

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Function blocks (FB) for process control and electronic device description  
language (EDDL) –  
Part 5: EDDL Built-in library**

**Blocs fonctionnels (FB) pour les procédés industriels et le langage de  
description électronique de produit (EDDL) –  
Partie 5: Bibliothèque de Built-in EDDL**



**THIS PUBLICATION IS COPYRIGHT PROTECTED**  
**Copyright © 2015 IEC, Geneva, Switzerland**

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

#### About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

#### About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

#### IEC Catalogue - [webstore.iec.ch/catalogue](http://webstore.iec.ch/catalogue)

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

#### IEC publications search - [www.iec.ch/searchpub](http://www.iec.ch/searchpub)

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

#### IEC Just Published - [webstore.iec.ch/justpublished](http://webstore.iec.ch/justpublished)

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

#### Electropedia - [www.electropedia.org](http://www.electropedia.org)

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in 15 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

#### IEC Glossary - [std.iec.ch/glossary](http://std.iec.ch/glossary)

More than 60 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

#### IEC Customer Service Centre - [webstore.iec.ch/csc](http://webstore.iec.ch/csc)

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: [csc@iec.ch](mailto:csc@iec.ch).

#### A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

#### A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

#### Catalogue IEC - [webstore.iec.ch/catalogue](http://webstore.iec.ch/catalogue)

Application autonome pour consulter tous les renseignements bibliographiques sur les Normes internationales, Spécifications techniques, Rapports techniques et autres documents de l'IEC. Disponible pour PC, Mac OS, tablettes Android et iPad.

#### Recherche de publications IEC - [www.iec.ch/searchpub](http://www.iec.ch/searchpub)

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

#### IEC Just Published - [webstore.iec.ch/justpublished](http://webstore.iec.ch/justpublished)

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

#### Electropedia - [www.electropedia.org](http://www.electropedia.org)

Le premier dictionnaire en ligne de termes électroniques et électriques. Il contient plus de 30 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans 15 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

#### Glossaire IEC - [std.iec.ch/glossary](http://std.iec.ch/glossary)

Plus de 60 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.

#### Service Clients - [webstore.iec.ch/csc](http://webstore.iec.ch/csc)

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: [csc@iec.ch](mailto:csc@iec.ch).

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Function blocks (FB) for process control and electronic device description  
language (EDDL) –  
Part 5: EDDL Built-in library**

**Blocs fonctionnels (FB) pour les procédés industriels et le langage de  
description électronique de produit (EDDL) –  
Partie 5: Bibliothèque de Built-in EDDL**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 25.040.40; 35.240.50

ISBN 978-2-8322-2702-2

**Warning! Make sure that you obtained this publication from an authorized distributor.  
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

## CONTENTS

FOREWORD.....	19
INTRODUCTION.....	21
1 Scope.....	22
2 Normative references.....	22
3 Terms, definitions, acronyms and abbreviated terms .....	22
3.1 Terms and definitions .....	22
3.2 Acronyms and abbreviated terms.....	22
4 EDDL Builtin library .....	23
4.1 General.....	23
4.2 Conventions for Builtin descriptions .....	23
4.3 Builtin categories .....	24
4.3.1 Overview .....	24
4.3.2 User interface Builtins .....	25
4.3.3 Communication Builtins .....	26
4.3.4 Action Builtins .....	28
4.4 Builtin _ERROR .....	28
4.5 Builtin _TRACE .....	29
4.6 Builtin _WARNING .....	29
4.7 Builtin abort .....	29
4.8 Builtin abort_on_all_comm_errors.....	30
4.9 Builtin ABORT_ON_ALL_COMM_STATUS.....	30
4.10 Builtin ABORT_ON_ALL_DEVICE_STATUS.....	31
4.11 Builtin ABORT_ON_ALL_RESPONSE_CODES.....	31
4.12 Builtin abort_on_all_response_codes.....	32
4.13 Builtin ABORT_ON_COMM_ERROR.....	32
4.14 Builtin abort_on_comm_error.....	33
4.15 Builtin ABORT_ON_COMM_STATUS.....	33
4.16 Builtin ABORT_ON_DEVICE_STATUS.....	34
4.17 Builtin ABORT_ON_NO_DEVICE.....	34
4.18 Builtin ABORT_ON_RESPONSE_CODE .....	35
4.19 Builtin abort_on_response_code.....	36
4.20 Builtin abortTransferPort .....	36
4.21 Builtin abs.....	37
4.22 Builtin ACKNOWLEDGE .....	37
4.23 Builtin acknowledge .....	37
4.24 Builtin acos .....	38
4.25 Builtin add_abort_method (version A) .....	38
4.26 Builtin add_abort_method (version B) .....	38
4.27 Builtin AddTime.....	39
4.28 Builtin asin .....	39
4.29 Builtin assign .....	40
4.30 Builtin assign_double .....	40
4.31 Builtin assign_float .....	41
4.32 Builtin assign_int.....	41
4.33 Builtin assign_var.....	41
4.34 Builtin assign2 .....	42
4.35 Builtin atan.....	42

4.36	Builtin atof .....	43
4.37	Builtin atoi.....	43
4.38	Builtin browselidentity .....	43
4.39	Builtin BUILD_MESSAGE .....	44
4.40	Builtin ByteToDouble.....	44
4.41	Builtin ByteToFloat.....	45
4.42	Builtin ByteToLong .....	45
4.43	Builtin ByteToShort .....	45
4.44	Builtin cbrt .....	46
4.45	Builtin ceil .....	46
4.46	Builtin closeTransferPort .....	46
4.47	Builtin cos .....	47
4.48	Builtin cosh .....	47
4.49	Builtin dassign .....	47
4.50	Builtin DATE_AND_TIME_VALUE_to_string.....	48
4.51	Builtin Date_to_DayOfMonth.....	48
4.52	Builtin DATE_to_days.....	49
4.53	Builtin Date_to_Month .....	49
4.54	Builtin DATE_to_string .....	49
4.55	Builtin Date_To_Time .....	50
4.56	Builtin Date_to_Year .....	50
4.57	Builtin days_to_DATE.....	50
4.58	Builtin DELAY .....	51
4.59	Builtin delay .....	51
4.60	Builtin DELAY_TIME .....	52
4.61	Builtin delayfor.....	52
4.62	Builtin delayfor2 .....	53
4.63	Builtin DICT_ID .....	53
4.64	Builtin dictionary_string .....	54
4.65	Builtin DiffTime .....	54
4.66	Builtin discard_on_exit .....	55
4.67	Builtin DISPLAY .....	55
4.68	Builtin display.....	56
4.69	Builtin display_bitenum.....	56
4.70	Builtin display_builtin_error .....	57
4.71	Builtin display_comm_error .....	57
4.72	Builtin display_comm_status.....	58
4.73	Builtin display_device_status.....	58
4.74	Builtin display_dynamics .....	58
4.75	Builtin display_dynamics2 .....	59
4.76	Builtin display_message .....	60
4.77	Builtin display_message2 .....	61
4.78	Builtin display_response_code .....	61
4.79	Builtin display_response_status.....	62
4.80	Builtin display_xmtr_status .....	62
4.81	Builtin DoubleToByte.....	63
4.82	Builtin drand.....	63
4.83	Builtin dseed .....	64
4.84	Builtin edit_device_value .....	64

4.85	Builtin edit_device_value2 .....	65
4.86	Builtin edit_local_value .....	66
4.87	Builtin edit_local_value2 .....	67
4.88	Builtin exp .....	68
4.89	Builtin ext_send_command .....	68
4.90	Builtin ext_send_command_trans .....	69
4.91	Builtin fail_on_all_comm_errors .....	70
4.92	Builtin fail_on_all_response_codes .....	70
4.93	Builtin fail_on_comm_error .....	71
4.94	Builtin fail_on_response_code .....	71
4.95	Builtin fassign .....	72
4.96	Builtin fGetByte .....	72
4.97	Builtin fgetval .....	72
4.98	Builtin float_value .....	73
4.99	Builtin FloatToByte .....	73
4.100	Builtin floor .....	74
4.101	Builtin fmod .....	74
4.102	Builtin fpclassify .....	74
4.103	Builtin From_DATE_AND_TIME_VALUE .....	75
4.104	Builtin From_TIME_VALUE .....	75
4.105	Builtin fsetval .....	76
4.106	Builtin ftoa .....	76
4.107	Builtin fvar_value .....	76
4.108	Builtin get_acknowledgement .....	77
4.109	Builtin get_acknowledgement2 .....	77
4.110	Builtin get_block_instance_by_object_index .....	78
4.111	Builtin get_block_instance_by_tag .....	78
4.112	Builtin get_block_instance_count .....	79
4.113	Builtin get_comm_error .....	79
4.114	Builtin get_comm_error_string .....	80
4.115	Builtin get_date .....	80
4.116	Builtin get_date_lelem .....	81
4.117	Builtin get_date_lelem2 .....	81
4.118	Builtin get_date_value .....	82
4.119	Builtin get_date_value2 .....	82
4.120	Builtin GET_DD_REVISION .....	83
4.121	Builtin get_dds_error .....	83
4.122	Builtin GET_DEV_VAR_VALUE .....	84
4.123	Builtin get_dev_var_value .....	84
4.124	Builtin GET_DEVICE_REVISION .....	85
4.125	Builtin GET_DEVICE_TYPE .....	85
4.126	Builtin get_dictionary_string .....	86
4.127	Builtin get_double .....	86
4.128	Builtin get_double_lelem .....	86
4.129	Builtin get_double_lelem2 .....	87
4.130	Builtin get_double_value .....	87
4.131	Builtin get_double_value2 .....	88
4.132	Builtin get_enum_string .....	89
4.133	Builtin get_float .....	89

4.134	Builtin get_float_lelem .....	89
4.135	Builtin get_float_lelem2 .....	90
4.136	Builtin get_float_value .....	90
4.137	Builtin get_float_value2 .....	91
4.138	Builtin GET_LOCAL_VAR_VALUE .....	91
4.139	Builtin get_local_var_value .....	92
4.140	Builtin GET_MANUFACTURER .....	92
4.141	Builtin get_more_status .....	93
4.142	Builtin get_resolve_status .....	93
4.143	Builtin get_response_code .....	94
4.144	Builtin get_response_code_string .....	94
4.145	Builtin get_rspcode_string .....	95
4.146	Builtin get_rspcode_string_by_id .....	95
4.147	Builtin get_signed .....	96
4.148	Builtin get_signed_lelem .....	96
4.149	Builtin get_signed_lelem2 .....	97
4.150	Builtin get_signed_value .....	97
4.151	Builtin get_signed_value2 .....	98
4.152	Builtin get_status_code_string .....	98
4.153	Builtin get_status_string .....	99
4.154	Builtin get_stddict_string .....	99
4.155	Builtin get_string .....	100
4.156	Builtin get_string_lelem .....	101
4.157	Builtin get_string_lelem2 .....	101
4.158	Builtin get_string_value .....	102
4.159	Builtin get_string_value2 .....	102
4.160	Builtin GET_TICK_COUNT .....	103
4.161	Builtin get_transfer_status .....	103
4.162	Builtin get_unsigned .....	104
4.163	Builtin get_unsigned_lelem .....	104
4.164	Builtin get_unsigned_lelem2 .....	105
4.165	Builtin get_unsigned_value .....	105
4.166	Builtin get_unsigned_value2 .....	106
4.167	Builtin get_variable_string .....	107
4.168	Builtin GetCurrentDate .....	107
4.169	Builtin GetCurrentDateAndTime .....	108
4.170	Builtin GetCurrentTime .....	108
4.171	Builtin iassign .....	108
4.172	Builtin igetval .....	109
4.173	Builtin IGNORE_ALL_COMM_STATUS .....	109
4.174	Builtin IGNORE_ALL_DEVICE_STATUS .....	109
4.175	Builtin IGNORE_ALL_RESPONSE_CODES .....	110
4.176	Builtin IGNORE_COMM_ERROR .....	110
4.177	Builtin IGNORE_COMM_STATUS .....	111
4.178	Builtin IGNORE_DEVICE_STATUS .....	111
4.179	Builtin IGNORE_NO_DEVICE .....	112
4.180	Builtin IGNORE_RESPONSE_CODE .....	112
4.181	Builtin int_value .....	113
4.182	Builtin is_NaN .....	113

4.183	Builtin isetval .....	114
4.184	Builtin isOffline.....	114
4.185	Builtin ITEM_ID.....	114
4.186	Builtin itoa (version A).....	115
4.187	Builtin itoa (version B).....	115
4.188	Builtin ivar_value.....	115
4.189	Builtin lassign.....	116
4.190	Builtin lgetval .....	116
4.191	Builtin ListDeleteElementAt .....	116
4.192	Builtin ListDeleteElementAt2 .....	117
4.193	Builtin ListInsert .....	117
4.194	Builtin ListInsert2 .....	118
4.195	Builtin log.....	118
4.196	Builtin LOG_MESSAGE .....	119
4.197	Builtin log10.....	119
4.198	Builtin log2.....	119
4.199	Builtin long_value.....	120
4.200	Builtin LongToByte .....	120
4.201	Builtin lsetval .....	121
4.202	Builtin lvar_value.....	121
4.203	Builtin Make_Time.....	121
4.204	Builtin MEMBER_ID .....	122
4.205	Builtin MenuDisplay.....	122
4.206	Builtin method_abort.....	123
4.207	Builtin nan.....	123
4.208	Builtin NaN_value .....	124
4.209	Builtin nanf.....	124
4.210	Builtin ObjectReference.....	125
4.211	Builtin openTransferPort.....	125
4.212	Builtin pop_abort_method.....	126
4.213	Builtin pow .....	126
4.214	Builtin process_abort.....	126
4.215	Builtin push_abort_method.....	127
4.216	Builtin put_date.....	127
4.217	Builtin put_date_value.....	127
4.218	Builtin put_date_value2.....	128
4.219	Builtin put_double .....	129
4.220	Builtin put_double_value .....	129
4.221	Builtin put_double_value2 .....	130
4.222	Builtin put_float.....	130
4.223	Builtin put_float_value.....	131
4.224	Builtin put_float_value2.....	131
4.225	Builtin PUT_MESSAGE .....	132
4.226	Builtin put_message.....	133
4.227	Builtin put_signed.....	134
4.228	Builtin put_signed_value.....	134
4.229	Builtin put_signed_value2.....	135
4.230	Builtin put_string .....	135
4.231	Builtin put_string_value .....	136

4.232	Builtin put_string_value2 .....	136
4.233	Builtin put_unsigned .....	137
4.234	Builtin put_unsigned_value .....	138
4.235	Builtin put_unsigned_value2 .....	138
4.236	Builtin re_read_file .....	139
4.237	Builtin re_write_file .....	139
4.238	Builtin read_value .....	140
4.239	Builtin read_value2 .....	140
4.240	Builtin ReadCommand .....	141
4.241	Builtin readItemFromDevice .....	141
4.242	Builtin remove_abort_method (version A) .....	142
4.243	Builtin remove_abort_method (version B) .....	142
4.244	Builtin remove_all_abort_methods .....	142
4.245	Builtin resolve_array_ref .....	143
4.246	Builtin resolve_array_ref2 .....	143
4.247	Builtin resolve_block_ref .....	144
4.248	Builtin resolve_block_ref2 .....	145
4.249	Builtin resolve_list_ref .....	145
4.250	Builtin resolve_local_ref .....	146
4.251	Builtin resolve_local_ref2 .....	146
4.252	Builtin resolve_param_list_ref .....	147
4.253	Builtin resolve_param_ref .....	147
4.254	Builtin resolve_param_ref2 .....	148
4.255	Builtin resolve_record_ref .....	148
4.256	Builtin resolve_record_ref2 .....	149
4.257	Builtin ret_double_value .....	149
4.258	Builtin ret_double_value2 .....	150
4.259	Builtin ret_float_value .....	150
4.260	Builtin ret_float_value2 .....	151
4.261	Builtin ret_signed_value .....	151
4.262	Builtin ret_signed_value2 .....	152
4.263	Builtin ret_unsigned_value .....	152
4.264	Builtin ret_unsigned_value2 .....	152
4.265	Builtin retry_on_all_comm_errors .....	153
4.266	Builtin RETRY_ON_ALL_COMM_STATUS .....	153
4.267	Builtin RETRY_ON_ALL_DEVICE_STATUS .....	154
4.268	Builtin RETRY_ON_ALL_RESPONSE_CODES .....	154
4.269	Builtin retry_on_all_response_codes .....	155
4.270	Builtin RETRY_ON_COMM_ERROR .....	155
4.271	Builtin retry_on_comm_error .....	156
4.272	Builtin RETRY_ON_COMM_STATUS .....	156
4.273	Builtin RETRY_ON_DEVICE_STATUS .....	157
4.274	Builtin RETRY_ON_NO_DEVICE .....	157
4.275	Builtin RETRY_ON_RESPONSE_CODE .....	158
4.276	Builtin retry_on_response_code .....	158
4.277	Builtin round .....	159
4.278	Builtin save_on_exit .....	159
4.279	Builtin save_values .....	160
4.280	Builtin seconds_to_TIME_VALUE .....	160

4.281	Builtin seconds_to_TIME_VALUE8 .....	160
4.282	Builtin SELECT_FROM_LIST .....	161
4.283	Builtin select_from_list .....	161
4.284	Builtin select_from_menu .....	162
4.285	Builtin select_from_menu2 .....	163
4.286	Builtin send .....	163
4.287	Builtin send_all_values .....	164
4.288	Builtin send_command .....	164
4.289	Builtin send_command_trans .....	165
4.290	Builtin send_on_exit .....	165
4.291	Builtin send_trans .....	166
4.292	Builtin send_value .....	166
4.293	Builtin send_value2 .....	167
4.294	Builtin SET_NUMBER_OF_RETRIES .....	168
4.295	Builtin sgetval .....	168
4.296	Builtin ShortToByte .....	168
4.297	Builtin sin .....	169
4.298	Builtin sinh .....	169
4.299	Builtin sqrt .....	169
4.300	Builtin ssetval .....	170
4.301	Builtin strcmp .....	170
4.302	Builtin strleft .....	170
4.303	Builtin strlen .....	171
4.304	Builtin strlwr .....	171
4.305	Builtin strmid .....	171
4.306	Builtin strright .....	172
4.307	Builtin strstr .....	172
4.308	Builtin strtrim .....	172
4.309	Builtin strupr .....	173
4.310	Builtin tan .....	173
4.311	Builtin tanh .....	173
4.312	Builtin Time_To_Date .....	174
4.313	Builtin TIME_VALUE_to_Hour .....	174
4.314	Builtin TIME_VALUE_to_Minute .....	174
4.315	Builtin TIME_VALUE_to_Second .....	175
4.316	Builtin TIME_VALUE_to_seconds .....	175
4.317	Builtin TIME_VALUE_to_string .....	176
4.318	Builtin timet_to_string .....	176
4.319	Builtin timet_to_TIME_VALUE .....	177
4.320	Builtin timet_to_TIME_VALUE8 .....	177
4.321	Builtin To_Date .....	177
4.322	Builtin To_Date_and_Time .....	178
4.323	Builtin To_Time .....	178
4.324	Builtin To_TIME_VALUE .....	179
4.325	Builtin To_TIME_VALUE8 .....	179
4.326	Builtin trunc .....	180
4.327	Builtin VARID .....	180
4.328	Builtin vassign .....	181
4.329	Builtin WriteCommand .....	181

4.330	Builtin writeltemToDevice .....	181
4.331	Builtin XMTR_ABORT_ON_ALL_COMM_STATUS .....	182
4.332	Builtin XMTR_ABORT_ON_ALL_DATA .....	182
4.333	Builtin XMTR_ABORT_ON_ALL_DEVICE_STATUS .....	183
4.334	Builtin XMTR_ABORT_ON_ALL_RESPONSE_CODES .....	183
4.335	Builtin XMTR_ABORT_ON_COMM_ERROR .....	184
4.336	Builtin XMTR_ABORT_ON_COMM_STATUS .....	184
4.337	Builtin XMTR_ABORT_ON_DATA .....	185
4.338	Builtin XMTR_ABORT_ON_DEVICE_STATUS .....	185
4.339	Builtin XMTR_ABORT_ON_NO_DEVICE .....	186
4.340	Builtin XMTR_ABORT_ON_RESPONSE_CODE .....	186
4.341	Builtin XMTR_IGNORE_ALL_COMM_STATUS .....	187
4.342	Builtin XMTR_IGNORE_ALL_DATA .....	187
4.343	Builtin XMTR_IGNORE_ALL_DEVICE_STATUS .....	188
4.344	Builtin XMTR_IGNORE_ALL_RESPONSE_CODES .....	188
4.345	Builtin XMTR_IGNORE_COMM_ERROR .....	189
4.346	Builtin XMTR_IGNORE_COMM_STATUS .....	189
4.347	Builtin XMTR_IGNORE_DATA .....	190
4.348	Builtin XMTR_IGNORE_DEVICE_STATUS .....	190
4.349	Builtin XMTR_IGNORE_NO_DEVICE .....	191
4.350	Builtin XMTR_IGNORE_RESPONSE_CODE .....	191
4.351	Builtin XMTR_RETRY_ON_ALL_COMM_STATUS .....	192
4.352	Builtin XMTR_RETRY_ON_ALL_DATA .....	192
4.353	Builtin XMTR_RETRY_ON_ALL_DEVICE_STATUS .....	193
4.354	Builtin XMTR_RETRY_ON_ALL_RESPONSE_CODE (removed) .....	193
4.355	Builtin XMTR_RETRY_ON_ALL_RESPONSE_CODES .....	193
4.356	Builtin XMTR_RETRY_ON_COMM_ERROR .....	194
4.357	Builtin XMTR_RETRY_ON_COMM_STATUS .....	194
4.358	Builtin XMTR_RETRY_ON_DATA .....	195
4.359	Builtin XMTR_RETRY_ON_DEVICE_STATUS .....	195
4.360	Builtin XMTR_RETRY_ON_NO_DEVICE .....	196
4.361	Builtin XMTR_RETRY_ON_RESPONSE_CODE .....	196
5	Builtins return codes .....	197
Annex A	(normative) Profiles of Builtins .....	199
A.1	Conventions for profiles of Builtins .....	199
A.2	Profiles for PROFIBUS and PROFINET .....	199
A.3	Profiles for FOUNDATION™ Fieldbus .....	208
A.4	Profiles for HART® .....	216
A.5	Profiles for Communication Servers .....	225
Table 1	– Format for the Builtins lexical element tables .....	23
Table 2	– Contents of the lexical element table .....	24
Table 3	– Usage of Builtins .....	24
Table 4	– User interface Builtins .....	25
Table 5	– Communication Builtins .....	26
Table 6	– Action Builtins .....	28
Table 7	– Builtin _ERROR .....	28
Table 8	– Builtin _TRACE .....	29

Table 9 – Builtin \_WARNING.....29

Table 10 – Builtin abort.....30

Table 11 – Builtin abort\_on\_all\_comm\_errors .....30

Table 12 – Builtin ABORT\_ON\_ALL\_COMM\_STATUS .....31

Table 13 – Builtin ABORT\_ON\_ALL\_DEVICE\_STATUS .....31

Table 14 – Builtin ABORT\_ON\_ALL\_RESPONSE\_CODES .....32

Table 15 – Builtin abort\_on\_all\_response\_codes .....32

Table 16 – Builtin ABORT\_ON\_COMM\_ERROR .....32

Table 17 – Builtin abort\_on\_comm\_error .....33

Table 18 – Builtin ABORT\_ON\_COMM\_STATUS .....34

Table 19 – Builtin ABORT\_ON\_DEVICE\_STATUS .....34

Table 20 – Builtin ABORT\_ON\_NO\_DEVICE .....35

Table 21 – Builtin ABORT\_ON\_RESPONSE\_CODE.....36

Table 22 – Builtin abort\_on\_response\_code .....36

Table 23 – Builtin abortTransferPort.....36

Table 24 – Builtin abs .....37

Table 25 – Builtin ACKNOWLEDGE .....37

Table 26 – Builtin acknowledge .....37

Table 27 – Builtin acos.....38

Table 28 – Builtin add\_abort\_method .....38

Table 29 – Builtin add\_abort\_method .....39

Table 30 – Builtin AddTime.....39

Table 31 – Builtin asin.....40

Table 32 – Builtin assign .....40

Table 33 – Builtin assign\_double.....40

Table 34 – Builtin assign\_float.....41

Table 35 – Builtin assign\_int .....41

Table 36 – Builtin assign\_var .....42

Table 37 – Builtin assign2.....42

Table 38 – Builtin atan .....43

Table 39 – Builtin atof.....43

Table 40 – Builtin atoi .....43

Table 41 – Builtin browseIdentity.....44

Table 42 – Builtin BUILD\_MESSAGE .....44

Table 43 – Builtin ByteToDouble .....44

Table 44 – Builtin ByteToFloat .....45

Table 45 – Builtin ByteToLong .....45

Table 46 – Builtin ByteToShort.....46

Table 47 – Builtin cbrt.....46

Table 48 – Builtin ceil .....46

Table 49 – Builtin closeTransferPort.....47

Table 50 – Builtin cos .....47

Table 51 – Builtin cosh.....47

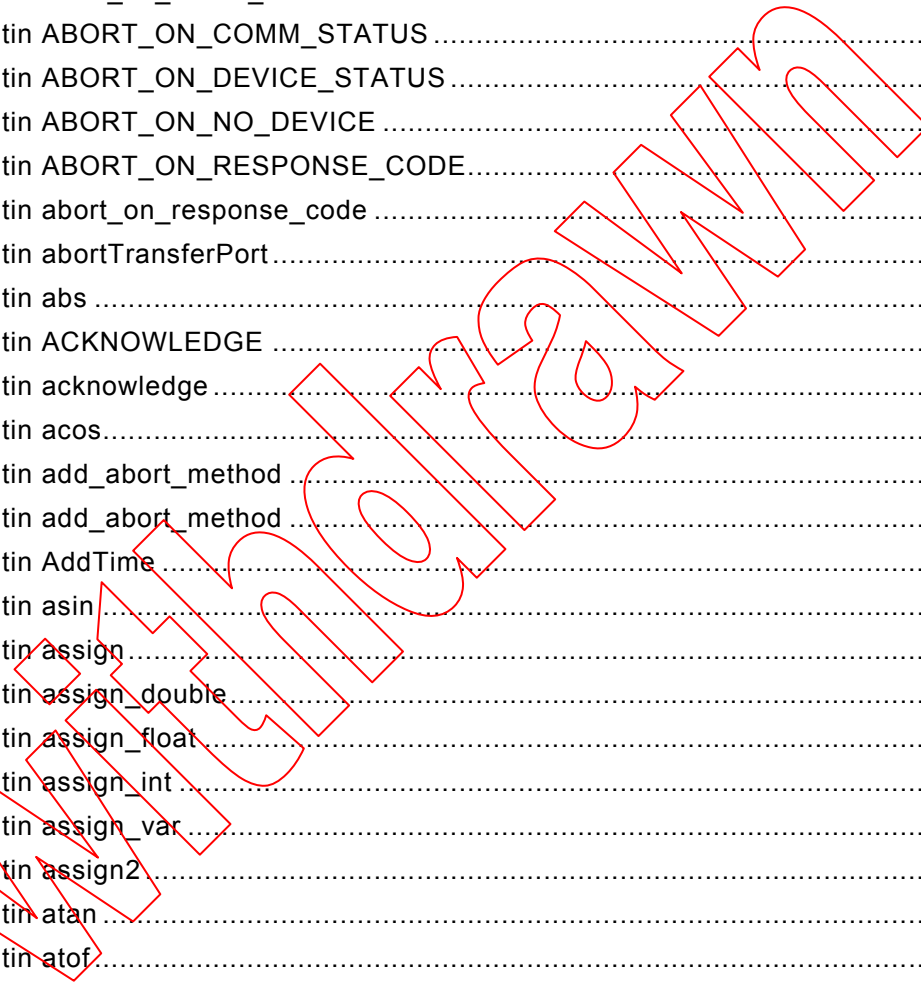


Table 52 – Builtin dassign .....	48
Table 53 – Builtin DATE_AND_TIME_VALUE_to_string .....	48
Table 54 – Builtin Date_to_DayOfMonth .....	48
Table 55 – Builtin DATE_to_days .....	49
Table 56 – Builtin Date_to_Month.....	49
Table 57 – Builtin DATE_to_string.....	50
Table 58 – Builtin Date_To_Time .....	50
Table 59 – Builtin Date_to_Year.....	50
Table 60 – Builtin days_to_DATE .....	51
Table 61 – Builtin DELAY .....	51
Table 62 – Builtin delay.....	52
Table 63 – Builtin DELAY_TIME .....	52
Table 64 – Builtin delayfor .....	53
Table 65 – Builtin delayfor2.....	53
Table 66 – Builtin DICT_ID.....	54
Table 67 – Builtin dictionary_string.....	54
Table 68 – Builtin DiffTime .....	54
Table 69 – Builtin discard_on_exit.....	55
Table 70 – Builtin DISPLAY.....	56
Table 71 – Builtin display .....	56
Table 72 – Builtin display_bitenum .....	56
Table 73 – Builtin display_builtin_error.....	57
Table 74 – Builtin display_comm_error.....	57
Table 75 – Builtin display_comm_status .....	58
Table 76 – Builtin display_device_status .....	58
Table 77 – Builtin display_dynamics.....	59
Table 78 – Builtin display_dynamics2.....	60
Table 79 – Builtin display_message .....	60
Table 80 – Builtin display_message2.....	61
Table 81 – Builtin display_response_code .....	62
Table 82 – Builtin display_response_status .....	62
Table 83 – Builtin display_xmtr_status .....	63
Table 84 – Builtin DoubleToByte .....	63
Table 85 – Builtin drand .....	63
Table 86 – Builtin dseed .....	64
Table 87 – Builtin edit_device_value .....	65
Table 88 – Builtin edit_device_value2 .....	66
Table 89 – Builtin edit_local_value .....	67
Table 90 – Builtin edit_local_value2 .....	68
Table 91 – Builtin exp .....	68
Table 92 – Builtin ext_send_command .....	69
Table 93 – Builtin ext_send_command_trans.....	69
Table 94 – Builtin fail_on_all_comm_errors .....	70

Table 95 – Builtin fail_on_all_response_codes .....	70
Table 96 – Builtin fail_on_comm_error .....	71
Table 97 – Builtin fail_on_response_code.....	72
Table 98 – Builtin fassign .....	72
Table 99 – Builtin fGetByte .....	72
Table 100 – Builtin fgetval.....	73
Table 101 – Builtin float_value .....	73
Table 102 – Builtin FloatToByte .....	73
Table 103 – Builtin floor .....	74
Table 104 – Builtin fmod .....	74
Table 105 – Builtin fpclassifyd.....	75
Table 106 – Builtin From_DATE_AND_TIME_VALUE.....	75
Table 107 – Builtin From_TIME_VALUE .....	76
Table 108 – Builtin fsetval.....	76
Table 109 – Builtin ftoa .....	76
Table 110 – Builtin fvar_value .....	77
Table 111 – Builtin get_acknowledgement.....	77
Table 112 – Builtin get_acknowledgement2.....	78
Table 113 – Builtin get_block_instance_by_object_index.....	78
Table 114 – Builtin get_block_instance_by_tag.....	79
Table 115 – Builtin get_block_instance_count.....	79
Table 116 – Builtin get_comm_error.....	80
Table 117 – Builtin get_comm_error_string.....	80
Table 118 – Builtin get_date.....	81
Table 119 – Builtin get_date_lelem.....	81
Table 120 – Builtin get_date_lelem2.....	82
Table 121 – Builtin get_date_value.....	82
Table 122 – Builtin get_date_value2.....	83
Table 123 – Builtin GET_DD_REVISION .....	83
Table 124 – Builtin get_dds_error.....	84
Table 125 – Builtin GET_DEV_VAR_VALUE.....	84
Table 126 – Builtin get_dev_var_value .....	85
Table 127 – Builtin GET_DEVICE_REVISION.....	85
Table 128 – Builtin GET_DEVICE_TYPE .....	85
Table 129 – Builtin get_dictionary_string .....	86
Table 130 – Builtin get_double .....	86
Table 131 – Builtin get_double_lelem.....	87
Table 132 – Builtin get_double_lelem2 .....	87
Table 133 – Builtin get_double_value.....	88
Table 134 – Builtin get_double_value2 .....	88
Table 135 – Builtin get_enum_string .....	89
Table 136 – Builtin get_float.....	89
Table 137 – Builtin get_float_lelem.....	90

Table 138 – Builtin get_float_lelem2.....	90
Table 139 – Builtin get_float_value.....	91
Table 140 – Builtin get_float_value2.....	91
Table 141 – Builtin GET_LOCAL_VAR_VALUE.....	92
Table 142 – Builtin get_local_var_value .....	92
Table 143 – Builtin GET_MANUFACTURER .....	92
Table 144 – Builtin get_more_status .....	93
Table 145 – Builtin get_resolve_status .....	93
Table 146 – Builtin get_response_code .....	94
Table 147 – Builtin get_response_code_string.....	95
Table 148 – Builtin get_rspcode_string.....	95
Table 149 – Builtin get_rspcode_string_by_id.....	96
Table 150 – Builtin get_signed .....	96
Table 151 – Builtin get_signed_lelem .....	97
Table 152 – Builtin get_signed_lelem2 .....	97
Table 153 – Builtin get_signed_value .....	98
Table 154 – Builtin get_signed_value2 .....	98
Table 155 – Builtin get_status_code_string.....	99
Table 156 – Builtin get_status_string.....	99
Table 157 – Builtin get_stddict_string.....	100
Table 158 – Builtin get_string.....	100
Table 159 – Builtin get_string_lelem.....	101
Table 160 – Builtin get_string_lelem2.....	102
Table 161 – Builtin get_string_value.....	102
Table 162 – Builtin get_string_value2.....	103
Table 163 – Builtin GET_TICK_COUNT.....	103
Table 164 – Builtin get_transfer_status .....	104
Table 165 – Builtin get_unsigned .....	104
Table 166 – Builtin get_unsigned_lelem .....	105
Table 167 – Builtin get_unsigned_lelem2 .....	105
Table 168 – Builtin get_unsigned_value .....	106
Table 169 – Builtin get_unsigned_value2 .....	107
Table 170 – Builtin get_variable_string.....	107
Table 171 – Builtin GetCurrentDate.....	107
Table 172 – Builtin GetCurrentDateAndTime .....	108
Table 173 – Builtin GetCurrentTime .....	108
Table 174 – Builtin iassign .....	108
Table 175 – Builtin igetval.....	109
Table 176 – Builtin IGNORE_ALL_COMM_STATUS .....	109
Table 177 – Builtin IGNORE_ALL_DEVICE_STATUS .....	110
Table 178 – Builtin IGNORE_ALL_RESPONSE_CODES.....	110
Table 179 – Builtin IGNORE_COMM_ERROR .....	111
Table 180 – Builtin IGNORE_COMM_STATUS .....	111

Table 181 – Builtin IGNORE_DEVICE_STATUS .....	112
Table 182 – Builtin IGNORE_NO_DEVICE .....	112
Table 183 – Builtin IGNORE_RESPONSE_CODE .....	113
Table 184 – Builtin int_value .....	113
Table 185 – Builtin is_NaN .....	113
Table 186 – Builtin isetval .....	114
Table 187 – Builtin isOffline .....	114
Table 188 – Builtin ITEM_ID .....	115
Table 189 – Builtin itoa (version A) .....	115
Table 190 – Builtin itoa (version B) .....	115
Table 191 – Builtin ivar_value .....	116
Table 192 – Builtin lassign .....	116
Table 193 – Builtin lgetval .....	116
Table 194 – Builtin ListDeleteElementAt .....	117
Table 195 – Builtin ListDeleteElementAt2 .....	117
Table 196 – Builtin ListInsert .....	118
Table 197 – Builtin ListInsert2 .....	118
Table 198 – Builtin log .....	119
Table 199 – Builtin LOG_MESSAGE .....	119
Table 200 – Builtin log10 .....	119
Table 201 – Builtin log2 .....	120
Table 202 – Builtin long_value .....	120
Table 203 – Builtin LongToByte .....	120
Table 204 – Builtin lsetval .....	121
Table 205 – Builtin lvar_value .....	121
Table 206 – Builtin Make_Time .....	122
Table 207 – Builtin MEMBER_ID .....	122
Table 208 – Builtin MenuDisplay .....	123
Table 209 – Builtin method_abort .....	123
Table 210 – Builtin nan .....	124
Table 211 – Builtin NaN_value .....	124
Table 212 – Builtin nanf .....	125
Table 213 – Builtin ObjectReference .....	125
Table 214 – Builtin openTransferPort .....	126
Table 215 – Builtin pop_abort_method .....	126
Table 216 – Builtin pow .....	126
Table 217 – Builtin process_abort .....	127
Table 218 – Builtin push_abort_method .....	127
Table 219 – Builtin put_date .....	127
Table 220 – Builtin put_date_value .....	128
Table 221 – Builtin put_date_value2 .....	129
Table 222 – Builtin put_double .....	129
Table 223 – Builtin put_double_value .....	130

Table 224 – Builtin put_double_value2 .....	130
Table 225 – Builtin put_float.....	131
Table 226 – Builtin put_float_value.....	131
Table 227 – Builtin put_float_value2.....	132
Table 228 – Format options.....	132
Table 229 – Builtin PUT_MESSAGE.....	133
Table 230 – Builtin put_message.....	133
Table 231 – Builtin put_signed .....	134
Table 232 – Builtin put_signed_value .....	134
Table 233 – Builtin put_signed_value2 .....	135
Table 234 – Builtin put_string.....	136
Table 235 – Builtin put_string_value.....	136
Table 236 – Builtin put_string_value2.....	137
Table 237 – Builtin put_unsigned .....	138
Table 238 – Builtin put_unsigned_value .....	138
Table 239 – Builtin put_unsigned_value2 .....	139
Table 240 – Builtin re_read_file.....	139
Table 241 – Builtin re_write_file .....	140
Table 242 – Builtin read_value .....	140
Table 243 – Builtin read_value2 .....	141
Table 244 – Builtin ReadCommand .....	141
Table 245 – Builtin readItemFromDevice .....	141
Table 246 – Builtin remove_abort_method.....	142
Table 247 – Builtin remove_abort_method.....	142
Table 248 – Builtin remove_all_abort_methods.....	143
Table 249 – Builtin resolve_array_ref.....	143
Table 250 – Builtin resolve_array_ref2 .....	144
Table 251 – Builtin resolve_block_ref.....	144
Table 252 – Builtin resolve_block_ref2 .....	145
Table 253 – Builtin resolve_list_ref.....	145
Table 254 – Builtin resolve_local_ref.....	146
Table 255 – Builtin resolve_local_ref2 .....	146
Table 256 – Builtin resolve_param_list_ref .....	147
Table 257 – Builtin resolve_param_ref .....	147
Table 258 – Builtin resolve_param_ref2.....	148
Table 259 – Builtin resolve_record_ref .....	149
Table 260 – Builtin resolve_record_ref2 .....	149
Table 261 – Builtin ret_double_value.....	150
Table 262 – Builtin ret_double_value2.....	150
Table 263 – Builtin ret_float_value .....	151
Table 264 – Builtin ret_float_value2 .....	151
Table 265 – Builtin ret_signed_value.....	151
Table 266 – Builtin ret_signed_value2.....	152

Table 267 – Builtin ret_unsigned_value .....	152
Table 268 – Builtin ret_unsigned_value2 .....	153
Table 269 – Builtin retry_on_all_comm_errors .....	153
Table 270 – Builtin RETRY_ON_ALL_COMM_STATUS .....	154
Table 271 – Builtin RETRY_ON_ALL_DEVICE_STATUS .....	154
Table 272 – Builtin RETRY_ON_ALL_RESPONSE_CODES .....	155
Table 273 – Builtin retry_on_all_response_codes .....	155
Table 274 – Builtin RETRY_ON_COMM_ERROR .....	156
Table 275 – Builtin retry_on_comm_error .....	156
Table 276 – Builtin RETRY_ON_COMM_STATUS .....	157
Table 277 – Builtin RETRY_ON_DEVICE_STATUS .....	157
Table 278 – Builtin RETRY_ON_NO_DEVICE .....	158
Table 279 – Builtin RETRY_ON_RESPONSE_CODE .....	158
Table 280 – Builtin retry_on_response_code .....	159
Table 281 – Builtin round .....	159
Table 282 – Builtin save_on_exit .....	160
Table 283 – Builtin save_values .....	160
Table 284 – Builtin seconds_to_TIME_VALUE .....	160
Table 285 – Builtin seconds_to_TIME_VALUE .....	161
Table 286 – Builtin SELECT_FROM_LIST .....	161
Table 287 – Builtin select_from_list .....	162
Table 288 – Builtin select_from_menu .....	162
Table 289 – Builtin select_from_menu2 .....	163
Table 290 – Builtin send .....	164
Table 291 – Builtin send_all_values .....	164
Table 292 – Builtin send_command .....	165
Table 293 – Builtin send_command_trans .....	165
Table 294 – Builtin send_on_exit .....	166
Table 295 – Builtin send_trans .....	166
Table 296 – Builtin send_value .....	167
Table 297 – Builtin send_value2 .....	167
Table 298 – Builtin SET_NUMBER_OF_RETRIES .....	168
Table 299 – Builtin sgetval .....	168
Table 300 – Builtin ShortToByte .....	169
Table 301 – Builtin sin .....	169
Table 302 – Builtin sinh .....	169
Table 303 – Builtin sqrt .....	170
Table 304 – Builtin ssetval .....	170
Table 305 – Builtin strcmp .....	170
Table 306 – Builtin strleft .....	171
Table 307 – Builtin strlen .....	171
Table 308 – Builtin strlwr .....	171
Table 309 – Builtin strmid .....	172

Table 310 – Builtin strright .....	172
Table 311 – Builtin strstr .....	172
Table 312 – Builtin strtrim .....	173
Table 313 – Builtin strupr .....	173
Table 314 – Builtin tan .....	173
Table 315 – Builtin tanh .....	174
Table 316 – Builtin Time_To_Date .....	174
Table 317 – Builtin TIME_VALUE_to_Hour .....	174
Table 318 – Builtin TIME_VALUE_to_Minute .....	175
Table 319 – Builtin TIME_VALUE_to_Second .....	175
Table 320 – Builtin TIME_VALUE_to_seconds .....	176
Table 321 – Builtin TIME_VALUE_to_string .....	176
Table 322 – Builtin timet_to_string .....	177
Table 323 – Builtin timet_to_TIME_VALUE .....	177
Table 324 – Builtin timet_to_TIME_VALUE8 .....	177
Table 325 – Builtin To_Date .....	178
Table 326 – Builtin To_Date_and_Time .....	178
Table 327 – Builtin To_Time .....	179
Table 328 – Builtin To_TIME_VALUE .....	179
Table 329 – Builtin To_TIME_VALUE8 .....	180
Table 330 – Builtin trunc .....	180
Table 331 – Builtin VARID .....	180
Table 332 – Builtin vassign .....	181
Table 333 – Builtin WriteCommand .....	181
Table 334 – Builtin writeItemToDevice .....	182
Table 335 – Builtin XMTR_ABORT_ON_ALL_COMM_STATUS .....	182
Table 336 – Builtin XMTR_ABORT_ON_ALL_DATA .....	183
Table 337 – Builtin XMTR_ABORT_ON_ALL_DEVICE_STATUS .....	183
Table 338 – Builtin XMTR_ABORT_ON_ALL_RESPONSE_CODES .....	184
Table 339 – Builtin XMTR_ABORT_ON_COMM_ERROR .....	184
Table 340 – Builtin XMTR_ABORT_ON_COMM_STATUS .....	185
Table 341 – Builtin XMTR_ABORT_ON_DATA .....	185
Table 342 – Builtin XMTR_ABORT_ON_DEVICE_STATUS .....	186
Table 343 – Builtin XMTR_ABORT_ON_NO_DEVICE .....	186
Table 344 – Builtin XMTR_ABORT_ON_RESPONSE_CODE .....	187
Table 345 – Builtin XMTR_IGNORE_ALL_COMM_STATUS .....	187
Table 346 – Builtin XMTR_IGNORE_ALL_DATA .....	188
Table 347 – Builtin XMTR_IGNORE_ALL_DEVICE_STATUS .....	188
Table 348 – Builtin XMTR_IGNORE_ALL_RESPONSE_CODES .....	189
Table 349 – Builtin XMTR_IGNORE_COMM_ERROR .....	189
Table 350 – Builtin XMTR_IGNORE_COMM_STATUS .....	190
Table 351 – Builtin XMTR_IGNORE_DATA .....	190
Table 352 – Builtin XMTR_IGNORE_DEVICE_STATUS .....	191

Table 353 – Builtin XMTR_IGNORE_NO_DEVICE .....	191
Table 354 – Builtin XMTR_IGNORE_RESPONSE_CODE.....	192
Table 355 – Builtin XMTR_RETRY_ON_ALL_COMM_STATUS .....	192
Table 356 – Builtin XMTR_RETRY_ON_ALL_DATA.....	193
Table 357 – Builtin XMTR_RETRY_ON_ALL_DEVICE_STATUS .....	193
Table 358 – Builtin XMTR_RETRY_ON_ALL_RESPONSE_CODES .....	194
Table 359 – Builtin XMTR_RETRY_ON_COMM_ERROR .....	194
Table 360 – Builtin XMTR_RETRY_ON_COMM_STATUS .....	195
Table 361 – Builtin XMTR_RETRY_ON_DATA.....	195
Table 362 – Builtin XMTR_RETRY_ON_DEVICE_STATUS .....	196
Table 363 – Builtin XMTR_RETRY_ON_NO_DEVICE .....	196
Table 364 – Builtin XMTR_RETRY_ON_RESPONSE_CODE.....	197
Table 365 – Contents of the return codes description table .....	197
Table 366 – Return code descriptions .....	198
Table 367 – Return code descriptions .....	198
Table A.1 – Builtin profile for PROFIBUS and PROFINET .....	199
Table A.2 – Builtin profile for FOUNDATION fieldbus .....	208
Table A.3 – Builtin profile for HART .....	216
Table A.4 – Builtin profile for Communication Servers.....	225

Withhold

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FUNCTION BLOCKS (FB) FOR PROCESS CONTROL AND  
ELECTRONIC DEVICE DESCRIPTION LANGUAGE (EDDL) –****Part 5: EDDL Builtin library**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61804-5 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

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

FDIS	Report on voting
65E/450/FDIS	65E/461/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 in the IEC 61804 series, published under the general title *Function blocks (FB) for process control and Electronic Device Description Language (EDDL)*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

Withdrawn

## INTRODUCTION

This part of IEC 61804 is an extension to IEC 61804-3. In earlier editions of IEC 61804-3 the EDDL Built-in library was part of the Electronic Device Description Language (EDDL) document IEC 61804-3. Because of editorial problems, the EDDL Built-in library is now moved to this separate part of IEC 61804.

Withdrawn