ICS 35.240.99, 91.140.01, 97.120

SLOVENSKÁ TECHNICKÁ NORMA

Máj 2015

STN	**Otvorená dátová komunikácia v automatizácii, riadení a manažérstve budov. Sieťový protokol. Časť 6: Aplikácia prvkov.**	**STN EN 14908-6** 74 7306

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/15

Obsahuje: EN 14908-6:2014

Oznámením tejto normy sa ruší
STN EN 14908-6 (74 7306) z apríla 2011

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2015
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14908-6

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

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

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

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2014 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 14908-6:2014 E

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 SCPTalrmClrT1 143
5.4 SCPTalrmClrT2 144
5.5 SCPTalrmInhbT 144
5.6 SCPTalrmSetT1 144
5.7 SCPTalrmSetT2 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 SCPThumSetpt ... 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 SCPThvacMode 155
5.76 SCPTcoolSetpt 156
5.77 SCPTcoolLowerSP 156
5.78 SCPTcoolUpperSP 156
5.79 SCPTheatSetpt 156
5.80 SCPTheatLowerSP 156
5.81 SCPTheatUpperSP 156
5.82 SCPTlimitChlrCap 157
5.83 SCPTluxSetpoint 157
5.84 SCPTstep 157
5.85 SCPTonOffHysteresis 157
5.86 SCPTclOffDelay 157
5.87 SCPTclOnDelay 157
5.88 SCPTpowerupState 158
5.89 SCPTminDeltaLevel 158
5.90 SCPTreflection 158
5.91 SCPTfieldCalib 158
5.92 SCPTholdTime 158
5.93 SCPTstepValue 158
5.94 SCPTmaxOut 159
5.95 SCPTsceneNmbr 159
5.96 SCPTfadeTime 159
5.97 SCPTdelayTime 159
5.98 SCPTmasterSlave 159
5.99 SCPTupdateRate 159
5.100 SCPTsummerTime 160
5.101 SCPTwinterTime 160
5.102 SCPTmanualAllowed 160
5.103 SCPTdefWeekMask 160
5.104 SCPTdayDateIndex 161
5.105 SCPTtimeEvent 162
5.106 SCPTmodeHrtBt 162
5.107 SCPTdefrostMode 162
5.108 SCPTmaxDefrstTime 162
5.109 SCPTdrainDelay 163
5.110 SCPTinjDelay 163
5.111 SCPTmaxDefrstTemp 163
5.112 SCPTstrtupDelay 163
5.113 SCPTtermTimeTemp 163
5.114 SCPTpumpDownDelay 163
5.115 SCPTsuperHtRefInit 164
5.116 SCPTstrtupOpen 164
5.117 SCPTsuperHtRefMin 164
5.118 SCPTrefrigGlide 164
5.119 SCPTsuperHtRefMax 164
5.120 SCPTrefrigType 165
5.121 SCPTthermMode 165
5.122 SCPTdayNightCntrl 165
5.123 SCPTdiffNight 166
5.124 SCPThighLimTemp 166
5.125 SCPThighLimDly 166
5.126 SCPTcutOutValue 166
5.127 SCPTairTemp1Day 166
5.128 SCPTsmokeNightAlrmLim 166
5.129 SCPTlowLimTemp 167
5.130 SCPTlowLimDly 167
5.131 SCPTdiffValue 167
5.132 SCPTairTemp1Night 167
5.133 SCPTairTemp1Alrm 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 SCPTrampUpTm ... 172
5.162 SCPTrampDownTm ... 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 SFPTrailcarAudioController (9111) 543
7.78 SFPTrailcarAudioSensor (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*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN