

**Tonet** Network Communication

Intelligent **Connect** Operation

## Communication Mode DC Brushless Motor

### ■ Communication Control

Only need RJ45 network cable to connect front controller so as to simplify wiring and engineering time.

### ■ I/O Control

Under [I/O mode], it can operate stand-alone, or control by PLC, PC program.



BRUSHLESS MOTOR

DBU Driver



TOP-1 Touchscreen Controller

### **Tonet** Network Communication System Integration

- By T-net network communication system integration platform [TOP-1], it can connect to multiple machine to set parameter, monitor status and test running.

### Network Communication Control Modbus

- Compatible to Modbus RTU communication protocol, RS-485 interface with RJ45 cable to control different machines in series to simplify wiring.
- Can be connected to TOP-1, PC, PLC and HMI.

### Flexible Customized I/O Interface

- IN connection→4 from 8; OUT connection→2 from 6. Terminal function can be customized and configured.
- Customize I/O terminal to compatible with previous controller without changing wiring or control program.
- Customized compatibility to all **TROY** brushless driver control modes, e.g. BMD/DB/ SBD/UBD/DBD.

### Color Indicators Shows Status

- 7 color LED indicator shows the running status of motor and driver.

### Running information Shown On

- 5 Running information can be shown on OLED panel, for easier identification of motor and driver status.

## Motor/Driver Specification and Characteristics

DC Brushless Motor

Power Output			200W	400W
Motor	Round Shaft Type		9BU200S-D T	9BU400S-D4 T
	Pinion Shaft Type		9BU200P-D T	-
Driver			DBU200-D T	DBU400-D4 T
Power Input	Rated Voltage	V	DC24±10%	DC48±10%
	Max. Current	A	21	13.3
	Rated Current	A	15.4	10.7
Rated Torque		Nm	0.65	1.28
Instant Max. Torque		Nm	0.81	1.76
Permissible Inertia Load GD <sup>2</sup>		kgcm <sup>2</sup>	54.4	72.6
Rated Speed		r/min	3000	3000
Speed Control Range		r/min	250~3000	300~3000

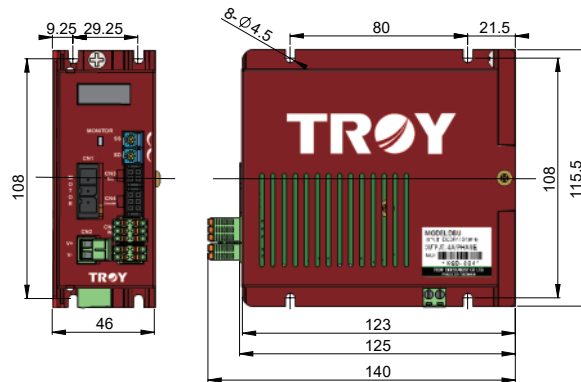
\*Torque 1Nm=10.19716 kgcm

<p>Communication Specification</p>	<p>[ Communication Protocol ] T-net communication protocol(compatible to Modbus RTU).                  [ Communication Rate ] 9600, 14400, 19200, 28800, 38400, 57600, 115200 bps.                  [ Transmission Mode ] RS-485 Synchronized half-duplex.                  [ Connection Range ] Use 1-meter-long CAT-6 specification network cable to connect in series, the actual test can connect up to 247 units in series.</p>
<p>Signal Input</p>	<p>[ Specification ] Photo Coupler Input Interface; correspond to NPN or PNP wiring.                  [ In Connection ] 4 from 8 terminal function can be customized and configured.                  CW/STOP, CCW/STOP or RUN/STOP, CW/CCW, Alarm-Reset, M0, M1, M2, EX-ER, Hold-Free can compatible with DB or SBD control mode.</p>
<p>Signal Output</p>	<p>[ Specification ] Open Collector Output Interface; correspond to NPN or PNP wiring.                  [ Out Connection ] 2 from 6 terminal function can be customized and configured.                  Alarm-out, Reach-out, VA-out, Speed-out, Warning-out, MOVE.</p>
<p>Features</p>	<ul style="list-style-type: none"> <li>· Can be connected to TOP-1(Touchscreen Controller), PC, PLC.</li> <li>· Connect to PC directly for communication setting by USB TO RS-485 convertor.</li> <li>· [Communication Mode]: Parameter setting, operation movement control, 8 stage speed set/select, monitor status can be controlled.</li> <li>· [ I/O Mode ]: Operation movement control, 8 stage speed select, monitor status can be controlled.</li> <li>· 10 Protective functions:                      Alarm protective functions like overload, over voltage, over current, over speed, overheat, power on, abnormal starting, register error, encoder signal error, external interrupt.</li> <li>· 7 Color LED indicator display:                      RUN/EDIT, CW, CCW, Alarm, external interrupt, register/ CPU/ communication abnormal.                      For easier identification of motor and driver status</li> <li>· 5 Operating information OLED panel display:                      Revolving speed, driver machine number, running data No., count down time or load rate, for easier identification of motor and driver set up status.</li> </ul> <p>* [TOP-1] is a integration platform touchscreen controller, TROY product series with [T-net communication protocol] can connected for internal data setting, but without front controller function (optional purchase individually).</p>

Dimensions

-Driver-

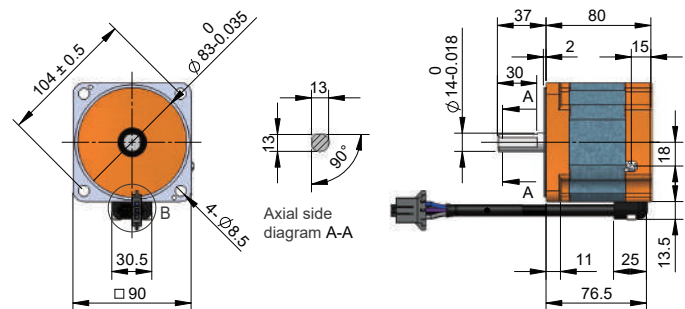
◆ DBU200-D T / DBU400-D4 T



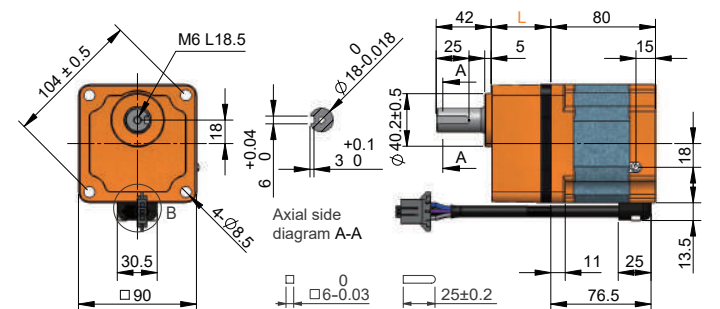
Unit : mm  
 Weight : 498g

-Motor-

◆ 9BU200S-D T / 9BU400S-D4 T Weight : 2455g / 2650g



◆ 9BU200P-D T + 9U□(H) Weight : 2430g+W



\*Pinion Shaft Type 9U5(H)~360(H), the spec of Gearbox length L and weight W as following:

	Model	9U5(H)~20(H)	9U30(H)~100(H)	9U200(H)~360(H)
Gearbox	Length(mm)	45.5	58.5	64.5
	Weight(g)	860	1125	1265

