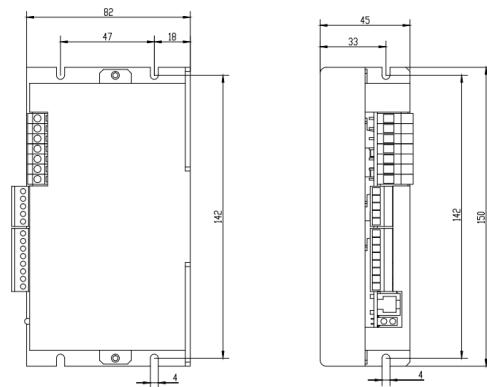


## DRAWING (mm)



## 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 <sup>1</sup>	A	20
Max. current <sup>1</sup>	A	40
Power range	W	≤ 1200
Speed range <sup>2</sup>	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.
	GND-C	External speed control ground	
Control signal	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.
			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
Others	PWR/ALM	Indicator	

## 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.