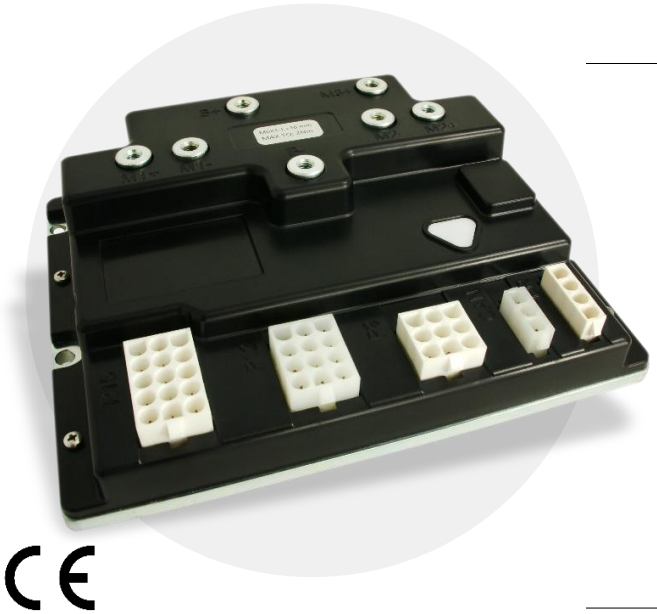
SPLIFT | DC MOTOR CONTROLLER



- ECU suitable for dual DC motor drive and vehicle management systems.
- Two proportional power channels for traction and steering control
- Redundant microcontroller
- Integrated and configurable tilt sensor
- PC software tool (via RS232) allows system diagnosis, software updates and parametrization
- CAN SLAVE version allows to manage the device by a CAN BUS network

TECHNICAL FEATURES	
MASTER CODE	SPL.444
POWER SUPPLY	18-30 VDC
INPUTS	No. 13+2* DIGITAL INPUTS (HIGH SIDE) No. 6 ANALOGUE INPUTS (0-5 VDC)
OUTPUTS	No. 4+2* DIGITAL HS OUTPUTS (MAX 2 A) – SELF PROTECTED DRIVER No. 2 DIGITAL PWM OUTPUTS (MAX 2 A – MAX 200 Hz) No. 4 DIGITAL LS OUTPUTS (MAX 1,8 A)
SHARED PIN (*)	No. 2 pin software configurable as: DIGITAL OUTPUT DIGITAL HS OUTPUT (MAX 2 A)
POWER OUTPUTS	No. 2 POWER OUTPUTS for traction motor controller NOMINAL CURRENT PER CHANNEL: 100 A MAX CURRENT PER CHANNEL: 160 A MAX FREQUENCY: 20 KHz
POWER SUPPLY OUTPUT	VREF: 5 VDC (MAX 500 mA with PTC) VSENS: V ALIM (MAX 1,10 A with PTC)
CAN BUS	No. 1 PORT: 2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S PROTOCOL for CAN slave version: CAN OPEN (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE) WITH DS306 EDS FILE
SERIAL	No. 1 PORT: RS232
TILT SENSOR	± 0 to 10°
SIGNALATION	No. 3 device status leds (green, yellow, red)
CASE	ABS - UL94-V0 PLATE AND CONNECTORS: ZINKED FE360/ALLUMINIUM
PROTECTION	IP40
WORKING TEMPERATURE	-20 +60°C - STORAGE: -40 +85°C

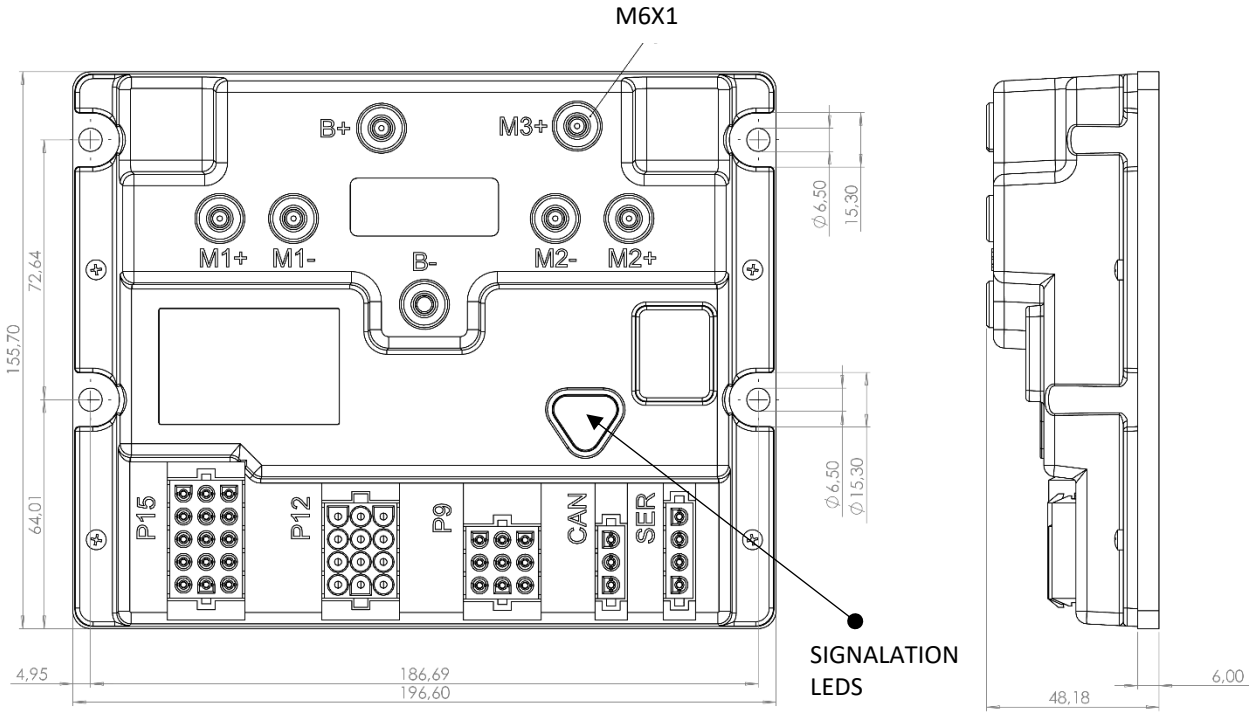
Scan me

(20/02/2026) - 1

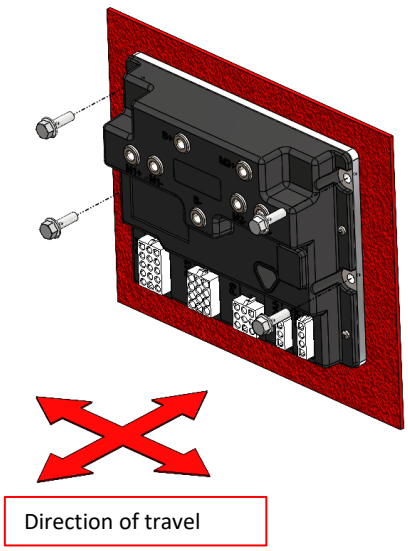
STANDARDS

DIRECTIVE	2014/30/EU (EMC)
ELECTROMAGNETIC COMPATIBILITY	EN 50498
ELECTROMAGNETIC EMISSIONS	EN 61000-6-4
ELECTROMAGNETIC IMMUNITY	EN 61000-6-2
PERFORMANCE LEVEL	ISO 13849-1:2015: PLd

SIZE (mm)



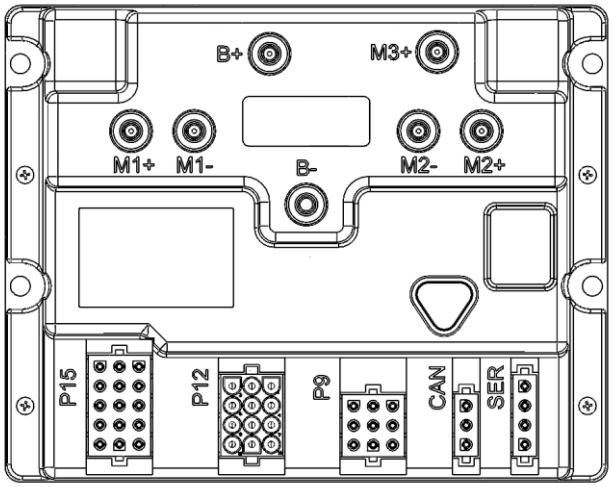
MOUNTING INFORMATIONS



FIXING BOLT	M6 - L ≥ 20 mm is recommended
POSITION	Wall mounting is needed. The device only operates in closed areas which are free from atmospheric agents: snow, rain and wind, etc.
WORKING DIRECTION	The plate must be set perpendicular to the floor and parallel or perpendicular to the direction of travel. P15-P12P9-CAN-SER connectors must be on the bottom
WIRE DISPOSITION	Wires must be downwards
PLATE	Plate is connected to the GND

ALMEC S.p.A. (a socio unico) - Via Torino 196 - 12063 - Dogliani (Cn) - Tel. +39 0173 742821 - www.almec.net - info@almec.net

CONNECTOR PINOUT



DES.	MATING PART	NOTE
M1 **M2** **M3** **B**	THREAD M6X1	LENGTH MAX: 16 mm (a spring washer add is suggested) MAX TORQUE: 2 Nm / 17,7 inlb
P15	50841150	MOLEX MLX POWER CONNECTION SERIES
P12	50841120	
P9	50841090	
CAN	50841030	
SER	50841040	

DES.	PIN	FUNCTION
P9	1	DO HS PWM 1
	2	DO HS PWM 2
	3	DO HS 1
	4	DO HS 2
	5	DO HS 3
	6	DO HS 4
	7	DO HS 5
	8	DI HS 1
	9	DO HS 6
P12	1	DI HS 2
	2	DI HS 3/ DI LS 1
	3	DI HS 4/ DI LS 2
	4	DI HS 5
	5	DI HS 6
	6	DI LS 3
	7	AIN 1
	8	VSENS+
	9	DI HS 7
	10	AIN 2
	11	AIN 3
	12	AIN 4

DES.	PIN	FUNCTION
P15	1	DI HS 8 & +V LOGIC PS
	2	DI HS 9
	3	DI HS 10
	4	DI LS 4
	5	DI HS 11
	6	DI HS 12
	7	DI LS 5
	8	DI HS 13
	9	DI HS 14
	10	DI LS 6
	11	DI HS 15
	12	VREF +
	13	AIN 5
	14	AIN 6
	15	GND LOGIC PS
CAN	1	CAN H
	2	CAN L
	3	CAN GND
SERIAL	1	+
	2	RX
	3	TX
	4	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
M3	+	+VALIM power output

ALMEC S.p.A. (a socio unico) - Via Torino 196 - 12063 - Dogliani (Cn) - Tel. +39 0173 742821 - www.almec.net - info@almec.net

NOTE