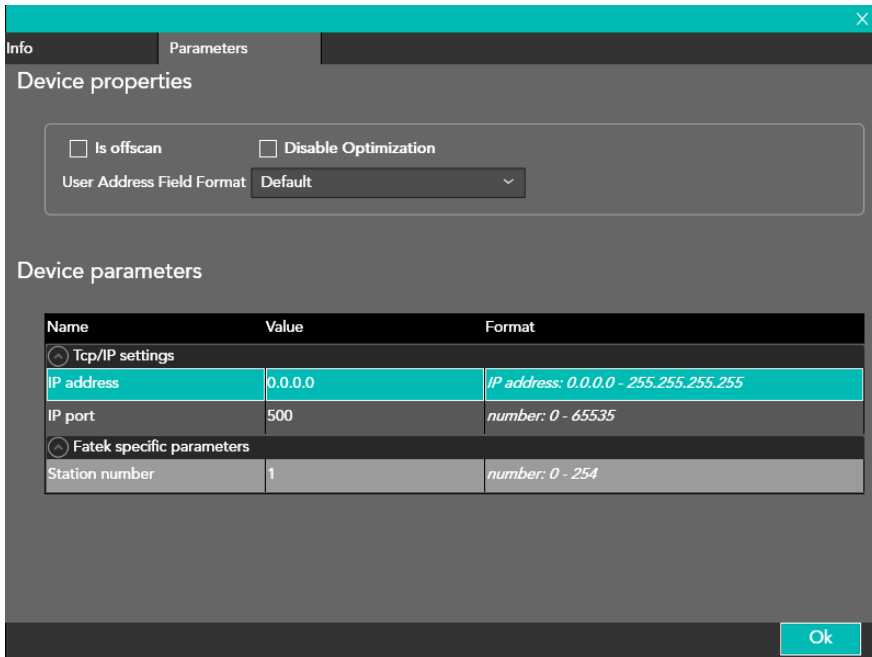
The page below is displayed by double click over the HMI model.



IP address	Ip address of the HMI port
Subnet mask	Subnet mask of the HMI port
Ping timeout	The PING command is sent in order to check the connection stability
Protocol Timeout	The PLC reply has to arrive inside this time out window
No. Of retry	After these retries (each one with communication error) the HMI itself will be forced in the error status



The page below will be displayed by double clicking on the Fatek driver.



Is offscan	The driver is defined in the project but will not be scheduled. In order to enable the driver it is mandatory to use the ST script function: TAG_SETOFFSCANDEV (device, state) TAG_SETOFFSCAN (Tag, state)
Disable Optimization	Disable the data optimization. Each tag will be refreshed with a separate communication message.
User Address Field Format	Tag address format. The default format is defined in the driver description but the user can select the desired format (DECIMAL or HEXADECIMAL)
Address prefix	Prefix that will be added at the beginning of the Tag addressing string.
IP address	IP address of the PLC port
IP port	Communication port. The default value is port 500
Station number	PLC address



IsOffscan

Is offscan management can be used in case a specific machine module will be part of the Kreo HMI project but will not be physically connected.



A NOT CONNECTED and ONSCAN device will reduce dramatically the performance of the page refresh due to the communication timeout.

Disable Optimization:

This option can be used in order to identify wich of the data displayed on a specific page is causing the communication error.

The value will not be displayed but a series of ????? will let the user identify the faulty tag to be fixed.



Tag definition

Tag

Transformations Thresholds Database Events

Name Tag1

Address type Device

Type UnsignedInteger Array size 1

Device FB series Dynamic

Data Area Counter (C) Data Type Value (Word) BCD Signed

RC 0

Persistent Read only Always update Use in scripts Allow subtags Tag OPC

Refresh (ms) 0 OffScan mode Never Network Id 0

Use default value

Unit [None]

Ok

The Tag addressing is physical based on the PLC memory mapping.



Memory areas

AREA	TIPO	DIM.	R/W	DESCRIZIONE
Data register (DR)	Word Dword Real String	16 32 32 8	R/W	Read/Write DR registers
Data register (HR)	Word Dword Real String	16 32 32 8	R/W	Read/Write HR registers
Data register (FR)	Word Dword Real String	16 32 32 8	R/W	Read/Write FR registers
Timer (T)	Value	16	R/W	Read/Write Timer value
Timer (T)	Contact	1	R/W	Read/Write the Timer contact
Counter (C)	Value	16	R/W	Read/Write the Counter
Counter (C)	Contact	1	R/W	Read/Write the Counter Contact
Input relay (X)	Bit Word Dword	1 16 32	R/-	Read Input
Output relay (Y)	Bit Word Dword	1 16 32	R/W	Read/Write output
Internal relay (X)	Bit Word Dword	1 16 32	R/W	Read/Write internal data



Internal relay (M)	Bit	1	R/W	Read/Write internal data
	Word	16		
	Dword	32		
Step relay (S)	Bit	1	R/W	Read/Write Step
	Word	16		
	Dword	32		

Error code

CODE	DESCRIPTION
DRIVER ERROR	The message cannot be dispatched. HW problem
PROTOCOL ERROR	Generic error
PROTOCOL TIMEOUT	The PLC did not reply before the timeout windows
SOCKET ERROR	The ethernet socket cannot be created
PING ERROR	The PLC does not reply the PING command
TRANSMISSION ERROR	The TCP message cannot be created
ERROR	Unknown error



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