

# **Type 8792**

Profinet

Objects

Document version 1.04

Supplement to Operating Instructions

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# 1 History

| Document version | Date       | Changes  |
|------------------|------------|--|
| 1.04             | 2022-10-31 | KPopen and KPclose were interchanged<br>Fixed Description of NamurStatus (reserved bits 4-7) |
| 1.03             | 2019-07-05 | Added Description of Object Route Function<br>Changed wording: SIM-Card --> Config-Client    |
| 1.02             | 2018-02-01 | Add Parameters to start Tunes from fieldbus  |
| 1.01             | 2017-12-21 | Initial released version   |

## 2 Overview

Used datatypes:

|        |                              |
|--------|------------------------------|
| UINT8  | 8 bit: unsigned integer      |
| UINT16 | 16 bit: unsigned integer     |
| UINT32 | 32 bit: unsigned integer     |
| REAL32 | 32 bit: float value IEEE 754 |
| String | C-string                     |

## 3 Objects

### 3.1 Cyclic data

Cyclic data are available on several slots / subslots.

| Slot | Subslot | Index  | name        | description   | access<br>type | Config-<br>Client |
|------|---------|--------|-------------|---|----------------|-------------------|
| 0x01 | 0x01    | 0x0001 | NamurStatus | Represents the device status <sup>1)</sup><br>UINT8 | RO             |                   |
| 0x02 | 0x01    | 0x0001 | CMD         | Position set point<br>REAL32 in %                   | RW             |                   |
| 0x02 | 0x02    | 0x0001 | POS         | Current valve position<br>REAL32 in %               | RO             |                   |

1)

| Bit 7    | Bit 6 | Bit 5 | Bit 4 | Bit 3   | Bit 2 | Bit 1 | Bit 0 |
|----------|-------|-------|-------|---|-------|-------|-------|
| reserved |       |       |       | Namur state:<br>0 – normal<br>1 – diagnose active<br>2 – maintenance required<br>3 – out of specification<br>4 – warning<br>5 - error |       |       |       |

## 3.2 Acyclic data

### 3.2.1 Device Data (Index 0x00\_\_)

#### 3.2.1.1 Object Route Function

| Slot | Subslot | Index  | name                       | description   | access<br>type | Config-<br>Client |
|------|---------|--------|----------------------------|---|----------------|-------------------|
| 0x00 | 0x01    | 0x0001 | Index / Subindex / NodeID  | Target object: Writing Index and Subindex of the object. Index and Subindex are stored in the device description/EDS. The NodeID is always 0. Index: 2 bytes (MSB), Subindex: 1 byte, Node ID: 1 byte (always 0). For write access + 0x00000080<br>UINT32 | RW             |                   |
| 0x00 | 0x01    | 0x0002 | Data length (write access) | Data length of the write command in bytes, number of valid bytes is not specified for reading.<br>UINT32  | RW             |                   |
| 0x00 | 0x01    | 0x0003 | Value UINT32               | Here the value to be written is specified or the readout value is displayed.<br>Data ≤ 4 bytes.<br>UINT32   | RW             |                   |
| 0x00 | 0x01    | 0x0004 | Value String               | Is used to read and write texts.<br>Data > 4 bytes.<br>STRING   | RW             |                   |
| 0x00 | 0x01    | 0x0005 | result                     | Process result:<br>0 = Command successfully executed<br>> 0 = Error occurred during execution (see "Table 6")<br>0xFFFFFFFF: Read and write process not yet Concluded<br>UINT32   | RO             |                   |
| 0x00 | 0x01    | 0x0006 | call/cancel                | Execute command:<br>1 = execute<br>0 = finish<br>UINT8  | RW             |                   |
| 0x00 | 0x01    | 0x0007 | Control Mode               |   | RW             |                   |

### 3.2.1.2 Buerkert Device Description Object

| Slot | Subslot | Index  | name                  | description  | access<br>type | Config-<br>Client |
|------|---------|--------|-----------------------|--|----------------|-------------------|
| 0x00 | 0x01    | 0x0008 | Device Name           | Unique device name<br>Visible string               | RO             |                   |
| 0x00 | 0x01    | 0x0009 | Ident Number          | Device ID No.<br>UINT32                            | RO             |                   |
| 0x00 | 0x01    | 0x000A | Manufacture Date      | Visible string                                     | RO             |                   |
| 0x00 | 0x01    | 0x000B | Software Ident Number | ID No. of firmware<br>UINT32                       | RO             |                   |
| 0x00 | 0x01    | 0x000C | Software Version      | Version No. of firmware<br>UINT32                  | RO             |                   |
| 0x00 | 0x01    | 0x000D | Hardware Version      | Version No. of hardware<br>UINT32                  | RO             |                   |
| 0x00 | 0x01    | 0x000E | Serial Number         | Serial No. device<br>UINT32                        | RO             |                   |
| 0x00 | 0x01    | 0x000F | Product Code          | Manufacturers product code (type number)<br>UINT32 | RO             |                   |

### 3.2.2 Position Controller Parameter (Index 0x02\_\_)

| Slot | Subslot | Index  | name      | description   | access<br>type | Config-<br>Client |
|------|---------|--------|-----------|---|----------------|-------------------|
| 0x00 | 0x01    | 0x0201 | DBDx      | Deadband of the position controller in %<br>REAL32  | RW             | X                 |
| 0x00 | 0x01    | 0x0202 | KPclose   | Proportional gain for closing the valve<br>SINT16   | RW             | X                 |
| 0x00 | 0x01    | 0x0203 | KPopen    | Proportional gain for opening the valve<br>SINT16   | RW             | X                 |
| 0x00 | 0x01    | 0x0204 | mCHARACT  | Charact curve selected<br>0: No charact curve<br>1:Charact Curve 1:25<br>2:Charact Curve 1:33<br>3:Charact Curve 1:50<br>4:Charact Curve 25:1<br>5:Charact Curve 33:1<br>6:Charact Curve 50:1<br>7:FREE (See0x2C11 for defining the values)<br>See User Manual for description of the function.<br>SINT16 | RW             | X                 |
| 0x00 | 0x01    | 0x0205 | CUTOFFmin | Lower CUTOFF level in %<br>SINT16   | RW             | X                 |
| 0x00 | 0x01    | 0x0206 | CUTOFFmax | Upper CUTOFF level in %<br>SINT16   | RW             | X                 |
| 0x00 | 0x01    | 0x0207 | POSmin    | Lower position for X.LIMIT in %<br>SINT16   | RW             | X                 |
| 0x00 | 0x01    | 0x0208 | POSmax    | Upper position for X.LIMIT in %<br>SINT16   | RW             | X                 |

|      |      |        |            |  |    |   |
|------|------|--------|------------|--|----|---|
| 0x00 | 0x01 | 0x0209 | XTIMEopen  | Limited opening time of the valve in s (X.TIME)<br>REAL32  | RW | X |
| 0x00 | 0x01 | 0x020A | XTIMEclose | Limited closing time of the valve in s (X.TIME)<br>REAL32  | RW | X |
| 0x00 | 0x01 | 0x020B | mDIRact    | 0: Rise (lower position > 0%)<br>1: Fall (upper position-> 100%)<br>See User Manual for description of the function.<br>SINT16   | RW | X |
| 0x00 | 0x01 | 0x020C | mSAFEpos   | Position used as safepos in %<br>SINT16  | RW | X |
| 0x00 | 0x01 | 0x020D | TUNEflags  | 0 if last tune was successful<br>UINT8   | RO |   |
| 0x00 | 0x01 | 0x020E | Menu_Items | Bitfield to Activate/Deactivate functions from<br>ADD.FUNCTION menu<br>Bit0 – Bit6: unused<br>Bit7: CHARACT<br>Bit8: CUTOFF<br>Bit9: DIR.CMD<br>Bit10: DIR.ACT<br>Bit11: SPLTRNG<br>Bit12: X.LIMIT<br>Bit13: X.TIME<br>Bit14: X.CONTROL<br>Bit15: P.CONTROL (only 8693/8793)<br>Bit16: SECURITY<br>Bit17: SAFEPOS<br>Bit18: SIG.ERROR<br>Bit19: BINARY.IN<br>Bit20: OUTPUT<br>Bit21: CAL.USER<br>Bit22: SET.FACTORY<br>Bit23: SERVICE.BUES<br>Bit24: EXTRAS<br>Bit25: POS.SENSOR (only type 879X)<br>Bit26: SERVICE<br>Bit27: SIMULATION<br>Bit28: DIAGNOSE<br>Bit29: F.CONTROL (only with FMR option)<br>UINT32 | RW | X |
| 0x00 | 0x01 | 0x020F | startTune  | Start Tune via fieldbus<br>2: X.Tune<br><br>startTune is set back from device<br>0:TUNE successfully started<br>255:TUNE could not be started<br><br>Tune has finished when zOPmode changed back<br>to Auto or Manual mode. Get result of last tune by<br>reading object TUNEflags<br><br>*since Release B.02.01<br>UINT8  | RW |   |
| 0x00 | 0x01 | 0x0210 | z_OPmode   | Get the current operating mode<br>0: Auto<br>1: Hand<br>2: X.Tune<br><br>*since Release B.02.01<br>UINT8   | RO |   |



