



# SIMATIC TDC

Reading and Writing  
Drive's Parameter

# SIMATIC TDC

## Read/Write Parameter via PROFIBUS DP

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

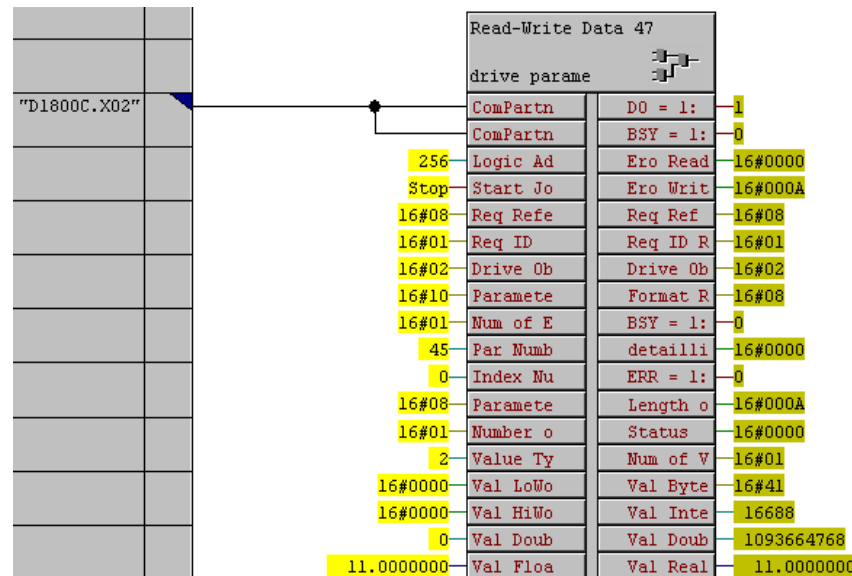
Request Header

Parameter Address

Parameter Value

Drive Response

Further Information



**Screenshot:**  
Reading "Drive-Parameter 45" (Smoothing time)

SIEMENS

# SIMATIC TDC – Function Block Read/Write Parameter via PROFIBUS DP

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

**SIEMENS**

## Features

- Read / Write Parameters of Drives (e.g. SINAMICS) from SIMATIC TDC-side via PROFIBUS DP by "Dataset 47"
- CFC – „Chart-In-Chart“ – function block
  - "Chart-In-Chart" can be copied from example-project "TDC-RW-DrvPar070913" chart "R-W\_Drive\_Parameter"
  - "Chart-In-Chart"-function block can be enhanced by user in order to handle more than one parameter

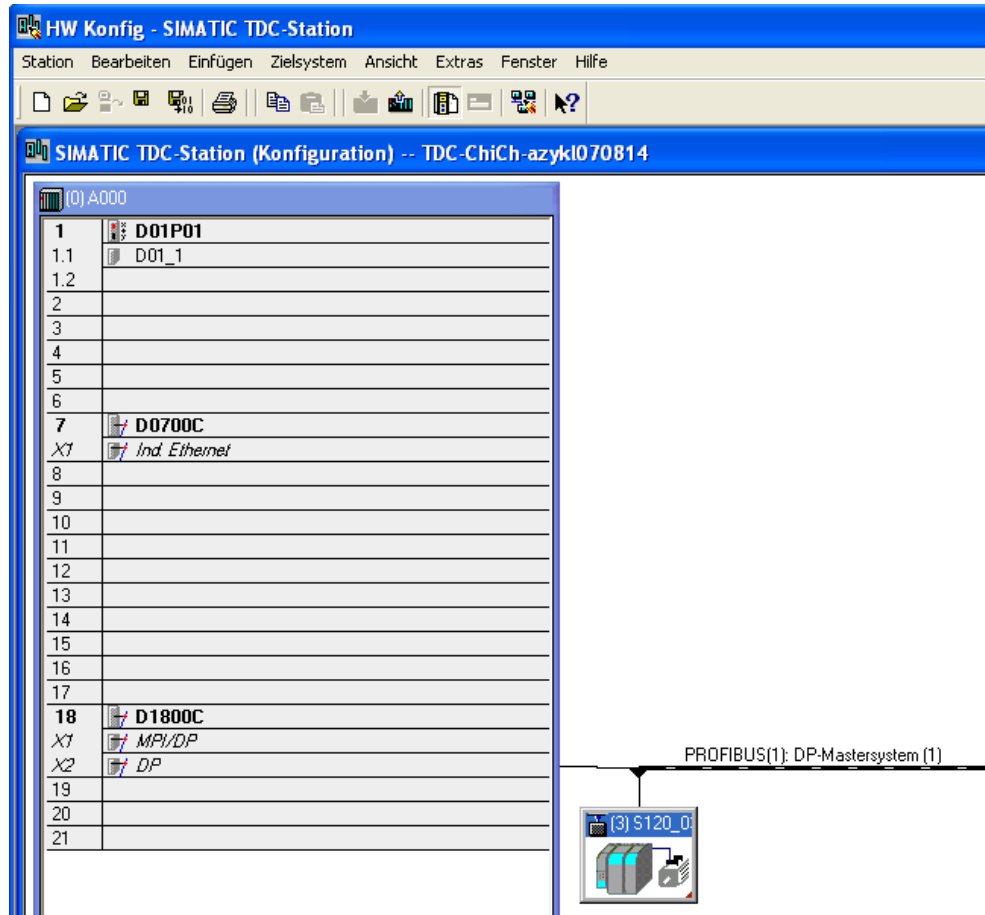
## Premises

- CP50M1
- D7-SYS V6.2 SP3

# SIMATIC TDC

## Read/Write Parameter via PROFIBUS DP

### Example's Hardware Configuration



SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

**SIEMENS**

# SIMATIC TDC

## Read/Write Parameter via PROFIBUS DP

- Counting
- Positioning
- Loop Control
- Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

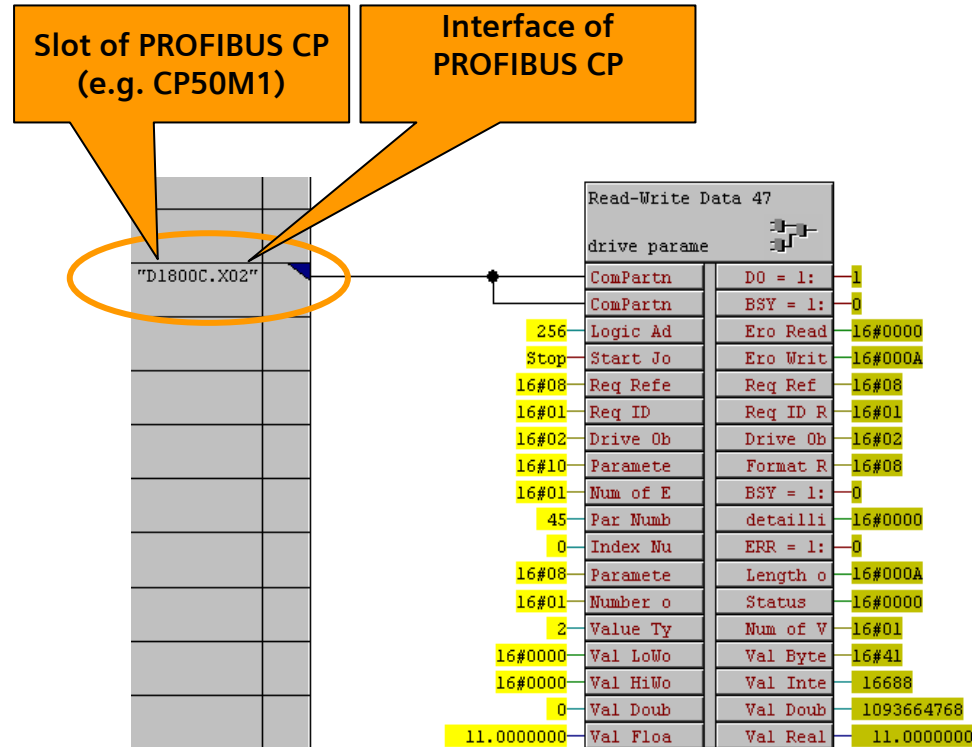
Parameter Address

Parameter Value

Drive Response

Further Information

**SIEMENS**



# Identifying logic addresses of drives

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Head

Parameter Ad

Parameter Va

Drive Respons

Further Inform

S7T Config - TDC-PIPazyki070813 - [S120\_03 - Configuration]

Project Edit Insert Target system View Options Window Help

PROFIBUS message frame | Version overview

The drive objects are supplied with data in the following sequence from the PROFIBUS message frame:

Object	Drive object	-No.	Message frame type	I address	O address	Axis
1	SERVO_02	2	SIEMENS telegram 105	256..263	256..263	---
2	SERVO_03	3	SIEMENS telegram 105	276..283	276..283	---
3	TB30_04	4	Free message frame configuration with BICO	---	---	---
4	CU_126	1	Free message frame configuration with BICO	---	---	---

Read-Write Data 47

drive param

ComPartn	DO = 1:	1
ComPartn	BSY = 1:	0
256	Logic Ad	16#0000
Stop	Start Jo	16#000A
16#08	Req Refe	16#08
16#01	Req ID	16#01
16#02	Drive Ob	16#02
16#10	Paramete	16#08
16#01	Num of E	BSY = 1: 0
45	Par Numb	detailli 16#0000
0	Index Nu	ERR = 1: 0
16#08	Paramete	Length o 16#000A
16#01	Number o	Status 16#0000
2	Value Ty	Num of V 16#01
16#0000	Val LoWo	Val Byte 16#41
16#0000	Val HiWo	Val Inte 16688
0	Val Doub	Val Doub 1093664768
11.0000000	Val Floa	Val Real 11.0000000

18 D1800C

X1 MPI/DP

X2 DP

19 D1900C

X1 D19\_1

X2 D19\_2

20

21

PROFIBUS(1): I

(3) S120\_03

Slot	Baugruppe	E-Adresse	A-Adresse	K
4	Drive Data	256...263		
5	Drive Data		256...263	
6	Drive Data			
7	Drive Data	264...271		
8	Drive Data		264...271	
9				

SIEMENS

# Start of Parameter Job

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

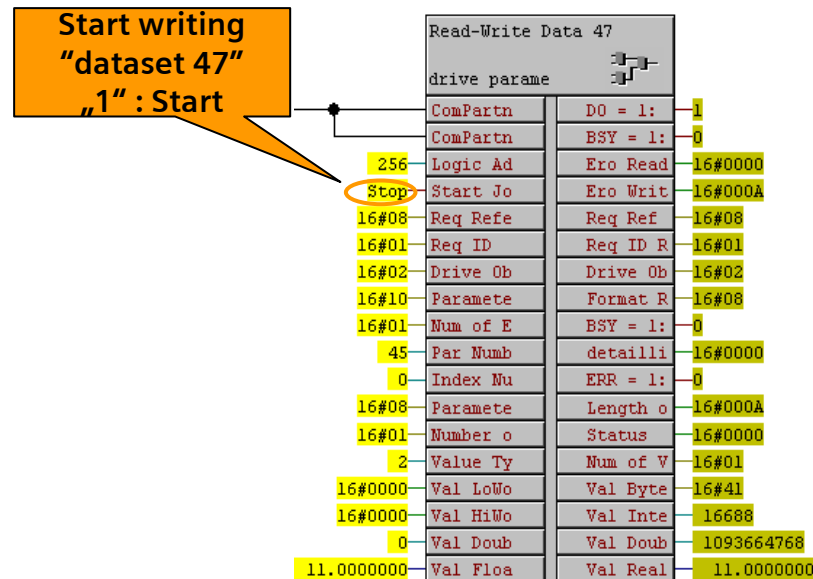
Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS



# Defining "Request Header"

## SIMATIC Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

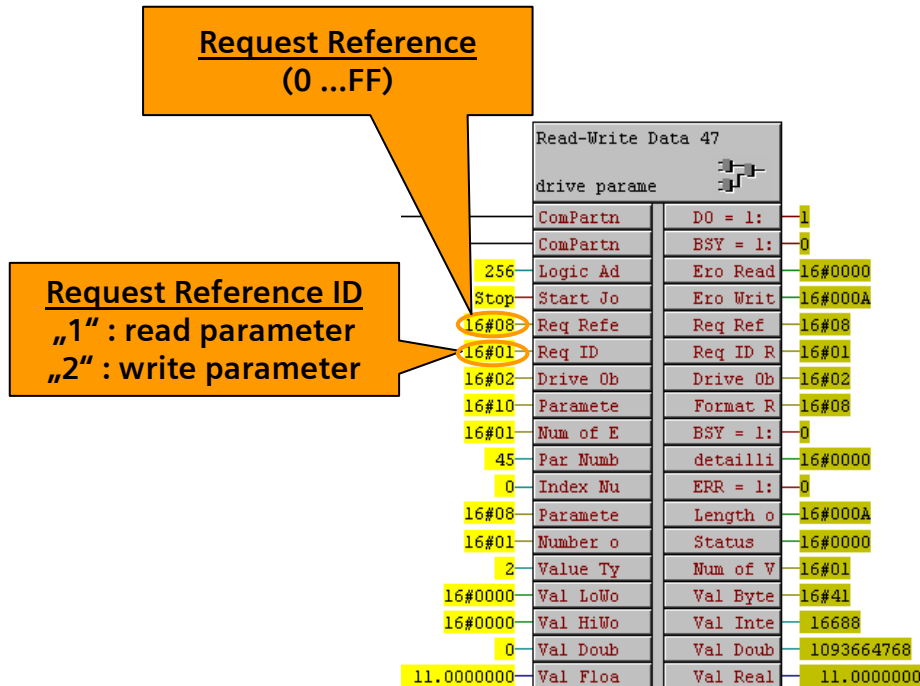
Parameter Address

Parameter Value

Drive Response

Further Information

# SIEMENS





# Defining "Request Header"

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

S7T Config - TDC-PIPazyki070813 - [S120\_03 - Configuration]

Project Edit Insert Target system View Options Window Help

PROFIBUS message frame | Version overview

The drive objects are supplied with data in the following sequence from the PROFIBUS message frame:

Object	Drive object	-No.	Message frame type	I address	O address	Axis
1	SERVO_02	2	SIEMENS telegram 105	256..263	256..263	---
2	SERVO_03	3	SIEMENS telegram 105	276..283	276..283	---
3	TB30_04	4	Free message frame configuration with BICO	---	---	---
4	CU_126	1	Free message frame configuration with BICO	---	---	---

Read-Write Data 47

drive param

ComPartn	DO = 1:	1
ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read 16#0000
Stop	Start Jo	Ero Writ 16#000A
16#08	Req Refe	Req Ref 16#08
16#01	Req ID	Req ID R 16#01
16#02	Drive Ob	Drive Ob 16#02
16#10	Paramete	Format R 16#08
16#01	Num of E	BSY = 1: 0
45	Par Numb	detailli 16#0000
0	Index Nu	ERR = 1: 0
16#08	Paramete	Length o 16#000A
16#01	Number o	Status 16#0000
2	Value Ty	Num of V 16#01
16#0000	Val LoWo	Val Byte 16#41
16#0000	Val HiWo	Val Inte 16688
0	Val Doub	Val Doub 1093664768
11.0000000	Val Floa	Val Real 11.0000000

Drive Object Number:

# Defining "Parameter Address"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

**Parameter Attribute:**  
 „10“ : value  
 „20“ : description  
 ....

SIEMENS

# Defining "Parameter Address"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive parame			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

**Number of Elements:**

SIEMENS

# Defining "Parameter Address"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
	45	Par Numb	detailli 16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Parameter Number:

SIEMENS

# Defining "Parameter Address"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

Read-Write Data 47			
drive parame			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Parameter Index:

# Defining "Parameter Value"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

## Parameter Format:

....  
"6" : Unsigned 16

....  
"8" : Real (Floating Point)

....

# Defining "Parameter Value"

Counting  
Positioning  
Loop Control  
Cam Control

## SIMATIC Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

### Parameter Format:

(Drive Information)

....  
„6" : Unsigned 16  
....  
„8" : Real (Floating Point)  
....

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

### Value Type:

selecting concerning input  
(Parameter Format):

„1" : Double Integer  
„2" : Real  
„X" : XWL + 65536 x XWH

# Defining "Parameter Value"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Number of Elements:



# Defining "Parameter Value"

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Value Type: "Low Word"

Value Type: "High Word"

Value Type:  
"Double Integer"

Value Type: "Float"

SIEMENS

# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

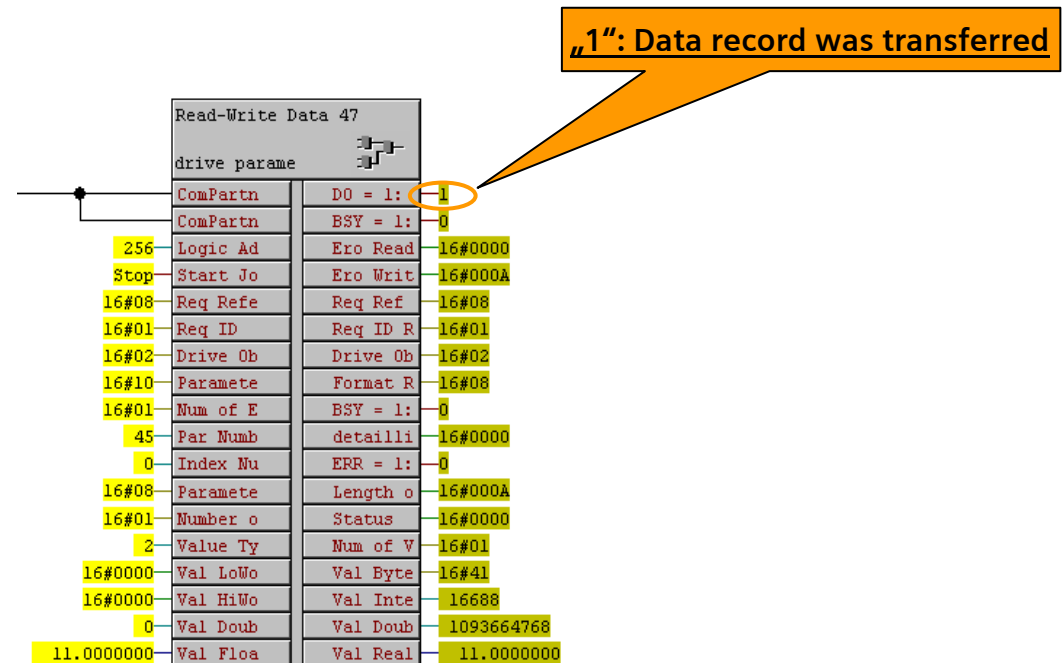
Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS



# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

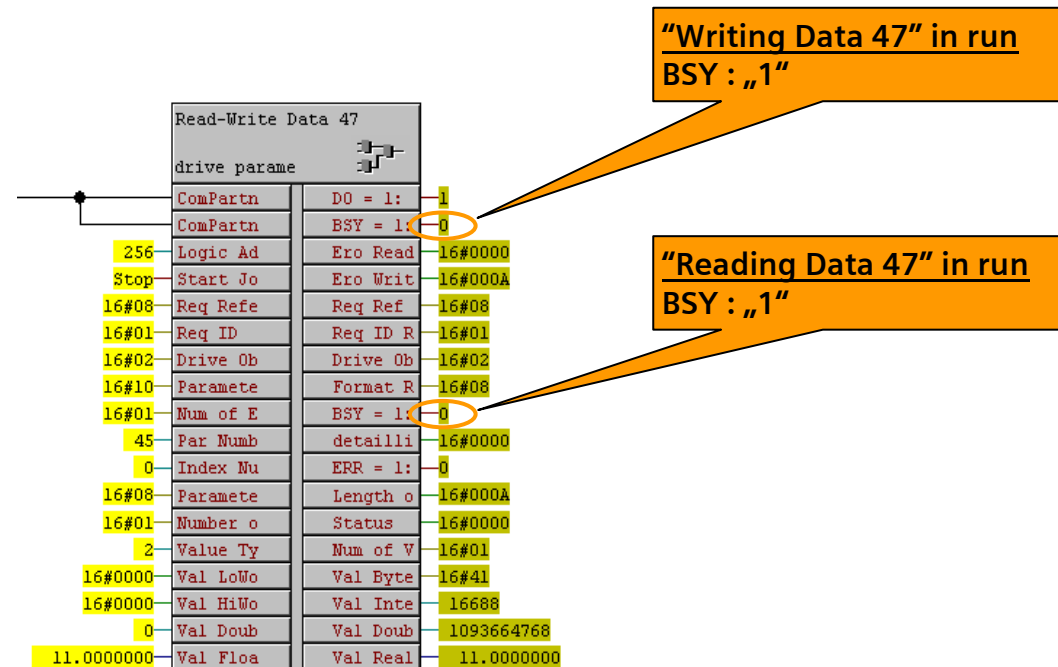
Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS



# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

Error Code: (according SFB54 "RALM)

...  
00XY: Number of received Bytes  
...  
7002: Data Set Transmission in run  
...

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

# Drive Response – Request Header

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

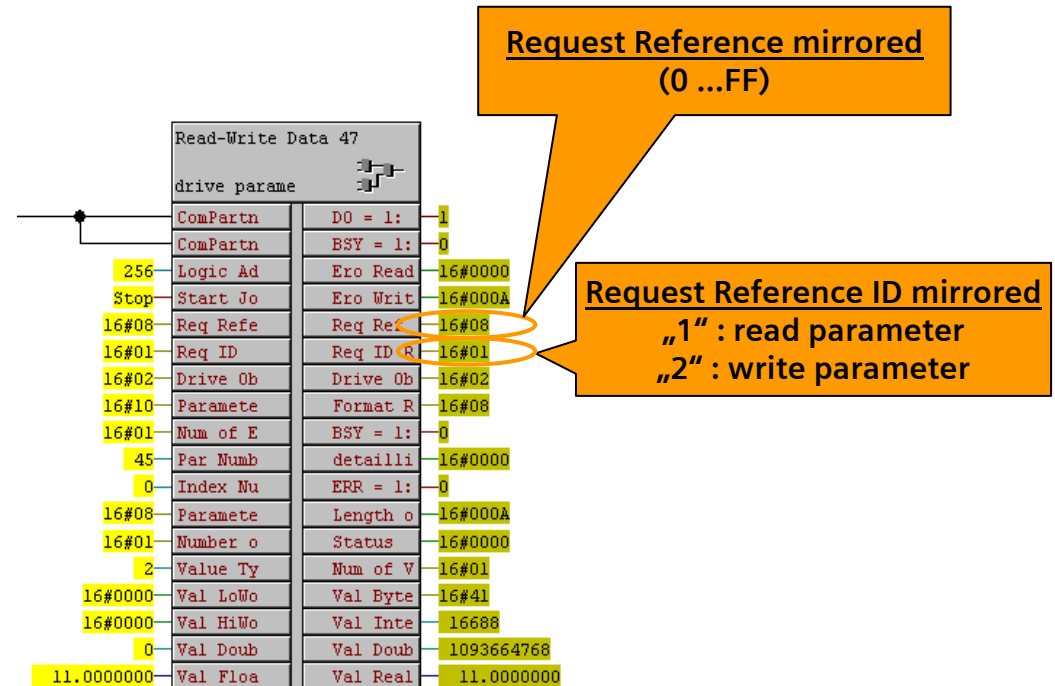
Request Header

Parameter Address

Parameter Value

Drive Response

Further Information



SIEMENS

# Drive Response – Request Header

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Drive Object Number mirrored:

SIEMENS

# Drive Response – Parameter Value

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

**Parameter Format:**

....  
**„6“** : Unsigned 16  
 ....  
**„8“** : Real (Floating Point)  
 ....

SIEMENS

# Drive Response – Parameter Value

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

SIEMENS

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detail1	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

**TlgStatus**, detailed status display; for the appropriate values refer to: D7-SYS Online Help "Help on events". (Press the F1 key in the CFC and call the topic "Help on events" under "CFC for SIMADYN D".)



# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

"1": A read error has occurred

SIEMENS

# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Number of received Bytes

SIEMENS

# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive param			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

## Coupling Status:

For an explanation refer to "Manual, System- and communication configuring D7-SYS", Section "Communications utility process data".

SIEMENS

# Drive Response – Diagnostic

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

Read-Write Data 47			
drive parame			
	ComPartn	DO = 1:	1
	ComPartn	BSY = 1:	0
256	Logic Ad	Ero Read	16#0000
Stop	Start Jo	Ero Writ	16#000A
16#08	Req Refe	Req Ref	16#08
16#01	Req ID	Req ID R	16#01
16#02	Drive Ob	Drive Ob	16#02
16#10	Paramete	Format R	16#08
16#01	Num of E	BSY = 1:	0
45	Par Numb	detailli	16#0000
0	Index Nu	ERR = 1:	0
16#08	Paramete	Length o	16#000A
16#01	Number o	Status	16#0000
2	Value Ty	Num of V	16#01
16#0000	Val LoWo	Val Byte	16#41
16#0000	Val HiWo	Val Inte	16688
0	Val Doub	Val Doub	1093664768
11.0000000	Val Floa	Val Real	11.0000000

Number of Values mirrored

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# Drive Response – Parameter Value

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

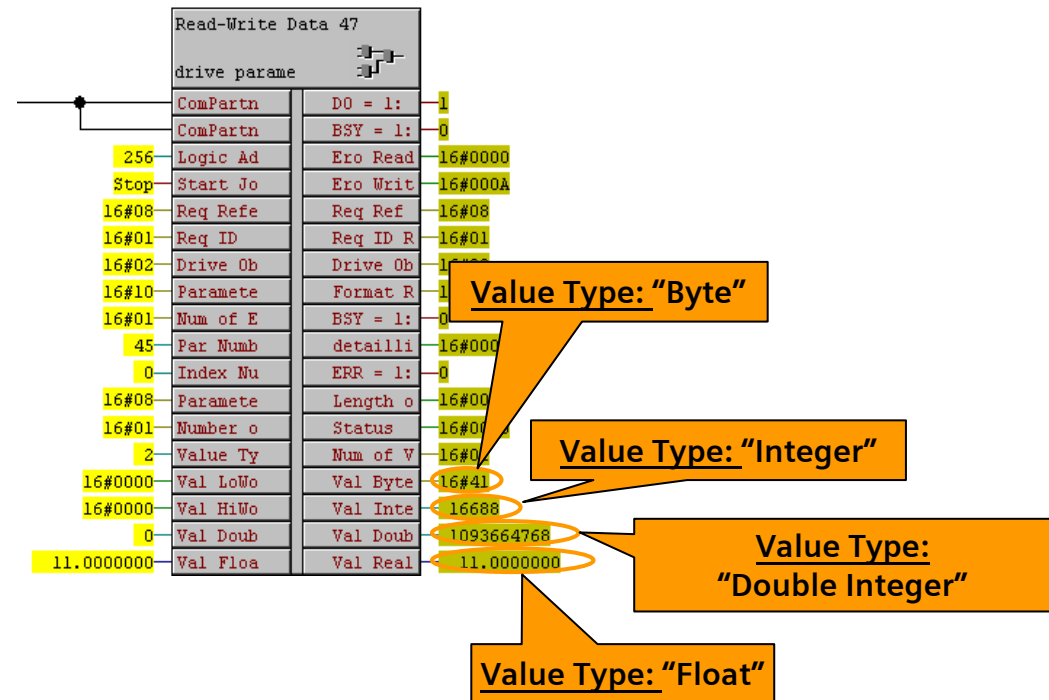
Request Header

Parameter Address

Parameter Value

Drive Response

Further Information



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# SIMATIC TDC

## Read- /Write Parameter via PROFIBUS DP

Counting  
Positioning  
Loop Control  
Cam Control

SIMATIC  
Technology

Function Block:  
Read/Write Dataset 47

Modul Name,  
Interface

Logic Address

Start Job

Request Header

Parameter Address

Parameter Value

Drive Response

Further Information

### Further Information

#### ■ Telegram Set

e.g.: SINAMICS S120 Commissioning Manual  
4 Communications according to PROFIdrive  
4.3 Acyclic communication (Page 181 - 196)

[http://www.automation.siemens.com/doconweb/content.asp?item=1393&cd=sinamics\\_0306\\_e&scope=all](http://www.automation.siemens.com/doconweb/content.asp?item=1393&cd=sinamics_0306_e&scope=all)

#### ■ Error Codes:

➔ SIMATIC Manager

- File > Open
- Libraries
- Standard Library
- System Function Blocks
- Blocks
- SFB54
- Block
- F1 (Help)

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