ABC IT
FOR AUTOMATION

User guide

ABC-CPU systems

Quantity Framework

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Content

1. Quantity Framework

1.1 ABC-CPU Hardware

1.1.1 ABC X-CPU-4 CPU416

Function blocks	**FBs**
Number	65536
Permissible number	0 to 65535
Maximum size	2 Byte to 64KByte
Functions	**FCs**
Number	65536
Permissible number	0 to 65535
Maximum size	2 Byte to 64KByte
Data blocks	**DBs**
Number	65535
Permissible number	0 to 65535
Maximum size	2 Byte to 64KByte
Times	**T**
Number	2048
Permissible number	0 to 2047
Counter	**Z**
Number	2048
Permissible number	0 to 2047
Markers	**M**
Number	16384 Byte
Permissible number	0.0 to 16383.7
Process image Inputs	**E**
Number	16384 Byte

Permissible number	0.0 to 16383.7
Process image Outputs	**A**
Number	16384 Byte
Permissible number	0.0 to 16383.7
Local data per OB	**L**
Number	16384 Byte
Main memory	**RAM, buffered**
Number	48 Mbyte
Load memory	**RAM, buffered**
Number	64 MByte
Comm.-contracts	**Objects**
Number	10.000

1.1.2 ABC X-CPU-4 CPU416/945

1.1.2.1 X7-CPU945

Function blocks	**FBs**
Number	256
Permissible number	0 to 255
Maximum size	2 Byte to 64KByte

Program blocks	**PBs**
Number	256
Permissible number	0 to 255
Maximum size	2 Byte to 64KByte

Sequence blocks	**SBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Data blocks	**DBs**
Number	255
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Organization blocks	**OBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Exp. Function blocks	**FXen**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Exp. Data blocks	**DXen**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Times	**T**
Number	256
Permissible Number	0 to 255

Counter	**Z**
Number	256
Permissible Number	0 to 255
M-Markers	**M**
Number	256 * 8 Bit
Permissible Number	0.0 to 255.7
S-Markers	**S**
Number	4096 * 8 Bit
Permissible Number	0.0 to 4095.7
Process image Inputs	**E**
Number	128 * 8 Bit
Permissible Number	0.0 to 127.7
Process image Outputs	**A**
Number	128 * 8 Bit
Permissible Number	0.0 to 127.7
P-Periphery	**P**
Number	256 Byte
Permissible Number	0..255
Q-Periphery	**Q**
Number	256 Byte
Permissible Number	0..255
Main memory	**RAM, buffered**
Number	704 KByte

1.1.2.2 X7-CPU416

Function blocks	**FBs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte
Functions	**FCs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte
Data blocks	**DBs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte
Times	**T**
Number	2048
Permissible Number	0 to 2047
Counter	**Z**
Number	2048
Permissible Number	0 to 2047
Markers	**M**
Number	16384 Byte
Permissible Number	0.0 to 16383.7
Process Image Inputs	**E**
Number	16384 Byte
Permissible Number	0.0 to 16383.7
Process Image Outputs	**A**
Number	16384 Byte
Permissible Number	0.0 to 16383.7
Local data per OB	**L**
Number	16384 Byte
Main memory	**RAM, buffered**
Number	48 MByte

Load memory	**RAM, buffered**
Number	64 MByte
Comm.-contracts	**Objects**
Number	10.000

1.1.3 ABC X-CPU-4 CPU416/948

1.1.3.1 X7-CPU948

Function blocks	**FBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Program blocks	**PBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Sequence blocks	**SBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Data blocks	**DBs**
Number	255
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Organization blocks	**OBs**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Exp. Function blocks	**FXen**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Exp. Data blocks	**DXen**
Number	256
Permissible Number	0 to 255
Maximum size	2 Byte to 64KByte

Times	**T**
Number	256
Permissible Number	0 to 255

Counter	**Z**
Number	256
Permissible Number	0 to 255
M-Markers	**M**
Number	256 * 8 Bit
Permissible Number	0.0 to 255.7
S-Markers	**S**
Number	4096 * 8 Bit
Permissible Number	0.0 to 4095.7
Process image Inputs	**E**
Number	128 * 8 Bit
Permissible Number	0.0 to 127.7
Process image Outputs	**A**
Number	128 * 8 Bit
Permissible Number	0.0 to 127.7
P-Periphery	**P**
Number	256 Byte
Permissible Number	0..255
Q-Periphery	**Q**
Number	256 Byte
Permissible Number	0..255
Main memory	**RAM, buffered**
Number	640 KByte

1.1.3.2 X7-CPU416

Function blocks	**FBs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte

Functions	**FCs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte

Data blocks	**DBs**
Number	32768
Permissible Number	0 to 32767
Maximum size	2 Byte to 64KByte

Times	**T**
Number	2048
Permissible Number	0 to 2047

Counter	**Z**
Number	2048
Permissible Number	0 to 2047

Markers	**M**
Number	16384 Byte
Permissible Number	0.0 to 16383.7

Process image Inputs	**E**
Number	16384 Byte
Permissible Number	0.0 to 16383.7

Process image Outputs	**A**
Number	16384 Byte
Permissible Number	0.0 to 16383.7

Local data per OB	**L**
Number	16384 Byte

Main memory	**RAM, buffered**
Number	48 MByte

Load memory	**RAM, buffered**
Number	64 Mbyte

Comm. - Contracts	**Objects**
Number	10.000