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Open Data Communication in Building Automation,
Controls and Building Management - Control Network
Protocol - Part 6: Application elements

EESTI STANDARDI EESSÕNA

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ICS 35.240.99, 91.140.01, 97.120

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December 2014

ICS 35.240.99; 91.140.01; 97.120

Supersedes EN 14908-6:2010

English Version

Open Data Communication in Building Automation, Controls and
Building Management - Control Network Protocol - Part 6:
Application elements

Réseau ouvert de communication de données pour
l'automatisation, la régulation et la gestion technique du
bâtiment - Protocole de réseau pour le bâtiment - Partie 6 :
Eléments pour l'application

Firmeneutrale Datenkommunikation für die
Gebäudeautomation und Gebäudemanagement - Gebäude
Netzwerk Protokoll - Teil 6: Anwendungselemente

This European Standard was approved by CEN on 18 October 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

	Page
Foreword	16
Introduction	17
1 Scope	18
2 Normative references	18
3 Terms and definitions	18
4 Standard network-variable type – SNVT	26
4.1 Introduction	26
4.2 SNVT_amp	26
4.3 SNVT_amp_mil	26
4.4 SNVT_angle	26
4.5 SNVT_angle_vel	27
4.6 SNVT_btu_kilo	27
4.7 SNVT_btu_mega	27
4.8 SNVT_char_ascii	27
4.9 SNVT_count	27
4.10 SNVT_count_inc	27
4.11 SNVT_date_day	28
4.12 SNVT_elec_kwh	28
4.13 SNVT_elec_whr	28
4.14 SNVT_flow	28
4.15 SNVT_flow_mil	28
4.16 SNVT_length	28
4.17 SNVT_length_kilo	29
4.18 SNVT_length_micr	29
4.19 SNVT_length_mil	29
4.20 SNVT_lev_cont	29
4.21 SNVT_mass	29
4.22 SNVT_mass_kilo	29
4.23 SNVT_mass_mega	30
4.24 SNVT_mass_mil	30
4.25 SNVT_power	30
4.26 SNVT_power_kilo	30
4.27 SNVT_ppm	30
4.28 SNVT_press	30
4.29 SNVT_res	31
4.30 SNVT_res_kilo	31
4.31 SNVT_sound_db	31
4.32 SNVT_speed	31
4.33 SNVT_speed_mil	31
4.34 SNVT_str_asc	32
4.35 SNVT_str_int	32
4.36 SNVT_telcom	32
4.37 SNVT_temp	32
4.38 SNVT_vol	33
4.39 SNVT_vol_kilo	33
4.40 SNVT_vol_mil	33
4.41 SNVT_volt	33
4.42 SNVT_volt_dbmv	33
4.43 SNVT_volt_kilo	33
4.44 SNVT_volt_mil	34
4.45 SNVT_amp_f	34

4.46	SNVT_angle_f	34
4.47	SNVT_angle_vel_f	34
4.48	SNVT_count_f	34
4.49	SNVT_count_inc_f	35
4.50	SNVT_flow_f	35
4.51	SNVT_length_f	35
4.52	SNVT_lev_cont_f	35
4.53	SNVT_mass_f	35
4.54	SNVT_power_f	36
4.55	SNVT_ppm_f	36
4.56	SNVT_press_f	36
4.57	SNVT_res_f	36
4.58	SNVT_sound_db_f	37
4.59	SNVT_speed_f	37
4.60	SNVT_temp_f	37
4.61	SNVT_time_f	37
4.62	SNVT_vol_f	38
4.63	SNVT_volt_f	38
4.64	SNVT_btu_f	38
4.65	SNVT_elec_whr_f	38
4.66	SNVT_config_src	38
4.67	SNVT_color	39
4.68	SNVT_grammage	39
4.69	SNVT_grammage_f	39
4.70	SNVT_file_req	39
4.71	SNVT_file_status	41
4.72	SNVT_freq_f	43
4.73	SNVT_freq_hz	43
4.74	SNVT_freq_kilohz	43
4.75	SNVT_freq_milhz	43
4.76	SNVT_lux	43
4.77	SNVT_lev_percent	43
4.78	SNVT_multiplier	44
4.79	SNVT_state	44
4.80	SNVT_time_stamp	45
4.81	SNVT_zerospan	46
4.82	SNVT_magcard	46
4.83	SNVT_elapsed_tm	49
4.84	SNVT_alarm	50
4.85	SNVT_currency	51
4.86	SNVT_file_pos	52
4.87	SNVT_muldiv	52
4.88	SNVT_obj_request	52
4.89	SNVT_obj_status	53
4.90	SNVT_preset	55
4.91	SNVT_switch	56
4.92	SNVT_trans_table	56
4.93	SNVT_override	57
4.94	SNVT_pwr_fact	57
4.95	SNVT_pwr_fact_f	57
4.96	SNVT_density	57
4.97	SNVT_density_f	58
4.98	SNVT_rpm	58
4.99	SNVT_hvac_emerg	58
4.100	SNVT_angle_deg	58
4.101	SNVT_temp_p	58
4.102	SNVT_temp_setpt	58
4.103	SNVT_time_sec	59
4.104	SNVT_hvac_mode	59

4.105	SNVT_occupancy.....	59
4.106	SNVT_area.....	59
4.107	SNVT_hvac_overid	60
4.108	SNVT_hvac_status.....	60
4.109	SNVT_press_p.....	61
4.110	SNVT_address.....	61
4.111	SNVT_scene	61
4.112	SNVT_scene_cfg.....	62
4.113	SNVT_setting.....	62
4.114	SNVT_evap_state.....	63
4.115	SNVT_therm_mode.....	63
4.116	SNVT_defr_mode.....	63
4.117	SNVT_defr_term.....	63
4.118	SNVT_defr_state.....	63
4.119	SNVT_time_min.....	64
4.120	SNVT_time_hour.....	64
4.121	SNVT_ph.....	64
4.122	SNVT_ph_f.....	64
4.123	SNVT_chlr_status	64
4.124	SNVT_tod_event	65
4.125	SNVT_smo_obscur.....	66
4.126	SNVT_fire_test	66
4.127	SNVT_temp_ror.....	66
4.128	SNVT_fire_init	66
4.129	SNVT_fire_indcte	66
4.130	SNVT_time_zone.....	67
4.131	SNVT_earth_pos	69
4.132	SNVT_reg_val.....	70
4.133	SNVT_reg_val_ts.....	70
4.134	SNVT_volt_ac.....	71
4.135	SNVT_amp_ac.....	71
4.136	SNVT_turbidity.....	72
4.137	SNVT_turbidity_f.....	72
4.138	SNVT_hvac_type.....	72
4.139	SNVT_elec_kwh_l	72
4.140	SNVT_temp_diff_p	72
4.141	SNVT_ctrl_req	73
4.142	SNVT_ctrl_resp	73
4.143	SNVT_ptz	74
4.144	SNVT_privacyzone	75
4.145	SNVT_pos_ctrl	75
4.146	SNVT_enthalpy.....	76
4.147	SNVT_gfci_status	76
4.148	SNVT_motor_state	76
4.149	SNVT_pumpset_mn	77
4.150	SNVT_ex_control	78
4.151	SNVT_pumpset_sn	78
4.152	SNVT_pump_sensor	80
4.153	SNVT_abs_humid	81
4.154	SNVT_flow_p	81
4.155	SNVT_dev_c_mode	81
4.156	SNVT_valve_mode	81
4.157	SNVT_alarm_2	82
4.158	SNVT_state_64	82
4.159	SNVT_nv_type	87
4.160	SNVT_ent_opmode	88
4.161	SNVT_ent_state	88
4.162	SNVT_ent_status	89
4.163	SNVT_flow_dir.....	91

4.164	SNVT_hvac_satsts	91
4.165	SNVT_dev_status	92
4.166	SNVT_dev_fault	95
4.167	SNVT_dev_maint	98
4.168	SNVT_date_event	100
4.169	SNVT_sched_val.....	100
4.170	SNVT_sec_state.....	100
4.171	SNVT_sec_status	101
4.172	SNVT_sblnd_state	102
4.173	SNVT_rac_ctrl	102
4.174	SNVT_rac_req	104
4.175	SNVT_count_32	106
4.176	SNVT_clothes_w_c.....	106
4.177	SNVT_clothes_w_m	109
4.178	SNVT_clothes_w_s.....	109
4.179	SNVT_clothes_w_a.....	112
4.180	SNVT_multiplier_s.....	115
4.181	SNVT_switch_2	115
4.182	SNVT_color_2	117
4.183	SNVT_log_status	118
4.184	SNVT_time_stamp_p	119
4.185	SNVT_log_fx_request	120
4.186	SNVT_log_fx_status	120
4.187	SNVT_log_request.....	121
4.188	SNVT_enthalpy_d	121
4.189	SNVT_amp_ac_mil	121
4.190	SNVT_time_hour_p	121
4.191	SNVT_lamp_status	122
4.192	SNVT_environment	129
4.193	SNVT_geo_loc	130
4.194	SNVT_program_status	131
4.195	SNVT_load_offsets	131
4.196	SNVT_Wm2_p	132
4.197	SNVT_safe_1	132
4.198	SNVT_safe_2	134
4.199	SNVT_safe_4	136
4.200	SNVT_safe_8	138
4.201	SNVT_time_val_2.....	140
4.202	SNVT_time_offset.....	141
4.203	SNVT_sched_exc.....	141
4.204	SNVT_sched_status	142
4.205	SNVT_mass_flow.....	142
4.206	SNVT_mass_flow_f	142
5	Standard configuration-property type – SCPT	143
5.1	Introduction	143
5.2	SCPTactFbDly	143
5.3	SCPTalarmClrT1	143
5.4	SCPTalarmClrT2	144
5.5	SCPTalarmLhbT	144
5.6	SCPTalarmSetT1	144
5.7	SCPTalarmSetT2	144
5.8	SCPTdefOutput	144
5.9	SCPTdriveT	144
5.10	SCPThighLimit1	145
5.11	SCPThighLimit2	145
5.12	SCPThystHigh1	145
5.13	SCPThystHigh2	145
5.14	SCPThystLow1	145
5.15	SCPThystLow2	145

5.16	SCPTinFbDly	146
5.17	SCPTinVrtOut	146
5.18	SCPTlocation.....	146
5.19	SCPTlowLimit1.....	146
5.20	SCPTlowLimit2.....	146
5.21	SCPTmaxRnge	146
5.22	SCPTmaxRcvT	147
5.23	SCPTmaxSndT	147
5.24	SCPTminRnge	147
5.25	SCPTminSndT	147
5.26	SCPTnwrkCnfg	147
5.27	SCPToffset.....	147
5.28	SCPTsndDelta	148
5.29	SCPTtrnsTblX	148
5.30	SCPTtrnsTblY	148
5.31	SCPToffDely	148
5.32	SCPTgain	148
5.33	SCPTovrBehave	148
5.34	SCPTovrValue	149
5.35	SCPTbypassTime.....	149
5.36	SCPTmanOvrTime	149
5.37	SCPTThumSetpt.....	149
5.38	SCPTmaxFlowHeat	149
5.39	SCPTfireInitType	149
5.40	SCPTsmokeNomSens	150
5.41	SCPTsmokeDayAlrmLim.....	150
5.42	SCPTactuatorType	150
5.43	SCPTlimitCO2.....	150
5.44	SCPTminDeltaAngl	150
5.45	SCPTdirection	150
5.46	SCPTdriveTime	151
5.47	SCPTductArea.....	151
5.48	SCPTminDeltaFlow	151
5.49	SCPTmaxRcvTime	151
5.50	SCPTmaxSendTime	151
5.51	SCPTmaxSetpoint.....	151
5.52	SCPTmaxFlow	152
5.53	SCPTminSendTime	152
5.54	SCPTminSetpoint.....	152
5.55	SCPTminFlow	152
5.56	SCPTminFlowHeat	152
5.57	SCPTminFlowStby	152
5.58	SCPTnomAirFlow	153
5.59	SCPTnomAngle	153
5.60	SCPTnumValves	153
5.61	SCPTsetPnts	153
5.62	SCPToemType.....	153
5.63	SCPTminDeltaRH	153
5.64	SCPTminDeltaCO2	154
5.65	SCPTminDeltaTemp	154
5.66	SCPTsensConstTmp	154
5.67	SCPTgainVAV	154
5.68	SCPTsensConstVAV	154
5.69	SCPToffsetCO2	154
5.70	SCPToffsetRH	155
5.71	SCPToffsetTemp	155
5.72	SCPTdefltBehave	155
5.73	SCPTpwrUpDelay	155
5.74	SCPTpwrUpState	155

5.75	SCPT hvacMode	155
5.76	SCPT coolSetpt.....	156
5.77	SCPT coolLowerSP	156
5.78	SCPT coolUpperSP	156
5.79	SCPT heatSetpt.....	156
5.80	SCPT heatLowerSP	156
5.81	SCPT heatUpperSP	156
5.82	SCPT limitChlrCap.....	157
5.83	SCPT luxSetpoint	157
5.84	SCPT step.....	157
5.85	SCPT onOffHysteresis	157
5.86	SCPT clOffDelay	157
5.87	SCPT clOnDelay	157
5.88	SCPT powerupState	158
5.89	SCPT minDeltaLevel.....	158
5.90	SCPT reflection	158
5.91	SCPT fieldCalib	158
5.92	SCPT holdTime	158
5.93	SCPT stepValue	158
5.94	SCPT maxOut.....	159
5.95	SCPT sceneNmbr	159
5.96	SCPT fadeTime	159
5.97	SCPT delayTime	159
5.98	SCPT masterSlave	159
5.99	SCPT updateRate	159
5.100	SCPT summerTime.....	160
5.101	SCPT winterTime	160
5.102	SCPT manualAllowed.....	160
5.103	SCPT defWeekMask	160
5.104	SCPT dayDateIndex.....	161
5.105	SCPT timeEvent	162
5.106	SCPT modeHrtBt	162
5.107	SCPT defrostMode	162
5.108	SCPT maxDefrstTime	162
5.109	SCPT drainDelay.....	163
5.110	SCPT injDelay	163
5.111	SCPT maxDefrstTemp	163
5.112	SCPT strtpupDelay	163
5.113	SCPT termTimeTemp	163
5.114	SCPT pumpDownDelay.....	163
5.115	SCPT superHtRefInit	164
5.116	SCPT strtpupOpen.....	164
5.117	SCPT superHtRefMin	164
5.118	SCPT refregGlide	164
5.119	SCPT superHtRefMax	164
5.120	SCPT refregType	165
5.121	SCPT thermMode	165
5.122	SCPT dayNightCntrl	165
5.123	SCPT diffNight	166
5.124	SCPT highLimTemp	166
5.125	SCPT highLimDly	166
5.126	SCPT cutOutValue	166
5.127	SCPT airTemp1Day	166
5.128	SCPT smokeNightAlrmLim	166
5.129	SCPT lowLimTemp	167
5.130	SCPT lowLimDly	167
5.131	SCPT diffValue	167
5.132	SCPT airTemp1Night	167
5.133	SCPT airTemp1Alrm	167

5.134	SCPThighLimDefrDly	167
5.135	SCPTdeltaNight.....	167
5.136	SCPTrunHrInit	168
5.137	SCPTrunHrAlarm	168
5.138	SCPTenergyCntInit	168
5.139	SCPTsmokeDayPreAlrmLim.....	168
5.140	SCPTdebounce	168
5.141	SCPTsmokeNightPreAlrmLim	169
5.142	SCPTzoneNum	169
5.143	SCPTthermAlrmROR	169
5.144	SCPTvisOutput.....	169
5.145	SCPTaudOutput	169
5.146	SCPTflashFreq	169
5.147	SCPTinstallDate	170
5.148	SCPTmaintDate	170
5.149	SCPTmanfDate	170
5.150	SCPTfireTxt1	170
5.151	SCPTfireTxt2	170
5.152	SCPTfireTxt3	170
5.153	SCPTthermThreshold	171
5.154	SCPTfireIndicate	171
5.155	SCPTtimeZone	171
5.156	SCPTprimeVal	171
5.157	SCPTsecondVal	171
5.158	SCPTsceneOffset.....	171
5.159	SCPTnomRPM.....	172
5.160	SCPTnomFreq	172
5.161	SCPTtrampUpTm	172
5.162	SCPTtrampDownTm	172
5.163	SCPTdefScale.....	172
5.164	SCPTregName	172
5.165	SCPTbaseValue.....	173
5.166	SCPTdevMajVer	173
5.167	SCPTdevMinVer	173
5.168	SCPTobjMajVer	173
5.169	SCPTobjMinVer	173
5.170	SCPThvacType.....	173
5.171	SCPTtimeout	174
5.172	SCPTcontrolPriority.....	174
5.173	SCPTdeviceGroupID	174
5.174	SCPTmaxPrivacyZones.....	174
5.175	SCPTmaxCameraPrepositions	174
5.176	SCPTdefaultPanTiltZoomSpeeds	174
5.177	SCPTdefaultAutoPanSpeed	175
5.178	SCPTautoAnswer.....	175
5.179	SCPTdialString.....	175
5.180	SCPTserialNumber	175
5.181	SCPTnormalRotationalSpeed	175
5.182	SCPTstandbyRotationalSpeed	175
5.183	SCPTpartNumber	176
5.184	SCPTdischargeAirCoolingSetpoint	176
5.185	SCPTdischargeAirHeatingSetpoint.....	176
5.186	SCPTmaxSupplyFanCapacity.....	176
5.187	SCPTminSupplyFanCapacity	176
5.188	SCPTmaxReturnExhaustFanCapacity	176
5.189	SCPTminReturnExhaustFanCapacity.....	177
5.190	SCPTductStaticPressureSetpoint	177
5.191	SCPTmaxDuctStaticPressureSetpoint	177
5.192	SCPTminDuctStaticPressureSetpoint	177

5.193	SCPTductStaticPressureLimit	177
5.194	SCPTbuildingStaticPressureSetpoint	177
5.195	SCPTreturnFanStaticPressureSetpoint	178
5.196	SCPTfanDifferentialSetpoint	178
5.197	SCPTmixedAirLowLimitSetpoint	178
5.198	SCPTmixedAirTempSetpoint	178
5.199	SCPTminOutdoorAirFlowSetpoint.....	178
5.200	SCPToutdoorAirTempSetpoint	178
5.201	SCPToutdoorAirEnthalpySetpoint.....	179
5.202	SCPTdiffTempSetpoint	179
5.203	SCPTexhaustEnablePosition	179
5.204	SCPTspaceHumSetpoint	179
5.205	SCPTdischargeAirDewpointSetpoint	179
5.206	SCPTmaxDischargeAirCoolingSetpoint	179
5.207	SCPTminDischargeAirCoolingSetpoint	180
5.208	SCPTmaxDischargeAirHeatingSetpoint.....	180
5.209	SCPTminDischargeAirHeatingSetpoint	180
5.210	SCPTcoolingLockout	180
5.211	SCPTheatingLockout	180
5.212	SCPTcoolingResetEnable	180
5.213	SCPTheatingResetEnable	181
5.214	SCPTsetpoint	181
5.215	SCPTtemperatureHysteresis	181
5.216	SCPTcontrolTemperatureWeighting	181
5.217	SCPTpwmPeriod.....	181
5.218	SCPTdefrostInternalSchedule	181
5.219	SCPTdefrostStart.....	182
5.220	SCPTdefrostCycles	182
5.221	SCPTminDefrostTime	182
5.222	SCPTmaxDefrostTime	182
5.223	SCPTdefrostFanDelay	182
5.224	SCPTdefrostRecoveryTime	182
5.225	SCPTdefrostHold	183
5.226	SCPTdefrostDetect	183
5.227	SCPTscheduleInternal	183
5.228	SCPTtempOffset	183
5.229	SCPTaudibleLevel	183
5.230	SCPTscrollSpeed.....	183
5.231	SCPTbrightness	184
5.232	SCPTorientation	184
5.233	SCPTinstalledLevel	184
5.234	SCPTpumpCharacteristic	184
5.235	SCPTminPressureSetpoint	185
5.236	SCPTmaxPressureSetpoint	185
5.237	SCPTminFlowSetpoint	185
5.238	SCPTmaxFlowSetpoint	185
5.239	SCPTdeviceControlMode.....	185
5.240	SCPTminRemotePressureSetpoint	185
5.241	SCPTmaxRemotePressureSetpoint.....	186
5.242	SCPTminRemoteFlowSetpoint	186
5.243	SCPTmaxRemoteFlowSetpoint	186
5.244	SCPTminRemoteTempSetpoint	186
5.245	SCPTmaxRemoteTempSetpoint	186
5.246	SCPTcontrolSignal	187
5.247	SCPTnightPurgePosition	187
5.248	SCPTfreeCoolPosition	187
5.249	SCPTvalveFlowCharacteristic.....	187
5.250	SCPTvalveOperatingMode.....	188
5.251	SCPTemergencyPosition	188

5.252	SCPTblockProtectionTime.....	188
5.253	SCPTminStroke.....	188
5.254	SCPTmaxStroke	188
5.255	SCPTnvType	188
5.256	SCPTmaxNVLength	189
5.257	SCPTnvDynamicAssignment	189
5.258	SCPTsafExtCnfg	189
5.259	SCPTemergCnfg	190
5.260	SCPTsluiceCnfg	190
5.261	SCPTfanOperation	190
5.262	SCPTminFlowUnit.....	190
5.263	SCPTmaxFlowUnit.....	190
5.264	SCPTminFlowHeatStby	190
5.265	SCPTminFlowUnitStby	191
5.266	SCPToffsetFlow	191
5.267	SCPTareaDuctHeat	191
5.268	SCPTnomAirFlowHeat.....	191
5.269	SCPTgainVAVHeat.....	191
5.270	SCPTnumDampers	191
5.271	SCPTminFlowUnitHeat	192
5.272	SCPTsaturationDelay	192
5.273	SCPTeffectivePeriod	192
5.274	SCPTscheduleDates	193
5.275	SCPTschedule.....	194
5.276	SCPTscheduleTimeValue	195
5.277	SCPTvalueDefinition	195
5.278	SCPTvalueName	196
5.279	SCPTweeklySchedule	196
5.280	SCPTscheduleName	196
5.281	SCPTvalveStroke	197
5.282	SCPTvalveNominalSize	197
5.283	SCPTvalveKvs	197
5.284	SCPTvalveType	197
5.285	SCPTactuatorCharacteristic	197
5.286	SCPTtrnsTblX2	197
5.287	SCPTtrnsTblY2	198
5.288	SCPTcombFlowCharacteristic	198
5.289	SCPTtrnsTblX3	198
5.290	SCPTtrnsTblY3	198
5.291	SCPTrunTimeAlarm	198
5.292	SCPTtimePeriod	199
5.293	SCPTpulseValue	199
5.294	SCPTnumDigits	200
5.295	SCPTnvPriority	200
5.296	SCPTdefaultSetting	200
5.297	SCPTlowLimit1Enable	200
5.298	SCPTlowLimit2Enable	200
5.299	SCPTclockCalibration	201
5.300	SCPTneuronId	201
5.301	SCPThighLimit1Enable	201
5.302	SCPThighLimit2Enable	201
5.303	SCPTahamApplianceModel	201
5.304	SCPTdefInput	202
5.305	SCPTname1	202
5.306	SCPTscene	202
5.307	SCPTsceneTiming	203
5.308	SCPTname2	203
5.309	SCPTname3	204
5.310	SCPTbuttonPressAction	204

5.311	SCPTbuttonColor	205
5.312	SCPTbuttonRepeatInterval	206
5.313	SCPTbuttonHoldAction	206
5.314	SCPTpwrSendOnDelta	207
5.315	SCPTsceneName	207
5.316	SCPTmaxPower	207
5.317	SCPTifaceDesc	207
5.318	SCPTmonInterval	208
5.319	SCPTlinkPowerDetectEnable	208
5.320	SCPTscanTime	208
5.321	SCPTdevListDesc	208
5.322	SCPTdevListEntry	208
5.323	SCPTlogCapacity	209
5.324	SCPTlogNotificationThreshold	209
5.325	SCPTlogSize	210
5.326	SCPTlogType	210
5.327	SCPTfanInEnable	210
5.328	SCPTlogTimestampEnable	210
5.329	SCPTlogHighLimit	210
5.330	SCPTlogLowLimit	211
5.331	SCPTmaxFanIn	211
5.332	SCPTlogMinDeltaTime	211
5.333	SCPTlogMinDeltaValue	211
5.334	SCPTpollRate	212
5.335	SCPTsourceAddress	212
5.336	SCPTlogRecord	212
5.337	SCPTlogFileHeader	214
5.338	SCPTlogAlarmThreshold	215
5.339	SCPTlogRequest	215
5.340	SCPTlogResponse	216
5.341	SCPTlightingGroupEnable	216
5.342	SCPTsceneColor	217
5.343	SCPTbkupSchedule	217
5.344	SCPTOLCLimits	217
5.345	SCPTlampPower	218
5.346	SCPTdeviceOutSelection	219
5.347	SCPTenableStatusMsg	219
5.348	SCPTmaxLevelVolt	222
5.349	SCPTgeoLocation	222
5.350	SCPTprogName	222
5.351	SCPTprogRevision	223
5.352	SCPTprogSelect	223
5.353	SCPTprogSourceLocation	223
5.354	SCPTprogFileIndexes	224
5.355	SCPTprogCmdHistory	224
5.356	SCPTprogStateHistory	224
5.357	SCPTnsdsFbIndex	225
5.358	SCPTcurrentSenseEnable	225
5.359	SCPTmeasurementInterval	225
5.360	SCPTlightingGroupMembership	225
5.361	SCPTloadControlOffset	226
5.362	SCPTprogErrorHistory	226
5.363	SCPTnvUsage	226
5.364	SCPTscheduleSunday	227
5.365	SCPTscheduleMonday	227
5.366	SCPTscheduleTuesday	227
5.367	SCPTscheduleWednesday	228
5.368	SCPTscheduleThursday	228
5.369	SCPTscheduleFriday	228

5.370	SCPTscheduleSaturday	229
5.371	SCPToccupancyBehavior	229
5.372	SCPTtimeSource	230
5.373	SCPTscheduleException	230
5.374	SCPTscheduleHoliday	230
5.375	SCPTrandomizationInterval	230
5.376	SCPTsunriseTime	231
5.377	SCPTsunsetTime	231
5.378	SCPTschedulerOptions	231
5.379	SCPToccupancyThresholds	232
6	Standard Enumeration Type	233
6.1	Introduction	233
6.2	days_of_week_t	233
6.3	discrete_levels_t	233
6.4	telcom_states_t	234
6.5	config_source_t	235
6.6	file_request_t	235
6.7	file_status_t	235
6.8	alarm_type_t	236
6.9	priority_level_t	237
6.10	currency_t	238
6.11	object_request_t	240
6.12	learn_mode_t	241
6.13	override_t	241
6.14	emerg_t	241
6.15	hvac_t	242
6.16	occup_t	243
6.17	hvac_overid_t	243
6.18	scene_t	245
6.19	scene_config_t	246
6.20	setting_t	246
6.21	evap_t	246
6.22	therm_mode_t	247
6.23	defrost_mode_t	247
6.24	defrost_term_t	247
6.25	defrost_state_t	248
6.26	chiller_t	248
6.27	fire_test_t	248
6.28	fire_initiator_t	248
6.29	fire_indicator_t	249
6.30	calendar_type_t	250
6.31	reg_val_unit_t	250
6.32	hvac_hvt_t	251
6.33	control_resp_t	252
6.34	pan_dir_t	252
6.35	tilt_dir_t	253
6.36	zoom_t	253
6.37	privacyzone_t	253
6.38	cam_func_t	253
6.39	cam_act_t	254
6.40	gfci_status_t	254
6.41	motor_state_t	254
6.42	boolean_t	255
6.43	ex_control_t	255
6.44	unit_temp_t	255
6.45	device_c_mode_t	255
6.46	valve_mode_t	256
6.47	nv_type_category_t	257
6.48	ent_opmode_cmd_t	257

6.49	ent_cmd_t.....	258
6.50	flow_direction_t.....	259
6.51	device_select_t.....	259
6.52	event_mode_type_t.....	259
6.53	master_slave_t.....	260
6.54	fan_operation_t.....	260
6.55	days_of_month_t.....	260
6.56	months_t.....	264
6.57	sec_status_t.....	265
6.58	sec_state_t.....	266
6.59	interval_of_month_t.....	267
6.60	sblnd_cmd_source_t.....	268
6.61	sblnd_error_t.....	269
6.62	rail_audio_sensor_type_t.....	270
6.63	rail_audio_type_t.....	271
6.64	appl_cwc_t.....	272
6.65	appl_cws_t.....	272
6.66	appl_cwp_t.....	272
6.67	appl_rin_t.....	273
6.68	aham_appl_t.....	273
6.69	button_action_t.....	274
6.70	char_encoding_t.....	275
6.71	switch_state_t.....	276
6.72	color_encoding_t.....	278
6.73	log_status_t.....	278
6.74	log_type_t.....	278
6.75	timestamp_t.....	278
6.76	log_record_t.....	279
6.77	point_status_t.....	279
6.78	message_code_t.....	279
6.79	log_access_req_t.....	280
6.80	log_response_code_t.....	280
6.81	address_type_t.....	280
6.82	olc_select_t.....	280
6.83	program_state_t.....	281
6.84	file_type_t.....	281
6.85	program_status_error_t.....	282
6.86	time_source_t.....	283
6.87	scheduler_status_t.....	283
7	Standard functional profiles.....	283
7.1	General	283
7.2	Functional Profile List.....	284
7.3	SFPTnodeObject (0)	284
7.4	SFPTopenLoopSensor (1)	287
7.5	SFPTclosedLoopSensor (2).....	290
7.6	SFPTopenLoopActuator (3).....	293
7.7	SFPTclosedLoopActuator (4).....	295
7.8	SFPTcalendar (6)	298
7.9	SFPTscheduler (7)	299
7.10	SFPTisiMonitorPoint (8).....	301
7.11	SFPTdataLogger (9)	302
7.12	SFPTschedulerSimple (17)	305
7.13	SFPTchannelMonitor (132)	306
7.14	SFPTdeviceMonitor (136).....	312
7.15	SFPTchannelContinuityMonitor (137)	314
7.16	SFPTstaticProgrammable (410)	314
7.17	SFPTanalogInput (520).....	316
7.18	SFPTanalogOutput (521).....	316
7.19	SFPTlightSensor (1010)	316

7.20	SFPTglobalSolarRadiation (1015)	317
7.21	SFPTpressureSensor (1030)	318
7.22	SFPThvacTempSensor (1040)	320
7.23	SFPTfrostSensor (1042)	320
7.24	SFPThvacRelativeHumiditySensor (1050)	321
7.25	SFPTrainSensor (1051)	322
7.26	SFPToccupancySensor (1060)	322
7.27	SFPTisiOccupancySensor (1061)	323
7.28	SFPTco2Sensor (1070)	325
7.29	SFPTairVelocitySensor (1083)	326
7.30	SFPTutilityDataLoggerRegister (2110)	328
7.31	SFPTutilityMeter (2201)	330
7.32	SFPTlampActuator (3040)	331
7.33	SFPTisiLampActuator (3041)	332
7.34	SFPTconstantLightController (3050)	337
7.35	SFPToccupancyController (3071)	338
7.36	SFPTswitch (3200)	340
7.37	SFPTscenePanel (3250)	341
7.38	SFPTsceneController (3251)	342
7.39	SFPTpartitionWallController (3252)	343
7.40	SFPTisiKeypad (3253)	344
7.41	SFPTrealTimeKeeper (3300)	347
7.42	SFPTrealTimeBasedScheduler (3301)	348
7.43	SFPTlightingPanelController (3401)	349
7.44	SFPToutdoorLuminairController (3512)	349
7.45	SFPTidentifierSensor (5035)	351
7.46	SFPTentryExit (5051)	352
7.47	SFPTmodemController (5091)	355
7.48	SFPTtelephoneDirectory (5092)	356
7.49	SFPTvariableSpeedMotorDrive (6010)	356
7.50	SFPTsunblindActuator (6110)	358
7.51	SFPTsunblindController (6111)	360
7.52	SFPTisiSunblindActuator (6112)	364
7.53	SFPTvariableAirVolume (8010)	367
7.54	SFPTfanCoilUnit (8020)	372
7.55	SFPTrooftopUnit (8030)	375
7.56	SFPTchiller (8040)	379
7.57	SFPTheatPump (8051)	382
7.58	SFPTthermostat (8060)	384
7.59	SFPTchilledCeilingController (8070)	388
7.60	SFPTunitVentilatorController (8080)	396
7.61	SFPTsccCommandModule (8090)	405
7.62	SFPTdamperActuator (8110)	411
7.63	SFPTpumpController (8120)	414
7.64	SFPThvacValvePositioner (8131)	418
7.65	SFPTboilerController (8301)	426
7.66	SFPTspaceComfortController (8500)	429
7.67	SFPTsccFanCoil (8501)	439
7.68	SFPTsccVAV (8502)	449
7.69	SFPTsccHeatPump (8503)	459
7.70	SFPTsccRooftop (8504)	469
7.71	SFPTsccUnitVentilator (8505)	479
7.72	SFPTsccChilledCeiling (8506)	489
7.73	SFPTsccRadiator (8507)	500
7.74	SFPTsccAHU (8508)	510
7.75	SFPTsccSelfContained (8509)	520
7.76	SFPTdischargeAirController (8610)	530
7.77	SFPTtrailcarAudioController (9111)	543
7.78	SFPTtrailcarAudioSensor (9112)	544

7.79	SFPTrefrigDisplayCaseControllerDefrost (10010)	545
7.80	SFPTrefrigDisplayCaseControllerEvaporator (10011).....	547
7.81	SFPTrefrigDisplayCaseControllerThermostat (10012)	551
7.82	SFPTfireSmokeDamperActuator (11001)	554
7.83	SFPTsmokeFireInitiatorIntelli (11002)	556
7.84	SFPTsmokeFireInitiatorConvent (11003)	558
7.85	SFPTthermalFireInitiator (11004)	560
7.86	SFPTpullStationFireInitiator (11005)	561
7.87	SFPTaudibleFireIndicator (11006)	563
7.88	SFPTvisibleFireIndicator (11007).....	565
7.89	SFPTuniversalFireInitiator (11010)	567
7.90	SFPTuniversalFireIndicator (11011)	569
7.91	SFPTgeneratorSet (13110).....	570
7.92	SFPTautomaticTransferSwitch (13120).....	573
7.93	SFPTelevatorPositionIndicator (14011).....	577
7.94	SFPTelevatorHallLantern (14012)	578
7.95	SFPTelevatorArrivalGong (14013)	580
7.96	SFPTelevatorDirectionLantern (14014)	581
7.97	SFPTelevatorFireSystemsPort (14041)	582
7.98	SFPTelevatorVoiceAnnouncer (14061)	583
7.99	SFPTclothesWasherDomestic (15011).....	585
8	Device-interface files.....	587
8.1	Introduction.....	587
8.2	Text Device-Interface File Format.....	587
8.2.1	General	587
8.2.2	Header Section	588
9	Standard method of file transfer between devices	604
9.1	Introduction.....	604
9.2	Windowed Transfer Protocol.....	604
9.3	Setting-Up a File Transfer.....	605
9.4	Random Access.....	606
9.5	Delayed Responses.....	606
9.6	Completing a Data Exchange	606
9.7	Completing a File Transfer	606
9.8	Multicast File Transfers	607
9.9	Concurrency	607
9.10	SNVT_file_req Data Structure	607
9.11	SNVT_file_status Data Structure	608
9.12	SNVT_file_pos Data Structure	609
9.13	Application Protocol Data Unit Structure	609
	Annex A (informative) Protocol Processor Types	611
	Annex B (normative) Standard Program Identifier (SPID) Master List.....	612
B.1	General	612
B.2	Manufacturer Field	612
B.3	Device Class Field	612
B.4	Usage Field	626
B.4.1	General	626
B.4.2	Usage ID	626
B.5	Channel Type Field.....	626
	Annex C (informative) Standard Transceiver-Type Identifiers	628
	Bibliography.....	629

Foreword

This document (EN 14908-6:2014) has been prepared by Technical Committee CEN/TC 247 “Building automation, controls and building management”, the secretariat of which is held by SNV.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2015 and conflicting national standards shall be withdrawn at the latest by June 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14908-6:2010.

This European Standard is part of the EN 14908 series, which consists of the following parts:

- EN 14908-1, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 1: Protocol Stack*
- EN 14908-2, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 2: Twisted Pair Communication*
- EN 14908-3, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 3: Power Line Channel Specification*
- EN 14908-4, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 4: IP Communication*
- EN 14908-5, *Open Data Communication in Building Automation, Controls and Building Management Implementation Guideline — Control Network Protocol — Part 5: Implementation*
- EN 14908-6, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 6: Application Elements*

The content of this European Standard covers the data communications used for management, automation/control and field functions.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard is intended to be used by all involved in design, manufacture, engineering, installation and commissioning activities.

This document specifies the definition of various types of data-transfer containers for carrying temperature, pressure, state, and other forms of data over the protocol defined by EN 14908-1 from any number of devices to any other number of devices, as defined by the limits in EN 14908-1. It also specifies the data types for configuration information, used to define timing, default values, and other data. This document describes a data-file transfer method that may be used for transferring configuration information to and from devices, and specifies the device-interface format that describes the interconnection points of a device.

NOTE The file-transfer mechanism is not exclusively used for loading configuration information into a device and can therefore have other purposes.

This European Standard contributes to the general European policy for energy savings, particularly in the field of the "Energy Performance of Building Directive" and the Construction Products Directive (ER No. 6 "Energy Economy and Heat Retention").

1 Scope

This European Standard provides mechanisms through which various vendors of building automation, control, and building management systems may exchange information in a standardized way.

This document provides specifications for the Application Elements of Control Network Protocol packets as follows:

- definitions of standardized packet (network-variable) data types;
- definitions of device-interface files;
- definitions of standardized configuration-property types;
- definitions of standardized enumeration types;
- definitions of standardized functional profiles;
- definition of the standardized method of file transfer between devices.

The purpose of this specification is to ensure interoperability between various CNP implementations. This document contains all the information necessary to read and interpret the format of data and control information that is used by EN 14908-5. It also defines the device interface for a device as specified, which is necessary to exchange data between various devices from different manufacturers.

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.

EN 14908-1:2005, *Open Data Communication in Building Automation, Controls and Building Management — Building Network Protocol — Part 1: Protocol Stack*

EN 14908-2, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 2: Twisted Pair Communication*

EN 14908-3, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 3: Power Line Channel Specification*

EN 14908-4, *Open Data Communication in Building Automation, Controls and Building Management — Control Network Protocol — Part 4: IP Communication*

EN 14908-5, *Open Data Communication in Building Automation, Controls and Building Management Implementation Guideline — Control Network Protocol — Part 5: Implementation*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14908-1:2005 and the following apply.

3.1

application set

functional block or functional blocks to which a configuration property applies

EXAMPLE A network variable, a series or compilation of network variables, a functional block, a series or compilation of functional blocks, or the entire device.