



SPLIFT-NEXT

DC MOTOR CONTROLLER



- Rugged motor controller for up to 500W dual DC motor drive and vehicle management systems.
- two proportional power channels for traction and steering control.
- Microcontroller with watchdog, to ensure the failsafe operation
- Designed for machines and equipment equipped with a CAN BUS network.



TECHNICAL DATA

<b>MASTER CODE</b>	SPL.485
<b>POWER SUPPLY</b>	20-30 VDC
<b>INPUTS</b>	No. 2 HIGH FREQUENCY DIGITAL INPUTS (HIGH SIDE) No. 4 ANALOGUE INPUTS (4-20mA / 0-5 VDC / 0-30 VDC software selectable) No. 3 ANALOGUE INPUTS (0-30 VDC)*
<b>OUTPUTS</b>	No. 4 DIGITAL HIGH SIDE OUTPUT (MAX 2 A) – SELF PROTECTED DRIVER No. 2 H-BRIDGE (MAX 4 A)
<b>POWER OUTPUTS</b>	No. 2 POWER OUTPUTS for traction motor controller <ul style="list-style-type: none"> <li>• NOMINAL POWER PER CHANNEL: 500W</li> <li>• MAX CURRENT PER CHANNEL: 50 A</li> <li>• MAX FREQUENCY: 20 KHz</li> </ul> MOTOR CONTROL: Indirect magnetic field orientated vector control with sensor
<b>POWER SUPPLY OUTPUT</b>	VSNS: =V ALIM (MAX 1,10 A with PTC)
<b>NETWORK FEATURES</b>	CAN BUS PORT 2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S PROTOCOLS: CAN OPEN (CiA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) TERMINATOR LINE: integrated (software selectable)
<b>CONNECTIONS</b>	SYSTEM CONNECTOR: 23 PIN AMPSEAL CONNECTOR POWER CONNECTORS: THREAD M6X1 - LENGTH MAX: 16 mm
<b>SIGNALATION</b>	No. 3 device status leds (green, yellow, red)
<b>CASE</b>	ABS - UL94-V0 PLATE: ALLUMINIUM PWR CONNECTORS: ZINCKED STEEL
<b>WORKING TEMPERATURE</b>	-20 +60°C - STORAGE: -40 +85°C





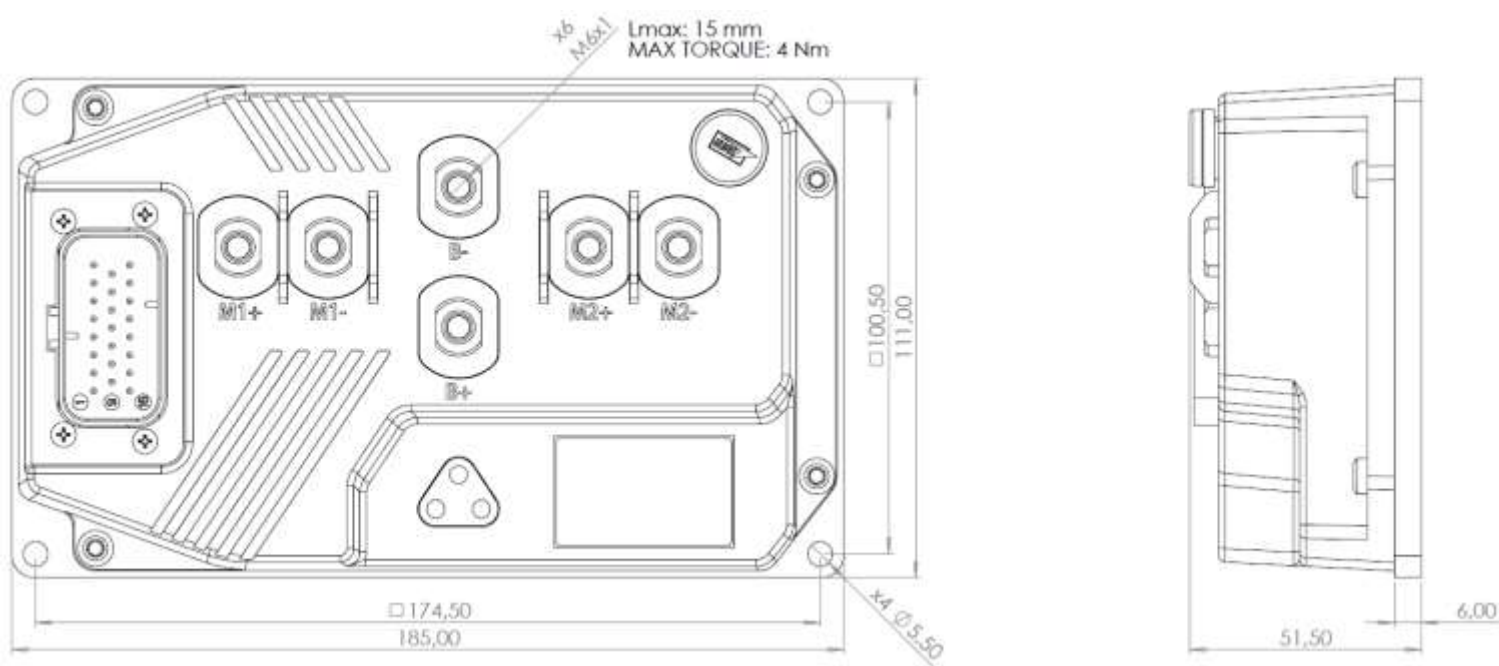
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**ELECTRONIC FEATURES**

<b>SLAVE USAGE</b>	EDS FILE
<b>PROGRAMMING</b>	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
<b>CYBER SECURITY</b>	Secure Update and secure boot ready compliant with CRA
<b>CPU</b>	CPU 1: MAIN CONTROLLER CPU 2: CPU1 WATCHDOG AND POWER MANAGEMENT

**SIZE (mm)**



**STANDARDS**

<b>ELECTROMAGNETIC (EMC)</b>	ACCORDING TO DIRECTIVE 2014/30/EU: EN 61000-6-4 EN 61000-6-2 EN 50498
<b>ENVIRONMENTAL TESTING</b> Mechanical shock	IEC 60068-2-64 IEC 60068-2-27 IEC 60068-2-27 IEC 60068-2-30
<b>PERFORMANCE LEVEL</b>	ISO 13849-1:2015 Up to PLd with appropriate system layout
<b>PROTECTION</b>	IEC 60529 (IP65)



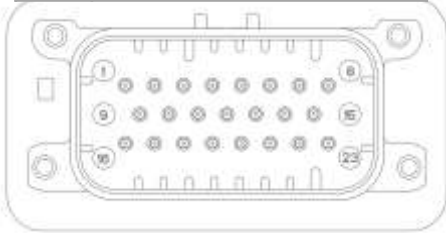
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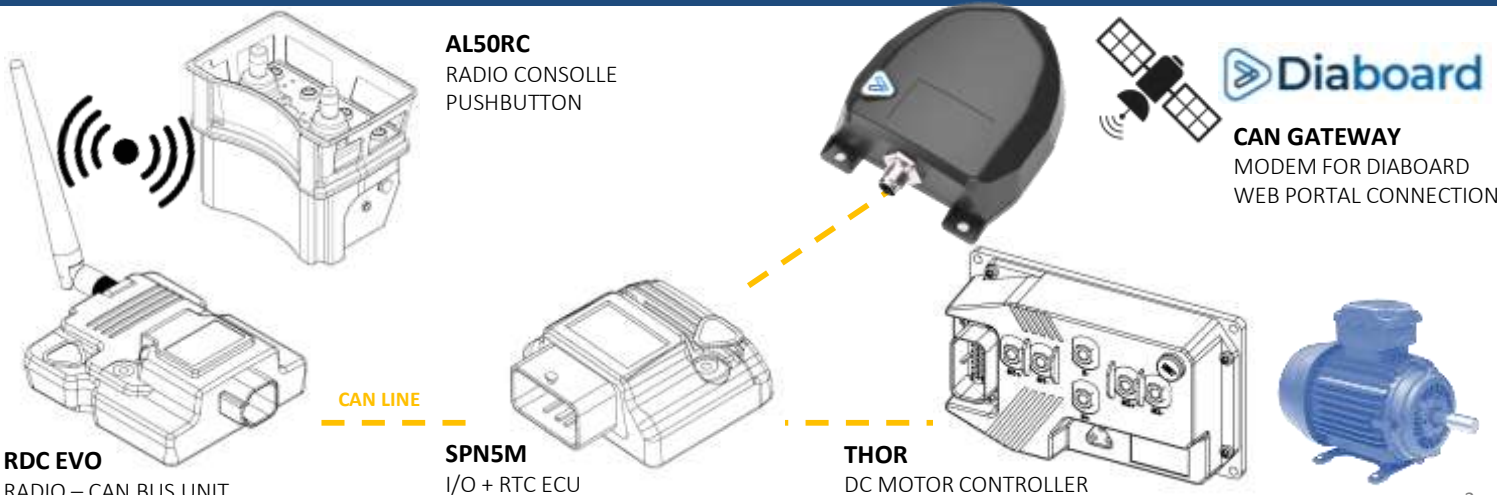
CONNECTIONS

PIN	FUNCTION
1	POWER SUPPLY
2	KEY IGNITION POWER ON
3	AN IN 4
4	AN IN 3
5	AN IN 2*
6	AN IN 1*
7	FAST DIG IN 2
8	FAST DIG IN 1
9	CAN LINE LOW
10	CAN LINE HIGH
11	AN IN 7*
12	AN IN 6
13	AN IN 5
14	H BRIDGE 1
15	H BRIDGE 1
16	V SENS
17	DIG OUT HS 1
18	DIG OUT HS 2
19	DIG OUT HS 3
20	DIG OUT HS 4
21	H BRIDGE 2
22	H BRIDGE 2
23	GND

DES.	PIN	FUNCTION
B	+	POSITIVE power output ps
	-	GND power output ps
M1	+	POSITIVE DC MOTOR power output 1
	-	GND DC MOTOR power output 1
M2	+	POSITIVE DC MOTOR power output 2
	-	GND DC MOTOR power output 2



SYSTEM INTEGRATION example





NOTE

