

INTERNATIONAL STANDARD



**Adjustable speed electrical power drive systems –
Part 7-301: Generic interface and use of profiles for power drive systems –
Mapping of profile type 1 to network technologies**



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**Adjustable speed electrical power drive systems –
Part 7-301: Generic interface and use of profiles for power drive systems –
Mapping of profile type 1 to network technologies**

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CONTENTS

FOREWORD.....	10
INTRODUCTION.....	12
1 Scope.....	17
2 Normative references	17
3 Terms, definitions and abbreviated terms	18
3.1 Terms and definitions.....	18
3.2 Abbreviated terms.....	22
4 General	23
5 Mapping to CANopen.....	23
5.1 Overview.....	23
5.2 Mapping of communication objects	23
5.3 Communication parameter objects	23
5.3.1 General	23
5.3.2 Object 1000 _h : Device type.....	24
5.3.3 Object 1029 _h : Error behavior.....	24
5.3.4 Object 67FF _h : Single device type	25
5.4 Emergency message.....	26
5.5 Communication fault events	26
5.6 Sets of pre-defined PDOs	26
5.6.1 General	26
5.6.2 PDO set for generic drive device	26
5.6.3 PDO set for frequency converter.....	58
5.6.4 PDO set for servo drive	71
5.6.5 PDO set for stepper motor	87
5.7 PDO mapping attributes	104
6 Mapping to CC-Link IE Field Network	108
6.1 Overview.....	108
6.2 Device model.....	108
6.3 Mapping of communication objects	109
6.3.1 General	109
6.3.2 The detailed mapping of communication objects	109
6.3.3 FAL syntax description	109
6.3.4 FAL transfer syntax	111
6.4 Communication parameter objects	115
6.4.1 General	115
6.4.2 Object 1000 _h : Device type.....	116
6.5 Sets of pre-defined PDOs	116
6.5.1 General	116
6.5.2 PDO set for generic drive device	116
6.6 PDO mapping attributes	119
7 Mapping to EPA.....	119
7.1 Overview.....	119
7.2 Device module	119
7.2.1 Overview	119
7.2.2 Additional definition for mapping to CiA 402.....	121

7.2.3	CiA 402 mapping module	123
7.2.4	FAL management object for CiA 402 mapping	124
7.3	PDOs mapping on cyclic PDU transmission	128
7.3.1	Overview	128
7.3.2	Configuration	129
7.3.3	Procedure of sending PDOs.....	131
7.3.4	Procedure of receiving PDOs.....	131
7.4	PDOs mapping on acyclic PDU transmission.....	132
7.4.1	General	132
7.4.2	FRTRead service	132
7.4.3	FRTWrite service	133
7.4.4	FRTRead service process.....	133
7.4.5	FRTWrite service process.....	134
7.5	Alarm mechanism	134
7.5.1	Overview	134
7.5.2	EventReport service	134
7.5.3	EventReportAcknowledge service	135
7.5.4	Event object	135
7.5.5	Alarm process	136
7.5.6	Error code	136
8	Mapping to EtherCAT	136
8.1	Overview.....	136
8.2	Mapping of communication objects	137
8.3	Communication parameter objects	137
8.3.1	General	137
8.3.2	Object 1000 _h : Device type.....	137
8.4	Sets of pre-defined PDOs	138
8.5	PDO mapping attributes	138
9	Mapping to ETHERNET Powerlink	138
9.1	Overview.....	138
9.2	Mapping of communication objects	138
9.3	Communication parameter objects	138
9.3.1	General	138
9.3.2	Object 1000 _h : Device type.....	139
9.3.3	Object 67FF _h : Single device type	139
9.4	Emergency information	139
9.5	Sets of pre-defined PDOs	139
9.5.1	General	139
9.5.2	PDO set for generic drive device	139
9.5.3	PDO set for frequency converter.....	146
9.5.4	PDO set for servo drive	150
9.5.5	PDO set for stepper motor.....	154
9.6	PDO mapping attributes	158
	Bibliography.....	159
	Figure 1 – Structure of IEC 61800-7.....	16
	Figure 2 – Structure of EPA drive system.....	120
	Figure 3 – CiA 402 mapping structure	123

Figure 4 – Format of Type 14 PDU for FRT application 129

Table 1 – List of used data types	23
Table 2 – Additional information field for generic PDO mapping	24
Table 3 – Additional information field for type-specific PDO mapping	24
Table 4 – Value definition	25
Table 5 – Object description	25
Table 6 – Entry description	25
Table 7 – Overview on RPDO	27
Table 8 – Overview on TPDO.....	27
Table 9 – Object description of communication parameters.....	27
Table 10 – Entry description of communication parameters.....	28
Table 11 – Object description of mapping parameters.....	28
Table 12 – Entry description of mapping parameters.....	29
Table 13 – Object description of communication parameters.....	29
Table 14 – Entry description of communication parameters.....	30
Table 15 – Object description of mapping parameters.....	30
Table 16 – Entry description of mapping parameters.....	31
Table 17 – Object description of communication parameters.....	32
Table 18 – Entry description of communication parameters.....	32
Table 19 – Object description of mapping parameters.....	33
Table 20 – Entry description of mapping parameters.....	33
Table 21 – Object description of communication parameters.....	34
Table 22 – Entry description of communication parameters.....	34
Table 23 – Object description of mapping parameters.....	35
Table 24 – Entry description of mapping parameters.....	35
Table 25 – Object description of communication parameters.....	36
Table 26 – Entry description of communication parameters.....	36
Table 27 – Object description of mapping parameters.....	37
Table 28 – Entry description of mapping parameters.....	37
Table 29 – Object description of communication parameters.....	38
Table 30 – Entry description of communication parameters.....	38
Table 31 – Object description of mapping parameters.....	39
Table 32 – Entry description of mapping parameters.....	39
Table 33 – Object description of communication parameters.....	40
Table 34 – Entry description of communication parameters.....	40
Table 35 – Object description of mapping parameters.....	41
Table 36 – Entry description of mapping parameters.....	41
Table 37 – Object description of communication parameters.....	42
Table 38 – Entry description of communication parameters.....	42
Table 39 – Object description of mapping parameters.....	43
Table 40 – Entry description of mapping parameters.....	43
Table 41 – Object description of communication parameters.....	44

Table 42 – Entry description of communication parameters.....	44
Table 43 – Object description of mapping parameters.....	45
Table 44 – Entry description of mapping parameters.....	45
Table 45 – Object description of communication parameters.....	46
Table 46 – Entry description of communication parameters.....	46
Table 47 – Object description of mapping parameters.....	47
Table 48 – Entry description of mapping parameters.....	47
Table 49 – Object description of communication parameters.....	48
Table 50 – Entry description of communication parameters.....	48
Table 51 – Object description of mapping parameters.....	49
Table 52 – Entry description of mapping parameters.....	49
Table 53 – Object description of communication parameters.....	50
Table 54 – Entry description of communication parameters.....	50
Table 55 – Object description of mapping parameters.....	51
Table 56 – Entry description of mapping parameters.....	51
Table 57 – Object description of communication parameters.....	52
Table 58 – Entry description of communication parameters.....	52
Table 59 – Object description of mapping parameters.....	53
Table 60 – Entry description of mapping parameters.....	53
Table 61 – Object description of communication parameters.....	54
Table 62 – Entry description of communication parameters.....	54
Table 63 – Object description of mapping parameters.....	55
Table 64 – Entry description of mapping parameters.....	55
Table 65 – Object description of communication parameters.....	56
Table 66 – Entry description of communication parameters.....	56
Table 67 – Object description of mapping parameters.....	57
Table 68 – Entry description of mapping parameters.....	57
Table 69 – Overview on RPDO	58
Table 70 – Overview on TPDO.....	58
Table 71 – Object description of communication parameters.....	58
Table 72 – Entry description of communication parameters.....	59
Table 73 – Object description of mapping parameters.....	59
Table 74 – Entry description of mapping parameters.....	60
Table 75 – Object description of communication parameters.....	61
Table 76 – Entry description of communication parameters.....	61
Table 77 – Object description of mapping parameters.....	62
Table 78 – Entry description of mapping parameters.....	62
Table 79 – Object description of communication parameters.....	63
Table 80 – Entry description of communication parameters.....	63
Table 81 – Object description of mapping parameters.....	64
Table 82 – Entry description of mapping parameters.....	64
Table 83 – Object description of communication parameters.....	65
Table 84 – Entry description of communication parameters.....	65

Table 85 – Object description of mapping parameters.....	66
Table 86 – Entry description of mapping parameters.....	66
Table 87 – Object description of communication parameters.....	67
Table 88 – Entry description of communication parameters.....	67
Table 89 – Object description of mapping parameters.....	68
Table 90 – Entry description of mapping parameters.....	68
Table 91 – Object description of communication parameters.....	69
Table 92 – Entry description of communication parameters.....	69
Table 93 – Object description of mapping parameters.....	70
Table 94 – Entry description of mapping parameters.....	70
Table 95 – Overview on RPDO	71
Table 96 – Overview on TPDO.....	71
Table 97 – Object description of communication parameters.....	71
Table 98 – Entry description of communication parameters.....	72
Table 99 – Object description of mapping parameters.....	72
Table 100 – Entry description of mapping parameters.....	73
Table 101 – Object description of communication parameters.....	73
Table 102 – Entry description of communication parameters.....	74
Table 103 – Object description of mapping parameters.....	74
Table 104 – Entry description of mapping parameters.....	75
Table 105 – Object description of communication parameters.....	76
Table 106 – Entry description of communication parameters.....	76
Table 107 – Object description of mapping parameters.....	77
Table 108 – Entry description of mapping parameters.....	77
Table 109 – Object description of communication parameters.....	78
Table 110 – Entry description of communication parameters.....	78
Table 111 – Object description of mapping parameters.....	79
Table 112 – Entry description of mapping parameters.....	79
Table 113 – Object description of communication parameters.....	80
Table 114 – Entry description of communication parameters.....	80
Table 115 – Object description of mapping parameters.....	81
Table 116 – Entry description of mapping parameters.....	81
Table 117 – Object description of communication parameters.....	82
Table 118 – Entry description of communication parameters.....	82
Table 119 – Object description of mapping parameters.....	83
Table 120 – Entry description of mapping parameters.....	83
Table 121 – Object description of communication parameters.....	84
Table 122 – Entry description of communication parameters.....	84
Table 123 – Object description of mapping parameters.....	85
Table 124 – Entry description of mapping parameters.....	85
Table 125 – Object description of communication parameters.....	86
Table 126 – Entry description of communication parameters.....	86
Table 127 – Object description of mapping parameters.....	87

Table 128 – Entry description of mapping parameters	87
Table 129 – Overview on RPDO	88
Table 130 – Overview on TPDO	88
Table 131 – Object description of communication parameters	88
Table 132 – Entry description of communication parameters	89
Table 133 – Object description of mapping parameters	89
Table 134 – Entry description of mapping parameters	90
Table 135 – Object description of communication parameters	90
Table 136 – Entry description of communication parameters	91
Table 137 – Object description of mapping parameters	91
Table 138 – Entry description of mapping parameters	92
Table 139 – Object description of communication parameters	93
Table 140 – Entry description of communication parameters	93
Table 141 – Object description of mapping parameters	94
Table 142 – Entry description of mapping parameters	94
Table 143 – Object description of communication parameters	95
Table 144 – Entry description of communication parameters	95
Table 145 – Object description of mapping parameters	96
Table 146 – Entry description of mapping parameters	96
Table 147 – Object description of communication parameters	97
Table 148 – Entry description of communication parameters	97
Table 149 – Object description of mapping parameters	98
Table 150 – Entry description of mapping parameters	98
Table 151 – Object description of communication parameters	99
Table 152 – Entry description of communication parameters	99
Table 153 – Object description of mapping parameters	100
Table 154 – Entry description of mapping parameters	100
Table 155 – Object description of communication parameters	101
Table 156 – Entry description of communication parameters	101
Table 157 – Object description of mapping parameters	102
Table 158 – Entry description of mapping parameters	102
Table 159 – Object description of communication parameters	103
Table 160 – Entry description of communication parameters	103
Table 161 – Object description of mapping parameters	104
Table 162 – Entry description of mapping parameters	104
Table 163 – PDO mapping attributes of CiA 402 objects	105
Table 164 – Object dictionary structure	109
Table 165 – FieldMotionSpecificTransient	111
Table 166 – command (dataType: 08 _h , dataSubType: 0002 _h)	112
Table 167 – subCommand type for each command type	112
Table 168 – Structure of setCycleTimeRequest	112
Table 169 – ctCycle	112
Table 170 – syCycle	113

Table 171 – Structure of setCycleTimeResponse	114
Table 172 – Result.....	114
Table 173 – Structure of readObjectRequest.....	114
Table 174 – Structure of readObjectResponse	115
Table 175 – Structure of writeObjectRequest	115
Table 176 – Structure of writeObjectResponse	115
Table 177 – List of used data types	115
Table 178 – Overview on object in RPDO	116
Table 179 – Overview on object in TPDO.....	116
Table 180 – Object description of mapping parameters.....	116
Table 181 – Entry description of mapping parameters.....	117
Table 182 – Object description of mapping parameters.....	118
Table 183 – Entry description of mapping parameters.....	118
Table 184 – List of used data types	119
Table 185 – Overview on RPDO	120
Table 186 – Overview on TPDO.....	120
Table 187 – Management object base.....	122
Table 188 – Definition of Type 14 FRT link object	129
Table 189 – Encoding of FRTRead request parameters	132
Table 190 – Encoding of FRTRead positive response parameters.....	132
Table 191 – Encoding of FRTRead negative response parameters	133
Table 192 – Encoding of FRTWrite request parameters	133
Table 193 – Encoding of FRTWrite positive response parameters.....	133
Table 194 – Encoding of FRTWrite negative response parameters	133
Table 195 – Encoding of EventReport parameters	135
Table 196 – Format of EventReport service for alarm	135
Table 197 – Encoding of EventReportAcknowledge parameters.....	135
Table 198 – Format of EventReportAcknowledge service for alarm	135
Table 199 – Event object assignment.....	136
Table 200 – Example of Event object header	136
Table 201 – Example of Event object.....	136
Table 202 – List of used data types	137
Table 203 – Additional information field for generic PDO mapping	138
Table 204 – List of used data types	139
Table 205 – Overview on objects in RPDO.....	140
Table 206 – Overview on objects in TPDO	140
Table 207 – Object description of communication parameters.....	140
Table 208 – Entry description of communication parameters.....	141
Table 209 – Object description of mapping parameters.....	141
Table 210 – Entry description of mapping parameters.....	142
Table 211 – Object description of communication parameters.....	143
Table 212 – Entry description of communication parameters.....	144
Table 213 – Object description of mapping parameters.....	144

Table 214 – Entry description of mapping parameters	145
Table 215 – Overview on objects in RPDO	146
Table 216 – Overview on objects in TPDO	146
Table 217 – Object description of communication parameters	146
Table 218 – Entry description of communication parameters	147
Table 219 – Object description of mapping parameters	147
Table 220 – Entry description of mapping parameters	148
Table 221 – Object description of communication parameters	148
Table 222 – Entry description of communication parameters	149
Table 223 – Object description of mapping parameters	149
Table 224 – Entry description of mapping parameters	150
Table 225 – Overview on objects in RPDO	150
Table 226 – Overview on objects in TPDO	151
Table 227 – Object description of communication parameters	151
Table 228 – Entry description of communication parameters	151
Table 229 – Object description of mapping parameters	152
Table 230 – Entry description of mapping parameters	152
Table 231 – Object description of communication parameters	153
Table 232 – Entry description of communication parameters	153
Table 233 – Object description of mapping parameters	153
Table 234 – Entry description of mapping parameters	154
Table 235 – Overview on objects in RPDO	154
Table 236 – Overview on objects in TPDO	155
Table 237 – Object description of communication parameters	155
Table 238 – Entry description of communication parameters	155
Table 239 – Object description of mapping parameters	156
Table 240 – Entry description of mapping parameters	156
Table 241 – Object description of communication parameters	157
Table 242 – Entry description of communication parameters	157
Table 243 – Object description of mapping parameters	157
Table 244 – Entry description of mapping parameters	158

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ADJUSTABLE SPEED ELECTRICAL POWER DRIVE SYSTEMS –

Part 7-301: Generic interface and use of profiles for power drive systems – Mapping of profile type 1 to network technologies

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International Standard IEC 61800-7-301 has been prepared by subcommittee SC 22G: Adjustable speed electric drive systems incorporating semiconductor power converters, of IEC technical committee TC 22: Power electronic systems and equipment.

This second edition cancels and replaces the first edition published in 2007. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- Additional mappings to communication systems are included (see Clause 6 and Clause 7).

The text of this standard is based on the following documents:

FDIS	Report on voting
22G/311/FDIS	22G/326/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61800 series, under the general title *Adjustable speed electrical power drive systems*, can be found on the IEC website.

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INTRODUCTION

The IEC 61800 series is intended to provide a common set of specifications for adjustable speed electrical power drive systems.

IEC 61800-7 specifies profiles for power drive systems (PDS) and their mapping to existing communication systems by use of a generic interface model.

IEC 61800-7 describes a generic interface between control systems and power drive systems. This interface can be embedded in the control system. The control system itself can also be located in the drive (sometimes known as "smart drive" or "intelligent drive").

A variety of physical interfaces is available (analogue and digital inputs and outputs, serial and parallel interfaces, fieldbuses and networks). Profiles based on specific physical interfaces are already defined for some application areas (e.g. motion control) and some device classes (e.g. standard drives, positioner). The implementations of the associated drivers and application-programmers programming interfaces are proprietary and vary widely.

IEC 61800-7 defines a set of common drive control functions, parameters, and state machines or description of sequences of operation to be mapped to the drive profiles.

IEC 61800-7 provides a way to access functions and data of a drive that is independent of the used drive profile and communication interface. The objective is a common drive model with generic functions and objects suitable to be mapped on different communication interfaces. This makes it possible to provide common implementations of motion control (or velocity control or drive control applications) in controllers without any specific knowledge of the drive implementation.

There are several reasons to define a generic interface:

For a drive device manufacturer

- less effort to support system integrators;
- less effort to describe drive functions because of common terminology;
- the selection of drives does not depend on availability of specific support;

For a control device manufacturer

- no influence of bus technology;
- easy device integration;
- independent of a drive supplier;

For a system integrator

- less integration effort for devices;
- only one understandable way of modeling;
- independent of bus technology.

Much effort is needed to design a motion control application with several different drives and a specific control system. The tasks to implement the system software and to understand the functional description of the individual components may exhaust the project resources. In some cases, the drives do not share the same physical interface. Some control devices just support a single interface, which will not be supported by a specific drive. On the other hand, the functions and data structures are often specified with incompatibilities. This requires the system integrator to write special interfaces for the application software and this should not be his responsibility.

Some applications need device exchangeability or integration of new devices in an existing configuration. They are faced with different incompatible solutions. The efforts to ~~adopt~~ adapt a solution to a drive profile and to manufacturer-specific extensions may be unacceptable. This will reduce the degree of freedom to select a device best suited for this application to the selection of the unit, which will be available for a specific physical interface and supported by the controller.

IEC 61800-7-1 is divided into a generic part and several annexes as shown in Figure 1. The drive profile types for CiA® 402¹, CIP Motion™², PROFIdrive³ and SERCOS®-interface™⁴ are mapped to the generic interface in the corresponding annex. The annexes have been submitted by open international network or fieldbus organizations, which are responsible for the content of the related annex and use of the related trade marks.

-
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The different profile types 1, 2, 3, 4 are specified in IEC 61800-7-201, IEC 61800-7-202, IEC 61800-7-203 and IEC 61800-7-204.

This part of IEC 61800-7 specifies how the profile type 1 (CiA® 402) is mapped to the network technologies CANopen⁵, ~~EtherCAT~~TM, CC-Link IE® Field Network⁶, EPATM⁷, EtherCAT[®]⁸ and Ethernet PowerlinkTM⁹.

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IEC 61800-7-302, IEC 61800-7-303 and IEC 61800-7-304 specify how the profile types 2, 3 and 4 are mapped to different network technologies (such as EtherCAT®, DeviceNet™¹⁰, ControlNet™¹¹, EtherNet/IP™¹², PROFIBUS¹³, PROFINET¹⁴ and SERCOS®-interface).

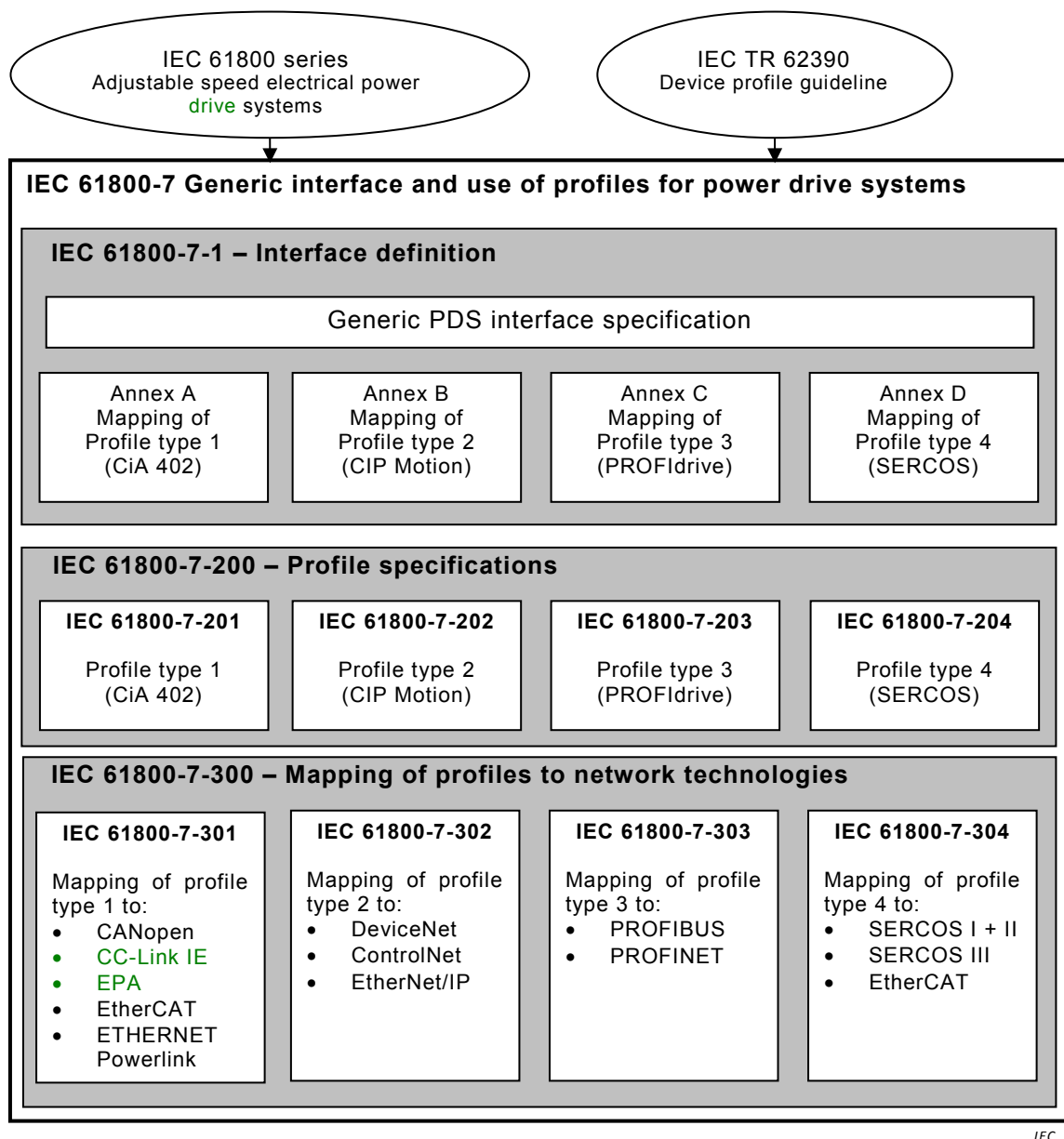
¹⁰ DeviceNet™ is a trade-name mark of ODVA, Inc. This information is given for the convenience of users of this International Standard and does not constitute an endorsement by IEC of the trade mark holder or any of its products. Compliance to this profile does not require use of the trade-name mark DeviceNet™. Use of the trade-name mark DeviceNet™ requires permission of ODVA, Inc.

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IEC

Figure 1 – Structure of IEC 61800-7

ADJUSTABLE SPEED ELECTRICAL POWER DRIVE SYSTEMS –

Part 7-301: Generic interface and use of profiles for power drive systems – Mapping of profile type 1 to network technologies

1 Scope

~~IEC 61800-7 specifies profiles for Power Drive Systems (PDS) and their mapping to existing communication systems by use of a generic interface model.~~

This part of IEC 61800 specifies the mapping of the profile type 1 (CiA 402) specified in IEC 61800-7-201 onto different network technologies.

The functions specified in this part of IEC 61800-7 are not intended to ensure functional safety. This requires additional measures according to the relevant standards, agreements and laws.

- CANopen, see Clause 5;
- CC-Link IE Field, see Clause 6;
- EPA, see Clause 7;
- EtherCAT, see Clause 8;
- ETHERNET Powerlink, see Clause 9.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61158-4-14, *Industrial communication networks – Fieldbus specifications – Part 4-14: Data-link layer protocol specification – Type 14 elements*

IEC 61158-5-12, *Industrial communication networks – Fieldbus specifications – Part 5-12 (Ed. 1.0): Application layer service definition – Type 12 elements*

IEC 61158-5-13, *Industrial communication networks – Fieldbus specifications – Part 5-13 (Ed. 1.0): Application layer service definition – Type 13 elements*

IEC 61158-5-14, *Industrial communication networks – Fieldbus specifications – Part 5-14: Application layer service definition – Type 14 elements*

IEC 61158-5-23, *Industrial communication networks – Fieldbus specifications – Part 5-23: Application layer service definition – Type 23 elements*

IEC 61158-6-12, *Industrial communication networks – Fieldbus specifications – Part 6-12 (Ed. 1.0): Application layer protocol specification – Type 12 elements*

IEC 61158-6-13, *Industrial communication networks – Fieldbus specifications – Part 6-13 (Ed. 1.0): Application layer protocol specification – Type 13 elements*

~~IEC 61800-7 (all parts), Adjustable speed electrical power drive systems – Generic interface and use of profiles for power drive systems~~

IEC 61158-6-14, *Industrial communication networks – Fieldbus specification – Part 6-14: Application layer protocol specification – Type 14 elements*

IEC 61158-6-23, *Industrial communication networks – Fieldbus specification – Part 6-23: Application layer protocol specification – Type 23 elements*

IEC 61800-7-201, *Adjustable speed electrical power drive systems – Part 7-201: Generic interface and use of profiles for power drive systems – Profile type 1 specification*

EN 50325-4, *Industrial communications subsystem based on ISO 11898 (CAN) for controller-device interfaces – Part 4: CANopen*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

actual value

value of a variable **quantity** at a given instant

Note 1 to entry: Actual value ~~or actual variable are~~ is used in this document as input data of the application control program to monitor ~~feedback variables or other process~~ variables of the PDS (e.g. **feedback variables**).

[SOURCE: ~~IEV 351-21-02~~ IEC 61800-7-1:2015, 3.3.1.1]

3.1.2

application

software functional element specific to the solution of a problem in industrial-process measurement and control

Note 1 to entry: An application may be distributed among resources, and may communicate with other applications.

[SOURCE: ~~IEC/TR 62390:2005, 3.1.2, modified~~ IEC 61800-7-1:2015, 3.2.2]

3.1.3

attribute

property or characteristic of an entity

[SOURCE: ~~IEC/TR 62390:2005, 3.1.3~~ IEC 61800-7-1:2015, 3.2.3]

3.1.4

class

description of a set of objects that share the same attributes, operations, methods, relationships, and semantics

[SOURCE: ~~ISO/IEC 19501, modified~~ IEC 61800-7-1:2015, 3.2.5]

3.1.5

commands

set of commands from the application control program to the PDS to control the behavior of the PDS or functional elements of the PDS

Note 1 to entry: The behavior is reflected by states or operating modes.

Note 2 to entry: The different commands may be represented by one bit each.

[SOURCE: IEC 61800-7-1:2015, 3.3.1.3]

3.1.6

communication macrocycle

set of basic cycles needed for a configured communication activity in a macro network segment

3.1.7

configuration data

data for selecting functional units, assigning their location and defining their interconnections

3.1.8

control

purposeful action on or in a process to meet specified objectives

[SOURCE: ~~IEV 351-21-29~~ IEC 61800-7-1:2015, 3.2.6]

3.1.9

control device

physical unit that contains – in a module/subassembly or device – an application program to control the PDS

[SOURCE: IEC 61800-7-1:2015, 3.2.7]

3.1.10

data type

set of values together with a set of permitted operations

[SOURCE: ~~ISO/IEC 2382-15:1999, 15.04.01, modified~~ IEC 61800-7-1:2015, 3.2.8]

3.1.11

device

field device

<function blocks> networked independent physical entity of an industrial automation system capable of performing specified functions in a particular context and delimited by its interfaces

[SOURCE: ~~IEC 61499-1:2005, 3.30, modified~~ IEC 61800-7-1:2015, 3.2.9]

~~entity that performs control, actuating and/or sensing functions and interfaces to other such entities within an automation system~~

~~[ISO 15745-1:2003, 3.11]~~

3.1.12

device profile

representation of a device in terms of its parameters, parameter assemblies and behaviour according to a device model that describes the data and behaviour of the device as viewed through a network, independent from any network technology

~~NOTE This is a definition from IEC/TS 61915 which is extended by the addition of the device functional structure.~~

[SOURCE: ~~IEC 61390, 3.19, modified~~ IEC 61800-7-1:2015, 3.2.11]

3.1.13

entity

particular thing, such as a person, place, process, object, concept, association, or event

3.1.14

feedback variable

variable **quantity**, which represents the controlled variable and is returned to the comparing element

[SOURCE: ~~IEV 351-27-03~~ IEC 61800-7-1:2015, 3.2.12]

3.1.15

functional element

entity of software or software combined with hardware, capable of accomplishing a specified function of a device

Note 1 to entry: A functional element has an interface, associations to other functional elements and functions.

Note 2 to entry: A functional element can be made out of function block(s), object(s) or parameter list(s).

[SOURCE: ~~IEC/TR 62390:2005, 3.1.12~~ IEC 61800-7-1:2015, 3.2.13]

3.1.16

input data

data transferred from an external source into a device, resource or functional element

[SOURCE: ~~IEC/TR 62390:2005, 3.1.14~~ IEC 61800-7-1:2015, 3.2.14]

3.1.17

interface

shared boundary between two entities defined by functional characteristics, signal characteristics, or other characteristics as appropriate

[SOURCE: ~~IEV 351-21-35, modified~~ IEC 61800-7-1:2015, 3.2.15]

3.1.18

mapping

set of values having defined correspondence with the quantities or values of another set

3.1.19

message

ordered series of octets intended to convey information

3.1.20

model

mathematical or physical representation of a system or a process, based with sufficient precision upon known laws, identification or specified suppositions

[SOURCE: ~~IEV 351-21-36~~ IEC 61800-7-1:2015, 3.2.17]

3.1.21

operating mode

characterization of the way and the extent to which the human operator intervenes in the control equipment

[SOURCE: ~~IEV 351-31-04~~ IEC 61800-7-1:2015, 3.2.18]

3.1.22

offset

number of octets from a specially designed position

3.1.23

output data

data originating in a device, resource or functional element and transferred from them to external systems

[SOURCE: ~~IEC/TR 62390:2005, 3.1.21~~ IEC 61800-7-1:2015, 3.2.19]

3.1.24

parameter

data element that represents device information that can be read from or written to a device, for example through the network or a local HMI

~~Note 1 — Adapted from IEC/TS 61915.~~

Note 1 to entry: A parameter is typically characterized by a parameter name, data type and access direction.

[SOURCE: ~~IEC/TR 62390:2005, 3.1.22, modified~~ IEC 61800-7-1:2015, 3.2.20]

3.1.25

profile

representation of a PDS interface in terms of its parameters, parameter assemblies and behavior according to a communication profile and a device profile

[SOURCE: IEC 61800-7-1:2015, 3.2.21, modified — Note 1 to entry is deleted]

3.1.26

set-point

value or variable used as output data of the application control program to control the PDS

[SOURCE: IEC 61800-7-1:2015, 3.3.1.5]

3.1.27

status

set of information from the PDS to the application control program reflecting the state or mode of the PDS or a functional element of the PDS

Note 1 to entry: The different status information may be coded with one bit each.

[SOURCE: IEC 61800-7-1:2015, 3.3.1.6]

3.1.28

type

hardware or software element which specifies the common attributes shared by all instances of the type

[SOURCE: ~~IEC/TR 62390:2005, 3.1.25~~ IEC 61800-7-1:2015, 3.2.23]

3.1.29 variable

software entity that may take different values, one at a time

Note 1 to entry: The values of a variable as well as of a parameter are usually restricted to a certain data type.

[SOURCE: ~~IEC/TR 62390:2005, 3.1.27~~ IEC 61800-7-1:2015, 3.2.25]

3.2 Abbreviated terms

APDU	application protocol data unit
AREP	application relationship end point
ASE	application service element
c	constant
CAN	controller area network
CiA	CAN in Automation
COB	communication object
ECSME	Type 14 communication scheduling management entity
EMCY	emergency message
EPA	Ethernet for Plant Automation
FAL	fieldbus application layer
FCS	frame check sequence
FRT	fast real-time
EM	(as a prefix) Type 14 management
FSA	finite state automaton
ID	identifier
IP	internet protocol
MOB	management object base
NMT	network management
PDO	process data object
PDS	power drive system
PDU	protocol data unit
ro	read-only
RPDO	receive- PDO process data object
rw	read-write
SDO	service data object
SYNC	synchronization message
TIME	time message
TPDO	transmit process data object
wdc	watch dog counter

4 General

The following clauses specify the mapping of the CiA 402 drive profile onto different communication technologies:

- CANopen, see Clause 5
- CC-Link IE, see Clause 6
- EPA, see Clause 7
- EtherCAT, see Clause 8
- ETHERNET Powerlink, see Clause 9

5 Mapping to CANopen

5.1 Overview

This clause specifies the mapping of the CiA 402 drive profile onto CANopen network. In particular, the process data object (PDO) communication and mapping parameters are defined. In addition, this part of the IEC 61800-7 series defines the PDO mapping attribute for all objects defined in the CiA 402 drive profile (see IEC 61800-7-201).

5.2 Mapping of communication objects

COBs for real-time data transmission shall be mapped to process data object messages (PDOs). COBs for configuration data transmission shall be mapped to service data object message(s) (SDO). COBs for emergency information transmission shall be mapped to emergency messages (EMCY). COBs for network management commands shall be mapped to NMT messages. COB for network management state information may be mapped to heartbeat message or node guarding message. COB for synchronization may be mapped to sync message (SYNC). COB for system time distribution may be mapped to time message (TIME).

5.3 Communication parameter objects

5.3.1 General

The drive device shall implement the mandatory communication parameter objects as defined in EN 50325-4. The drive device may implement the optional communication parameter objects as defined in EN 50325-4.

The category and entry category attributes of an object indicate if the object shall be implemented (mandatory) or may be implemented (optional).

The object code and data type attributes are defined in detail in EN 50325-4. The data types used in Clause 5 are listed in Table 1. The data types used in the CiA 402 profile are defined in EN 50325-4. Therefore, no mapping is defined.

Table 1 – List of used data types

Data type	Reference
Unsigned8	EN 50325-4
Unsigned16	EN 50325-4
Unsigned32	EN 50325-4
Integer8	EN 50325-4
Integer16	EN 50325-4
Integer32	EN 50325-4
PDO commpar	EN 50325-4
PDO mapping	EN 50325-4

In the entry description, the access attribute indicating if an application object is read only (ro), read/write (rw), or constant (c) is defined. Read only indicates that this shall not be written via the bus; read/write allows to read and to write this object; and constant means that this object is not changed.

The default value attribute defines the factory setting value of an object with access attribute of the value 'rw' or 'c'.

5.3.2 Object 1000_h: Device type

This object is defined in IEC 61800-7-201 and EN 50325-4. Drive devices shall support either the generic PDO mapping or the type-specific PDO mapping. For devices supporting the generic PDO mapping (bit 22 in the additional information field shall be 0), the definitions given in Table 2 shall apply. For devices supporting the type-specific PDO mapping (bit 22 in the additional information field shall be 1) the definitions given in Table 3 shall apply. In Table 2 and Table 3 the symbol “*” means manufacturer-specific.

Table 2 – Additional information field for generic PDO mapping

Device	Additional information															
	Mode bits								Type							
	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
Frequency converter	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	1
Servo drive	*	*	*	*	*	*	*	*	0	0	0	0	0	0	1	0
Stepper motor	*	*	*	*	*	*	*	*	0	0	0	0	0	1	0	0
Multiple device module	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 3 – Additional information field for type-specific PDO mapping

Device	Additional information															
	Mode bits								Type							
	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
Frequency converter	*	*	*	*	*	*	*	*	0	1	0	0	0	0	0	1
Servo drive	*	*	*	*	*	*	*	*	0	1	0	0	0	0	1	0
Stepper motor	*	*	*	*	*	*	*	*	0	1	0	0	0	1	0	0
Multiple device module	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

5.3.3 Object 1029_h: Error behavior

This object specifies to which NMT state the device shall be set (see EN 50325-4), when a communication error or a device-internal error is detected. The device-internal error shall be valid when the PDS FSA is in ~~Error~~ fault reaction active state (see IEC 61800-7-201).

Table 4 specifies the value definition, Table 5 specifies the object description, and Table 6 specifies the entry description.

Table 4 – Value definition

Value	Definition
00 _h	Enter NMT pre-operational state (only if current NMT state is operational)
01 _h	No NMT state change
02 _h	Enter NMT stopped state

Table 5 – Object description

Attribute	Value
Index	1029 _h
Name	Error behavior
Object code	Array
Data type	Unsigned8
Category	Optional

Table 6 – Entry description

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c
PDO mapping	No
Value range	01 _h to 02 _h
Default value	Manufacturer-specific
Sub-index	01 _h
Description	Communication error
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	See Table 4
Default value	00 _h
Sub-index	02 _h
Description	Internal device error
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See Table 4
Default value	01 _h

5.3.4 Object 67FF_h: Single device type

The object at index 67FF_h and multiples with an offset of 800_h shall define the type of each device within one drive unit and its functionality. The object structure shall be the same as defined in object 1000_h (for details, see EN-50325-4).

5.4 Emergency message

When the drive device detects internally a failure, it may transmit an emergency message as defined in EN 50325-4. The emergency message may use the error codes as defined in EN 50325-4 or in IEC 61800-7-201.

5.5 Communication fault events

~~In addition to local drive device fault events, the following communication events shall cause a transition to the PDS FSA fault reaction state:~~

- ~~• NMT stopped state indication if the PDS FSA is in Operation enabled state or in Quick-stop state.~~
- ~~• NMT initialisation state indication if the PDS FSA is in Operation enabled state or in Quick-stop state.~~
- ~~• Heartbeat/Life guarding event indication if the PDS FSA is in Operation enabled state or in Quick-stop state.~~

These events are covered by IEC 61800-7-201 object 6007_h.

5.6 Sets of pre-defined PDOs

5.6.1 General

A drive device supporting more than one mode of operation may require more than one pre-defined PDO. Therefore several PDOs are pre-defined in respect to the different possible modes of operation for drive devices.

The PDO assignments defined hereafter shall be used for every axis of a multi-device module with an offset of 64. For example, the first PDO of the second axis gets the number 65. In this way, a drive device is able to support a maximum of 8 axes.

NOTE All PDOs of the second and following axes are disabled by default.

There are several sets of pre-defined PDOs. The PDO set for generic drive device is independent from the drive type. The PDO sets for specific drive devices are different for frequency converter, servo controller, and stepper motor.

All pre-defined RPDOs with transmission type of 255 shall immediately enter all mapped objects into the object dictionary.

All pre-defined TPDOs with transmission type of 255 shall be transmitted when entering the NMT operational state.

The PDO compar and the PDO mapping record definitions, and the value definitions of the PDO communication and mapping parameters are defined in EN 50325-4.

In general all PDO communication objects defined in EN 50325-4 can be used. The following sections describe only the default values of the PDO objects.

5.6.2 PDO set for generic drive device

5.6.2.1 Overview and introduction

The PDO set for generic drive device pre-defines eight RPDOs (see Table 7) and seven TPDOs (see Table 8). The TPDOs with transmission type of 255 shall be triggered when any mapped object is changing. The RPDOs with transmission type 255 shall immediately update all mapped objects.

Table 7 – Overview on RPDO

PDO	Support	Description
1	Mandatory	Controls PDS FSA
2	Optional	Controls PDS FSA and modes of operation
3	Optional	Controls PDS FSA and target position (pp)
4	Optional	Controls PDS FSA and target velocity (pv)
5	Optional	Controls PDS FSA and target torque (tq)
6	Optional	Controls PDS FSA and nominal speed (vl)
7	Optional	Controls PDS FSA and digital outputs
8	Optional	Controls PDS FSA and mode of operation (broadcast PDO)
9 to 16	Reserved	
17 to 64	Optional	Manufacturer-specific

Table 8 – Overview on TPDO

PDO	Support	Description
1	Mandatory	Specifies PDS FSA status
2	Optional	Specifies PDS FSA status and current mode of operation
3	Optional	Specifies PDS FSA status and current position (pp)
4	Optional	Specifies PDS FSA status and current velocity (pv)
5	Optional	Specifies PDS FSA status and current torque (tq)
6	Optional	Specifies PDS FSA status and current speed (vl)
7	Optional	Specifies PDS FSA status and digital inputs
8 to 16	Reserved	
17 to 64	Optional	Manufacturer-specific

5.6.2.2 RPDO 1

Table 9 specifies the object description and Table 10 specifies the entry description of the PDO communication parameters.

Table 9 – Object description of communication parameters

Attribute	Value
Index	1400 _h
Name	Receive PDO1 parameter
Object code	Record
Data type	PDO commpar
Category	Mandatory

Table 10 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	0000 0200 _h + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 11 specifies the object description and Table 12 specifies the entry description of the PDO mapping parameters.

Table 11 – Object description of mapping parameters

Attribute	Value
Index	1600 _h
Name	Receive PDO1 mapping
Object code	Record
Data type	PDO mapping
Category	Mandatory

Table 12 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	01 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.3 RPDO 2

Table 13 specifies the object description and Table 14 specifies the entry description of the PDO communication parameters.

Table 13 – Object description of communication parameters

Attribute	Value
Index	1401 _h
Name	Receive PDO2 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 14 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	(0000 0300 _h or 8000 0300 _h) + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 15 specifies the object description and Table 16 specifies the entry description of the PDO mapping parameters.

Table 15 – Object description of mapping parameters

Attribute	Value
Index	1601 _h
Name	Receive PDO2 mapping
Object code	Record
Data type	PDO mapping
Category	Conditional, if 1401 _h is implemented

Table 16 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6060 0008 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.4 RPDO 3

Table 17 specifies the object description and Table 18 specifies the entry description of the PDO communication parameters.

Table 17 – Object description of communication parameters

Attribute	Value
Index	1402 _h
Name	Receive PDO3 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 18 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02_h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	(0000 0400 _h or 8000 0400 _h) + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0_d Manufacturer-specific

Table 19 specifies the object description and Table 20 specifies the entry description of the PDO mapping parameters.

Table 19 – Object description of mapping parameters

Attribute	Value
Index	1602 _h
Name	Receive PDO3 mapping
Object code	Record
Data type	PDO mapping
Category	Conditonal, if 1402 _h is implemented

Table 20 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	607A 0020 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.5 RPDO 4

Table 21 specifies the object description and Table 22 specifies the entry description of the PDO communication parameters.

Table 21 – Object description of communication parameters

Attribute	Value
Index	1403 _h
Name	Receive PDO4 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 22 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	(0000 0500 _h or 8000 0500 _h) + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _h Manufacturer-specific

Table 23 specifies the object description and Table 24 specifies the entry description of the PDO mapping parameters.

Table 23 – Object description of mapping parameters

Attribute	Value
Index	1603 _h
Name	Receive PDO4 mapping
Object code	Record
Data type	PDO mapping
Category	Conditonal, if 1403 _h is implemented

Table 24 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	60FF 0020 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.6 RPDO 5

Table 25 specifies the object description and Table 26 specifies the entry description of the PDO communication parameters.

Table 25 – Object description of communication parameters

Attribute	Value
Index	1404 _h
Name	Receive PDO5 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 26 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	8000 0000 _h
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 27 specifies the object description and Table 28 specifies the entry description of the PDO mapping parameters.

Table 27 – Object description of mapping parameters

Attribute	Value
Index	1604 _h
Name	Receive PDO5 mapping
Object code	Record
Data type	PDO mapping
Category	Conditional, if 1404 _h is implemented

Table 28 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6071 0010 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.7 RPDO 6

Table 29 specifies the object description and Table 30 specifies the entry description of the PDO communication parameters.

Table 29 – Object description of communication parameters

Attribute	Value
Index	1405 _h
Name	Receive PDO6 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 30 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO-linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	8000 0000 _h
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 31 specifies the object description and Table 32 specifies the entry description of the PDO mapping parameters.

Table 31 – Object description of mapping parameters

Attribute	Value
Index	1605 _h
Name	Receive PDO6 mapping
Object code	Record
Data type	PDO mapping
Category	Conditonal, if 1405 _h is implemented

Table 32 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6042 0010 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.8 RPDO 7

Table 33 specifies the object description and Table 34 specifies the entry description of the PDO communication parameters.

Table 33 – Object description of communication parameters

Attribute	Value
Index	1406 _h
Name	Receive PDO7 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 34 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	8000 0000 _h
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 35 specifies the object description and Table 36 specifies the entry description of the PDO mapping parameters.

Table 35 – Object description of mapping parameters

Attribute	Value
Index	1606 _h
Name	Receive PDO7 mapping
Object code	Record
Data type	PDO mapping
Category	Conditonal, if 1406 _h is implemented

Table 36 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	60FE 0120 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.9 RPDO 8

Table 37 specifies the object description and Table 38 specifies the entry description of the PDO communication parameters.

Table 37 – Object description of communication parameters

Attribute	Value
Index	1407 _h
Name	Receive PDO8 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 38 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	8000 0000 _h
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific

Table 39 specifies the object description and Table 40 specifies the entry description of the PDO mapping parameters.

Table 39 – Object description of mapping parameters

Attribute	Value
Index	1607 _h
Name	Receive PDO8 mapping
Object code	Record
Data type	PDO mapping
Category	Conditional, if 1407 _h is implemented

Table 40 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6040 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6060 0008 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.10 TPDO 1

Table 41 specifies the object description and Table 42 specifies the entry description of the PDO communication parameters.

Table 41 – Object description of communication parameters

Attribute	Value
Index	1800 _h
Name	Transmit PDO1 parameter
Object code	Record
Data type	PDO commpar
Category	Mandatory

Table 42 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	No Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	4000 0180 _h + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	03 _h
Description	Inhibit time
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

Table 43 specifies the object description and Table 44 specifies the entry description of the PDO mapping parameters.

Table 43 – Object description of mapping parameters

Attribute	Value
Index	1A00 _h
Name	Transmit PDO1 mapping
Object code	Record
Data type	PDO mapping
Category	Mandatory

Table 44 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	01 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6041 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.11 TPDO 2

Table 45 specifies the object description and Table 46 specifies the entry description of the PDO communication parameters.

Table 45 – Object description of communication parameters

Attribute	Value
Index	1801 _h
Name	Transmit PDO2 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 46 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	rw c
PDO mapping	No
Value range	See EN 50325-4
Default value	No Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	(4000 0280 _h or C000 0280 _h) + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	255 _d
Sub-index	03 _h
Description	Inhibit time
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 Manufacturer-specific
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 Manufacturer-specific

Table 47 specifies the object description and Table 48 specifies the entry description of the PDO mapping parameters.

Table 47 – Object description of mapping parameters

Attribute	Value
Index	1A01 _h
Name	Transmit PDO2 mapping
Object code	Record
Data type	PDO mapping
Category	Conditional, if 1801 _h is implemented

Table 48 – Entry description of mapping parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	02 _h
Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6041 0010 _h
Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	6061 0008 _h
Sub-index	03 _h
Description	3rd application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific
to	
Sub-index	40 _h
Description	64th application object
Entry category	Optional
Access	c or rw (if variable mapping is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	Manufacturer-specific

5.6.2.12 TPDO 3

Table 49 specifies the object description and Table 50 specifies the entry description of the PDO communication parameters.

Table 49 – Object description of communication parameters

Attribute	Value
Index	1802 _h
Name	Transmit PDO3 parameter
Object code	Record
Data type	PDO commpar
Category	Optional

Table 50 – Entry description of communication parameters

Attribute	Value
Sub-index	00 _h
Description	Highest sub-index supported
Entry category	Mandatory
Access	ro c
PDO mapping	No
Value range	See EN 50325-4
Default value	No Manufacturer-specific
Sub-index	01 _h
Description	COB-ID used by PDO
Entry category	Mandatory
Access	c or rw (if PDO linking is supported COB-ID is changeable)
PDO mapping	No
Value range	See EN 50325-4
Default value	(4000 0380 _h or C000 0380 _h) + node-ID
Sub-index	02 _h
Description	Transmission type
Entry category	Mandatory
Access	c or rw (if PDO type change is supported)
PDO mapping	No
Value range	See EN 50325-4
Default value	1 _d
Sub-index	03 _h
Description	Inhibit time
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific
Sub-index	05 _h
Description	Event timer
Entry category	Optional
Access	rw
PDO mapping	No
Value range	See EN 50325-4
Default value	0 _d Manufacturer-specific