TB2 / HTB2 RELAY SPECIFICATIONS Taiko Device Techno & Co.,Ltd. **SPECIFICATION** ITEM Contact Arrangement 1Form C x 2 (H-Bridge) (TB2-Z / HTB2-Z type) 1Form C x 2 (1T x 2; Separate type) **Contact Material** AgSnO₂ Alloy Contact Resistance Max 50mΩ (6VDC 1A voltage drop method) 25A @ 14VDC Motor load/ Locked Rotor Contact Rated Load Max. Switching Current/ Voltage 30 A 16VDC 25 A @ 14VDC for 10 minutes at 20°C Max. Carrying Current Min. Switching Current 1A 12VDC Dielectric Strength 500VAC for 1minute (between coil and contact) 500VAC for 1minute (between open contacts) Insulation Resistance Min $100M\Omega$ (at 500VDC) Operate Time Max 10ms (at rated voltage) Release Time Max 10ms (at rated voltage) Shock False Operation Min 98m/s² (10G):Shock wave 11ms Endurance Min 980m/s² (100G) :Shock wave 11ms Vibration 10 to 500Hz 43m/s² (4.4G) **False Operation** Endurance 10 to 500Hz 43m/s² (4.4G) Mechanical Life 10×10⁶ Operations or more (300 cycles/minute) Electrical Life 0.1 x 10⁶ Operations or more 14VDC 25A P/W Motor Load/ Locked Rotor (0.5 sec. ON/ 9.5 sec. OFF) Coil Rating Coil Resistance Part Number Rated Voltage Pull-in Voltage **Drop-out Voltage** at 20°C Ambient Temperature (+-10%)(H)TB2-160(Z) 12VDC 0.8V 160Ω 6.5V (H)TB2-100(Z) 12VDC 100Ω 5.5V 0.5V (H)TB2-225(Z) 12VDC 225Ω 7.7V 0.8V Ambient Temperature/ Humidity -40°C to +85°C, 85%RH or less Weight Approx. 9.5grms External Dimensions / Wiring Diagram / PCB Pin Layout Fig.1. External dimensions Fig.3. PCB pin layout (Reference figure) (BOTTOM VIEW) 1T ×2 H-Bridge H-Bridge TD TAIKO TD TAIKO 4- Φ1.6 0 TB2-1 12VDC unit: mm -160Z -160 12VDC \bigcirc \bigcirc 17.4±0.5 14±0.5 4- Φ1.: 1T ×2 *Terminal section is pre-soldered. The terminal dimension shown are after the pre-soldering. Tolerance of terminal pitch is ±0.2 <u>4- Φ1.1</u> at the root of terminal Hole punching tolerance ± 0.1 Fig.2. Wiring diagram (BOTTOM VIEW) H-Bridge 1T x2

B Relay

^{*} The above specifications are tentative and subject to change.