## **OVER LOAD LIMITER (DIGITAL TYPE)**

### BRI-001D (Micro Processor)

#### Introduction:

During in use the crane and hoist, this is detected the current through the motor automatically, and the resulted in, as the condition of power, it is always checked as digital and during the overload condition, warning chime sounds to inform the risk on around.

After stopping surrounding circuit, the termination of alarm and winding stop is terminated enough as rising high during descent operation automatically.



#### Features:

- During the hoist operation, the current value is indicated as digital.
- As the adoption of self-diagnostic circuit can be checked settings.
- In order to use as the combined general and creep hoist, it is produced specially.
- Adopting automatic voltage compensation circuit.
- Digital control system by microprocessor.
- During the overload operation, hold condition is indicated by the digital sequence of the setting and load current values.
- The analysis capacity can be precisely controlled as 0.1A unit.
- As the function adoption of manual test, it is possible to check occasionally.
- Waterproof, dust-proof,

	Operation function	
Power	AC110/220V 60HZ	
Using range	0.1A-99.9A, automatic set(1A-999A)	
Main control unit	Micro Processor (16c57)	
Start time	0.1sec - 9.9sec auto.	
Shock time	0.1sec - 9.9sec auto.	
Start amper	1A - 9.9A auto.	
Low set current	0.1A - 99.9A auto(1A - 999A)	
High set current	0.1A - 99.9A auto(1A - 999A)	
Outred mathed	Over load stop contact	
Output method	For main hoist (1B Out)	
Display	Motor actual load current value indicated	
Working temperature	-20°C - +70°C (Ambient temperature)	
Environment	Waterproof, Moisture-proof, anti-vibration	
Environment	Indoor, Outdoor combination	

### Applicable to industrial machinery

- Chain Hoist
- Wire Hoist
- Creep Hiost
- Over Head Crane

## OVER LOAD LIMITER (DIGITAL TYPE)

**BRI-500D** 



#### Features:

- The lift height of crane's voltage & current is indicated as digital.
- Zero-fialure rate by the adoption of self-failure diagnosis circuit.
- digital operation system by the micro-processor.
- Possible automatic compensation of setting current of the voltage variation.
- Built-in auto-sensing function of the product during low and high voltage than setting voltage.
- Detection function of single-phase and phase loss time.
- Automatic detection of motor phase-to-phase unbalance.
- Auto setup function by singularwound motor.
- As the adoption of magnetic contact melt monitoring, iti is possible to prevent the damage.
- Built-in magnet fault detection of secondary resistance control.

	Operation Function	
Power	AC110/220V±20% 60HZ	
Power consumption	15W	
Current adjustment rang	0.1A - 99.9/1A - 999 Auto	
Control method	Micro processor	
Start Time	0.1sec - 9.9sec Auto.	
Shock Time	0.1sec - 9.9sec Auto.	
Start Amper	1A - 9.9A Auto.	
Low/high voltage setting	10% - 99% Auto.	
Unbalance setting	Operate more than 30% after 3sec.	
Single phase &	Operated after 3 seconds from after	
Phase loss	signal detection,	
	Voltage Display: 3 digits red end	
	Current Display: 3 digits red end	
Display	Rise time: 3 digits red end	
	Signal control: 3 digits red end	
	Setting current : 3 digits red end	
	Relay1: Overload stop contact for hoist	
Output signal contact	Relay2: signal-phase/phase loss, high &	
	low voltage, unbalance operation time	
Deturning mathed	As long as the height of the rise time,	
Returning method	It is returned during the descent automatically	
Usage temperature	-20°C - +70°C (surface temperature)	

### Applicable to industrial machinery

- Wirewound crane for secondary resistance control.
- Motor monitoring control.

## **MOTOR AUTOMATIC CONTROLLER (AC)**

### SOFT MAN (FR-5000 SERIES)

DIMENSION			
Capacity/Division	Horizontal	Vertical	height
Less than 22KW (380V/440V)	150	200	150
Less than 110KW	250	300	200
Less than 200KW	400	350	300
Less than 300KW	450	400	300



#### Features:

- High level micro processor-controlled start and slow stop device instead of use existing magnetic switch and reactor operation system.
- In accordance with forward and reverse operation and start & stop operation of the solid-state control, starting time is adjusted to smooth operation depending on the load type from low load to constant speed.
- As the low cost operation, ease of installation and replacement, minimized mounting space, over-current sensing, it is a compact and lightweight with semi-permanent innovation product in view of start and stop for motor.
- During the motor operation, it is operated by dynamic brake due to the start-up time control and deceleration time control system.

OPERATION FUNCTION		
Slow starter	1sec - 99.9sec Auto.	
Slow stop	1sec - 9.9sec Auto.	
Offset	1% - 99% Auto.	
Control system	Thyrist 3 phase voltage control	
Forward and reverse operation	S.C.R solid state operation system	
Single-phase, phase loss	When one phase of the three phase	
Single-phase, phase loss	is broken, it is stopping instantly.	
Over-current detection	Automatic detection depending on	
Over-current detection	the driving range.	
Braking holding	Built-in operation function.	
Energy	Saving.	

#### Application Industry:

- Driving and transverse motion of the hoist and crane.
- Roller machine, air compressor, dust collectors, conveyor machine.
- Half performed light-load and heavy-load motor.
- Constant operation motor as light load.
- The motor of initial start-up large stroke.
- Fluctuating load motor.
- Performed forward and reverse motor operation frequently.

# **MOTOR SOFT STARTER (THYRISTER)**

### BRI-F3000 (Series) One-way control

DIMENSION			
Capacity/Division	Horizontal	Vertical	height
Less than 22KW (380V/440V)	150	200	150
Less than 110KW	250	300	200
Less than 200KW	400	350	300
Less than 300KW	450	400	300



#### Features:

- Digital operation by micro processor.
- Actual start and stop of a one-way operation.
- During start-up and operation, overcurrent
  - and phase loss and phase detection.
- Semi-permanent life by three-phase non-contact operation control.
- Extended motor life and protection of reducer and machinery.
- In accordance with use method, can be possible to forward and reverse by the combination of magnet.
- Built-in digital display of operation status.
- Simplified installation by the compact and lightweight.
- Depending on the order specification,

BRI	-3000F ONE-\	NAY SOFT S	TART
MODEL	CAPACITY	MODEL	CAPACITY
BRI-237F	220V 3.7KW	BRI-430F	440V 30KW
BRI-337F	380V 3.7KW	BRI-240F	220V 40KW
BRI-437F	440V 3.7KW	BRI-340F	380V 40KW
BRI-255F	220V 5.5KW	BRI-440F	440V 40KW
BRI-355F	380V 5.5KW	BRI-250F	220V 50KW
BRI-455F	440V 5.5KW	BRI-350F	380V 50KW
BRI-275F	220V 7.5KW	BRI-450F	440V 50KW
BRI-375F	380V 7.5KW	BRI-270F	220V 70KW
BRI-475F	440V 7.5KW	BRI-370F	380V 70KW
BRI-210F	220V 10KW	BRI-470F	440V 70KW
BRI-310F	380V 10KW	BRI-2100F	220V 100KV
BRI-410F	440V 10KW	BRI-3100F	380V 100KV
BRI-215F	220V 15KW	BRI-4100F	440V 100KV
BRI-315F	380V 15KW	BRI-2150F	220V 150KV
BRI-415F	440V 15KW	BRI-3150F	380V 150KV
BRI-220F	220V 20KW	BRI-4150F	440V 150KV
BRI-320F	380V 20KW	BRI-2200F	220V 200KV
BRI-420F	440V 20KW	BRI-3200F	380V 200KV
BRI-230F	220V 30KW	BRI-4200F	440V 200KV
BRI-330F	380V 30KW		3

# MOTOR SOFT STARTER (BY-PASS function)

BRI-F3000BM SERIES (One-way)
BRI-F5000BM SERIES (Two-way)

#### Features:

- Built-in by-pass function
- Fully digitized of starting method.
- Lack of current sensing function of the single phase, phase loss, over-current and reverse-phase.
- Micro processor control system.
- The function diversification is possible in accordance with the requirements of the customers.
- Capacity: 3.7KW-800KW
- Compact, lightweight and semipermanent product with innovationally.



SOFT STA	RT PRODUCT SERIES
BRI-F3000	General one-way starting system
BRI-F3000BM	By-pass one-way starting system
BRI-FR5000	General forward/reverse operation system
BRI-FR5000BM	By-pass forward/reverse operation system

## **CRANE ANTI-COLLISION DEVICE**

## BRI-P900D (2 level control output)

#### SIZE: 240X185X90

#### Features:

- Infrared-sensitive crane anticollision device.
- Detection distance: up to 25m can be set up.
- Distance output can be set to a two-step.
- Human body detection function of crane travel corridors.
- There is no malfunction due to the dirt and dust condition.
- Malfunction prevention circuit due to disturbance is operated perfectly.
- As the aluminum die-casting, it is characterized by dust, moisture and shock-resistant.
- As the developments of the first domestic can be easily carried out A/S work.



Name	Crane anti-collision device
Model	BRI-P900D
Usage voltage	AC110/220V 60HZ
Usage source	Infrared light sensor
Detection	Primary detection range- variable within 25m
condition	Second detection range- 30-80% action of primary detection
Extraneous light	Less than 7000 lux
Distance error ±	Less than 5%
Output system	First detection-relay on output on light
	Second detection-relay on output on light
Operation indicator	First detection-green lamp lights up
	Second detection-red lamp lights up
Box material	aluminum die-casting
Use environment	Indoor/outdoor combined use, waterproof, dust-proof, moisture-proof
Weight	approx. 4Kg including reflection mirror