

Gearmotor with Brake built in rectifier

Motor Capacity Designation

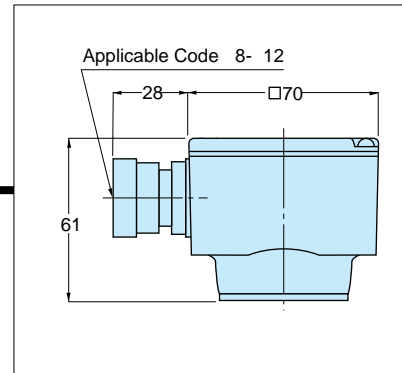
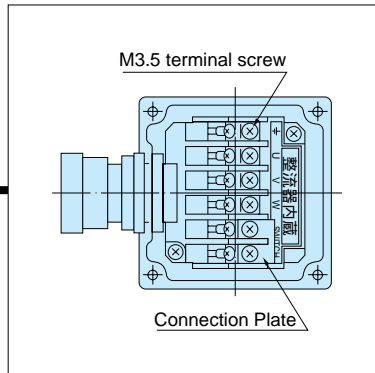
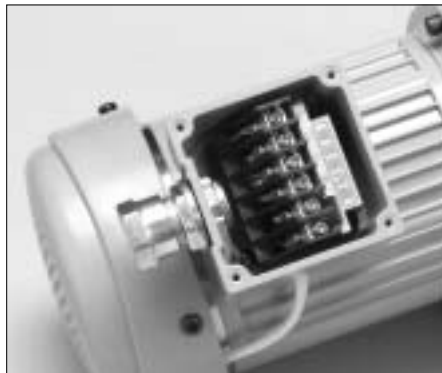
3-Phase / T50 ·T010 ·T020 ·T040 / T50W·T010W·T020W·T040W

Z-Type terminal box with built-in rectifier can be attached to the brake motors with the designation codes listed on the left. If you need this spec., direct us when ordering.

In case of rectifier built-in type, the code of the terminal box will change from "A" to "Z". Direct us for the wiring method.

Z-Type Terminal Box

3-Phase / Standard Specifications·High voltage



Z-Type Terminal Box Wiring Types, Specifications and Selecting Points

Wiring	Specs. and Selecting Points	Inverter	Hoisting Operation	Wire Saving	Braking Delay
AC Switching(B)	Z-Type terminal box contains built-in rectifier and is connected in "AC Switching(B)". Therefore, just connect power supply source to the terminals for start operation. Also you can modify to "DC Switching" by just taking off the connecting plate.	× (Unusable)	× (Unusable)		
DC Switching	Because of the shortest braking delay time, This is appropriate for the application which needs sudden braking such as hoisting operation.	× (Unusable)	(Optimum)		
AC Switching(A)	Separate circuit can be employed for motor and brake. Therefore, most appropriate for inverter drive operation. Wiring with 200V supply is appropriate for the standard voltage. As for the double voltage supply, use the 200V terminal (red lead wire, 0.75 ~ 2.2kW for B terminal) which is extended out from the motor. (Not fixed to the terminal block.) Since the AC Switching(A) wiring is a custom specification, direct us when ordering.	(Optimum)	(Usable)		
Independent Rectifier	The brake lead wire is taken into the terminal box and fixed in the terminal block. Rectifier is not built-in. Any wiring can be feasible according to the customer's specification, for example, putting the rectifier within the switchboard, etc. As for the double voltage supply, use the 200V terminal (red lead wire, 0.75 ~ 2.2kW for B terminal) which is extended out from the motor. (Not fixed to the terminal block.) Since the model with independent rectifier is a custom specification, direct us when ordering. As the rectifier is attached, select the most appropriate wiring method, referring the wiring diagram on page E20.	Application differs according to the wiring method in the switchboard of the rectifier. (AC Switching(A), AC Switching (B) or DC Switching)			

Note 1) "braking delay time" means the time from turn off switch to start braking motion, not the total time for braking.

For braking delay time cause of wiring method, please refer to Table-15 on page E21.

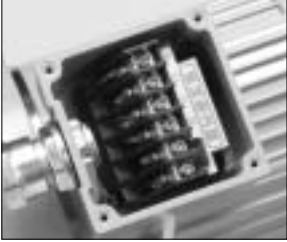
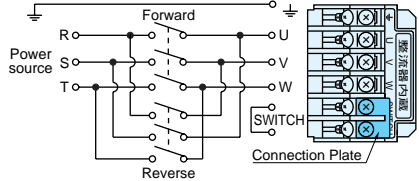
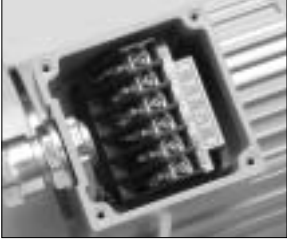
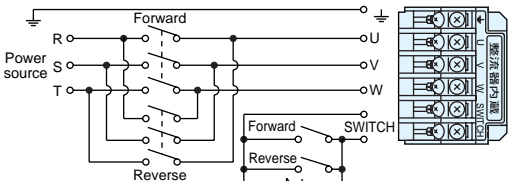

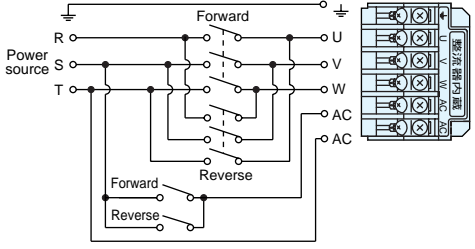
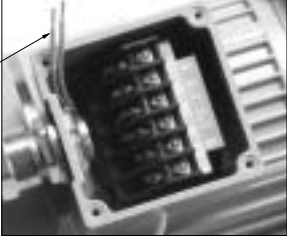
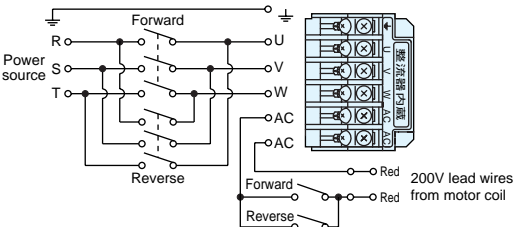
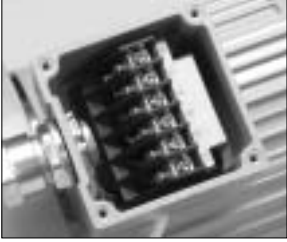
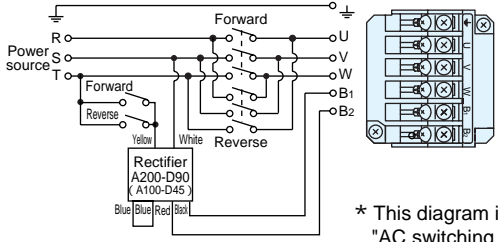
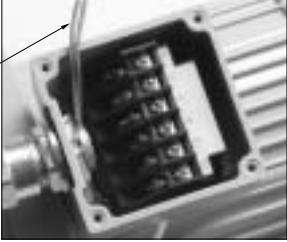
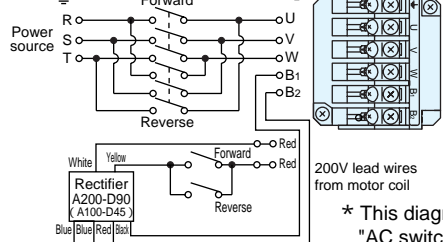
Please refer to calculated data according to page E8.

2) In case of inverter drive, "AC Switching(B)" wiring and "DC Switching" wiring are not feasible, while "AC Switching(A)" wiring is feasible. (Custom specs.) However, the lead wire 200V terminal extended out from the motor body cannot be used. Contact us for details. For cautions for inverter drive, refer to page E44.

Rated Current

The rated current values listed on the motor performance table on page E12 are the ones for motor itself. For rectifier built-in type terminal box, the current value through brake should be taken into account. For details, consult us.

Wiring Z type Terminal Box

Wiring	3-Phase	
AC Switching(B)	Standard Specifications/ High voltage	 
DC Switching	Standard Specifications/ High voltage	 
AC Switching(A) (Specific wiring)	Standard Specifications	 
	High voltage 200V lead wires from motor coil	 
Independent Rectifier (Specific wiring)	Standard Specifications	  <p>* This diagram illustrates "AC switching (A)"</p>
	High voltage 200V lead wires from motor coil	  <p>* This diagram illustrates "AC switching (A)"</p>

Parallel Shaft
(Performance
Table/Dimension)

Gearmotor
with Brake

Water-resistant,
Outdoor
Gearmotor
with Brake

Gearmotor
with
Clutch/Brake

Reducer
(Double Shaft)

S-Type
Reducer

Right Angle Shaft
(Performance
Table/Dimension)

Gearmotor
with Brake

Water-resistant,
Outdoor
Gearmotor
with Brake

Gearmotor
with Clutch
/Brake

Reduce
(Double Shaft)

S-Type
Reducer

Hollow Shaft
Solid Shaft
Performance
Table/Dimension

Gearmotor
with Brake

Water-Resistant,
Outdoor
Gearmotor
with Brake

Reduce
(Double Shaft)

S-Type
Reducer

Concentric Hollow Shaft
Concentric Solid Shaft
Performance Table
Dimension

Gearmotor
with Brake

Water-Resistant,
Outdoor
Gearmotor
with Brake

Reducer
(Parallel Shaft)

S-Type
Reducer

Technical Information

Standard Motors

Cautions for Safety

Option

GT-STEP
Index
Gearmotor

KOMPASS
Gearbox

Gearmotor with Brake built in rectifier

Motor Capacity Designation

3-Phase / 075・150・220

Please let me know if you need built in rectifier type terminal box when you order.

* When high voltage is required, please ask us on a head.

In case of rectifier built-in motor, inform us of the wiring method together with the type name.

For example : G3LB-32-30-075 AC switching (A)

Wiring method

Wiring	Motor Capacity Designation [075]	Motor Capacity Designation [150・220]
DC Switching		
AC Switching (A)		
AC Switching (B)		

Incase of changing speed by inverter drive

In case of rectifier built-in terminal box in combination with inverter, wirings other than AC Switching (A) are not feasible. Also, in the case of AC Switching (A) wiring, power supply to the rectifier should be done through the primary input of the inverter. Refer to page E44.

Rated Current

The rated current values listed on the motor performance table on page E12 are the ones for motor itself. For rectifier built-in type terminal box, the current value through brake should be taken into account. For details, consult us.

- Parallel Shaft (Performance Table/Dimension)
- Gearmotor with Brake
- Water-resistant, Outdoor Gearmotor with Brake
- Gearmotor with Clutch/Brake
- Reducer (Double Shaft)
- S-Type Reducer
- Right Angle Shaft (Performance Table/Dimension)
- Gearmotor with Brake
- Water-resistant, Outdoor Gearmotor with Brake
- Gearmotor with Clutch /Brake
- Reduce (Double Shaft)
- S-Type Reducer
- Hollow Shaft Solid Shaft Performance Table/Dimension
- Gearmotor with Brake
- Water-resistant, Outdoor Gearmotor with Brake
- Reduce (Double Shaft)
- S-Type Reducer
- Concentric Hollow Shaft Concentric Solid Shaft Performance Table Dimension
- Gearmotor with Brake
- Water-Resistant, Outdoor Gearmotor with Brake
- Reducer (Parallel Shaft)
- S-Type Reducer
- Technical Information
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- GT-STEP Index Gearmotor
- KOMPASS Gearbox

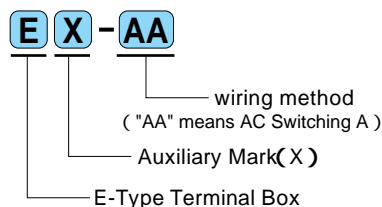
Water-Resistant Specifications Gearmotor with Brake Wiring • Built-in Rectifier Terminal Box

Separated rectifier type is the standard specification of the terminal box in gearmotors with brake.
When you need the rectifier built-in type, contact us with the following manner.

Type	Type Code when ordering(Example) (Indicate this type cord in your order.)
AC Switching A	EX-AA
AC Switching B	EX-AB
DC Switching	EX-DC

The wiring method indication code does not appear on the product-type name. It appears in the supplemental number column on the nameplate.

Explanations of Type Designation



Wiring Method

	Wiring	Inverter Operation	Hoisting Operation	Point	Ordered Type
Standard	<p>Please refer to diagram of page E30</p> <p>Fan cover side Brake Lead Wire</p>			Any wiring can be possible according to the customer's specification, for example, putting the rectifier inside of the switchboard, etc. Brake lead wire is extended out to the terminal block.	End of type E
AC Switching(A)	<p>Fan cover side lead Wires at</p>	(Optimum)	(Usable)	Wiring enables inverter operation. Also, the power supply input lead wire for rectifier is extended out to the terminal block.	End of type EX-AA
AC Switching(B)	<p>Fan cover side connection lead wire</p>	x (Unusable)	x (Unusable)	Easy wiring. Start operation only by connecting the power source (U·V·W). (Modification to DC Switching wiring can be done only by taking out the connecting lead wire.)	End of type EX-AB
DC Switching	<p>Fan cover side Switch plate for DC Switching</p>	x (Unusable)	(Optimum)	Because of the shortest braking delay time, most appropriate for the application such as hoisting operation, the DC Switching terminal is extended out to the terminal block.	End of type EX-DC

Parallel Shaft (Performance Table/Dimension)

Gearmotor with Brake

Water-resistant, Outdoor Gearmotor with Brake

Gearmotor with Clutch/Brake

Reducer (Double Shaft)

S-Type Reducer

Right Angle Shaft (Performance Table/Dimension)

Gearmotor with Brake

Water-resistant, Outdoor Gearmotor with Brake

Gearmotor with Clutch/Brake

Reduce (Double Shaft)

S-Type Reducer

Hollow Shaft Solid Shaft Performance Table/Dimension

Gearmotor with Brake

Water-Resistant, Outdoor Gearmotor with Brake

Reduce (Double Shaft)

S-Type Reducer

Concentric Hollow Shaft Concentric Solid Shaft Performance Table/Dimension

Gearmotor with Brake

Water-Resistant, Outdoor Gearmotor with Brake

Reducer (Parallel Shaft)

S-Type Reducer

Technical Information

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KOMPASS Gearbox