

EPS BLI

THE INTEGRATED STEERING

INFORMATION

EPS BLI is an integrated electrical steering solution that includes a brushless permanent magnet motor and an inverter. This integrated solution minimizes the wiring, reduces the installation time and improves reliability.

EPS BLI can implement a steer-by-wire or an assisted steering (on demand). It can easily interface with a wide range of external devices via CAN bus. Redundancy of microcontrollers and sensors makes possible to fulfill ISO13849 category #3 and performance level requirements.



APPLICATIONS



Tow tractors and airport ground support vehicles



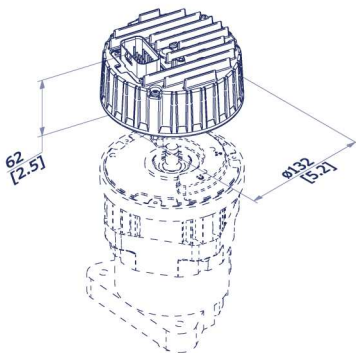
Material handling and AGV



Aerial-access equipment (AWP)

DIMENSIONS

mm [in]



Motor and gearbox sections can vary on application basis

EPS BLI

THE INTEGRATED STEERING CONTROLLER

FEATURES

Connector	23 - pins Ampseal
Digital input	1
Analog inputs	4
PWM voltage-controlled output	1
PWM current-controlled output	1
CAN bus interface	1
Input for motor thermal sensor	1
Encoder interface	1
Auxiliary supply output (+12/+5V)	3
Microcontrollers	2
Ambient temperature, operating	-30 °C ÷ +40 °C (-22 °F ÷ 104 °F)
Ambient temperature, storage	-30 °C ÷ +80 °C (-22 °F ÷ 176 °F)
Maximum motor speed	3000 rpm (gearbox limited)
Maximum motor torque	4 ÷ 5
Gearbox reduction ratio	1:43 / 1:28 (multiple brands available)
Steering transmission	Mechanical

MODEL CHART

Nominal DC voltage	DC Voltage range	Maximum AC current rating (2') [Arms]
24/36 V	17 V ÷ 31 V	50, 70
36/48 V	25 V ÷ 62 V	70
72/80 V	51 V ÷ 104 V	40

Current ratings are based on an initial heat sink temperature of 40 °C (104 °F) and a maximum heat sink temperature of 80 °C (176 °F).

REGULATIONS

UL certificate	UL 583 compliant (AU3503)
EMC	EN 12895:2015+A1:2019
Functional safety	Designed to achieve EN1175-2020 requirements. Designed to achieve CATEGORY 3 according to EN13849.
IP code	IP65