



The indication of fault texts for DM1 and the entry in the respective alarm list is only possible for SPNs which are listed in the SPN list (refer to [↩➤](#) “Standard visualization messages”)!

For SPNs without text: Refer to the J1939 specification for a list of all SPNs.

Standard visualization messages



In case of ...

- ... defective sensor: **"Error"** is displayed.
- ... missing sensor: **"Missing"** is displayed.

SPN	PGN	Description	Resol.	Data range J1939	Index
38	65276	38:Fuel level 2 ⁴	0.1 %	0 to 100 %	12017
52	65262	52:Engine Intercooler Temp ²	1 °C	-40 to 210 °C	15217
91	61443	91:Accelerator Pedal Pos.1 ¹	0.1 %	0 to 100 %	15207
92	61443	92:Load At Current Speed ¹	1 %	0 to 250 %	15208
94	65263	94:Fuel Delivery Pressure ²	1 kPa	0 to 1000 kPa	15218
95	65276	95:Fuel Filter Diff. Pressure ²	1 kPa	0 to 500 kPa	15219
96	65276	96:Fuel level 1 ⁴	0.1 %	0 to 100 %	12016
98	65263	98:Engine Oil Level ¹	0.1 %	0 to 100 %	15210
100	65263	100:Engine Oil Pressure ¹	1 kPa	0 to 1000 kPa	15205
101	65263	101:Crankcase Pressure ²	1 kPa	-250 to 251 kPa	15220
102	65270	102:Intake Manifold 1 Pressure ¹	1 kPa	0 to 500 kPa	15214
105	65270	105:Intake Manifold 1 Temp ¹	1 °C	-40 to 210 °C	15215
106	65270	106:Air Intake Pressure ²	1 kPa	0 to 500 kPa	15221
107	65270	107:Air Filter 1 Diff.Pressure ²	0.01 kPa	0 to 12.5 kPa	15222
108	65269	108:Barometric Pressure ¹	0.1 kPa	0 to 125 kPa	15212
109	65263	109:Coolant Pressure ²	1 kPa	0 to 500 kPa	15223
110	65262	110:Engine Coolant Temp ¹	1 °C	-40 to 210 °C	15202
111	65263	111:Coolant Level ¹	0.1 %	0 to 100 %	15206
127	65272	127:Transm. Oil Pressure ²	1 kPa	0 to 4000 kPa	15224
157	65243	157:Inj.Metering Rail 1 Press. ²	0.1 MPa	0 to 251 MPa	15225
158	65271	158:Keyswitch Batt.Potential ⁴	0.1 V	0 to 3212.75 V	15312
171	65269	171:Ambient Air Temperature ²	0.1 °C	-273 to 1735 °C	15226
172	65269	172:Air Intake Temperature ¹	1 °C	-40 to 210 °C	15213
173	65270	173:Exhaust Gas Temperature ¹	0.1 °C	-273 to 1735 °C	15216
174	65262	174:Fuel Temperature 1 ¹	1 °C	-40 to 210 °C	15203

SPN	PGN	Description	Resol.	Data range J1939	Index
175	65262	175:Oil Temperature 1 ¹	0.1 °C	-273 to 1735 °C	15309
176	65262	176:Turbo Oil Temp ²	0.1 °C	-273 to 1735 °C	15227
177	65272	177:Transmission Oil Temp.1 ²	0.1 °C	-273 to 1735 °C	15228
183	65266	183:Fuel Rate ¹	0.1 l/h	0 to 3212.75 l/h	15307
190	61444	190:Engine Speed ¹	1 rpm	0 to 8031.875 rpm	15308
247	65253	247:Total Engine Hours ^{1, 7}	1 h	0 to 210554060 h	15201
250	65257	250:Total fuel used ⁴	0.5 l	0 to 2105540608 l	15319
441	65164	441:Auxiliary Temp 1 ²	1 °C	-40 to 210 °C	15229
442	65164	442:Auxiliary Temp 2 ²	1 °C	-40 to 210 °C	15230
513	61444	513:Actual Engine Torque ¹	1 %	-125 to 125 %	15209
1081	65252	1081: Eng.wait to start lamp ⁵		enumeration	15508
1122	65191	1122:Alternator Bear. 1 Temp ²	1 °C	-40 to 210 °C	15231
1123	65191	1123:Alternator Bear. 2 Temp ²	1 °C	-40 to 210 °C	15232
1124	65191	1124:Alternator Wind. 1 Temp ²	1 °C	-40 to 210 °C	15233
1125	65191	1125:Alternator Wind. 2 Temp ²	1 °C	-40 to 210 °C	15234
1126	65191	1126:Alternator Wind. 3 Temp ²	1 °C	-40 to 210 °C	15235
1131	65189	1131:Intake Manifold 2 Temp ²	1 °C	-40 to 210 °C	15236
1132	65189	1132:Intake Manifold 3 Temp ²	1 °C	-40 to 210 °C	15237
1133	65189	1133:Intake Manifold 4 Temp ²	1 °C	-40 to 210 °C	15238
1134	65262	1134:Intercooler Therm.Opening ²	0.1 %	0 to 100 %	15239
1135	65188	1135:Oil Temperature 2 ²	0.1 °C	-273 to 1735 °C	15240
1136	65188	1136:ECU Temperature ²	0.1 °C	-273 to 1735 °C	15241
1137	65187	1137:Exh.Gas Port 1 Temp ³	0.1 °C	-273 to 1735 °C	15242
1138	65187	1138:Exh.Gas Port 2 Temp ³	0.1 °C	-273 to 1735 °C	15243
1139	65187	1139:Exh.Gas Port 3 Temp ³	0.1 °C	-273 to 1735 °C	15244
1140	65187	1140:Exh.Gas Port 4 Temp ³	0.1 °C	-273 to 1735 °C	15245
1141	65186	1141:Exh.Gas Port 5 Temp ³	0.1 °C	-273 to 1735 °C	15246
1142	65186	1142:Exh.Gas Port 6 Temp ³	0.1 °C	-273 to 1735 °C	15247
1143	65186	1143:Exh.Gas Port 7 Temp ³	0.1 °C	-273 to 1735 °C	15248
1144	65186	1144:Exh.Gas Port 8 Temp ³	0.1 °C	-273 to 1735 °C	15249
1145	65185	1145:Exh.Gas Port 9 Temp ³	0.1 °C	-273 to 1735 °C	15250
1146	65185	1146:Exh.Gas Port 10 Temp ³	0.1 °C	-273 to 1735 °C	15251
1147	65185	1147:Exh.Gas Port 11 Temp ³	0.1 °C	-273 to 1735 °C	15252
1148	65185	1148:Exh.Gas Port 12 Temp ³	0.1 °C	-273 to 1735 °C	15253
1149	65184	1149:Exh.Gas Port 13 Temp ³	0.1 °C	-273 to 1735 °C	15254

7 Interfaces And Protocols

7.5.1 Displayed Messages (Visualization)

SPN	PGN	Description	Resol.	Data range J1939	Index
1150	65184	1150:Exh.Gas Port 14 Temp ³	0.1 °C	-273 to 1735 °C	15255
1151	65184	1151:Exh.Gas Port 15 Temp ³	0.1 °C	-273 to 1735 °C	15256
1152	65184	1152:Exh.Gas Port 16 Temp ³	0.1 °C	-273 to 1735 °C	15257
1153	65183	1153:Exh.Gas Port 17 Temp ³	0.1 °C	-273 to 1735 °C	15258
1154	65183	1154:Exh.Gas Port 18 Temp ³	0.1 °C	-273 to 1735 °C	15259
1155	65183	1155:Exh.Gas Port 19 Temp ³	0.1 °C	-273 to 1735 °C	15260
1156	65183	1156:Exh.Gas Port 20 Temp ³	0.1 °C	-273 to 1735 °C	15261
1157	65182	1157:Main Bearing 1 Temp ³	0.1 °C	-273 to 1735 °C	15262
1158	65182	1158:Main Bearing 2 Temp ³	0.1 °C	-273 to 1735 °C	15263
1159	65182	1159:Main Bearing 3 Temp ³	0.1 °C	-273 to 1735 °C	15264
1160	65182	1160:Main Bearing 4 Temp ³	0.1 °C	-273 to 1735 °C	15265
1161	65181	1161:Main Bearing 5 Temp ³	0.1 °C	-273 to 1735 °C	15266
1162	65181	1162:Main Bearing 6 Temp ³	0.1 °C	-273 to 1735 °C	15267
1163	65181	1163:Main Bearing 7 Temp ³	0.1 °C	-273 to 1735 °C	15268
1164	65181	1164:Main Bearing 8 Temp ³	0.1 °C	-273 to 1735 °C	15269
1165	65180	1165:Main Bearing 9 Temp ³	0.1 °C	-273 to 1735 °C	15270
1166	65180	1166:Main Bearing 10 Temp ³	0.1 °C	-273 to 1735 °C	15271
1167	65180	1167:Main Bearing 11 Temp ³	0.1 °C	-273 to 1735 °C	15272
1172	65178	1172:Turbo1 Compr.Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15273
1173	65178	1173:Turbo2 Compr.Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15274
1174	65178	1174:Turbo3 Compr.Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15275
1175	65178	1175:Turbo4 Compr.Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15276
1176	65177	1176:Turbo1 Compr.Intake Press ⁴	1 kPa	-250 to 251 kPa	15277
1177	65177	1177:Turbo2 Compr.Intake Press ⁴	1 kPa	-250 to 251 kPa	15278
1178	65177	1178:Turbo3 Compr.Intake Press ⁴	1 kPa	-250 to 251 kPa	15279
1179	65177	1179:Turbo4 Compr.Intake Press ⁴	1 kPa	-250 to 251 kPa	15280
1180	65176	1180:Turbo1 Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15281
1181	65176	1181:Turbo2 Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15282
1182	65176	1182:Turbo3 Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15283
1183	65176	1183:Turbo4 Intake Temp ⁴	0.1 °C	-273 to 1735 °C	15284
1184	65175	1184:Turbo1 Outlet Temp ⁴	0.1 °C	-273 to 1735 °C	15285
1185	65175	1185:Turbo2 Outlet Temp ⁴	0.1 °C	-273 to 1735 °C	15286
1186	65175	1186:Turbo3 Outlet Temp ⁴	0.1 °C	-273 to 1735 °C	15287
1187	65175	1187:Turbo4 Outlet Temp ⁴	0.1 °C	-273 to 1735 °C	15288
1203	65172	1203:Aux.Coolant Press ⁴	1 kPa	0 to 1000 kPa	15289

SPN	PGN	Description	Resol.	Data range J1939	Index
1208	65170	1208:Pre-filter Oil Pressure ⁴	1 kPa	0 to 1000 kPa	15290
1212	65172	1212:Aux. Coolant Temperature ⁴	1 °C	-40 to 210 °C	15291
1382	65130	1382:Fuel Filter Diff. Press ⁴	1 kPa	0 to 500 kPa	15292
1761	65110	1761:Aftertr.1 Exh.Tank1 Lev. ⁴	0.1%	0 to 100%	15313
1800	65104	1800:Battery 1 Temperature ⁴	1 °C	-40 to 210 °C	15293
1801	65104	1801:Battery 2 Temperature ⁴	1 °C	-40 to 210 °C	15294
1802	65189	1802:Intake Manifold 5 Temp ⁴	1 °C	-40 to 210 °C	15295
1803	65189	1803:Intake Manifold 6 Temp ⁴	1 °C	-40 to 210 °C	15296
2433	65031	2433:Right Exhaust Gas Temp ⁴	0.1 °C	-273 to 1735 °C	15297
2434	65031	2434:Left Exhaust Gas Temp ⁴	0.1 °C	-273 to 1735 °C	15298
2629	64979	2629:Turbo1 Compr. Outl. Temp ⁴	0.1 °C	-273 to 1736 °C	15310
3031	65110	3031:Aftertr.1 Exh.Tank1 Temp. ⁴	1 °C	-40 to 210 °C	15314
3216	61454	3216:Aftertreatm.1 NOx intake ⁴	0.05 ppm	-200 to 3012.75 ppm	15909
3226	61455	3226:Aftertreatm.1 NOx outlet ⁴	0.05 ppm	-200 to 3012.75 ppm	15911
3251	64946	3251:DPF Differential press. ⁴	0.1 kPa	0 to 6425.5 kPa	15550
3380	64934	3380:Excitation volt. ⁵	0.05 V	-1606.00 to 1606.75 V (only AM)	15904
3381	64934	3381:Excitation curr. ⁵	0.05 A	0 to 3212.75 A (only AM)	15905
3644	64914	3644:Derate Request ⁴	0.1 %	0 to 100%	15311
3697	64892	3697: DPF Lamp ⁵		enumeration	15504
3698	64892	3698: Exh. Gas temp.lamp ⁵		enumeration	15505
3699	64892	3699: DPF Passive regen. state ⁵		enumeration	15608
3700	64892	3700: DPF Active regen. status ⁵		enumeration	15506
3701	64892	3701: DPF Regeneration needed ⁵		enumeration	15507
3702	64892	3702: DPF Act. regen. inhibit ⁵		enumeration	15607
3703	64892	03.87 Inhibit Switch ⁶		enumeration (only LM)	11030
3711	64892	03.88 Low exhaust temp. ⁶		enumeration (only LM)	11031
3712	64892	03.89 System fault active ⁶		enumeration (only LM)	11032
3713	64892	03.90 System timeout ⁶		enumeration (only LM)	11033
3714	64892	03.91 Temporary lockout ⁶		enumeration (only LM)	11034

SPN	PGN	Description	Resol.	Data range J1939	Index
3715	64892	03.92 Permanent lockout ⁶		enumeration (only LM)	11035
3716	64892	03.93 Engine not warmed up ⁶		enumeration (only LM)	11036
3719	64891	3719:DPF 1 Soot load ⁴	1 %	0 to 250 %	12018
3720	64891	3720:DPF 1 Ash load ⁴	1 %	0 to 250 %	12019
3721	64891	3721 DPF1 time since regen. ⁴	1 s	0 to 4211081215 s	12043
3750	64892	03.86 DPF1 Act.reg.inhibit ⁶		enumeration (only LM)	11029
3251	64946	3251:DPF Differential press.	0.1 kPa	0 to 6,425.5 kPa	15550
4151	64851	4151: Exhaust Gas Temp. Avr. ³	0.1 °C	-273 to 1734 °C	12807
4152	64851	4152: Exh. Gas Temp. Avr. B2 ³	0.1 °C	-273 to 1734 °C	12812
4153	64851	4153: Exh. Gas Temp. Avr. B1 ³	0.1 °C	-273 to 1734 °C	12809
4332	61475	4332: SCR System state ⁵		enumeration	12049
4367	64829	4367:Aftertr.1 Exh.Tank2 Lev. ⁴	0.1 %	0 to 100%	15315
4368	64829	4367:Aftertr.1 Exh.Tank2 Lev. ⁴	1 °C	-40 to 210 °C	15316
4990	64789	4990: Charger 1 state ⁵		enumeration	15913
4991	64789	4991: Charger 1 power line ⁵		enumeration	15914
4992	64789	4992: Charger 1 output volt. ⁴	0.05 V	0 to 3212.75 V	15915
4993	64789	4993: Charger 1 output current ⁴	0.05 A	-1600 to 1612.75 A	15916
5245	65110	5245: SCR Inducement (DEF) ⁵		enumeration	12047
5246	65110	5246: SCR Inducement severity ⁵		enumeration	12048
5466	64891	5466 DPF1 soot load threshold ⁴	0.01 %	0 to 160.63 %	12044
6915	64586	6915: SCR Cleaning Lamp ⁵		enumeration	12050

Notes to SPNs:

- ¹Value located at "J1939 Analog values 1"
- ²Value located at "J1939 Analog values 2"
- ³Value located at "J1939 Analog values 3"
- ⁴Value located at "J1939 Analog values 4"
- ⁵Value located at "J1939 Status miscellaneous". (Additionally there are "Logical Command Variables".)
- ⁶Value only available as "Logical Command Variable" or "AnalogManager Variable"
- ⁷ If the total engine hours sent by the ECU exceed 419,000 hrs, the display in the unit is not correct anymore.