

## XENAX® Xv 50V6

### Overview

**Ethernet Servo controller  
for AC / DC / EC servo motors**

Edition May 2006



### XENAX®, servo controller

Ethernet TCP/IP

Set-up via web-browser

Multi-axis operation with Ethernet-Switch

Start-up Key with Application parameter

Space Vector Control

## Motor types

### LINAX® linear motors

3 phase synchronous motor  
with linear encoder RS422  
A/A\*, B/B\* und R/R\*

Special support for:  
Distance coded reference marks,  
no external sensor for homing necessary  
Temperature monitoring via I<sup>2</sup>C.



### Servo motors

DC-brushless or EC-motor respectively  
with encoder RS422 A/A\*, B/B\* und Z/Z\*  
with or without Hall-sensors

DC-brush-type with encoder  
RS422 A/A\*, B/B\* und Z/Z\*

for example “Faulhaber”, “Minimotor”,  
“Maxon”

AC-Servomotor  
with encoder RS422 A/A\*, B/B\* und Z/Z\*  
with or without Hall-sensors

for example: AEG B28 D4 from our  
range 0,4Nm, 6000 rpm



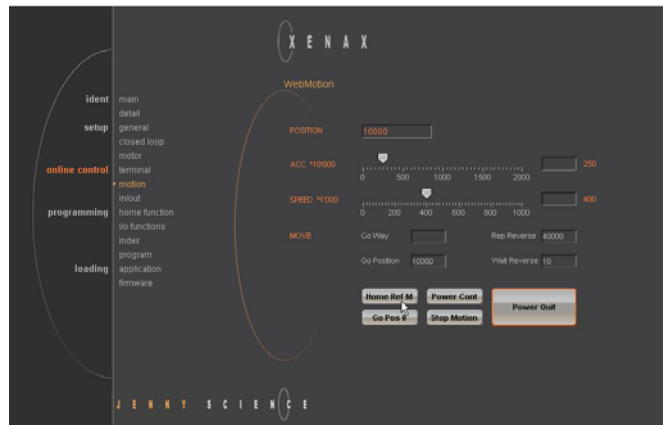
**FAULHABER GROUP**  
*We create motion*

**maxon motor**

## Special Features

### Web Technology

10/100Mbit Ethernet, Auto-sensing TCP/IP stack with http web-server  
 Integrated Website as graphic user interface, available via web-browser



### Example Programming

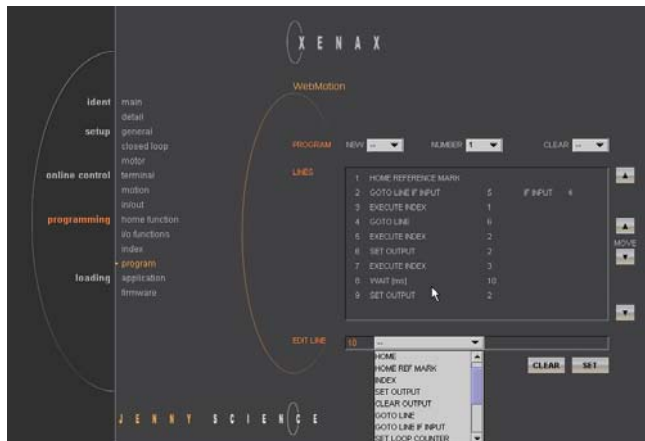
Here the program lines will be defined.

#### PROGRAM

Select, define or clear a program

#### LINES

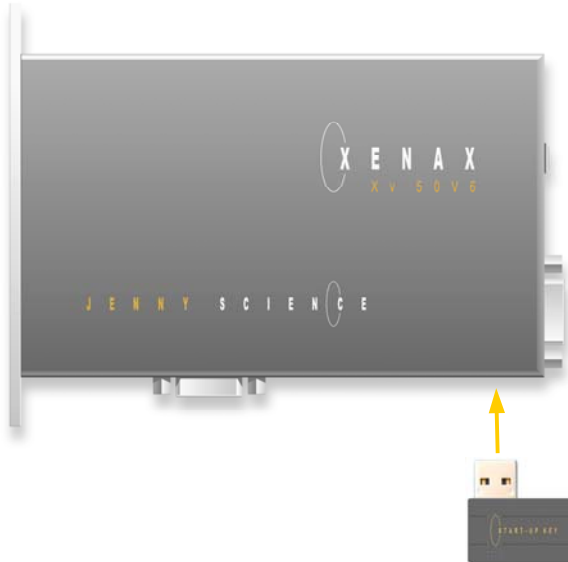
In this list all defined program lines of present program will be shown. The program instructions are presented in a window. Is a program line in the list selected then it can be moved with MOVE arrow to another position.



### Start-up Key

The Start-up Key contains an EEPROM where the complete application is stored. Application = all data and parameters programmed by the user. ( SETUP, INDEX, PROGRAM, HOME, bus baud-rate etc.)

On its reverse side, the Start-up Key has 2 coded switches for adjusting the field bus Node address (Identifier) from 01 – 99



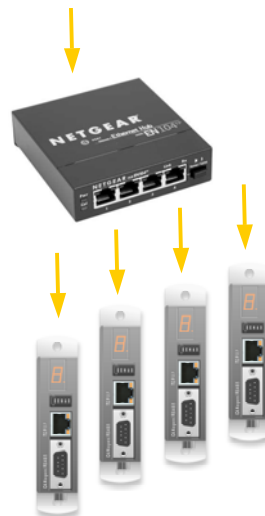
### Multi-axis operation

Simple, efficient TCP/IP standard.  
 Cost effective devices.  
 Significant time saving through elimination of complicated special protocols.

The XENAX® devices are connected to PC/Laptop via simple Ethernet switch.

Easy implementation with Delphi®, Labview®, Visual Basic® etc.

You achieve fast response times < 1ms with a separate Ethernet channel.



### Performance data Xv 50V6

Voltage	U 12-50VDC
Nominal current	In 0-6A
Peak current	Ip 10A
Temperature sensor	T 85°
Over-voltage monitor	Ov 58V
Ballast circuit	up to 80W
Power fuse	7A idle
Logic fuse	1A

### Electronic, Firmware

Interfaces	Ethernet, TCP/IP Stack, http Web Server CANopen, RS232, RS485, pulse/direction, analogue, master encoder, I/O
Fieldbus, multi-axis running	Ethernet Switch, TCP/IP RS485easy, CANopen
Status display	7-Segment display
Input digital	12 Input for sensors and start a function or program direct
Output digital	8 Output to control actuators and to show a status electrically
Home Function	Free programmable, incl. external sensor
Index	50 move profile (accel. / speed. / way, position)
I/O pre-selected application programs	15, Input 9-12 binary coded (MODE >=10)
Firmware Update	Via TCP/IP, Flash-Memory internal
Application and Parameter Update	Via TCP/IP, Flash-Memory internal

### Dimensions

Xv 50V6	L=142mm, H=85mm, W=25mm
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### Options

CANopen	DS402
Start-up Key	ID number and Application memory
E2	Second encoder channel for CAM profiles

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