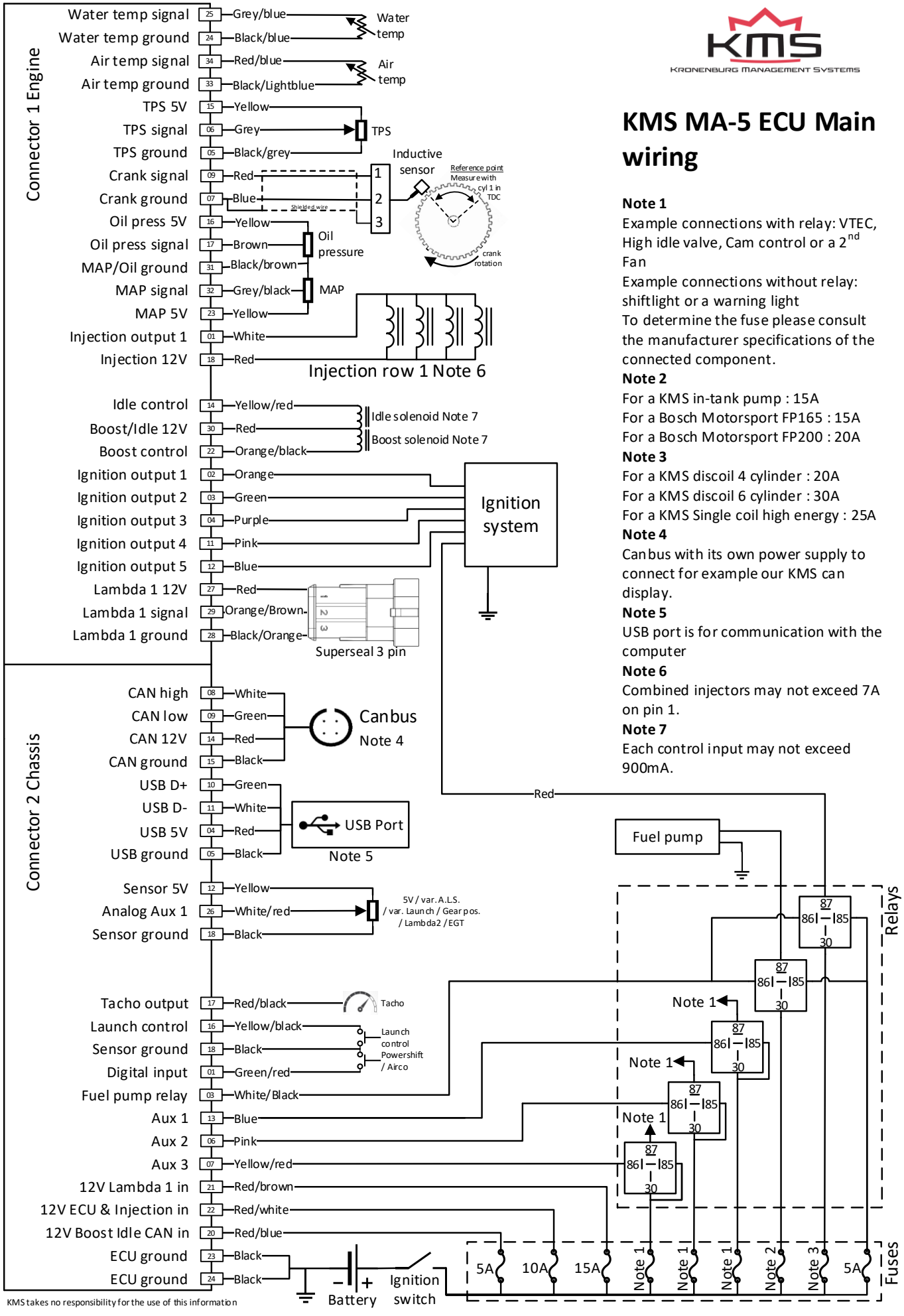
Standard colors KMS MA-5 ECU wiring loom

Pin nr. KMS	Colour	Length	Diameter: 0,5mm²	Diameter: 0,75mm²	Function
1	White		*		Injection output 1
2	Orange		*		Ignition output 1
3	Green		*		Ignition output 2
4	Purple		*		Ignition output 3
5	Black/grey		*		TPS ground
6	Grey		*		TPS signal
7	Blue(Shielded)		*		Crank ground
9	Red (shielded)		*		Crank signal inductive
11	Pink		*		Ignition output 4
12	Blue		*		Ignition output 5
14	Yellow/Red		*		Idle control
15	Yellow "TPS 5V"		*		TPS 5V
16	Yellow "Oil 5V"		*		Oil press 5V
17	Brown		*		Oil press signal
18	Red "ignition 12V"			*	Injection 12V
22	Orange/Black		*		Boost control
23	Yellow "MAP 5V"		*		MAP 5V
24	Black/Blue		*		Water temp ground
25	Grey/Blue		*		Water temp signal
27	Red "Lambda 12V"			*	Lambda1 12V
28	Black/Orange			*	Lambda1 Ground
29	Orange/Brown		*		Lambda1 signal
30	Red "Boost/Idle 12V"			*	Boost / Idle 12V
31	Black/Brown		*		MAP/Oil ground
32	Grey/Black		*		MAP signal
33	Black/Lightblue		*		Air temp ground
34	red/blue		*		Air temp signal

1	Red/Green		*		Digital input*
3	White/Black		*		Fuel pump relay
4	Red				USB 5v
5	Black				USB ground
6	Pink		*		Aux 2
7	Yellow /red		*		Aux 3
8	White				CAN high
9	Green				CAN low
10	Green				USB D+
11	White				USB D-
12	Yellow		*		Sensor 5V
13	Blue		*		Aux 1
14	Red				CAN 12V
15	Black				CAN ground
16	Yellow/Black		*		Launch control
17	Red/Black		*		Tacho output
18	Black		*		Sensor ground
20	Red "12V 5A "		*		12V Boost idle CAN in
21	Red "12V 15A"			*	12V Lambda in
22	Red "12V 10A "			*	12V ECU & Injection in
23	Black			*	ECU ground
24	Black			*	ECU ground
26	White/Red		*		Analog aux 1**

For more information, user manuals, wiring examples and software see our website: http://kms.vankronenburg.nl



KMS takes no responsibility for the use of this information

KMS MA-5 ECU Main wiring

Note 1
Example connections with relay: VTEC, High idle valve, Cam control or a 2nd Fan
Example connections without relay: shiftlight or a warning light
To determine the fuse please consult the manufacturer specifications of the connected component.

Note 2
For a KMS in-tank pump : 15A
For a Bosch Motorsport FP165 : 15A
For a Bosch Motorsport FP200 : 20A

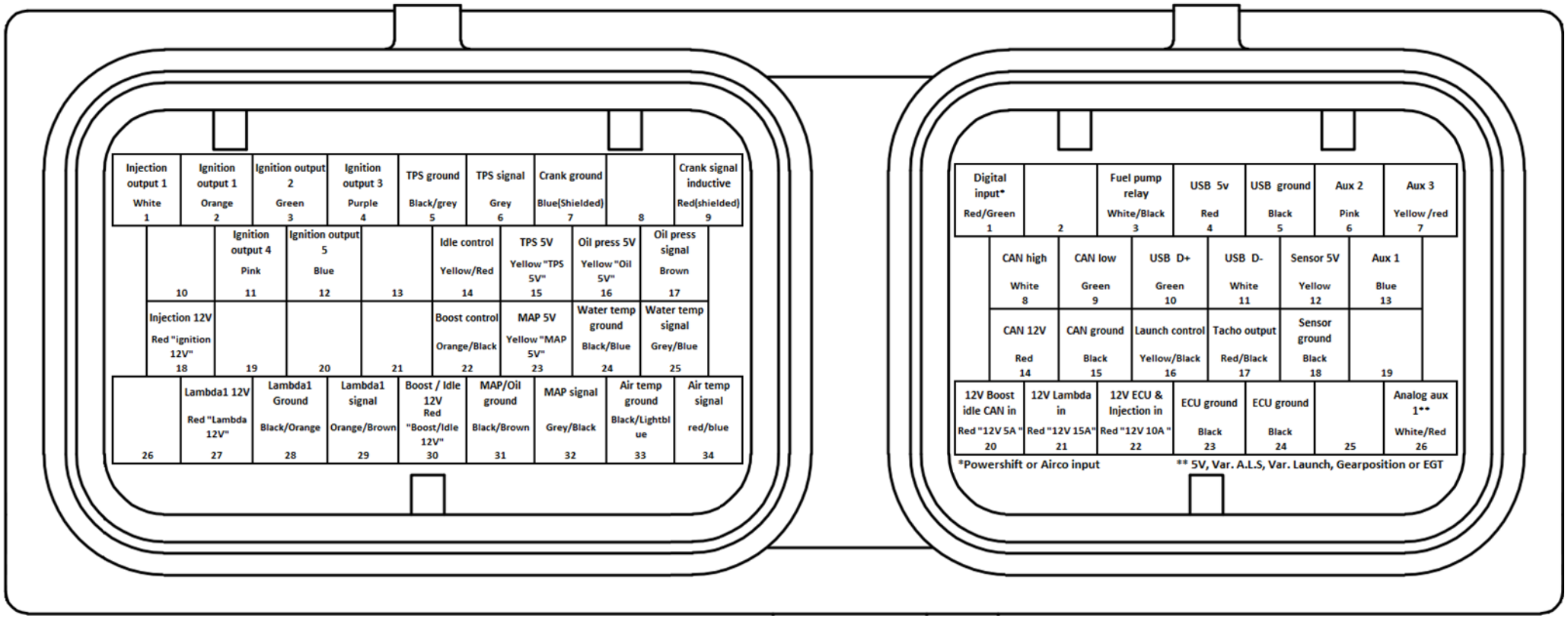
Note 3
For a KMS discoil 4 cylinder : 20A
For a KMS discoil 6 cylinder : 30A
For a KMS Single coil high energy : 25A

Note 4
Canbus with its own power supply to connect for example our KMS can display.

Note 5
USB port is for communication with the computer

Note 6
Combined injectors may not exceed 7A on pin 1.

Note 7
Each control input may not exceed 900mA.



MA-5 main wiring

Note 1: The injector output can deliver a maximum current of 7A. This means that a maximum of 6 high impedance (>=12 Ohm) injectors can be used on one injector output (pin 1). When using low impedance injectors (<12 Ohm) or more than 6 high impedance injectors on one injector output, an external KMS injection driver needs to be used. KMS injection drivers can take up to a maximum of 10A per output. For connection of the injection driver, see wiring examples.
Note 2: The value/capacity of the fuse is dependent on the total maximum current of the electrical components connected. See wiring examples for deterring the fuse values.
Note 3: Preferably put all ground connections (except coil ground!) on the same chassis point, to prevent a difference in potential between the grounds. **Warning:** The coil ground should be connected to the chassis on a separate point to prevent remaining ignition currents from transferring to the ECU system.
Note 4: All sensor grounds (including the shield of the crankshaft wires) must be soldered together at one point as close as possible to the main connector. The connecting point should then be wired to the main connecter by one single wire.