



## ADVANTAGE

**Solid thermal management**

**Different commutation modes**

**Integrated energybus controller**

**Various communication possibilities**

**Recuperation included**

**Compact design**

## PRODUCT FEATURES

- Up to 500 W nominal power
- Sinus commutation / space vector commutation, alternative block commutation according to application
- Energybus Controller is integrated in motor controller
- Energybus / CANopen, alternatively RS232/485
- Possible if integrated into hub motors
- Compact design with robust connection technology, high integration of electronics gives good vibration and moisture protection

## EXAMPLES OF APPLICATION

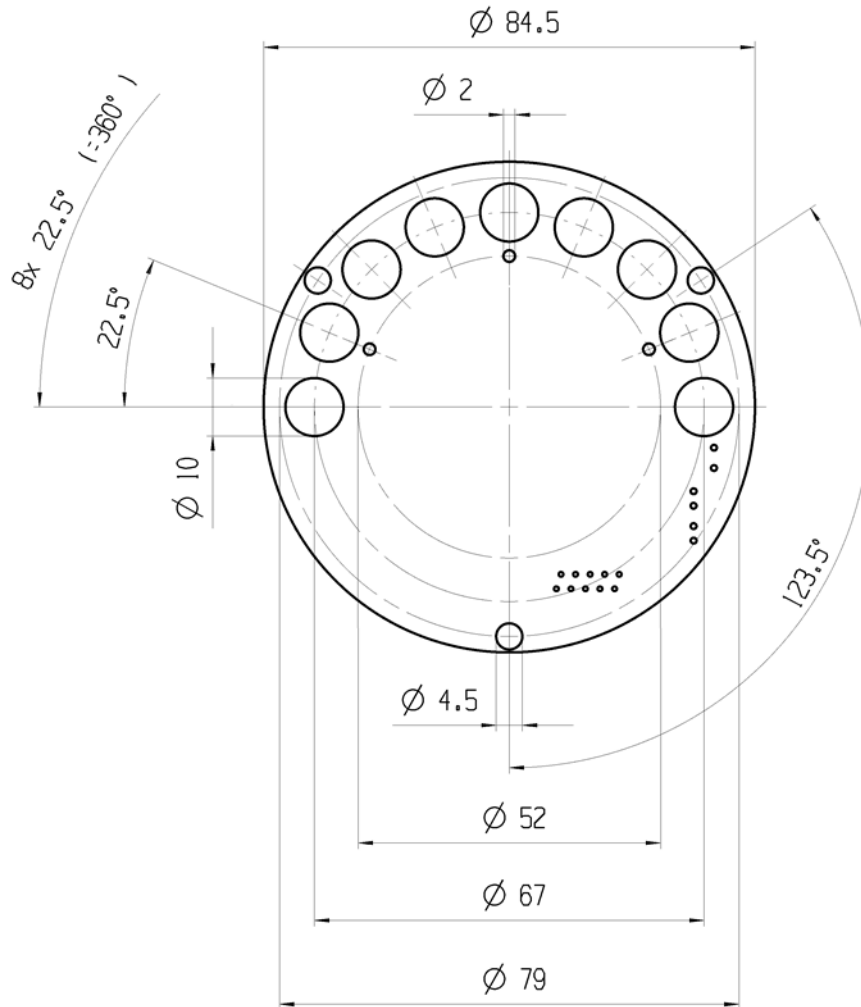
- E-Bikes
- Pedelecs
- LEV – Light Electric Vehicles
- Rehabilitation technology
- Electrical driven transport vehicles

Supply voltage	12 V up to 48 V
Current rating	Max. 50 A
Peak power < 10s	1,500 W
Power loss	< 30 W
Operating temperature range	-10 °C ... +70 °C
CAN Transceiver	According to ISO 11898-5
Position sensing	Hall elements, for rotor recognition
Motor connections, supply	Wires soldered
Sensor connections	JST, connectors or similar
Mounting	Screwed into housing
Cooling	Motor housing / gearbox



## DRAWINGS

(Dimensions in mm)



# MARQUARDT