

TIB2 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.

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.

7. With Anti-sway function (TIB2 Type)

- Anti-sway function can reduce swing of the load.
 - By setting length of the pendulum (length of the center of work) and the stop time, optimum Anti-sway function can be realized according to the usage pattern of the crane.
- ※TIB-2 is scheduled to be released in April 2022. (Order-receiving starting)

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.

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.

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.

6. Shared protection board function (TIB2-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		
		Crane saddle		Gear motor for crane saddle
		ST, SP series	MT, MP series	
TIB2-0.8(s)	5	Output of traveling motor Less than 0.4kW×2		SGM-0.4A-LK3×2 SGM-0.4A-HK3×2
TIB2-2.2(s)	11	Output of traveling motor Less than 0.75kW×2		SGM-0.75A-LK3×2 SGM-0.75A-HK3×2
TIB2-4.4(s)	22	Output of traveling motor Less than 2.2kW×2		SGM-1.5A-LK3×2 SGM-1.5A-HK3×2
				SGM-2.2A-LK2×2 SGM-2.2A-HK2×2
TIB2-7.4(s)	33	Output of traveling motor Less than 3.7kW×2		SGM-3.7A-LK3×2 SGM-3.7A-HK3×2
TIB-11	46	Out of general purpose motor	Less than 5.5kW×2, Less than 2.2kW×4	
TIB-15	61	Out of general purpose motor	Less than 7.5kW×2, Less than 3.7kW×4	
TIB-22	90	Out of general purpose motor	Less than 11kW×2, Less than 5.5kW×4	
TIB-30	115	Out of general purpose motor	Less than 15kW×2, Less than 7.5kW×4	

- ※ 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.
- ※ The range of TIB2 is from 0.8 to 7.4 (Model of TIB11 and above are made by special custom order; therefore, please contact is individually to determine whether Anti-sway function can be supported.)

Standard specifications		TIB2-○○(S)	TIB2-H○○(S)
Power supply		3-PHASE 200V 50/60Hz, 220V 60Hz	3-PHASE 400V 50/60Hz, 440V 60Hz(380V 50Hz is available)
Control system		Inverter control	
Speed ratio		The range of settable speed 1/10~standard speed	
Operating method		Push button	
Operation function		Equipped with Anti-sway function(TIB2 Type)	
Percentage of duty cycle and number of		Percentage of duty cycle 25%ED	
Starts per Hr (Allowable frequency of usage)		Number of starts per hour 250 S/Hr	
Service condition	Air temperature	-10°C to 40°C (No congelation)	
	Relative humidity	Ambient humidity 90% or less (Non condensation)	
	Atmosphere	Non corrosive gas environment, non considerable dust environment	
Enclosure		IP20:Indoor	
Protective functions		Over load, over voltage in regenerative(braking)	
Power supply system		Cable feeding	
Color coating		Metallic gray(Equivalent to Munsell N4.0)	

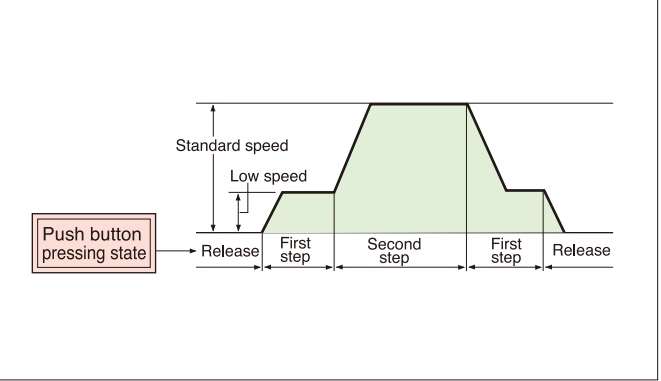
- ※Noises and other abnormalities may occur when installed on crane saddles or gear motors for crane saddle, which are produced by manufacturers other than us. Please contact us for further information.
- ※Not equipped with a noise filter or an AC reactor. Install one as required.
- ※The TIB2-H(S) 400V series is a soecual model. Please contact us for further information.
- ※To use the product outdoors, install a rain-proof cover or prepare an equipment shelter.
- ※Setting need to be changed according to acceleration/deceleration time calculated using the mass, rated load and traveling speed of the crane.
- ※There is a possibility that the sense of inching operation use is different from the conventional sense of inching operation use When using Anti-sway function. (If push button is equipped with a switching switch, function can be turned ON and OFF on your end.)



The stored equipments of TIB2-S Type

Type	NFB for main power	Contactor for main power	Space for Light, Buzzer and contactor
TIB2-0.8S	50A	S-T35	Screw holes are provided for a couple of S-N11 or S-N21.
TIB2-2.2S	60A	S-T50	
TIB2-4.4S	125A	S-T80	
TIB2-7.4S	175A	S-N125	

Push button operation and operation pattern



Function diagram

