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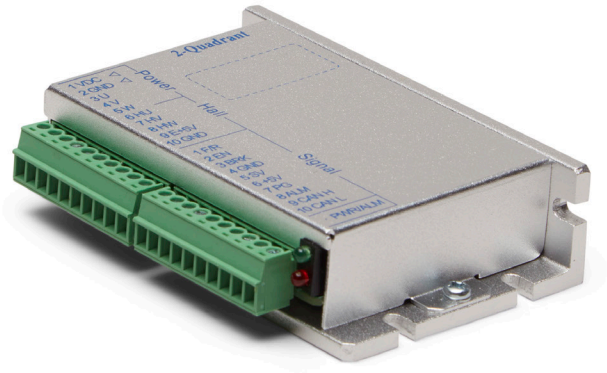

BRUSHLESS DC MOTOR DRIVERS | 8 - 60 V 3 - 20 A

We offer a broad range of high quality brushless DC motor drivers in standard and customized configurations. Our customer-centric approach makes us the ideal supplier for your project, especially to instrument and apparatus builders. In addition, we offer immediate delivery, thanks to always having a high number of motors in stock.

Customizations include:

- ✓ Customized harness
- ✓ Winding configuration
- ✓ Shaft configuration
- ✓ And more...

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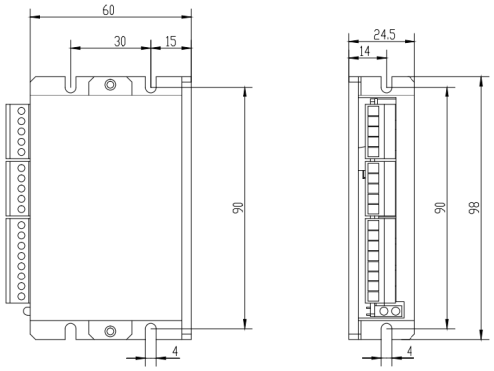
DBA-24-03 | 8 - 30 V | BRUSHLESS DC MOTOR DRIVER

DRAWING (mm)



PHOTO

MODEL NO. DESIGNATION

DBA	–	VOLTAGE	–	CONTINUOUS CURRENT

Example: DBA-24-03

OPTIONS POWER SUPPLIES

DRIVER DATA		
Nominal voltage	V	24
Voltage range	V	8 ~ 30
Current type		DC
Continuous current[1]	A	3
Max. current[1]	A	6
Power range	W	≤ 80
Speed range[2]	rpm	200 ~ 20000
Dimensions (W×D×H)	mm	98 × 60 × 24.5

NOTES

1. Operating temperature below 25°C.
2. Two-pole motor.

INTERFACE	PIN NAME	DEFINITION	FUNCTION
Power	VDC	8 ~ 30 input	
	GND	Power ground	
	U	Motor phase – U	
	V	Motor phase – V	
	W	Motor phase – W	
Motor	HU	Hall signal phase - U	
	HV	Hall signal phase - V	
	HW	Hall signal phase - W	
	+5V	5 V Hall power output (max. 200 mA)	
	GND-H	Hall ground	
	F/R	Positive and negative rotation control	F/R unconnected, CW rotating F/R short-circuit to GND, CCW rotating
	EN	Enable control	Unconnected EN, the motor is not rotating EN short-circuit to GND, the driver controls the motor.
	BRK	Brake control	Electronic brake locking function. BRK remains unconnected, motor on. BRK is short-connected to GND, motor off.
Control signal	GND-C	External speed control ground	
	SV	0 ~ 5 V analog voltage signal or PWM input	Speed control port
	+5V	5 V Power output (max. 50 mA)	
	PG	Motor speed pulse output	Needs external pull-up resistor.
	ALM	Alarm output	Needs external pull-up resistor.
Others	PWR/ALM	Indicator	Red flashes once: over-voltage protection Red flashes twice: under-voltage protection Red flashes three times: over-current protection Red flashes four times: over-temperature protection (70°C) Red flashes five times: Hall signal error Red on: hardware error Green on: fail to reach target speed

OTHER DRIVER DATA	
Protection features	OVP (over-voltage protection), UVP (under-voltage protection), OCP (over-current protection), OTP (over-temperature protection), Soft-start, Hall signal fault alarm.
Environmental conditions	No corrosive, flammable, explosive, conductive gas, liquid and dust.
Adapted motor	Brushless DC hall motor (120°)
Working mode	Hall speed closed-loop mode (factory default) | open-loop mode (optional).
Speed adjustment mode	Supports external potentiometer speed control (factory default), external voltage (0 - 5 V).
Heat dissipation mode	Natural cooling or external radiator.

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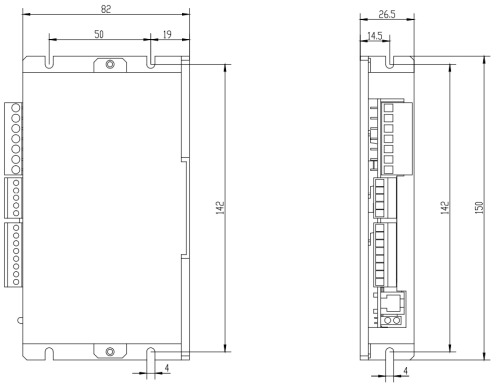
DBA-36-10 | 12 - 40 V | BRUSHLESS DC MOTOR DRIVER

DRAWING (mm)



PHOTO

MODEL NO. DESIGNATION

DBA	–	VOLTAGE	–	CONTINUOUS CURRENT

Example: DBA-36-10

OPTIONS POWER SUPPLIES

DRIVER DATA		
Nominal voltage	V	30
Voltage range	V	12 ~ 40
Current type		DC
Continuous current[1]	A	10
Max. current[1]	A	20
Power range	W	≤ 400
Speed range[2]	rpm	200 ~ 20000
Dimensions (W×D×H)	mm	150 × 82 × 26.5

NOTES

1. Operating temperature below 25°C.
2. Two-pole motor.

INTERFACE	PIN NAME	DEFINITION	FUNCTION
Power	VDC	12 ~ 40 input	
	GND	Power ground	
	U	Motor phase – U	
	V	Motor phase – V	
	W	Motor phase – W	
Motor	HU	Hall signal phase - U	
	HV	Hall signal phase - V	
	HW	Hall signal phase - W	
	+5V	5 V Hall power output (max. 200 mA)	
	GND-H	Hall ground	
	F/R	Positive and negative ration control	F/R unconnected, CW rotating F/R short-circuit to GND, CCW rotating
	EN	Enable control	Unconnected EN, the motor is not rotating EN short-circuit to GND, the driver controls the motor.
	BRK	Brake control	Electronic brake locking function. BRK remains unconnected, motor on. BRK is short-connected to GND, motor off.
Control signal	GND-C	External speed control ground	
	SV	0 ~ 5 V analog voltage signal or PWM input	Speed control port
	+5V	5 V Power output (max. 50 mA)	
	PG	Motor speed pulse output	Needs external pull-up resistor.
	ALM	Alarm output	Needs external pull-up resistor.
Others	PWR/ALM	Indicator	Red flashes once: over-voltage protection Red flashes twice: under-voltage protection Red flashes three times: over-current protection Red flashes four times: over-temperature protection (70°C) Red flashes five times: Hall signal error Red on: hardware error Green on: fail to reach target speed

OTHER DRIVER DATA	
Protection features	OVP (over-voltage protection), UVP (under-voltage protection), OCP (over-current protection), OTP (over-temperature protection), Soft-start, Hall signal fault alarm.
Environmental conditions	No corrosive, flammable, explosive, conductive gas, liquid and dust.
Adapted motor	Brushless DC hall motor (120°)
Working mode	Hall speed closed-loop mode (factory default) | open-loop mode (optional).
Speed adjustment mode	Supports external potentiometer speed control (factory default), external voltage (0 - 5 V).
Heat dissipation mode	Natural cooling or external radiator.

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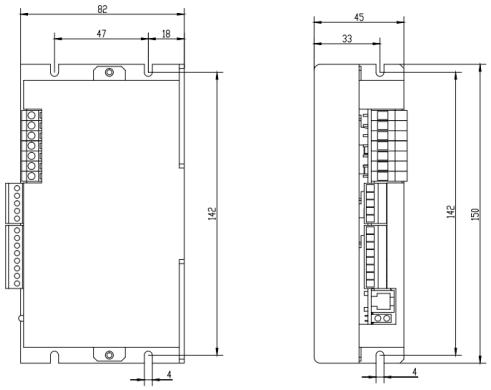
DBA-48-20 | 20 - 60 V | BRUSHLESS DC MOTOR DRIVER

DRAWING (mm)



PHOTO

MODEL NO. DESIGNATION

DBA	–	VOLTAGE	–	CONTINUOUS CURRENT

Example: DBA-48-20

OPTIONS POWER SUPPLIES

DRIVER DATA		
Nominal voltage	V	48
Voltage range	V	20 ~ 60
Current type		DC
Continuous current[1]	A	20
Max. current[1]	A	40
Power range	W	≤ 1200
Speed range[2]	rpm	200 ~ 20000
Dimensions (W×D×H)	mm	150 × 82 × 45

NOTES

1. Operating temperature below 25°C.
2. Two-pole motor.

INTERFACE	PIN NAME	DEFINITION	FUNCTION
Power	VDC	20 ~ 60 input	
	GND	Power ground	
	U	Motor phase – U	
	V	Motor phase – V	
	W	Motor phase – W	
Motor	HU	Hall signal phase - U	
	HV	Hall signal phase - V	
	HW	Hall signal phase - W	
	+5V	5 V Hall power output (max. 200 mA)	
	GND-H	Hall ground	
	F/R	Positive and Negative turning control	F/R unconnected, CW rotating F/R short-circuit to GND, CCW rotating
	EN	Enable Control	Unconnected EN, the motor is not rotating EN short-circuit to GND, the driver controls the motor.
	BRK	Brake Control	Electronic brake locking function. BRK remains unconnected, motor on. BRK is short-connected to GND, motor off.
Control signal	GND-C	External speed control ground	
	SV	0 ~ 5 V analog voltage signal or PWM input	Speed control port
	+5V	5 V Power output (max. 50 mA)	
	PG	Motor speed pulse output	Needs external pull-up resistor.
	ALM	Alarm output	Needs external pull-up resistor.
Others	PWR/ALM	Indicator	Red flashes once: over-voltage protection Red flashes twice: under-voltage protection Red flashes three times: over-current protection Red flashes four times: over-temperature protection (70°C) Red flashes five times: Hall signal error Red on: hardware error Green on: fail to reach target speed

OTHER DRIVER DATA	
Protection features	OVP (over-voltage protection), UVP (under-voltage protection), OCP (over-current protection), OTP (over-temperature protection), Soft-start, Hall signal fault alarm.
Environmental conditions	No corrosive, flammable, explosive, conductive gas, liquid and dust.
Adapted motor	Brushless DC hall motor (120°)
Working mode	Hall speed closed-loop mode (factory default) | open-loop mode (optional).
Speed adjustment mode	Supports external potentiometer speed control (factory default), external voltage (0 - 5 V).
Heat dissipation mode	Natural cooling or external radiator.

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