

MISUMI Conveyors Instruction Manual (Common to all models)



Introduction

Thank you for purchasing our products.

Be sure to read this manual before use to ensure correct and safe use.

Be sure to keep this manual nearby for handy reference.

Contents of this manual

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1. Handling Precautions

■ Before use

Be sure to read these handling precautions thoroughly to ensure correct use of the conveyor.

- Special care should be taken not to drop the conveyor during transportation to avoid personal injury. In addition, please note the balance of weight when lifting the conveyors with a crane.
- Please completely secure our standard belt conveyors to ensure safe use.
- Be sure to connect ground wires to prevent electric shocks. In addition, be sure to install a circuit breaker conforming to CE standards in the primary side of the device.
- Please conduct various checks required before use.
- Please adjust the belt tension before use.
- Warning labels are attached to the conveyor. Before use, warning labels should be placed in a visible position by the operator. For an attachment example of warning labels, refer to the separate sheet supplied with this manual.



Warning label (one sheet) indicating electric shock



Warning label (one sheet) indicating high temperature



Warning labels (two sheets) indicating rolled-in

■ Handling precautions

Do not use our conveyors for the following applications:

- Medical equipment
- Equipment for personal movement and/or transportation
- Do not use the conveyors in the following environment:
 - Place where water splashes on the conveyors (conveyors are not water-resistant.)
 - An explosive environment (locations where explosive gases or dusts exist)
- Do not touch any moving part while the conveyor is moving. If touched, you may be in danger. Provide a safety cover as required.
- Do not touch the conveyor motor while the conveyor is moving. If touched, you may get burned.
- Use the conveyor according to the specifications and to the limited ranges of conveyance capabilities described in the Specification Catalog.
- When using the conveyor, care should be taken so that your clothes are not caught nor rolled-in the conveyor.
- Do not give an excessive shock to the conveyor. Otherwise, the conveyor may be damaged.
- Do not touch electric parts with wet hands. Otherwise, an electric shock may result.
- Do not disassemble nor modify the conveyors so that their performance and functions are influenced.
- Be sure to conduct the maintenance service of the conveyor with its power turned off.
- When the conveyor belts are replaced, be sure to note the direction of their conveyance. (The belts should be installed according to their mounting direction.)
- Do not drive the conveyor with the materials put on it. Excessive loading may damage the conveyor motor.
- Do not give an excessive tension to the belt. There is the possibility of shortening the service life of the belts.
- Use proper belts meeting the conditions of the conveyance materials.
- Conduct periodic checks of all screws every year. (Any screw may be loosened by shaking during operation.)
- Stainless belt conveyors (CVSSA) use thin-plate, stainless steel belts. So, do not touch the end face of the belt while the belt is being rotated. Otherwise, you may get injured.
- We guarantee the performance of single article parts of the motor-gear-head-less conveyor and the belt-less conveyor.

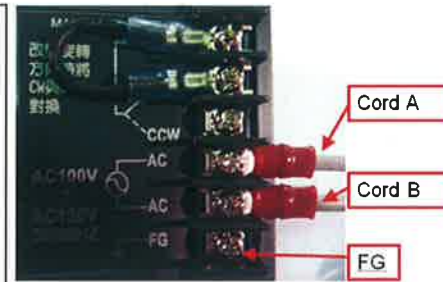
However, we can not guarantee the function with the components customer assembled.

- The motor-gear-head-less conveyor and the belt-less conveyor are inapplicable to CE.

2. Wiring Connections

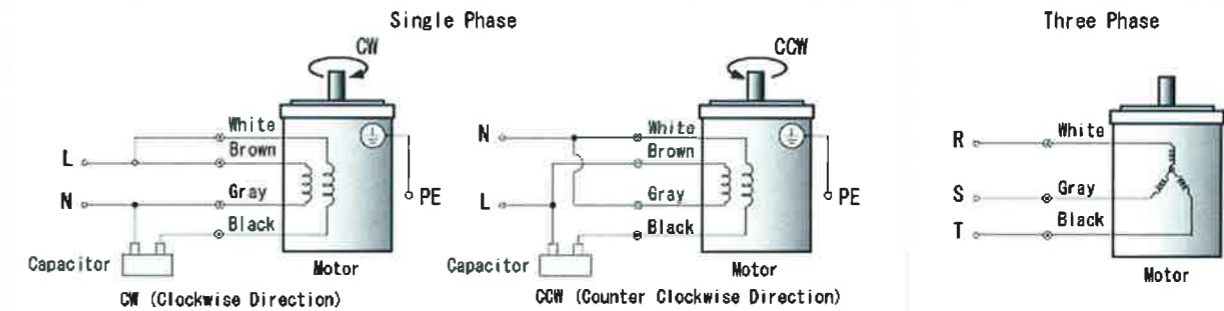
When the conveyor is incorporated in an automatic machine, refer to the connecting diagram for appropriate design.

- For avoiding an electric shock incident, be sure to wire the Earth Wire in presence of your chief of electric construction.
- * Any earth wire is not included with Taiwanese Speed Controllers.
- Procure the earth wire on your own and connect it to the FG part.
- Provide the CE Complaint Power Circuit Breaker on the primary side of conveyor.
- Provide the emergency stop equipment intended to stop the conveyor for emergency case.
- Provide some means of avoiding core cords from being frayed (for example, by soldering the cords for reinforcement). In this regard, by considering the likelihood of electrical short circuit, use of the crimp terminal is recommended. (For Taiwanese Motors only)
- Before turning on the above system, make sure that each screw is tightened properly. Furthermore, before turning on the system, make sure that each core cord is fixed steadily and that the Core Cord A and Core Cord B indicated on the "Wiring Example" section are not put into contact with each other. (For Taiwanese Motors only)



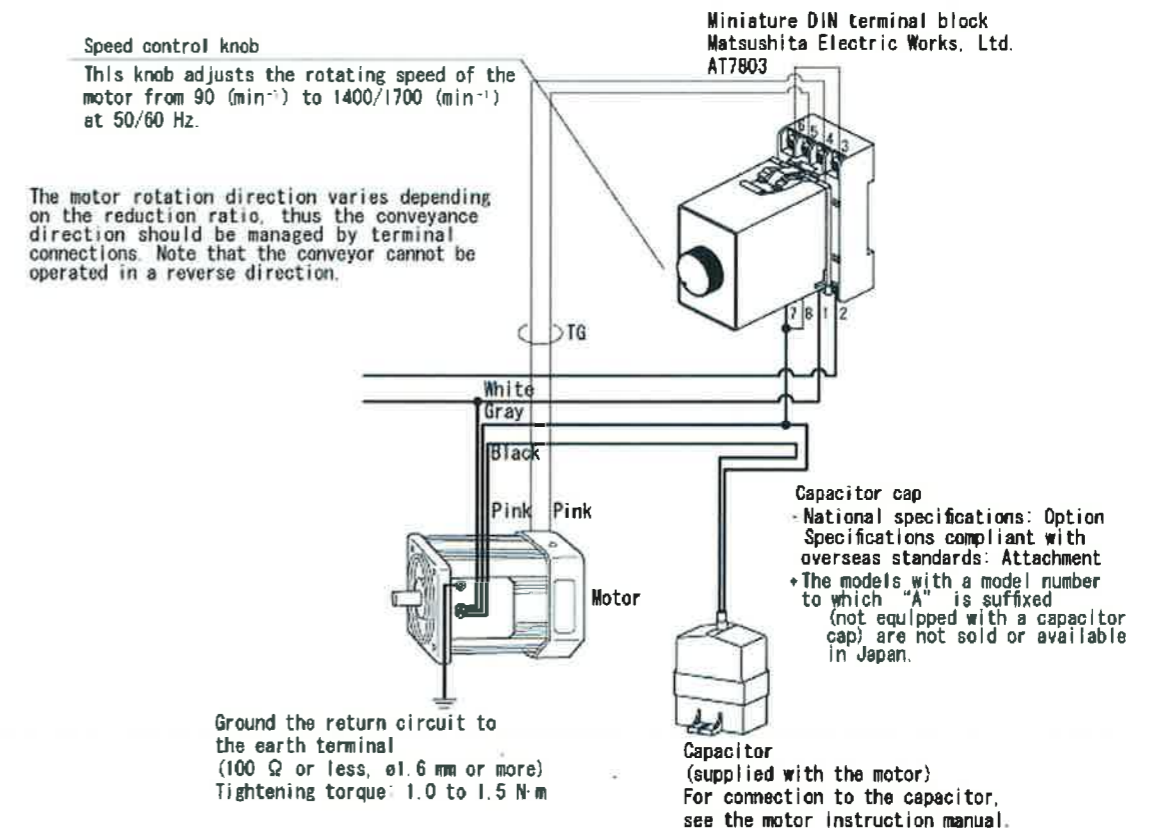
Make sure that the Core Cord A and Core Cord B are not put into contact with each other.

Induction Motor



The motor rotation direction varies depending on the reduction ratio, thus the conveyance direction should be managed by terminal connections. Note that the conveyor cannot be operated in a reverse direction.

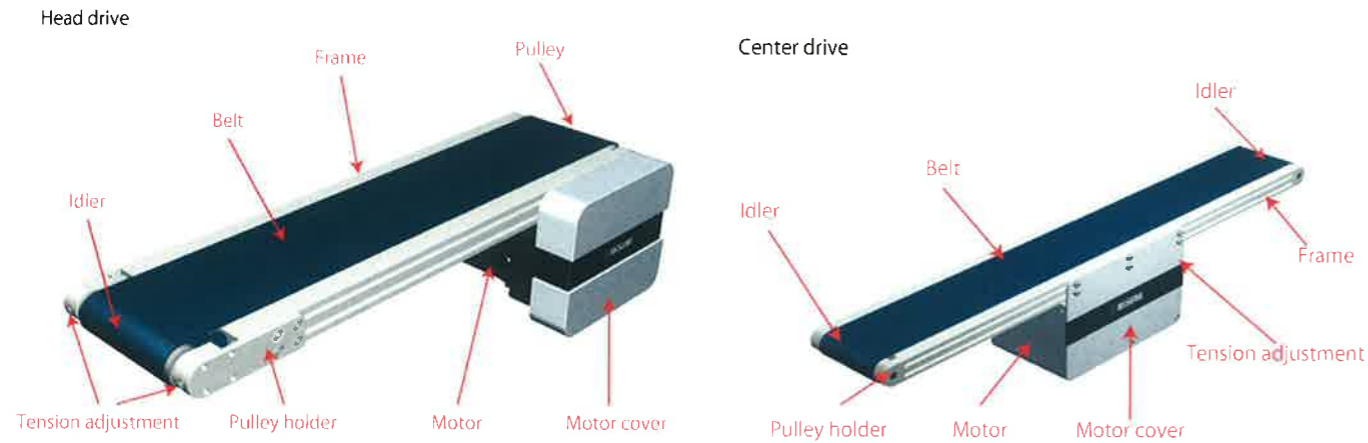
Speed Controller Specifications



* The above figure shows the Panasonic motor. For Oriental motors and motors made in Taiwan, refer to appropriate catalogs.

3. Construction

The following show the examples of the construction, which include head-driven type (shown above) and intermediate-driven type (shown below).



* Typical component parts are shown above.

4. Operation

The power requirement is able to be selected from plural specifications. (the conveyor has been shipped with no power connections made.) Electrical connections shall be made by a qualified engineer to connect the conveyor to each power receptacle or control panel to start the conveyor.

* This conveyor's power requirement is a single-phase or a three-phase. Be sure to use the specified supply voltage. DO NOT use supply voltages other than specified.

5. Maintenance

■ Maintenance parts

Misumi homepage allows you to easily confirm maintenance part numbers of the conveyor you bought.

Misumi conveyor maintenance part search site:

<http://jp.misumi-ec.com/maker/misumi/mech/product/cvs/>

* Be sure to select the same maintenance parts as those used in your conveyor when the conveyor parts are replaced.

Misumi Catalog allows you to easily buy a motor, a belt, etc.

* If the customer attempts to modify the conveyor, it is exempt from the safety standards (CE marking).

■ Precautions to be taken during maintenance work

- Be sure to check that the mains power supply is turned off before starting the maintenance work.
- Do not give excessive tension to the belt. If the conveyor is kept operating under excessive tension given to its belt, belt deterioration or damage to the pulley bearing may result. When a meandering adjustment is made, take the belt tension into consideration.
- Please clean the conveyor, before running the conveyor.
- Belt tension should be alternately adjusted little by little from left and right. If only one tension adjustment screw is continuously turned, the belt will be rapidly moved to one side, the belt may be frayed or worn.

■ Belt replacement

Belt replacement can be confirmed by the motion picture.

○ A head-driven type:

<http://youtu.be/x4s8QXKUkuw>

○ For intermediate-driven type:

<http://youtu.be/MC9TI8d7WI0>

6. Specifications and Environmental Conditions

Output	6 W, 25 W, 40 W, 60W, 90W
Rated voltage	100 V AC, 110V AC, 115V AC, 200 V AC, 220V AC, 230V AC
Operating voltage range	± 10% (with respect to rated voltage)*
Power-supply frequency	50 Hz or 60 Hz
Speed control range	90 to 1400 min – 1 (50 Hz) 90 to 1700 min – 1 (60 Hz)
Speed variation	5% (standard value)
Speed control	Set by speed control adjustment (analog setting)
Operating temperature range	-10° to 40°C
Storage temperature range	-20° to 60°C
Operating humidity range	85% RH maximum (non-condensing)

* ± 10% is a power-supply voltage variation range; this is not a voltage range that can be normally used.
A sound pressure level (noise level) generated by this conveyor is a maximum of 70 dB(A).

Contents of nameplate labels

1. Product category
2. Type
3. Voltage (V)
4. Current (Amperes)
5. Belt
6. Order entry number
7. CE mark (Some products do not apply)
8. Manufacturer and distributor

(1) →	CATEGORY CONVEYOR		
(2) →	TYPE	SVKA-100-100-25-TA220-IM-12.5-H-C	
(3) →	VOLTS	220V	50/60Hz
(4) →	AMPS	0.56/0.48A	50/60Hz
(5) →	BELT	HBLT50-1.0	
(6) →	SER. No.	0611465529835601	
(7) →	CE		MISUMI Corporation MADE IN JAPAN

(8)

Inquiries to technical questions:

Ver.05

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