

ISO 15531-42 :2005-09 (E)

Industrial automation systems and integration_ - Industrial manufacturing management data_ - Part_42: Time Model

Contents	page
1 Scope	1
2 Normative references.....	1
3 Terms, definitions and abbreviations	2
3.1 Terms and definitions.....	2
3.2 Abbreviated terms	6
4 Overview of the whole ISO 15531 scope.....	6
5 Domain property	7
5.1 Preamble.....	7
5.2 Fundamental concepts and assumptions.....	7
5.3 Domain property schema definition	8
5.4 Domain property type definitions.....	8
5.4.1 type_of_identifier_of_dom_gen_struct	8
5.4.2 type_of_domain.....	9
5.5 domain_property subtype constraint definitions	9
5.5.1 covered_range	9
5.5.2 complcompos_discrcont_bounded	9
5.5.3 complete_composite	9
5.5.4 discrete_continuous	10
5.5.5 lower_upper.....	10
5.5.6 compl_continuous_discrete	10
5.5.7 compos_continuous_discrete.....	11
5.5.8 cont_complete_composite	11
5.5.9 disc_complete_composite.....	11
5.5.10 both_bd_compl_compos_disc_cont	11
5.5.11 low_bd_compl_compos_disc_cont	12
5.5.12 up_bd_compl_compos_disc_cont	12
5.5.13 compl_disc_low_both_up	13
5.5.14 compl_cont_low_both_up.....	13
5.5.15 compos_cont_low_both_up.....	13
5.5.16 compos_disc_low_both_up.....	14
5.6 Domain property entity definitions	14
5.6.1 domain.....	14
5.6.2 time_domain.....	14
5.6.3 domain_generic_structure	15
5.6.4 complete_or_composite_domain.....	15
5.6.5 discrete_or_continuous_domain.....	16
5.6.6 bounded_domain	16
5.6.7 complete_domain	16
5.6.8 composite_domain.....	17
5.6.9 continuous_domain	17
5.6.10 discrete_domain.....	17
5.6.11 lower_bounded_domain	18
5.6.12 upper_bounded_domain	18
5.6.13 both_sides_bounded_domain	18
5.6.14 complete_continuous_domain.....	19
5.6.15 lower_bounded_complete_continuous_domain.....	19

5.6.16	upper_bounded_complete_continuous_domain	19
5.6.17	both_sides_bounded_complete_continuous_domain	20
5.6.18	composite_continuous_domain	20
5.6.19	lower_bounded_composite_continuous_domain	20
5.6.20	upper_bounded_composite_continuous_domain	20
5.6.21	both_sides_bounded_composite_continuous_domain	21
5.6.22	complete_discrete_domain	21
5.6.23	lower_bounded_complete_discrete_domain	21
5.6.24	upper_bounded_complete_discrete_domain	21
5.6.25	both_sides_bounded_complete_discrete_domain	22
5.6.26	composite_discrete_domain	22
5.6.27	lower_bounded_composite_discrete_domain	22
5.6.28	upper_bounded_composite_discrete_domain	22
5.6.29	both_sides_bounded_composite_discrete_domain	23
5.6.30	domain_point	23
6	Time domain	23
6.1	Preamble	23
6.2	Fundamental concepts and assumptions	24
6.3	Time domain schema definition	24
6.4	Time domain type definitions	25
6.4.1	type_of_description_of_transformation_rule	25
6.4.2	type_of_value_of_point_or_interval_in_time	25
6.5	Time domain entity definitions	26
6.5.1	interval_of_time	26
6.5.2	point_in_time	26
6.5.3	frequency_of_event	26
6.5.4	time_domain_relation	27
6.5.5	rule_of_reference_to_origin_relation	27
6.5.6	rule_of_unit_relation	28
6.5.7	time_unit_relation	28
6.5.8	point_in_time_event_assignment	28
6.5.9	point_in_time_event_assignment_role	29
6.6	Time domain function definition	29
	Annex A (normative) Use of ASN.1 Identifiers in SC4 standards	31
	Annex B (informative) EXPRESS listing	32
	Annex C (informative) EXPRESS-G figures	39
	Bibliography	42
	Index	43

Figures

Figure C.1	domain_property schema	39
Figure C.2	time_domain schema (1/2)	40
Figure C.3	time_domain schema (2/2)	41