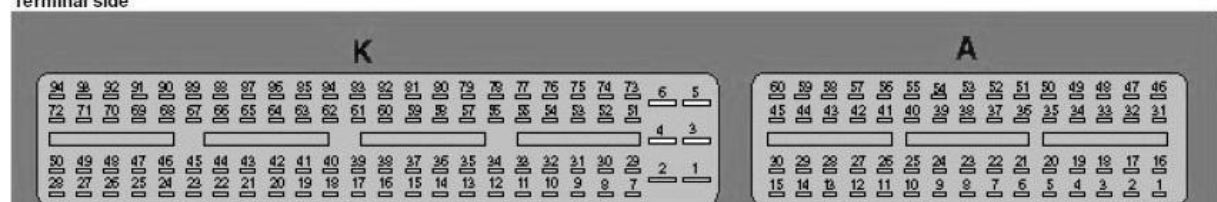
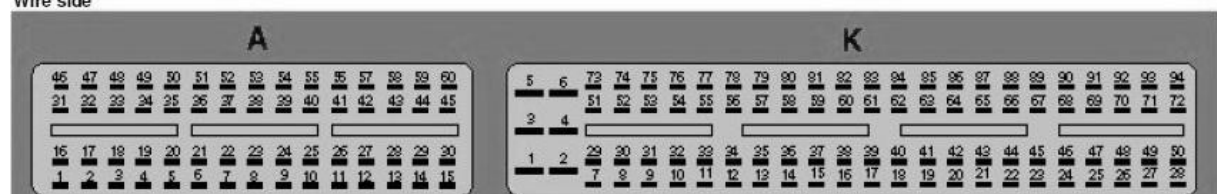


Terminal side



Wire side



<u>Accelerator pedal position (APP) sensor</u>	K31	←	Ignition ON - accelerator pedal released	0,5 V
<u>Accelerator pedal position (APP) sensor</u>	K31	←	Ignition ON - accelerator pedal depressed	1,9 V
<u>Accelerator pedal position (APP) sensor</u>	K45	⇒	Ignition ON	5 V
<u>Accelerator pedal position (APP) sensor</u>	K46	⇒	Ignition ON	5 V
<u>Brake pedal position (BPP) switch</u>	K17	←	Ignition ON - brake pedal released	0 V
<u>Brake pedal position (BPP) switch</u>	K17	←	Ignition ON - brake pedal depressed	11-14 V
<u>Brake pedal position (BPP) switch</u>	K80	←	Ignition ON - brake pedal released	11-14 V
<u>Brake pedal position (BPP) switch</u>	K80	←	Ignition ON - brake pedal depressed	0 V
<u>Camshaft position (CMP) sensor</u>	A11	⇒	Engine idling	5 V
<u>Camshaft position (CMP) sensor</u>	A20	↯	Engine idling	0 V
<u>Camshaft position (CMP) sensor</u>	A50	←	Ignition ON	0 V or 5 V
<u>Camshaft position (CMP) sensor</u>	A50	←	Engine idling	
CAN data bus - low	K61	↔		Connected pin - no test data available or random digital signal
CAN data bus - low	K83	↔		Connected pin - no test data available or random digital signal
CAN data bus - high	K62	↔		Connected pin - no test data available or random digital signal
CAN data bus - high	K84	↔		Connected pin - no test data available or random digital signal
<u>Clutch pedal position (CPP) switch</u>	K79	←	Ignition ON - clutch pedal released	11,5 V

CAN data bus - low	K61	↔		Connected pin - no test data available or random digital signal
CAN data bus - low	K83	↔		Connected pin - no test data available or random digital signal
CAN data bus - high	K62	↔		Connected pin - no test data available or random digital signal
CAN data bus - high	K84	↔		Connected pin - no test data available or random digital signal
<u>Clutch pedal position (CPP) switch</u>	K79	←	Ignition ON - clutch pedal released	11,5 V
<u>Clutch pedal position (CPP) switch</u>	K79	←	Ignition ON - clutch pedal depressed	0 V
<u>Crankshaft position (CKP) sensor</u>	A12	←	Ignition ON	2,4 V ac
<u>Crankshaft position (CKP) sensor</u>	A12	←	Engine idling	
<u>Crankshaft position (CKP) sensor</u>	A27	←	Ignition ON	2,4 V ac
<u>Crankshaft position (CKP) sensor</u>	A27	←	Engine idling	
Cruise control master switch	K38			Connected pin - no test data available or random digital signal
Cruise control master switch	K56			Connected pin - no test data available or random digital signal
Cruise control master switch	K77			Connected pin - no test data available or random digital signal
Cruise control master switch	K78			Connected pin - no test data available or random digital signal

Data link connector (DLC)	K25	←	Ignition ON	10,4 V
Data link connector (DLC)	K25	←	Engine idling	12,4 V
<u>Diesel particulate filter (DPF) pressure sensor</u>	K36	←	Ignition ON	0,5 V
<u>Diesel particulate filter (DPF) pressure sensor</u>	K36	←	Engine idling	0,5 V
<u>Diesel particulate filter (DPF) pressure sensor</u>	K37	↗	Ignition ON	0 V
<u>Diesel particulate filter (DPF) pressure sensor</u>	K44	⇒	Ignition ON	5 V
Earth	K2		Ignition ON	0 V
Earth	K4		Ignition ON	0 V
Earth	K6		Ignition ON	0 V
<u>Engine control (EC) relay</u>	K1	←	Ignition OFF	0 V
<u>Engine control (EC) relay</u>	K1	←	Ignition ON	11-14 V
<u>Engine control (EC) relay</u>	K5	←	Ignition OFF	0 V
<u>Engine control (EC) relay</u>	K5	←	Ignition ON	11-14 V
<u>Engine control (EC) relay</u>	K72	↗	Ignition OFF	11-14 V
<u>Engine control (EC) relay</u>	K72	↗	Ignition ON	0-1 V
Engine coolant blower motor relay 1	K69	↗	Engine idling - coolant blower motor OFF	11-14 V
Engine coolant blower motor relay 1	K69	↗	Engine idling - coolant blower motor ON - high speed	0-1 V
Engine coolant blower motor relay 2	K69	↗	Engine idling - coolant blower motor OFF	11-14 V
Engine coolant blower motor relay 2	K69	↗	Engine idling - coolant blower motor ON - high speed	0-1 V
Engine coolant blower motor relay 3	K90	↗	Engine idling - coolant blower motors OFF	11-14 V
Engine coolant blower motor relay 3	K90	↗	Engine idling - coolant blower motors ON - low speed	0-1 V

Engine coolant blower motor relay 3	K90		Engine idling - coolant blower motors ON - low speed	0-1 V
<u>Engine coolant temperature (ECT) sensor</u>	A41		Ignition ON	0 V
<u>Engine coolant temperature (ECT) sensor</u>	A58		Ignition ON - coolant temp. 20 °C	3,7 V
<u>Engine coolant temperature (ECT) sensor</u>	A58		Ignition ON - coolant temp. 75 °C	1,2 V
Engine oil pressure switch	A56		Ignition ON	0 V
Engine oil pressure switch	A56		Engine idling	5 V
<u>Exhaust gas recirculation (EGR) solenoid</u>	A60		Ignition ON	141 Hz/4%
<u>Exhaust gas recirculation (EGR) solenoid</u>	A60		Engine idling	141 Hz/4,5%
<u>Exhaust gas temperature sensor 1</u>	K32		Ignition ON	0,8 V
<u>Exhaust gas temperature sensor 1</u>	K32		Engine idling	1,1 V
<u>Exhaust gas temperature sensor 1</u>	K33		Ignition ON	0 V
<u>Exhaust gas temperature sensor 2</u>	K34		Ignition ON	0,8 V
<u>Exhaust gas temperature sensor 2</u>	K34		Engine idling	1,1 V

<u>Exhaust gas temperature sensor 2</u>	K35		Ignition ON	0 V
<u>Fuel pressure regulator control solenoid</u>	A19		Ignition ON	11-14 V
<u>Fuel pressure regulator control solenoid</u>	A49		Ignition ON	11-14 V
<u>Fuel pressure regulator control solenoid</u>	A49		Engine idling	
Fuel pump (FP) relay	K28		Ignition ON	11-14 V
Fuel pump (FP) relay	K91		Ignition ON	11-14 V
Fuel pump (FP) relay	K91		Engine idling	0,1 V
<u>Fuel rail pressure (FRP) control valve</u>	A4		Engine idling	11-14 V
<u>Fuel rail pressure (FRP) control valve</u>	A34		Ignition ON	
<u>Fuel rail pressure (FRP) control valve</u>	A34		Engine idling	
<u>Fuel rail pressure (FRP) sensor</u>	A8		Ignition ON	0 V
<u>Fuel rail pressure (FRP) sensor</u>	A28		Ignition ON	5 V
<u>Fuel rail pressure (FRP) sensor</u>	A43		Ignition ON	0,5 V
<u>Fuel rail pressure (FRP) sensor</u>	A43		Engine idling	1,1 V
<u>Fuel rail pressure (FRP) sensor</u>	A43		Engine idling - accelerate briefly	1,9 V briefly
<u>Fuel temperature sensor</u>	K10		Ignition ON	0 V
<u>Fuel temperature sensor</u>	K11		Ignition ON - fuel temp. 20°C	3,5 V
<u>Fuel temperature sensor</u>	K11		Ignition ON - fuel temp. 65°C	2,8 V
<u>Fuel/water separator sensor</u>	K74		Ignition ON	11,7 V
<u>Fuel/water separator sensor</u>	K74		Engine idling	11-14 V
Glow plug control module	K52			Connected pin - no test data available or random

<u>Fuel rail pressure (FRP) sensor</u>	A43	←	Ignition ON	0,5 V
<u>Fuel rail pressure (FRP) sensor</u>	A43	←	Engine idling	1,1 V
<u>Fuel rail pressure (FRP) sensor</u>	A43	←	Engine idling - accelerate briefly	1,9 V briefly
<u>Fuel temperature sensor</u>	K10	↗	Ignition ON	0 V
<u>Fuel temperature sensor</u>	K11	←	Ignition ON - fuel temp. 20 °C	3,5 V
<u>Fuel temperature sensor</u>	K11	←	Ignition ON - fuel temp. 65 °C	2,8 V
<u>Fuel/water separator sensor</u>	K74	←	Ignition ON	11,7 V
<u>Fuel/water separator sensor</u>	K74	←	Engine idling	11-14 V
<u>Glow plug control module</u>	K52			Connected pin - no test data available or random digital signal
<u>Glow plug control module</u>	K93			Connected pin - no test data available or random digital signal
<u>Immobilizer control module - in multifunction control module</u>	K47	←	Ignition ON	11 V
<u>Immobilizer control module - in multifunction control module</u>	K47	←	Engine idling	11-14 V
<u>Injector 1</u>	A16 (A47)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 1</u>	A47 (A16)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 2</u>	A2 (A31)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 2</u>	A31 (A2)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 3</u>	A1 (A46)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 3</u>	A46 (A1)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 4</u>	A17 (A33)	⇒	Engine idling	1 ms pilot + 1 ms main

<u>Injector 4</u>	A33 (A17)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 5</u>	A18 (A48)	⇒	Engine idling	1 ms pilot + 1 ms main
<u>Injector 5</u>	A48 (A18)	⇒	Engine idling	1 ms pilot + 1 ms main
Instrument panel	K26			Connected pin - no test data available or random digital signal
Instrument panel	K71	←	Ignition ON	0 V
Instrument panel	K71	←	Engine idling	11-14 V
<u>Intake air temperature (IAT) sensor</u>	A37	←	Ignition ON - air temp. 20 °C	19 Hz/37%
<u>Intake manifold air control solenoid</u>	A6	⌋	Ignition ON	0 V
<u>Intake manifold air control solenoid</u>	A35	←	Ignition ON	5 Hz/75%
<u>Intake manifold air control solenoid</u>	A35	←	Engine idling	5 Hz/75%
<u>Intake manifold air control solenoid</u>	A45	←	Ignition ON	141 Hz
<u>Intake manifold air control solenoid</u>	A45	←	Engine idling	141 Hz/10%
<u>Mass air flow (MAF) sensor</u>	A42	←	Engine idling	22000 Hz/52%
<u>Mass air flow (MAF) sensor</u>	A44	⌋	Ignition ON	0 V
<u>Throttle control solenoid</u>	A59	←	Ignition ON	263 Hz/98%
<u>Throttle control solenoid</u>	A59	←	Engine idling	263 Hz/20%
Throttle position (TP) sensor	A39	⌋	Ignition ON	0 V
Throttle position (TP) sensor	A52	←	Ignition ON	
Throttle position (TP) sensor	A52	←	Engine idling	

<u>Throttle control solenoid</u>	A59	←	Ignition ON	263 Hz/98%
<u>Throttle control solenoid</u>	A59	←	Engine idling	263 Hz/20%
<u>Throttle position (TP) sensor</u>	A39	⌋	Ignition ON	0 V
<u>Throttle position (TP) sensor</u>	A52	←	Ignition ON	
<u>Throttle position (TP) sensor</u>	A52	←	Engine idling	
<u>Turbocharger (TC) boost air temperature sensor</u>	A23	⌋	Ignition ON	0 V
<u>Turbocharger (TC) boost air temperature sensor</u>	A53	←	Ignition ON	3 V
<u>Turbocharger (TC) boost air temperature sensor</u>	A53	←	Engine idling	2,3 V
<u>Turbocharger (TC) boost pressure sensor</u>	A13	⇒	Ignition ON	5 V
<u>Turbocharger (TC) boost pressure sensor</u>	A23	⌋	Ignition ON	0 V
<u>Turbocharger (TC) boost pressure sensor</u>	A40	←	Engine idling	1,6 V
<u>Turbocharger (TC) boost pressure sensor</u>	A40	←	Engine idling - accelerate briefly	2,7 V briefly
<u>Turbocharger (TC) vane position actuator</u>	K7	←	Ignition ON	
<u>Turbocharger (TC) vane position actuator</u>	K7	←	Engine idling	