

TIB Inverter control box for saddle motor

Feature

1. Reduction of starting & stopping shock.

- The swing of load and building is reduced by the smooth inverter performance which restrains the shock of starting and stopping.

3. Small body and easy installation.

- TIB is equipped with a regenerative resistor unit as a standard equipment, and it can be installed directly to a crane girder with ease.

5. Enhanced safety functions

- In addition to the conventional functions (over load, the protection of regenerative over voltage), the function of detecting input circuit fault is equipped as a standard.

2. Settable traveling speed for efficient operation

- The optimal operation speed (High and Low speed) can be set in the range from 1/10 to standard speed.
- Inching and plugging operations are possible.

4. Improved ease of maintenance

- In case a defect occurs, the function that displays failure mode facilitates the judgment of locating fault.
- The main circuit (noncontact) enhances reliability and improves ease of maintenance.

6. Shared protection board function (TIB-S)

- Circuit breaker box and contactors for on and off (electric power supply) are standard equipment. The box can combine with shared protection board for crane.
- Screw holes are provided for the contactors of light, buzzer and etc.

Type name and applicable models

Type	Rated Current (A)	Applicable Mitsubishi models		Gear motor for crane saddle
		Crane saddle	MT, MP series	
TIB-0.8(s)	5	ST, SP series	Output of traveling motor Less than 0.4kW×2	SGM-0.4A-LK2×2
TIB-2.2(s)	11		Output of traveling motor Less than 0.75kW×2	SGM-0.75A-LK2×2
TIB-4.4(s)	22		Output of traveling motor Less than 2.2kW×2	SGM-1.5A-LK2×2
TIB-7.4(s)	33		Output of traveling motor Less than 3.7kW×2	SGM-2.2A-LK×2
TIB-11	46		Output of general purpose motor Less than 5.5kW×2	SGM-3.7A-LK2×2
TIB-15	61		Output of general purpose motor Less than 7.5kW×2	
TIB-22	90		Output of general purpose motor Less than 11kW×2	
TIB-30	115		Output of general purpose motor Less than 15kW×2	

※ To use with the ST, SP and SGM series produced in 1987 and before, a special model compatible with a current brake is required. Please contact us for further information.

※ For types TIB-11 to TIB-30, a model equipped with a shared protection board function (S model) cannot be produced.

※ Please contact us for dimensional details.

Standard specifications

Power supply	3-phase 200V 50/60Hz, 220V 60Hz
Control system	Inverter control
Speed ratio	The range of settable speed 1/10 ~ standard speed
Operating method	Push button
Operating functions	Inching & plugging operations are possible
Percentage of duty cycle and number of starts per Hr (Allowable frequency of usage)	ED percent 25% ED Number of starts per hour 250S/Hr
Service condition	Air temperature -10°C to 40°C (No condensation)
	Relative humidity Ambient humidity 90% or less (Non condensation)
Enclosure	Atmosphere Non corrosive gas environment, non considerable dust environment
Protective functions	Equivalent to IP-44 except regenerative resistor: Simplified outdoor type
Power supply system	Over load, over voltage in regenerative (braking)
Color coating	Cable feeding
	Metallic gray (Equivalent to Munsell N4.0)

※ Noises and other abnormalities may occur when installed on crane saddles or gear motors for crane saddle, which are produced by manufacturers other than us. Please contact us for further information.

※ Not equipped with a noise filter or an AC reactor. Install one as required.

※ The TIB-H (HS) 400V series is a special model. Please contact us for further information.

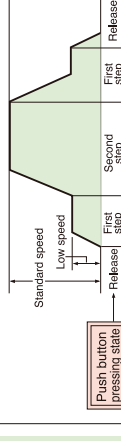
※ To use the product outdoors, install a rain-proof cover or prepare an equipment shelter.

※ Settings need to be changed according to acceleration/deceleration time calculated using the mass, rated load and travelling speed of the crane.



The picture is TIB-2.2

Push button operation and operation pattern



TIB-S TYPE

Type	NFB for main power	Contactor for main power	Space for Light, Buzzer and contactor
TIB-0.8S	50A	S-N95	Screw holes are provided for a couple of S-N11 or S-N21.
TIB-2.2S	60A	S-N50	
TIB-4.4S	125A	S-N80	
TIB-7.4S	175A	S-N125	

Function diagram

