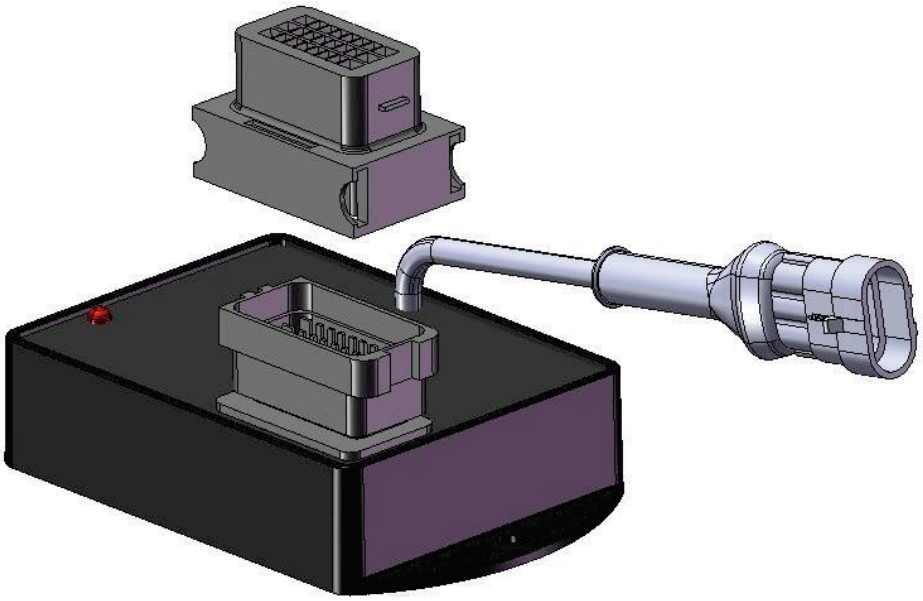
Index



General information - Features

The MAV4211SH controller unit is used for the control of variable displacement pumps and motors and additional switching functions. The proportional solenoid outputs are pulse -width-modulated (PWM) and optimally adapted for electric proportional control of Dana products. The switched outputs are designed for the direct switching of relays, lamps and switching solenoids. The MAV4211SH unit can managed up to 2 analog input signal and 4 PWM current output. Connecting the card properly, can be used in at least 5 different applications.
The RS232 serial interface and BPE software tool enables the connection of PC for service functions, such as diagnostics, parameter setting or display of process variables. The software is free downloadable from internet site:

http://www.bpe-electronics.it/upload/bpeterminal.zip

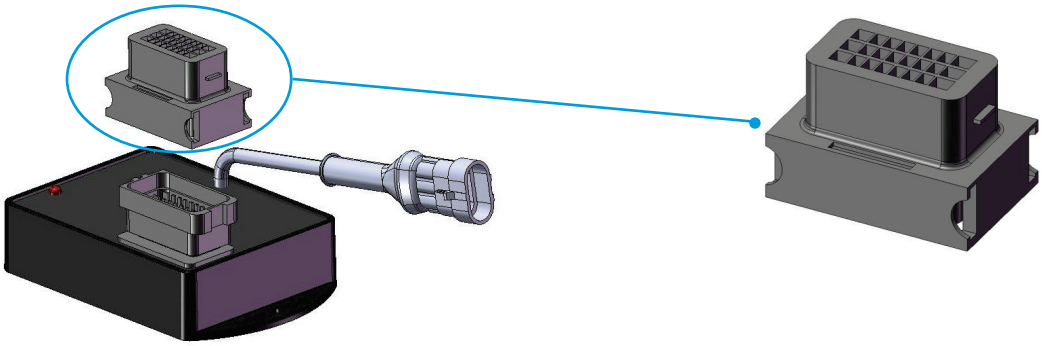
Adjustment parameters by RS232 link :
- Frequency PWM
- Offset current
- Gain current
- Ramp up time current
- Ramp down time current
- Analog input configuration (0÷5V, 0÷10V, 0÷20mA).

Main features:
- CE requirements: European norms: EN61000-ElectroMagnetic Compatibility (EMC) - industrial environment.

Additional features:
- Aerial platforms
- Mobile cranes
- Agricultural machines
- Handling machines

Nominal voltage		12V - 24V
Operating supply voltage		9 ÷ 33Vdc
Current consumption	With load, max	9 A
Protection Fuse	Only external	Rapid fuse 10A
Constant voltage source	For joystick supply	5V
Analog inputs	N°2 polarized at 2.5V	0 ÷ 2.5V ÷ 5V
	N° 2 selectable from Voltage to current	0 ÷ 10V
		0 ÷ 20mA
Switch input	High or low active	Low< 1.5V; high > 6V
Proportional PWM output		0 ÷ 2A
PWM frequency range		70Hz ÷ 250Hz
On/off output (mosfet)	Max load	3A
Led indicator		Green / Red / Yellow
Interfaces		RS232
Number of switch inputs	MAV - Enable	1
	Enable the motor displacement variation	1
	Forward / Reverse	2
Number of PWM output		4
Number on/off output	Motor Brake Release	2
Protection against short circuit	Input and output	Yes
Reverse connect protection	Power supply	Yes
Operating temperature		-40 ÷ 70°C
IP protection	With mounted mating connector	IP67
Mating connector	FCI - SICMA	24 poles

Ordering code

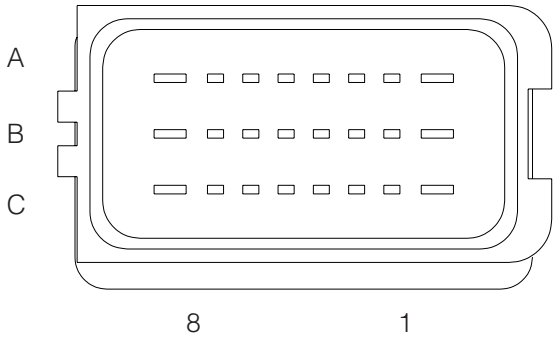


The card will be supplied in configuration 1 as “Control of one circuit closed pump”. For more information, please to consult the instruction manual.

Plug-in connector to separate order under material:
- 24 poles FCI - SICMA

- Plug in connector to 24 poles FCI – SICMA with 1 mt. cable length.

SICMA 2



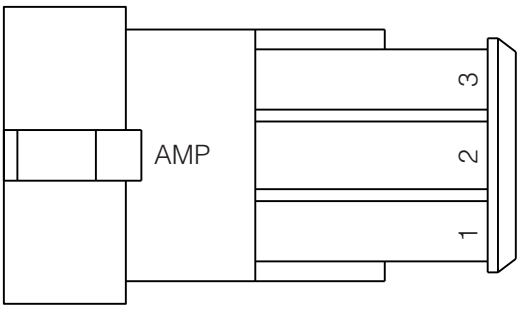
pin	8	7	6	5	4	3	2	1
A	On/off output Brake 1	Input EMDV	Return PWM 1 A and B	PWM out A2	Input Fw / Rw			Pos (+) Supply

pin	8	7	6	5	4	3	2	1
B	PWM out B1	Return PWM A3	Return PWM A2	input enable	Analog input CH1	Analog input CH3		PWM out A3

pin	8	7	6	5	4	3	2	1
C	PWM out A2	5V joystick supply	PWM out A1	On/off output Brake 2	Analog input CH2	Analog input CH4	Input Fw/Rw	Neg (-) Supply

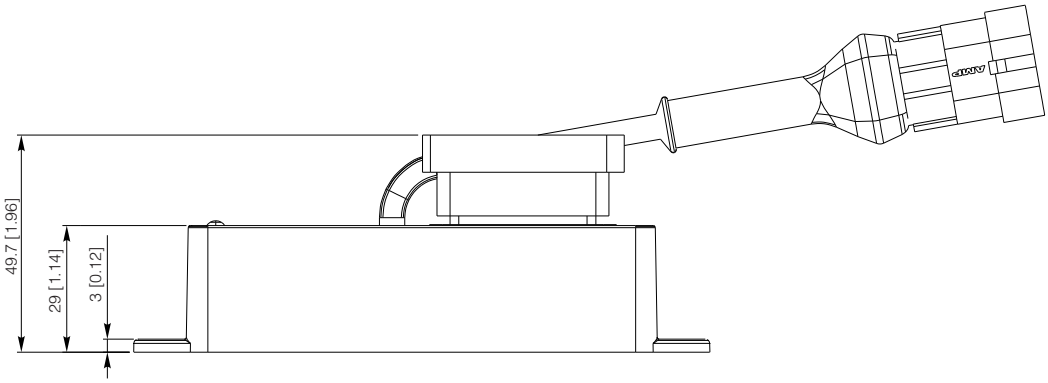
Note:
The negative (0V) of joysticks supply or pedal has to be connected to the negative of battery.

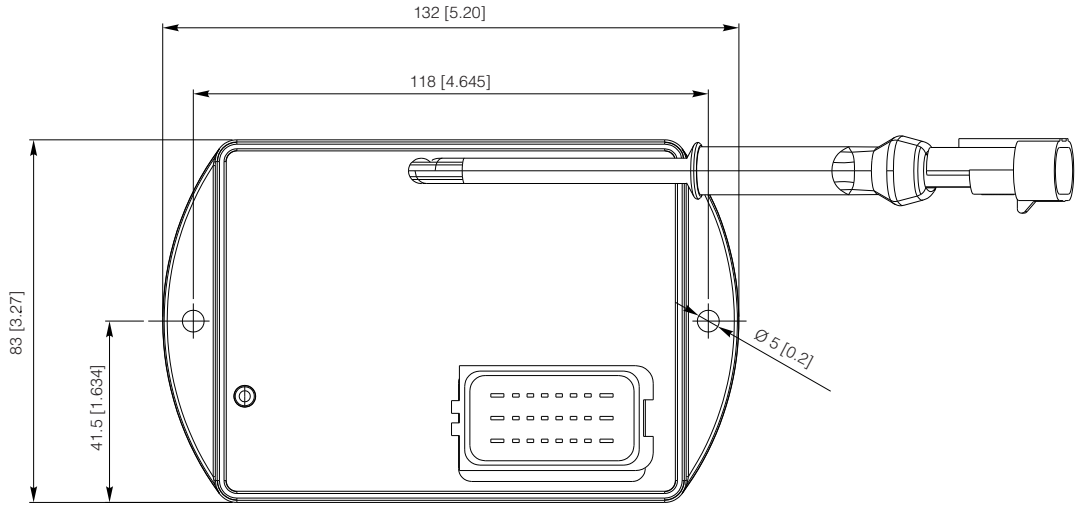
Serial Link RS232 connector : AMP superseal 1.5



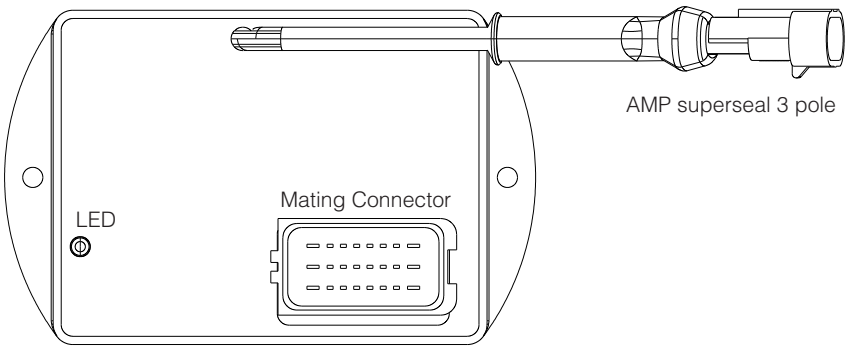
Pin 1	Pin 2	Pin 3
GND	RX	TX

Dimensions



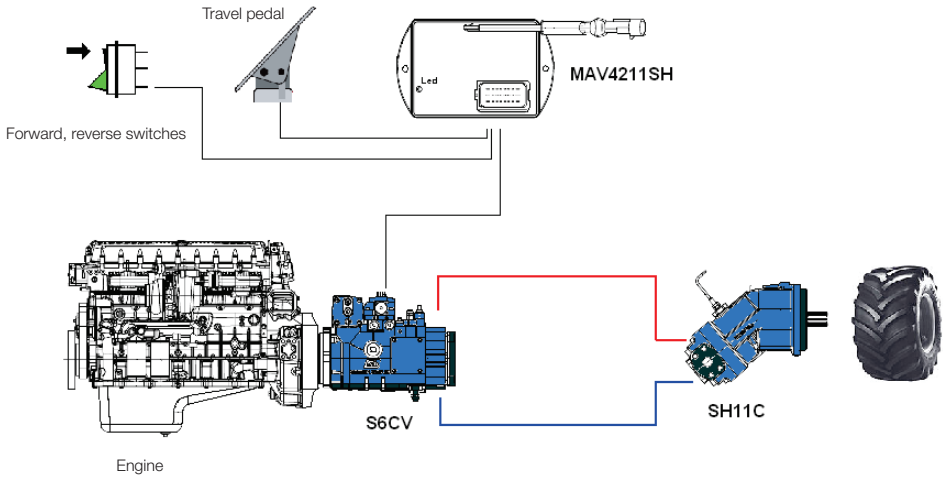


LAYOUT



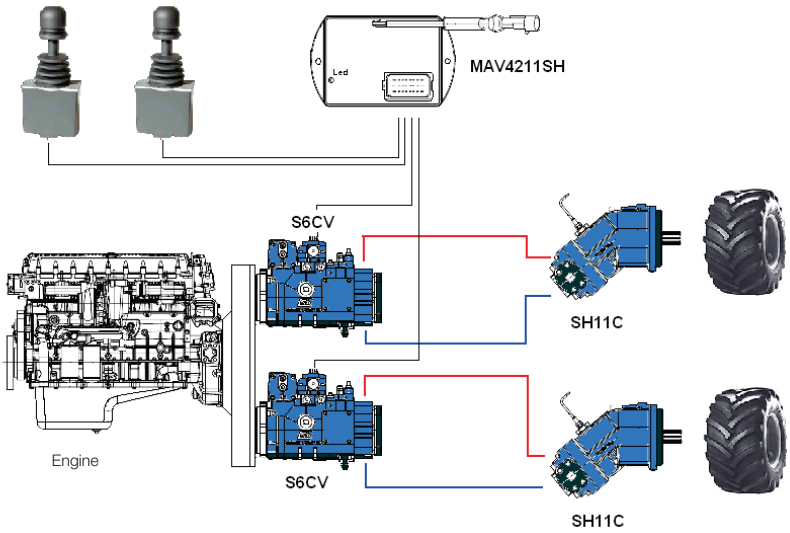
MODES 1

Control of one circuit closed pump



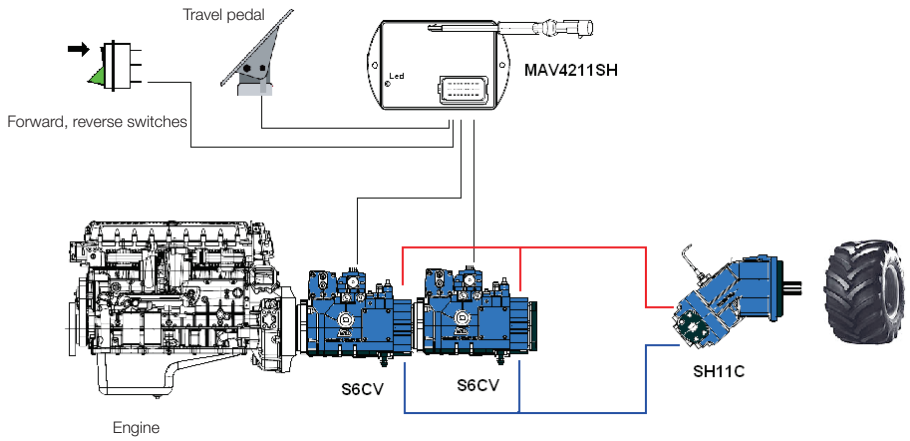
MODES 2

Control of two independent closed circuit pumps.



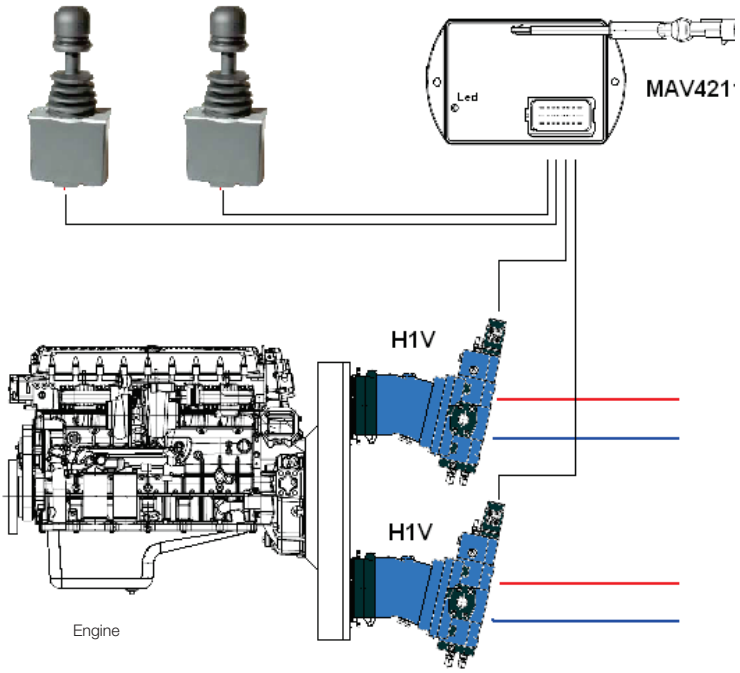
MODES 3

Control of two closed circuit pumps in tandem configuration.



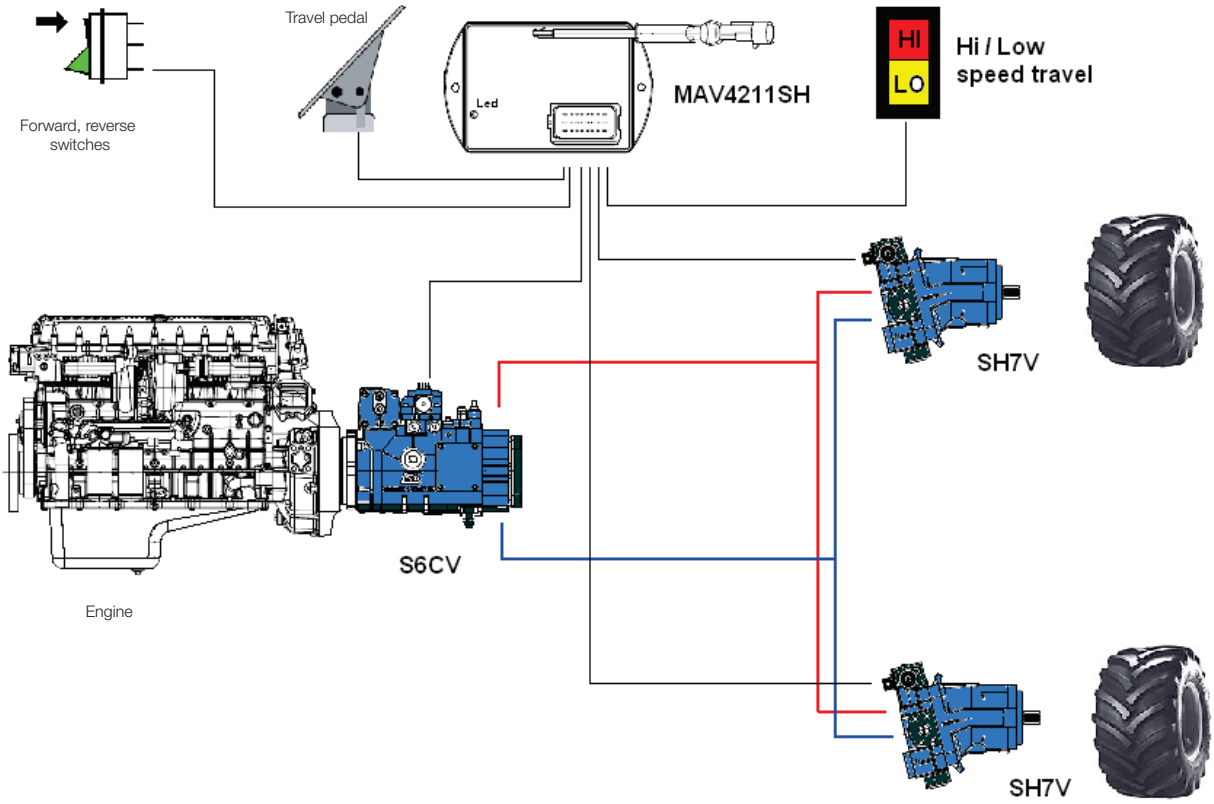
MODES 4

Control of two independent (motors) or open circuit pumps.



MODES 5

Control of one circuit closed circuit pump and one or two variable displacement motors.



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