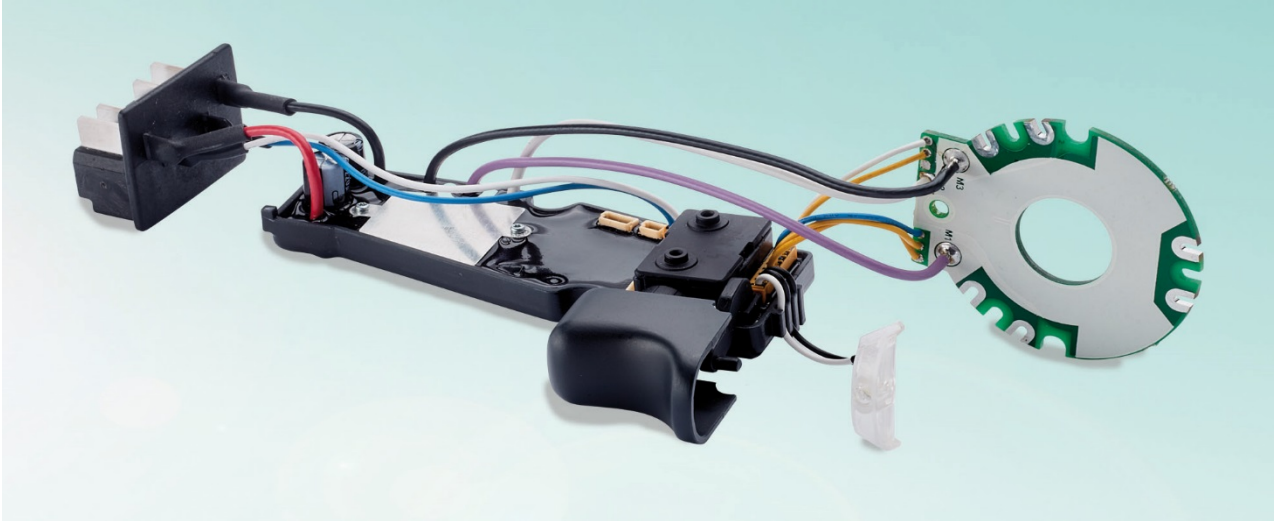




# SERIES 2811 – COMPACT BLDC CONTROLLER

WITH INTEGRATED BATTERY MONITORING



## ADVANTAGE

**Highly integrated BLDC solution**

**Easy integration into existing systems**

**Flexible design for multiple power applications**

**High level of safety and reliability**

## PRODUCT FEATURES

- Motor control electronics for 3-phase BLDC motors, integrated trigger switch and forward and reverse function
- Compact design reduces wiring efforts, adaptable for various power tools
- Multiple heat sink options to meet optimal cooling requirements; motorspeed adjustable by software; supports 3 to 6 Li-Ion battery cells
- Monitoring of voltage, overcurrent, battery temperature and MOSFET-temperature

## EXAMPLES OF APPLICATION

- Power tools
- Industrial screwdrivers
- Garden tools
- Household appliances

	Min.	Typical	Max.
Nominal operating voltage	5 V	10.8 V	14 V
	8 V	14.4 V	16 V
	8 V	18 V	21 V
	8 V	21.6 V	25 V
Nominal operating current	30 A continuous 180 A peak (locked-rotor current)		
Sleep current	Max. 40 $\mu$ A (<5 $\mu$ A version available)		
Mechanical life endurance			
→ Actuator	300,000 (3E5)		
→ Reversing lever	50,000 (5E4)		
Actuator travel			
→ ON contact	2.0 mm		
→ Total	8.5 mm		
Software features	<ul style="list-style-type: none"> <li>→ Hall-sensored six-step commutation</li> <li>→ Switching with electrical angle displacement</li> <li>→ Current control and limitation</li> <li>→ Various braking methods (Hard-to-Soft)</li> <li>→ Self-protection</li> <li>→ LED brightness software with afterglow functionality</li> <li>→ Parameterization (Development/Production)</li> </ul>		
On request	<ul style="list-style-type: none"> <li>→ Electronic torque control</li> <li>→ Data logging</li> </ul>		

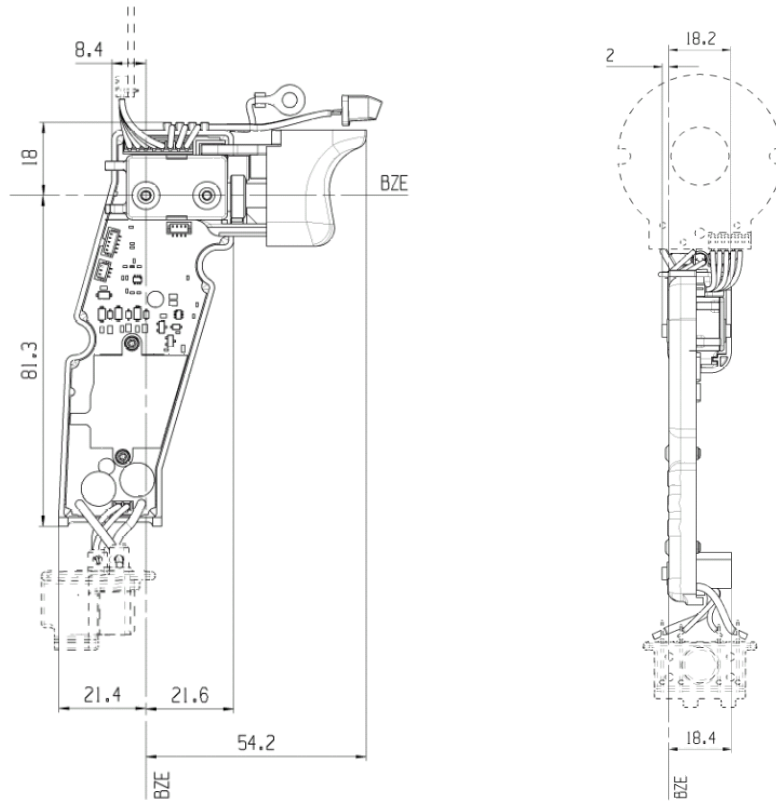


# SERIES 2811 – COMPACT BLDC CONTROLLER

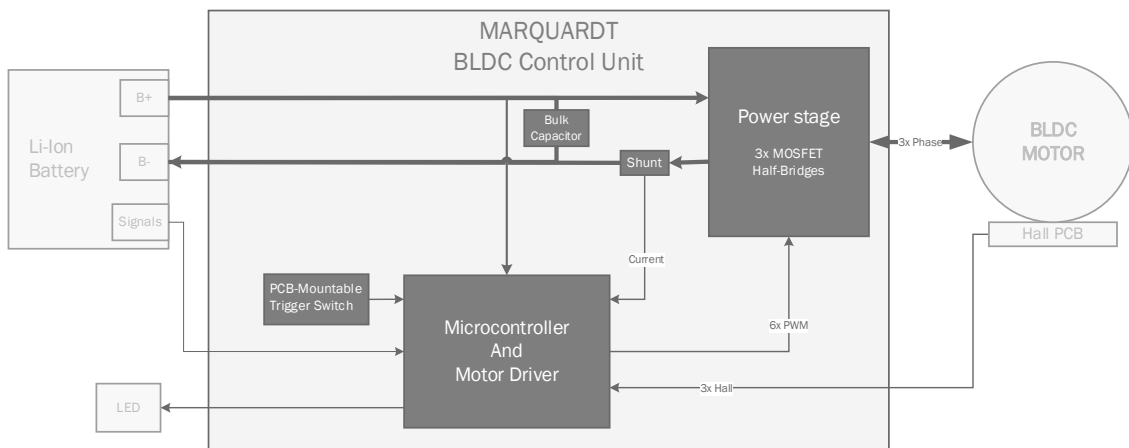
WITH INTEGRATED BATTERY MONITORING

## DRAWINGS

(Dimensions in mm)



## BLOCK DIAGRAM



# MARQUARDT

Marquardt Verwaltungs-GmbH Zweigniederlassung Schaffhausen · Ernst Müller-Str. 7 · CH-8201 Schaffhausen · Switzerland  
Phone +41 (52) / 644 30 00 · Fax +41 (52) / 644 30 60 · info@marquardt.ch · www.marquardt.ch