

**List of S30 / S40 and S90 CS31-Modules**

**And the way to configure them**

**With Control Builder Plus by using**

**The feature „Other Module“**

## Module 07 AC 91

| Module | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|--------|---------|------------|-------------|------------|-------------|---------|
| 07AC91 | Analog. | 8          | 8           | -          | -           |         |

8 \* Word\_Input                      8 configurable analog in/outputs  
 8 \* Word\_Output

### Device Configuration

| Other module Configuration                                                                                  |                     |        |               |      |                                                     |
|-------------------------------------------------------------------------------------------------------------|---------------------|--------|---------------|------|-----------------------------------------------------|
| Parameter                                                                                                   | Type                | Value  | Default Value | Unit | Description                                         |
|  Ignore module             | Enumeration of BYTE | No     | No            |      | This parameter allows to set whether the I/O device |
|  Module address            | BYTE(0..61)         | 6      | 1             |      | Set the address of the CS31 module (same setting    |
|  Digital or analog module | Enumeration of BYTE | Analog | Digital       |      | Choose module type digital or analog                |

### Input / Output Configuration

| 07AC91 (Other module)                                                               |                                              |
|-------------------------------------------------------------------------------------|----------------------------------------------|
|  | Slave_1_Word_input_16 (Slave 1 Word input)   |
|  | Slave_1_Word_input_17 (Slave 1 Word input)   |
|  | Slave_1_Word_input_18 (Slave 1 Word input)   |
|  | Slave_1_Word_input_19 (Slave 1 Word input)   |
|  | Slave_1_Word_input_20 (Slave 1 Word input)   |
|  | Slave_1_Word_input_21 (Slave 1 Word input)   |
|  | Slave_1_Word_input_22 (Slave 1 Word input)   |
|  | Slave_1_Word_input_23 (Slave 1 Word input)   |
|  | Slave_1_Word_output_18 (Slave 1 Word output) |
|  | Slave_1_Word_output_19 (Slave 1 Word output) |
|  | Slave_1_Word_output_20 (Slave 1 Word output) |
|  | Slave_1_Word_output_21 (Slave 1 Word output) |
|  | Slave_1_Word_output_22 (Slave 1 Word output) |
|  | Slave_1_Word_output_23 (Slave 1 Word output) |
|  | Slave_1_Word_output_24 (Slave 1 Word output) |
|  | Slave_1_Word_output_25 (Slave 1 Word output) |

## **Module 07 AI 91**

| Module | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|--------|---------|------------|-------------|------------|-------------|---------|
| 07AI91 | Analog. | 8          | -           | -          | -           |         |

Word\_Input                8 analog input

Word\_Input

Word\_Input

Word\_Input

Word\_Input

Word\_Input

Word\_Input

Word\_Input

### **Device Configuration**

| Other module Configuration |                     |        |               |      |                                                                          |
|----------------------------|---------------------|--------|---------------|------|--------------------------------------------------------------------------|
| Parameter                  | Type                | Value  | Default Value | Unit | Description                                                              |
| Ignore module              | Enumeration of BYTE | No     | No            |      | This parameter allows to set whether the I/O device is ignored.          |
| Module address             | BYTE(0..61)         | 8      | 1             |      | Set the address of the CS31 module (same setting as the module address). |
| Digital or analog module   | Enumeration of BYTE | Analog | Digital       |      | Choose module type digital or analog.                                    |

### **Input / Output Configuration**

| _07AI91 (Other module) |                                            |
|------------------------|--------------------------------------------|
|                        | Slave_1_Word_input_36 (Slave 1 Word input) |
|                        | Slave_1_Word_input_37 (Slave 1 Word input) |
|                        | Slave_1_Word_input_38 (Slave 1 Word input) |
|                        | Slave_1_Word_input_39 (Slave 1 Word input) |
|                        | Slave_1_Word_input_40 (Slave 1 Word input) |
|                        | Slave_1_Word_input_41 (Slave 1 Word input) |
|                        | Slave_1_Word_input_42 (Slave 1 Word input) |
|                        | Slave_1_Word_input_43 (Slave 1 Word input) |

## **Module 07 DC 91**

| Module | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|--------|---------|------------|-------------|------------|-------------|---------|
| 07DC91 | Digital | -          | -           | 3          | 2           |         |

8Bit\_Input            16 digital inputs  
8Bit\_Input

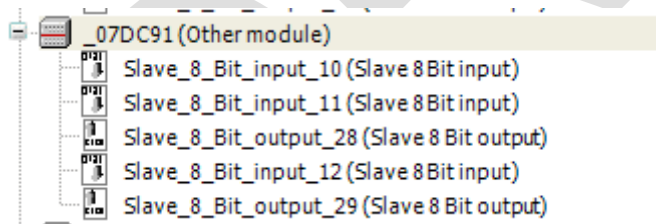
8Bit\_Output            8 digital outputs

8Bit\_Input            8 configurable in/outputs  
8Bit\_Output

### **Device Configuration**

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Module address             | BYTE(0..61)         | 18      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### **Input / Output Configuration**



## **Module 07 DC 92**

| Module | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|--------|---------|------------|-------------|------------|-------------|---------|
| 07DC92 | Digital | -          | -           | 4          | 4           |         |

8Bit\_Input                    32 configurable digital in / outputs

8Bit\_Input

8Bit\_Input

8Bit\_Input

8Bit\_Output

8Bit\_Output

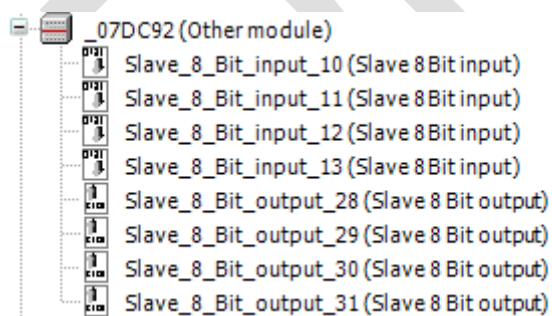
8Bit\_Output

8Bit\_Output

## **Device Configuration**

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Module address             | BYTE(0..61)         | 25      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

## **Input / Output Configuration**



## **Module 07 DI 92**

| Module | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|--------|---------|------------|-------------|------------|-------------|---------|
| 07DI92 | Digital | -          | -           | 4          | -           |         |

8Bit\_Input                      32 digital inputs

8Bit\_Input

8Bit\_Input

8Bit\_Input

### **Device Configuration**

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Module address             | BYTE(0..61)         | 25      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### **Input / Output Configuration**

| 07DI92 (Other module) |                                         |
|-----------------------|-----------------------------------------|
|                       | Slave_8_Bit_input_21 (Slave 8Bit input) |
|                       | Slave_8_Bit_input_22 (Slave 8Bit input) |
|                       | Slave_8_Bit_input_23 (Slave 8Bit input) |
|                       | Slave_8_Bit_input_24 (Slave 8Bit input) |

## Module ICPO 08 H1

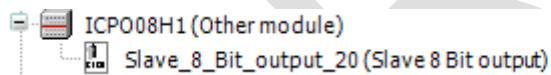
| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICPO08H1 | Digital | -          | -           | -          | 1           |         |

8Bit\_Output            8 digital outputs

### Device Configuration

| Other module Configuration                                                                                   |                     |         |               |      |                                                     |
|--------------------------------------------------------------------------------------------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                                                                                                    | Type                | Value   | Default Value | Unit | Description                                         |
|  Ignore module             | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
|  Module address           | BYTE(0..61)         | 4       | 1             |      | Set the address of the CS31 module (same setting    |
|  Digital or analog module | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### Input / Output Configuration



## Module ICSK20 F1

| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICSK20F1 | Digital | -          | -           | 2          | 1           |         |

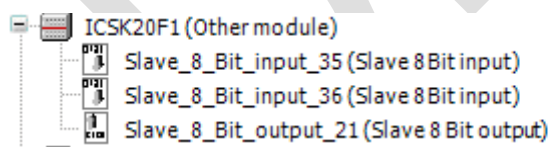
8Bit\_Input            16 (12) digital inputs  
8Bit\_Input

8Bit\_Output            8 digital outputs

### Device Configuration

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Module address             | BYTE(0..61)         | 12      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### Input / Output Configuration





## **Module ICSC08 L1**

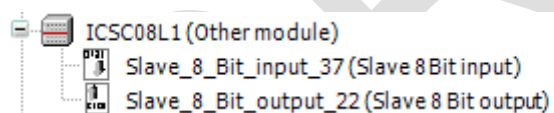
| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICSC08L1 | Digital | -          | -           | 1          | 1           |         |

8Bit\_Input                      8 configurable digital in/ outputs  
 8Bit\_Output

### **Device Configuration**

| Other module Configuration                                                                                   |                     |         |               |      |                                                     |
|--------------------------------------------------------------------------------------------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                                                                                                    | Type                | Value   | Default Value | Unit | Description                                         |
|  Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
|  Module address            | BYTE(0..61)         | 13      | 1             |      | Set the address of the CS31 module (same setting    |
|  Digital or analog module | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### **Input / Output Configuration**



## Module ICSI16 E1

| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICSI16E1 | Digital | -          | -           | 2          | -           |         |

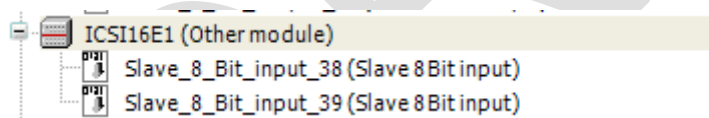
8Bit\_Input                  16 digital inputs

8Bit\_Input

### Device Configuration

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Module address             | BYTE(0..61)         | 14      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### Input / Output Configuration



## Module ICSF08D1

| Module   | Type   | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment             |
|----------|--------|------------|-------------|------------|-------------|---------------------|
| ICSF08D1 | analog | 5          | 3           | -          | -           | Fast Counter Module |

Word\_Input            5 analog inputs

Word\_Input

Word\_Input

Word\_Input

Word\_Input

Word\_Output           3 analog outputs

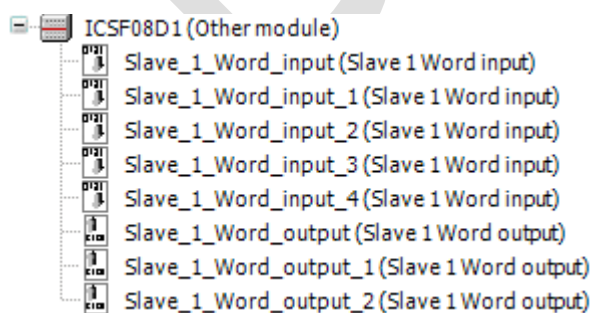
Word\_Output

Word\_Output

## Device Configuration

| Other module Configuration                                                                                   |                     |        |               |      |                                                                         |
|--------------------------------------------------------------------------------------------------------------|---------------------|--------|---------------|------|-------------------------------------------------------------------------|
| Parameter                                                                                                    | Type                | Value  | Default Value | Unit | Description                                                             |
|  Ignore module            | Enumeration of BYTE | No     | No            |      | This parameter allows to set whether the I/O device is ignored.         |
|  Module address           | BYTE(0..61)         | 4      | 1             |      | Set the address of the CS31 module (same setting as the master module). |
|  Digital or analog module | Enumeration of BYTE | Analog | Digital       |      | Choose module type digital or analog                                    |

## Input / Output Configuration



## **Module ICMK14 F1 (without Digital Expansions)**

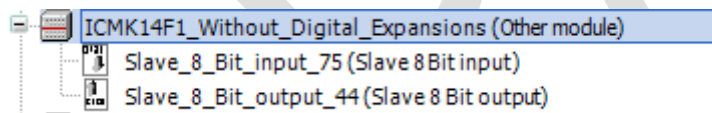
| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICMK14F1 | Digital | -          | -           | 1          | 1           |         |

8Bit\_Input                8 digital inputs  
 8Bit\_Output            8 digital outputs

### **Device Configuration**

| Other module Configuration |                     |         |               |      |                                                     |
|----------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                  | Type                | Value   | Default Value | Unit | Description                                         |
| Ignore module              | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
| Moduleaddress              | BYTE(0..61)         | 16      | 1             |      | Set the address of the CS31 module (same setting    |
| Digital or analog module   | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### **Input / Output Configuration**



## **Module ICMK14 F1 (with Digital Expansions)**

| Module   | Type    | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|---------|------------|-------------|------------|-------------|---------|
| ICMK14F1 | Digital | -          | -           | 2 + x      | 2 + y       |         |

8Bit\_Input                8 digital inputs  
 8Bit\_Input                8 digital inputs( 1 dummy byte )  
 \*1)

8Bit\_Output              8 digital outputs  
 8Bit\_Output              8 digital outputs( 1 dummy byte )  
 \*2)

\*: Additional digital inputs and outputs depend on the expansion module

\*1): x \* 8Bit\_Input            x \* 8 digital inputs

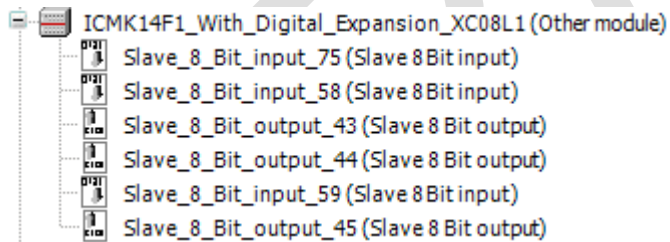
\*2): y \* 8Bit\_Output        y \* 8 digital outputs

(Example: when XC08L1 is used as expansion module: x=1 and y=1 )

### **Device Configuration**

| Other module Configuration                                                                                 |                     |         |               |      |                                                     |
|------------------------------------------------------------------------------------------------------------|---------------------|---------|---------------|------|-----------------------------------------------------|
| Parameter                                                                                                  | Type                | Value   | Default Value | Unit | Description                                         |
|  Ignore module            | Enumeration of BYTE | No      | No            |      | This parameter allows to set whether the I/O device |
|  Module address           | BYTE(0..61)         | 16      | 1             |      | Set the address of the CS31 module (same setting    |
|  Digital or analog module | Enumeration of BYTE | Digital | Digital       |      | Choose module type digital or analog                |

### **Input / Output Configuration**



## **Module ICMK14 F1 (with analog slaves)**

If there are analog slaves, there is to configure another „Other Modul“ with the same module address, but „analog“ as type.

| Module   | Type   | Word Input | Word Output | 8Bit Input | 8Bit Output | Comment |
|----------|--------|------------|-------------|------------|-------------|---------|
| ICMK14F1 | analog | X*         | Y*          | -          | -           |         |

\*: Analog inputs and outputs depend on the expansion slaves

X \* Word\_Input                      analog inputs of expansion

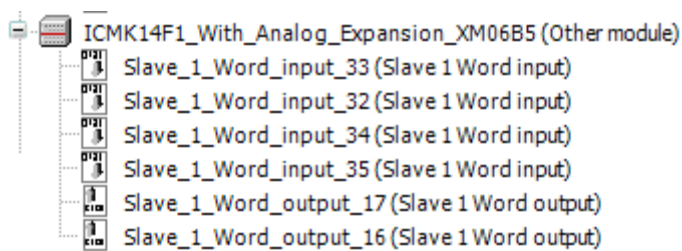
Y \* Word\_Output                      analog outputs of expansion

(Example: when XM06B5 is used as expansion module: X=4 and Y=2 )

## **Device Configuration**

| Other module Configuration                                                                                   |                     |        |               |      |                                                                       |
|--------------------------------------------------------------------------------------------------------------|---------------------|--------|---------------|------|-----------------------------------------------------------------------|
| Parameter                                                                                                    | Type                | Value  | Default Value | Unit | Description                                                           |
|  Ignore module            | Enumeration of BYTE | No     | No            |      | This parameter allows to set whether the I/O device is ignored.       |
|  Module address           | BYTE(0..61)         | 16     | 1             |      | Set the address of the CS31 module (same setting as the main module). |
|  Digital or analog module | Enumeration of BYTE | Analog | Digital       |      | Choose module type digital or analog                                  |

## **Input / Output Configuration**



**Faustregel Konfigurierung der digitalen Module bei ICMK14F1:**

- Bei den digitalen Modulen wird über "Add device" für jedes digitale Module  
2 x das Device "Slave 8 input" und  
2 x das Device "Slave 8 output" eingefügt.
- Die auf dem digitalen Module vorhandene Inputs/Outputs sind beginnend ab dem ersten Device adressierbar.
- Sind auf dem digitalen Module weniger oder gar keine Inputs/Outputs vorhanden, so sind die devices mit s.g. dummy bits/bytes aufgefüllt.

Siehe Beispiele:

