

Product Discontinuation

Servo Driver

R88D-GT[]
R88D-GN[]-ML2
R88D-GP08H

Servo Motor

R88M-G[]S-[]
R88M-G[]T-[]
R88M-G[]T-[]-D
R88M-GP[]S-[]
R88M-GP[]T-[]
R88M-GP[]T-[]-D



Recommended Replacement

Servo Driver

R88D-KT[]
R88D-KN[]-ML2
R88D-KT08H

Servo Motor

R88M-K[]S-[]
R88M-K[]T-[]
R88M-K[]T-[]
R88M-K[]S-[]
R88M-K[]T-[]
R88M-K[]T-[]

[Final order entry date]

The end of October, 2024

[Date of The Last Shipping]

The end of March, 2025

[Scheduled date of maintenance close]

The end of March, 2031

[Caution on recommended replacement]

- R88D-GP08H is part of the SmartStep2 Series lineup, but it will be discontinued with G Series.
- G5 Series does not have the flat type motors(R88M-GP[]). Please replace with the standard type motors.
- G5 Series does not have the circular connector type motors(R88M-G[]-D), however, the protective structure between the motor and the cable of G5 Series standard motors has been improved from IP65 to IP67.
- The mounting dimensions are not same between R88M-G1K030T-[](flange dimension:90×90) and R88M-K1K030T-[](flange dimension:100×100).
- The parameters are different between G series and G5 series. Please refer to the Replace Guides (I877-E1, I878-E1).

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
R88D-KT[]	--	*	--	**	*	--	--
R88D-KN[]-ML2	--	*	--	**	*	--	--
R88M-K[]	**	*	--	*	--	--	**
R88M-K[] (from flat type)	**	--	--	--	--	--	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
R88D-GT02L	R88D-KT02L
R88D-GT04L	R88D-KT04L
R88D-GT01H	R88D-KT01H
R88D-GT02H	R88D-KT02H
R88D-GT04H	R88D-KT04H
R88D-GT08H	R88D-KT08H
R88D-GT10H	R88D-KT10H
R88D-GT15H	R88D-KT15H
R88D-GN01H-ML2	R88D-KN01H-ML2
R88D-GN02H-ML2	R88D-KN02H-ML2
R88D-GN04H-ML2	R88D-KN04H-ML2
R88D-GN08H-ML2	R88D-KN08H-ML2
R88D-GN10H-ML2	R88D-KN10H-ML2
R88D-GN15H-ML2	R88D-KN15H-ML2
R88D-GN20H-ML2	R88D-KN20H-ML2
R88D-GN30H-ML2	R88D-KN30H-ML2
R88D-GP08H	R88D-KT08H
R88M-G05030T-S2	R88M-K05030T-S2
R88M-G05030T-S2-D	R88M-K05030T-S2
R88M-G05030T-B	R88M-K05030T-B
R88M-G05030T-BS2	R88M-K05030T-BS2
R88M-G05030T-BS2-D	R88M-K05030T-BS2
R88M-G10030S	R88M-K10030S
R88M-G10030S-O	R88M-K10030S-O
R88M-G10030S-S2	R88M-K10030S-S2
R88M-G10030S-OS2	R88M-K10030S-OS2
R88M-G10030S-B	R88M-K10030S-B
R88M-G10030S-BO	R88M-K10030S-BO
R88M-G10030S-BS2	R88M-K10030S-BS2
R88M-G10030S-BOS2	R88M-K10030S-BOS2
R88M-G20030S	R88M-K20030S
R88M-G20030S-O	R88M-K20030S-O
R88M-G20030S-S2	R88M-K20030S-S2
R88M-G20030S-OS2	R88M-K20030S-OS2
R88M-G20030S-B	R88M-K20030S-B
R88M-G20030S-BO	R88M-K20030S-BO
R88M-G20030S-BS2	R88M-K20030S-BS2
R88M-G20030S-BOS2	R88M-K20030S-BOS2
R88M-G40030S	R88M-K40030S
R88M-G40030S-O	R88M-K40030S-O
R88M-G40030S-S2	R88M-K40030S-S2
R88M-G40030S-OS2	R88M-K40030S-OS2
R88M-G40030S-B	R88M-K40030S-B
R88M-G40030S-BO	R88M-K40030S-BO
R88M-G40030S-BS2	R88M-K40030S-BS2
R88M-G40030S-BOS2	R88M-K40030S-BOS2
R88M-G10030T-S2	R88M-K10030T-S2
R88M-G10030T-S2-D	R88M-K10030T-S2

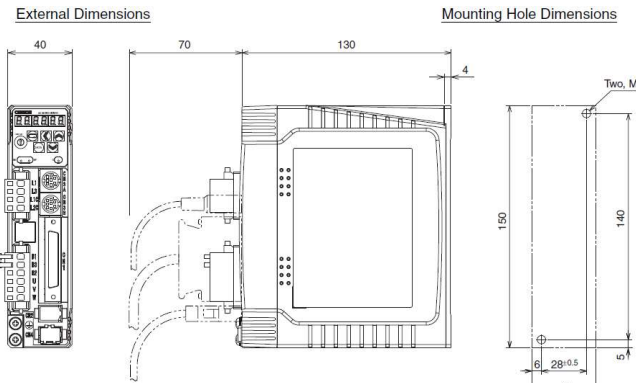
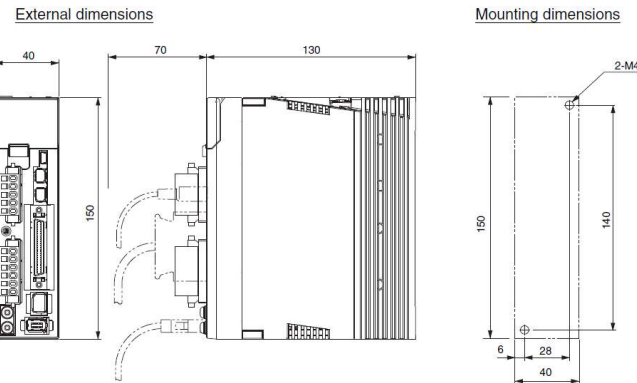
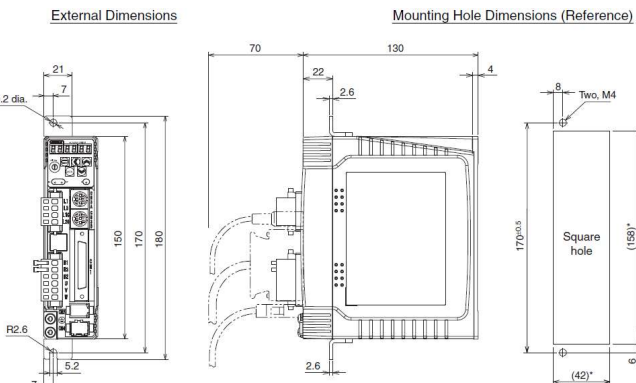
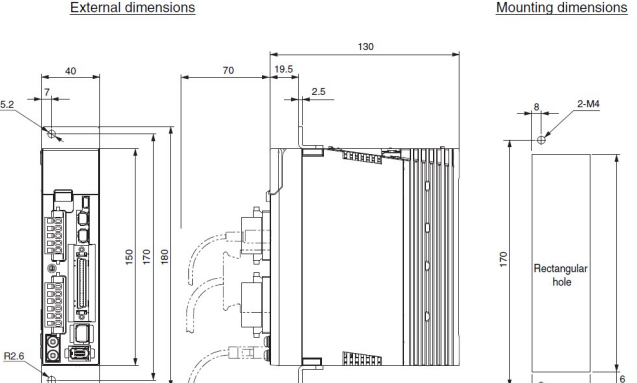
Product discontinuation	Recommended replacement
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R88M-G20030T-S2	R88M-K20030T-S2
R88M-G20030T-S2-D	R88M-K20030T-S2
R88M-G20030T-B	R88M-K20030T-B
R88M-G20030T-BS2	R88M-K20030T-BS2
R88M-G20030T-BS2-D	R88M-K20030T-BS2
R88M-G40030T	R88M-K40030T
R88M-G40030T-S2	R88M-K40030T-S2
R88M-G40030T-S2-D	R88M-K40030T-S2
R88M-G40030T-B	R88M-K40030T-B
R88M-G40030T-BS2	R88M-K40030T-BS2
R88M-G40030T-BS2-D	R88M-K40030T-BS2
R88M-G75030T	R88M-K75030T
R88M-G75030T-S2	R88M-K75030T-S2
R88M-G75030T-S2-D	R88M-K75030T-S2
R88M-G75030T-B	R88M-K75030T-B
R88M-G75030T-BS2	R88M-K75030T-BS2
R88M-G75030T-BS2-D	R88M-K75030T-BS2
R88M-G1K030T-S2	R88M-K1K030T-S2
R88M-G1K030T-BS2	R88M-K1K030T-BS2
R88M-G1K530T-S2	R88M-K1K530T-S2
R88M-G1K530T-B	R88M-K1K530T-B
R88M-G1K530T-BS2	R88M-K1K530T-BS2
R88M-GP10030S	R88M-K10030S
R88M-GP10030S-O	R88M-K10030S-O
R88M-GP10030S-S2	R88M-K10030S-S2
R88M-GP10030S-OS2	R88M-K10030S-OS2
R88M-GP10030S-B	R88M-K10030S-B
R88M-GP10030S-BO	R88M-K10030S-BO
R88M-GP10030S-BS2	R88M-K10030S-BS2
R88M-GP10030S-BOS2	R88M-K10030S-BOS2
R88M-GP20030S	R88M-K20030S
R88M-GP20030S-O	R88M-K20030S-O
R88M-GP20030S-S2	R88M-K20030S-S2
R88M-GP20030S-OS2	R88M-K20030S-OS2
R88M-GP20030S-B	R88M-K20030S-B
R88M-GP20030S-BO	R88M-K20030S-BO
R88M-GP20030S-BS2	R88M-K20030S-BS2
R88M-GP20030S-BOS2	R88M-K20030S-BOS2
R88M-GP40030S	R88M-K40030S
R88M-GP40030S-O	R88M-K40030S-O
R88M-GP40030S-S2	R88M-K40030S-S2
R88M-GP40030S-OS2	R88M-K40030S-OS2
R88M-GP40030S-B	R88M-K40030S-B
R88M-GP40030S-BO	R88M-K40030S-BO
R88M-GP40030S-BS2	R88M-K40030S-BS2
R88M-GP40030S-BOS2	R88M-K40030S-BOS2

Product discontinuation	Recommended replacement
R88M-GP10030T-S2	R88M-K10030T-S2
R88M-GP10030T-S2-D	R88M-K10030T-S2
R88M-GP10030T-BS2-D	R88M-K10030T-BS2
R88M-GP20030T-S2-D	R88M-K20030T-S2
R88M-GP20030T-BS2-D	R88M-K20030T-BS2
R88M-GP40030T-S2	R88M-K40030T-S2
R88M-GP40030T-S2-D	R88M-K40030T-S2
R88M-GP40030T-BS2-D	R88M-K40030T-BS2
R88M-G1K020T-S2	R88M-K1K020T-S2
R88M-G1K020T-BS2	R88M-K1K020T-BS2
R88M-G1K520T-S2	R88M-K1K520T-S2
R88M-G1K520T-BS2	R88M-K1K520T-BS2
R88M-G2K020T	R88M-K2K020T
R88M-G2K020T-S2	R88M-K2K020T-S2
R88M-G90010T-BS2	R88M-K90010T-BS2

[Body color]

Product discontinuation R88D-GT[]/R88D-GN[]-ML2/R88D-GP08H R88M-G[]	Recommendable replacement R88D-KT[]/R88D-KN[]-ML2 R88M-K[]
R88D-GT[]/R88D-GN[]-ML2/R88D-GP08H Ivory white R88M-G[] Silver, Black	R88D-KT[]/R88D-KN[]-ML2 Black R88M-K[] Silver, Black

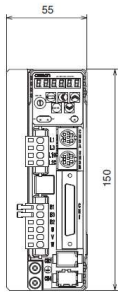
[Dimensions & Mounting dimensions]

<p>Product discontinuation R88D-GT[]</p>	<p>Recommendable replacement R88D-KT[]</p>
<p>R88D-GT01H/-GT02H Wall Mounting</p> <p>External Dimensions</p>  <p>Mounting Hole Dimensions</p>	<p>R88D-KT01H/-KT02H Wall Mounting</p> <p>External dimensions</p>  <p>Mounting dimensions</p>
<p>Front Panel Mounting (Using Mounting Brackets)</p> <p>External Dimensions</p>  <p>Mounting Hole Dimensions (Reference)</p> <p>* The dimensions of the square hole are reference values.</p> <p>Dimensions for front panel mounting are reference values that provide leeway.</p>	<p>Front Panel Mounting (Using Mounting Brackets)</p> <p>External dimensions</p>  <p>Mounting dimensions</p> <p>* Rectangular hole dimensions are reference values.</p>

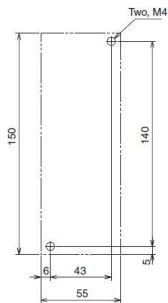
**Product discontinuation
R88D-GT[]**

**R88D-GT02L/-GT04H
Wall Mounting**

External Dimensions

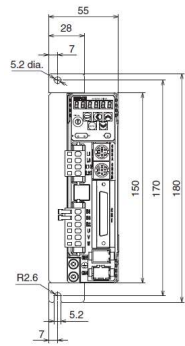


Mounting Hole Dimensions

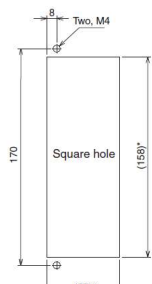


**Front Panel Mounting
(Using Mounting Brackets)**

External Dimensions



Mounting Hole Dimensions (Reference)



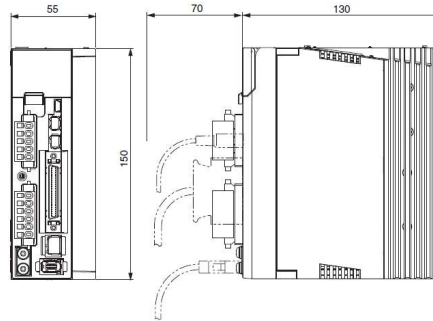
* The dimensions of the square hole are reference values.

Dimensions for front panel mounting are references values that provide leeway.

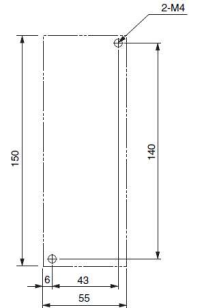
**Recommendable replacement
R88D-KT[]**

**R88D-KT02L/-KT04H
Wall Mounting**

External dimensions

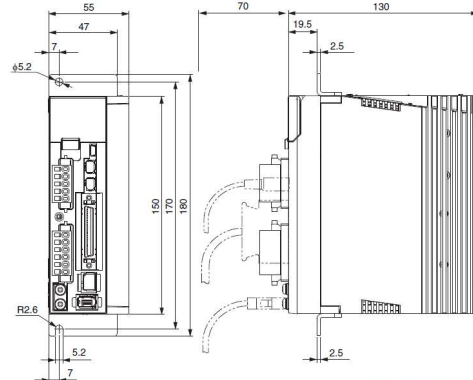


Mounting dimensions

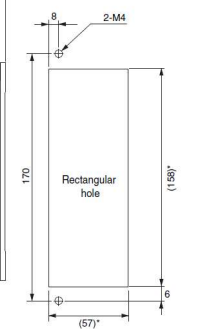


**Front Panel Mounting
(Using Mounting Brackets)**

External dimensions



Mounting dimensions

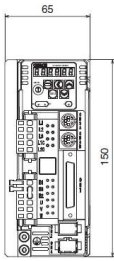


* Rectangular hole dimensions are reference values.

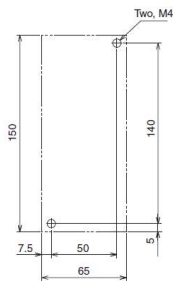
Product discontinuation
R88D-GT[]

R88D-GT04L/-GT08H
Wall Mounting

External Dimensions

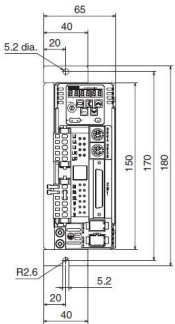


Mounting Hole Dimensions

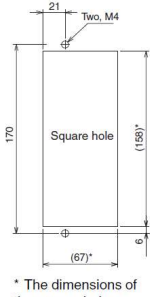


Front Panel Mounting
(Using Mounting Brackets)

External Dimensions



Mounting Hole Dimensions (Reference)



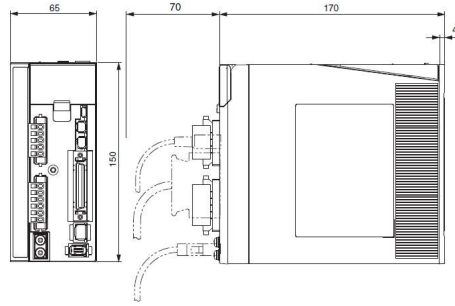
* The dimensions of the square hole are reference values.

Dimensions for front panel mounting are reference values that provide leeway.

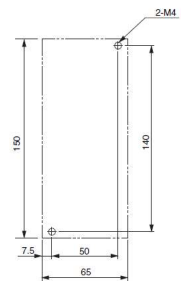
Recommendable replacement
R88D-KT[]

R88D-KT04L/-KT08H
Wall Mounting

External dimensions

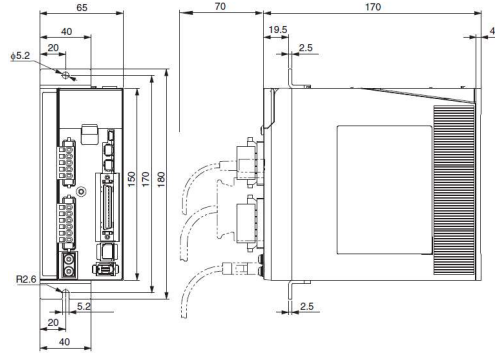


Mounting dimensions

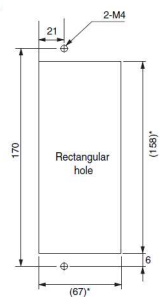


Front Panel Mounting
(Using Mounting Brackets)

External dimensions



Mounting dimensions



* Rectangular hole dimensions are reference values.

**Product discontinuation
R88D-GT[]**

**Recommendable replacement
R88D-KT[]**

**R88D-GT10H/-GT15H
Wall Mounting**

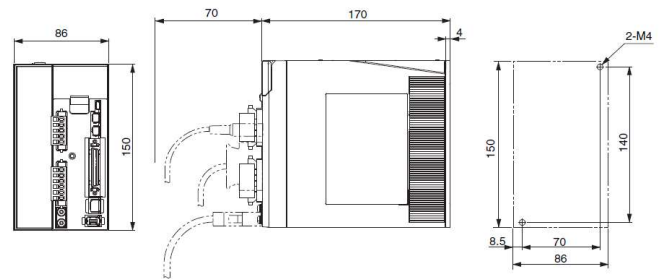
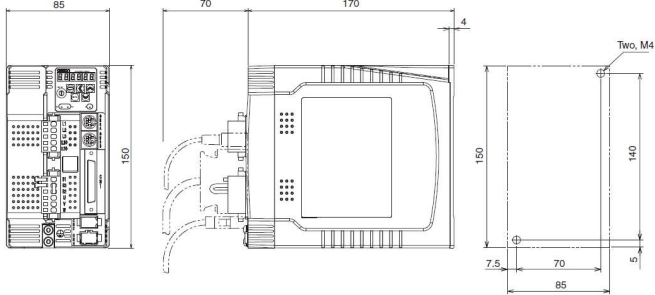
**R88D-KT10H/-KT15H
Wall Mounting**

External Dimensions

Mounting Hole Dimensions

External dimensions

Mounting dimensions



**Front Panel Mounting
(Using Mounting Brackets)**

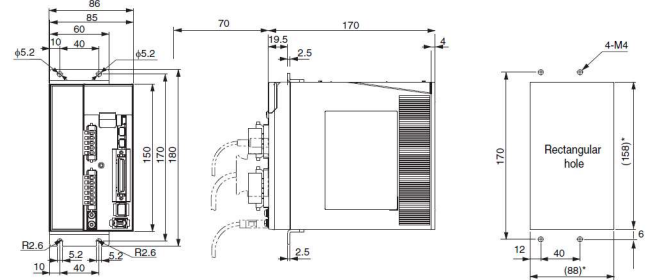
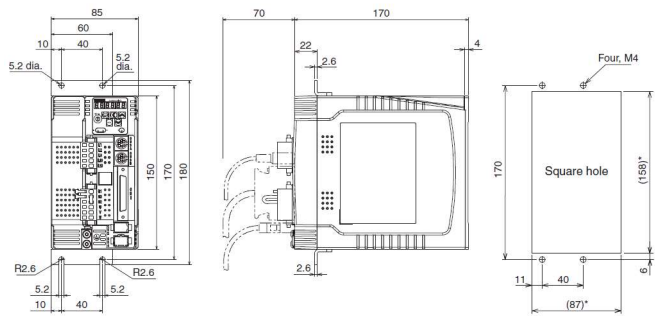
**Front Panel Mounting
(Using Mounting Brackets)**

External Dimensions

Mounting Hole Dimensions (Reference)

External dimensions

Mounting dimensions



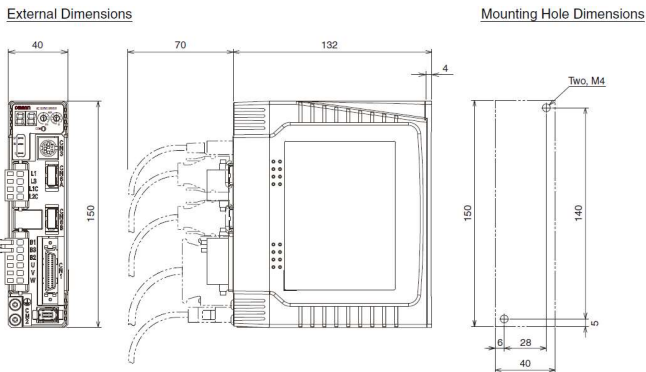
* The dimensions of the square hole are reference values.

* Rectangular hole dimensions are reference values.

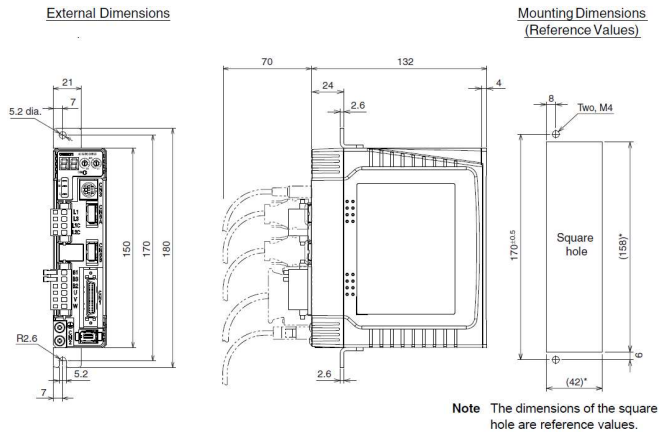
Dimensions for front panel mounting are reference values that provide leeway.

Product discontinuation
R88D-GN[-]ML2

R88D-GN01H-ML2/-GN02H-ML2
Wall Mounting

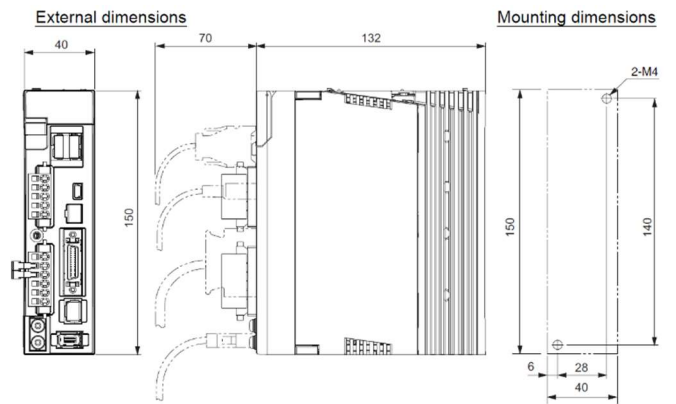


Front Panel Mounting
(Using Mounting Brackets)

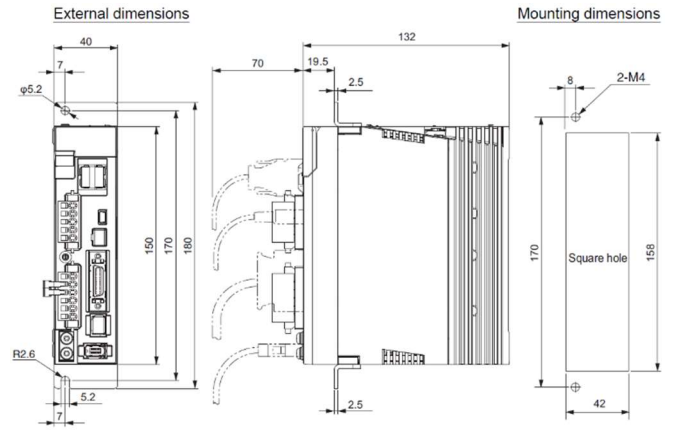


Recommendable replacement
R88D-KN[-]ML2

R88D-KN01H-ML2/-KN02H-ML2
Wall Mounting



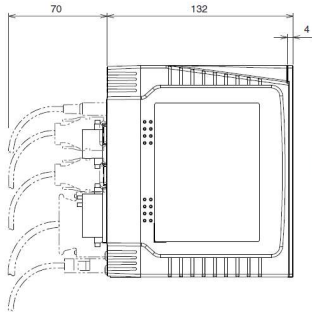
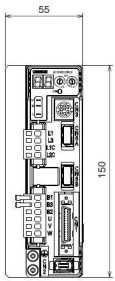
Front Panel Mounting
(Using Mounting Brackets)



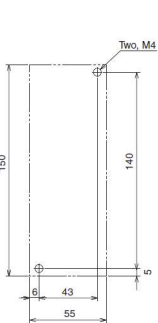
Product discontinuation
R88D-GN[]-ML2

R88D-GN04H-ML2
Wall Mounting

External Dimensions

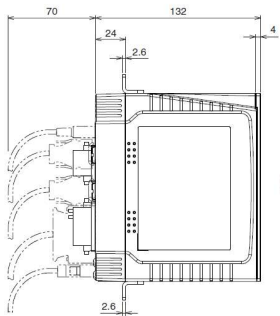
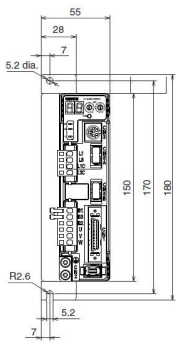


Mounting Hole Dimensions

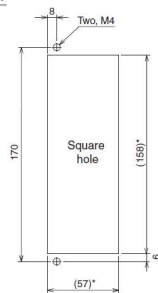


Front Panel Mounting
(Using Mounting Brackets)

External Dimensions



Mounting Dimensions
(Reference Values)

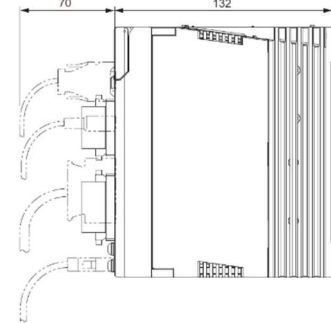
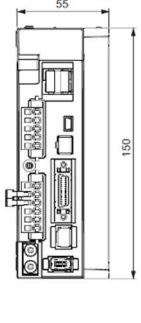


Note The dimensions of the square hole are reference values.

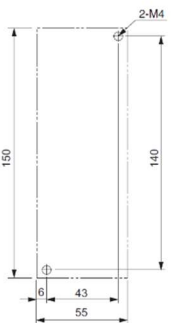
Recommendable replacement
R88D-KN[]-ML2

R88D-KN04H-ML2
Wall Mounting

External dimensions

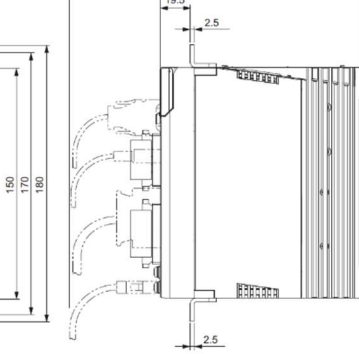
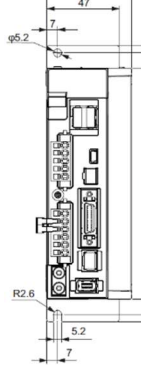


Mounting dimensions

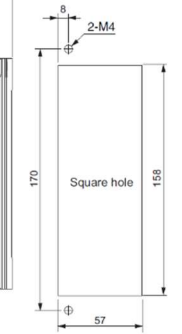


Front Panel Mounting
(Using Mounting Brackets)

External dimensions



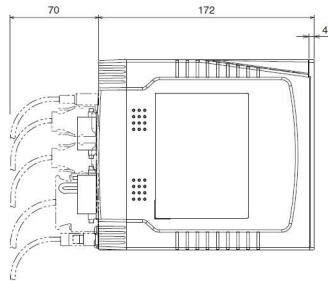
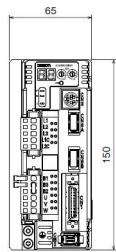
Mounting dimensions



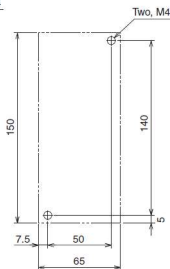
Product discontinuation
R88D-GN[]-ML2

R88D-GN08H-ML2
Wall Mounting

External Dimensions

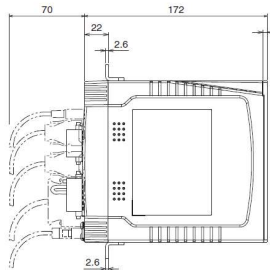
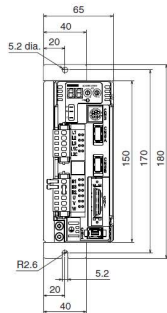


Mounting Hole Dimensions

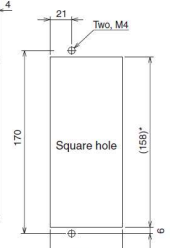


Front Panel Mounting
(Using Mounting Brackets)

External Dimensions



Mounting Dimensions
(Reference Values)

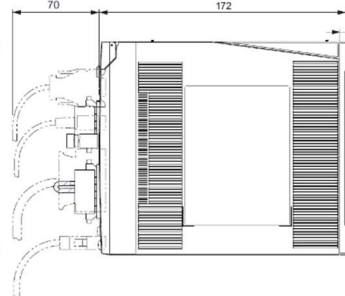
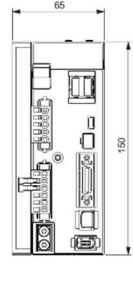


Note The dimensions of the square hole are reference values.

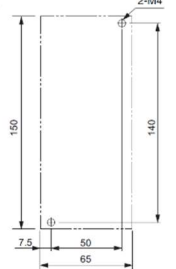
Recommendable replacement
R88D-KN[]-ML2

R88D-KN08H-ML2
Wall Mounting

External dimensions

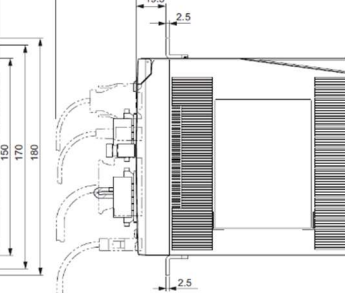
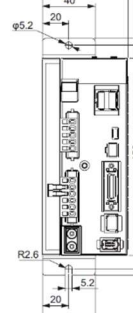


Mounting dimensions

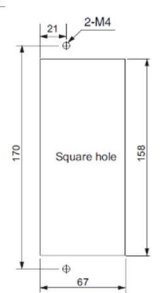


Front Panel Mounting
(Using Mounting Brackets)

External dimensions



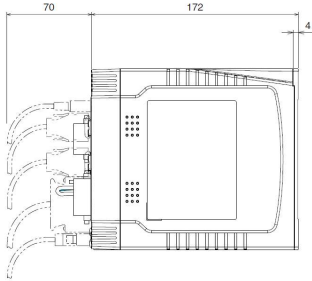
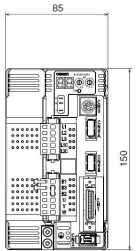
Mounting dimensions



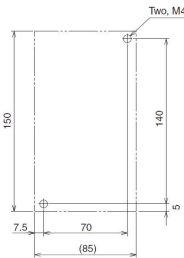
Product discontinuation
R88D-GN[-]ML2

R88D-GN10H-ML2/-GN15H-ML2
Wall Mounting

External Dimensions

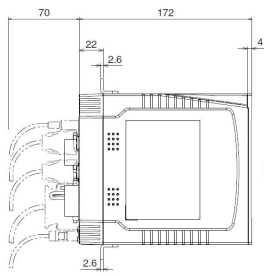
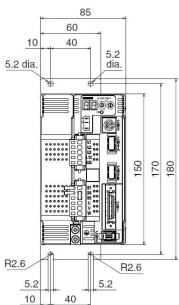


Mounting Hole Dimensions

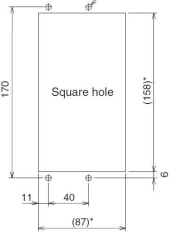


Front Panel Mounting
(Using Mounting Brackets)

External Dimensions



Mounting Dimensions
(Reference Values)

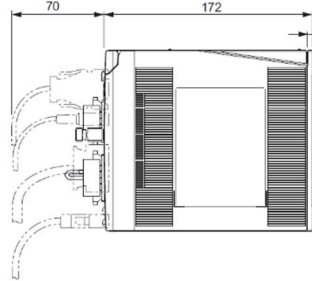
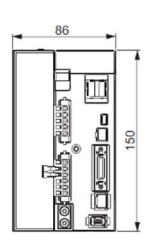


Note The dimensions of the square hole are reference values.

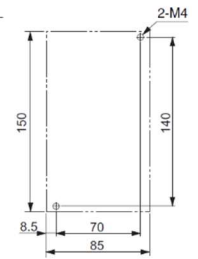
Recommendable replacement
R88D-KN[-]ML2

R88D-KN10H-ML2/-KN15H-ML2
Wall Mounting

External dimensions

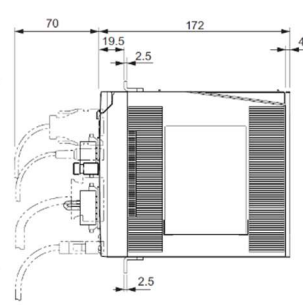
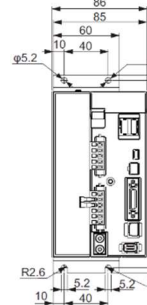


Mounting dimensions

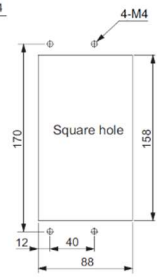


Front Panel Mounting
(Using Mounting Brackets)

External dimensions

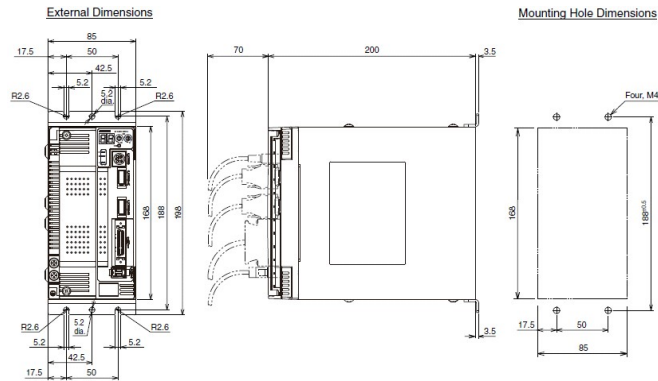


Mounting dimensions

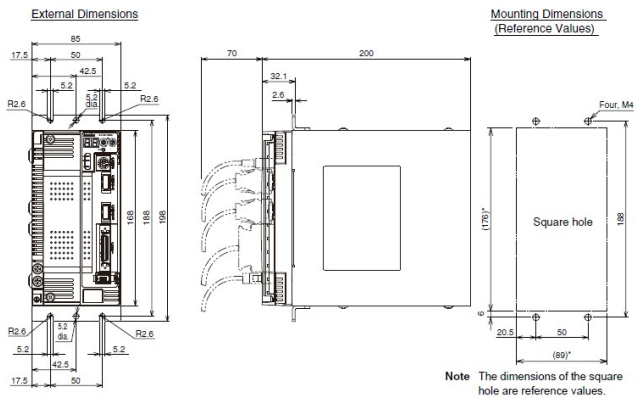


Product discontinuation
R88D-GN[]-ML2

R88D-GN20H-ML2
Wall Mounting

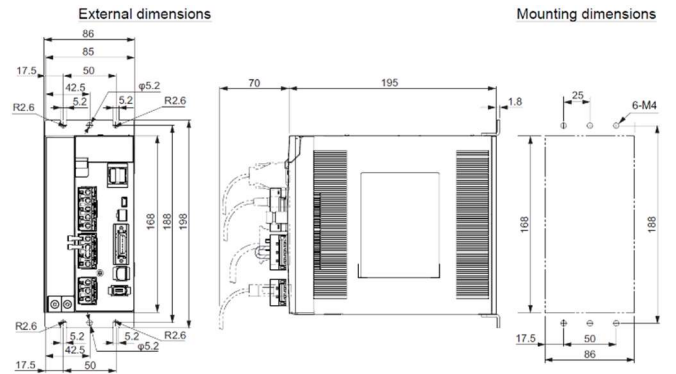


Front Panel Mounting
(Using Mounting Brackets)

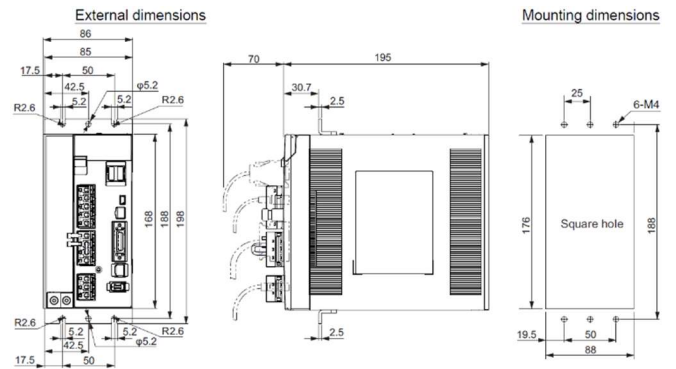


Recommendable replacement
R88D-KN[]-ML2

R88D-KN20H-ML2
Wall Mounting

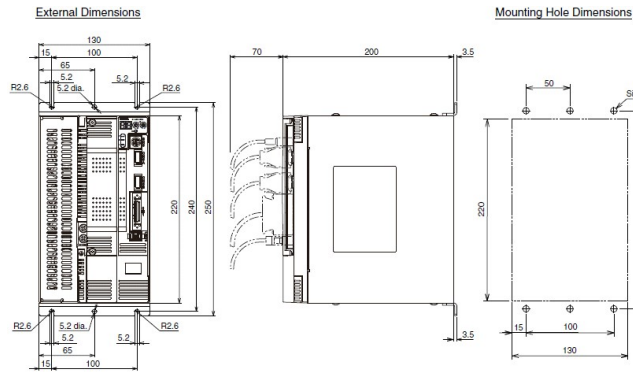


Front Panel Mounting
(Using Mounting Brackets)

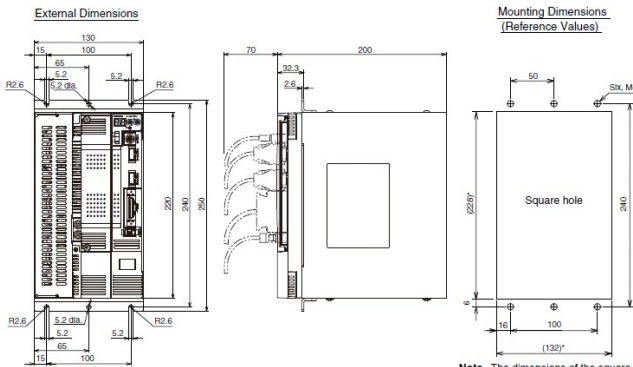


Product discontinuation
R88D-GN[]-ML2

R88D-GN30H-ML2
Wall Mounting

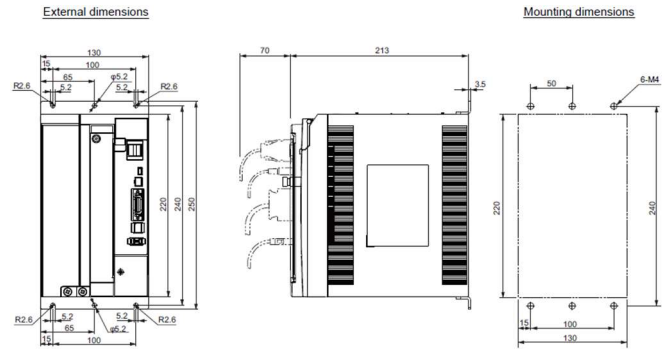


Front Panel Mounting
(Using Mounting Brackets)

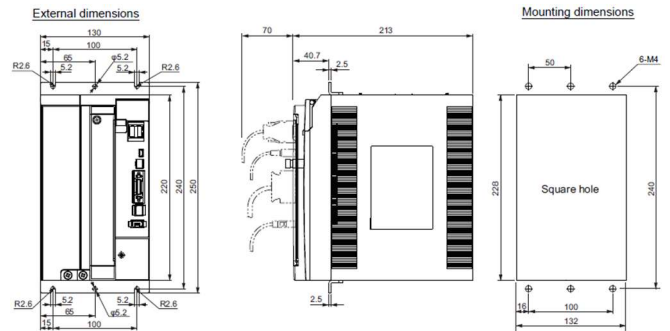


Recommendable replacement
R88D-KN[]-ML2

R88D-KN30H-ML2
Wall Mounting

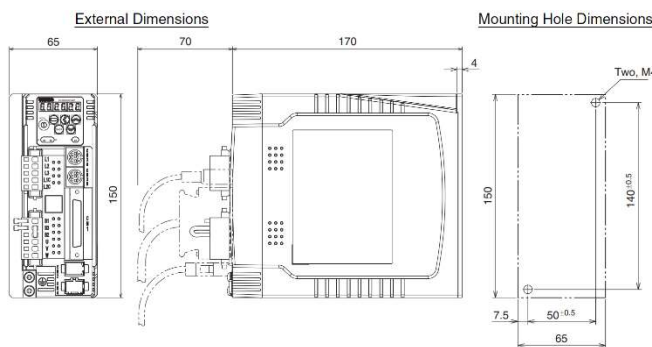


Front Panel Mounting
(Using Mounting Brackets)



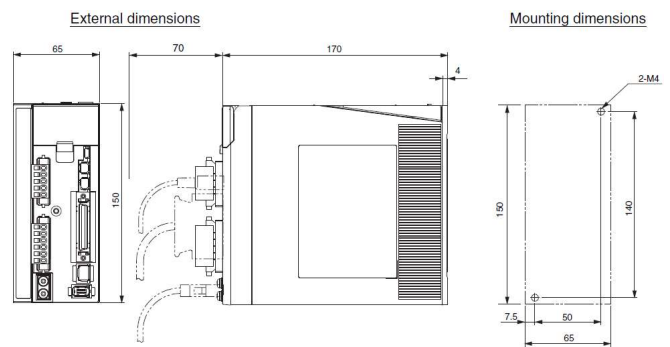
Product discontinuation
R88D-GP08H

R88D-GP08H
Wall Mounting



Recommendable replacement
R88D-KT08H

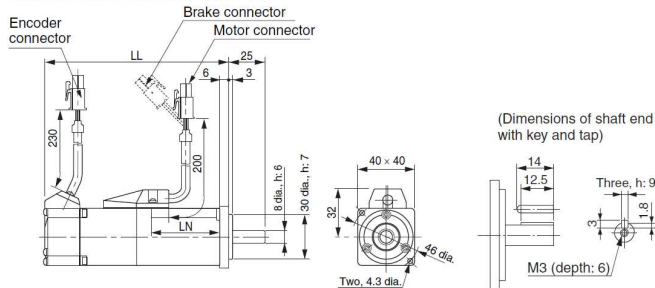
R88D-KT08H
Wall Mounting



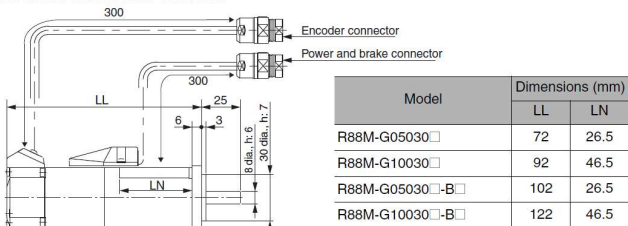
Product discontinuation
R88M-G□

R88M-G05030T-□/-G10030S-□/-G10030T-□
-G05030T-□-D/-G10030T-□-D

Servo motor with standard connector



Servo motor with circular connector

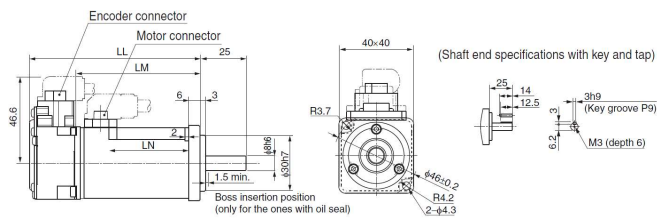


Note The standard models have a straight shaft. Models with a key and tap are indicated with "S2" at the end of the model number.

Recommendable replacement
R88M-K□

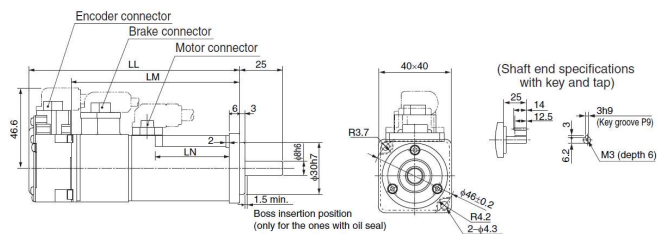
R88M-K05030T-□/-K10030S-□/-K10030T-□

Without brake



Model	Dimensions (mm)		
	LL	LM	LN
R88M-K05030□	72	48	23
R88M-K10030□	92	68	43

With brake

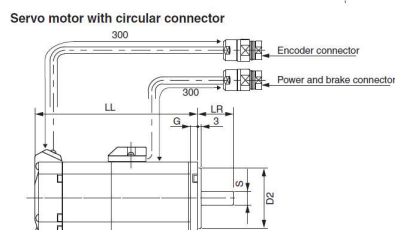
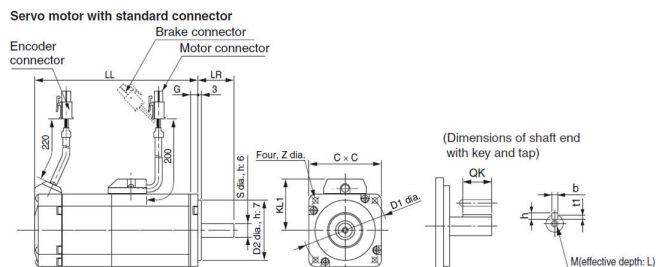


Model	Dimensions (mm)		
	LL	LM	LN
R88M-K05030□-Bx	102	78	23
R88M-K10030□-Bx	122	98	43

Note. The standard models have a straight shaft. Models with a key and tap are indicated with S2 at the end of the model number. Models with an oil seal are indicated with O at the end of the model number. The motor dimensions do not change.

Product discontinuation
R88M-G□

R88M-G20030S-□/-G40030S-□
-G20030T-□/-G40030T-□/-G75030T-□
-G20030T-□-D/-G40030T-□-D/-G75030T-□-D

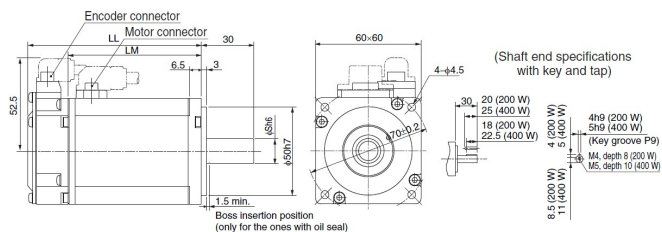


Model	Dimensions (mm)															
	LL	LR	S	D1	D2	C	G	KL1	Z	OK	b	h	M	t1	L	
R88M-G20030□	79.5	30	11	14	70	50	60	6.5	43	4.5	18	4h9	4	M4	2.5	8
R88M-G40030□	99	30	14	70	50	60	6.5	43	4.5	22.5	5h9	5	M5	3	10	
R88M-G75030□	112.2	35	19	90	70	80	8	53	6	22	6h9	6	M5	3.5	10	
R88M-G20030□-B□	116	30	11	70	50	60	6.5	43	4.5	18	4h9	4	M4	2.5	8	
R88M-G40030□-B□	135.5	30	14	70	50	60	6.5	43	4.5	22.5	5h9	5	M5	3	10	
R88M-G75030□-B□	149.2	35	19	90	70	80	8	53	6	22	6h9	6	M5	3.5	10	

Note The standard models have a straight shaft. Models with a key and tap are indicated with "S2" at the end of the model number.

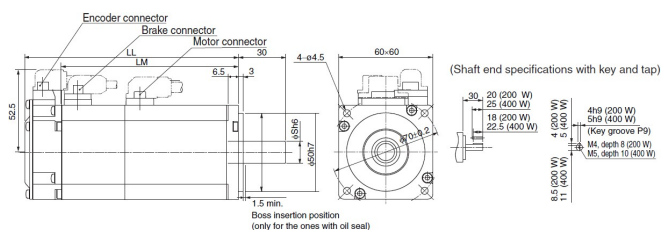
Recommendable replacement
R88M-K□

R88M-K20030S-□/-K40030S-□
-K20030T-□/-K40030T-□
Without brake



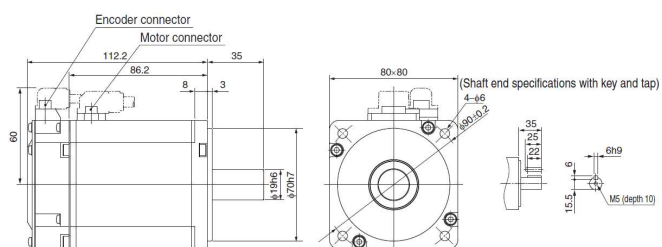
Model	Dimensions (mm)		
	LL	LM	S
R88M-K20030□	79.5	56.5	11
R88M-K40030□	99	76	14

With brake

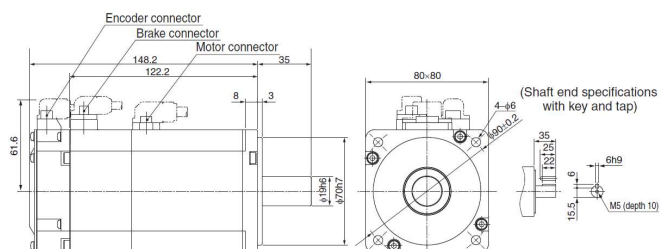


Model	Dimensions (mm)		
	LL	LM	S
R88M-K20030□-B□	116	93	11
R88M-K40030□-B□	135.5	112.5	14

R88M-K75030T-□
Without brake



With brake

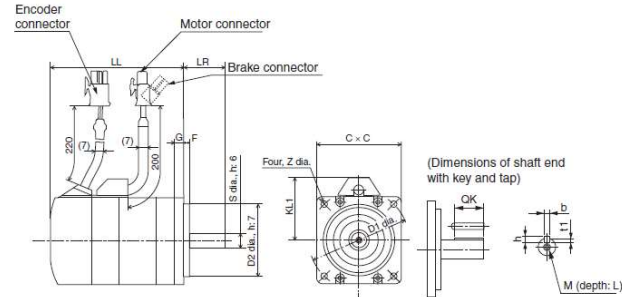


Note. The standard models have a straight shaft. Models with a key and tap are indicated with S2 at the end of the model number. Models with an oil seal are indicated with O at the end of the model number. The motor dimensions do not change.

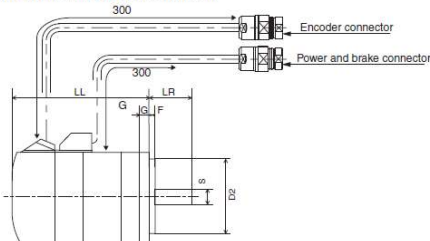
Product discontinuation
R88M-G□

R88M-GP10030S-□/-GP20030S-□/-GP40030S-□
-GP10030T-□/-GP20030T-□/-GP40030T-□
-GP10030T-□-D/-GP20030T-□-D
-GP40030T-□-D

Servo motor with standard connector



Servo motor with circular connector

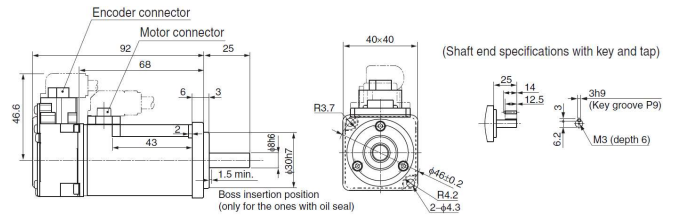


Model	Dimensions (mm)															
	LL	LR	S	D1	D2	C	F	G	KL1	Z	QK	b	h	t1	M	L
R88M-GP10030S	87.5	25	8	70	50	60	3	7	43	4.5	12.5	3h9	3	1.8	M3	6
R88M-GP10030T	87.5	25	8	70	50	60	3	7	43	4.5	12.5	3h9	3	1.8	M3	6
R88M-GP20030S	94.5	30	11	90	70	80	5	8	53	5.5	18	4h9	4	2.5	M4	8
R88M-GP20030T	94.5	30	11	90	70	80	5	8	53	5.5	18	4h9	4	2.5	M4	8
R88M-GP40030S	109.5	30	14	90	70	80	5	8	53	5.5	22.5	5h9	5	3	M5	10
R88M-GP40030T	109.5	30	14	90	70	80	5	8	53	5.5	22.5	5h9	5	3	M5	10
R88M-GP10030S-B□	111.5	25	8	70	50	60	3	7	43	4.5	12.5	3h9	3	1.8	M3	6
R88M-GP10030T-B□	111.5	25	8	70	50	60	3	7	43	4.5	12.5	3h9	3	1.8	M3	6
R88M-GP20030S-B□	127	11	11	90	70	80	5	8	53	5.5	18	4h9	4	2.5	M4	8
R88M-GP20030T-B□	127	11	11	90	70	80	5	8	53	5.5	18	4h9	4	2.5	M4	8
R88M-GP40030S-B□	142	14	14	90	70	80	5	8	53	5.5	22.5	5h9	5	3	M5	10
R88M-GP40030T-B□	142	14	14	90	70	80	5	8	53	5.5	22.5	5h9	5	3	M5	10

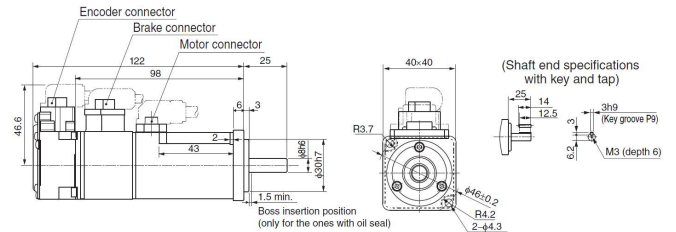
Note The standard models have a straight shaft. Models with a key and tap are indicated with "S2" at the end of the model number.

Recommendable replacement
R88M-K□

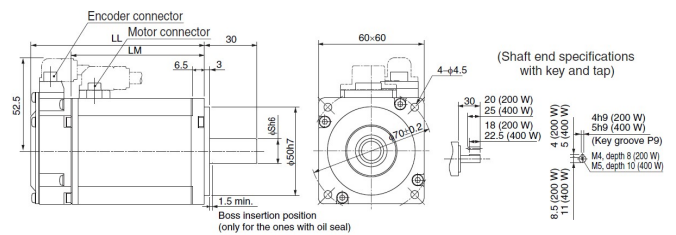
R88M-K10030S-□/-K10030T-□
Without brake



With brake

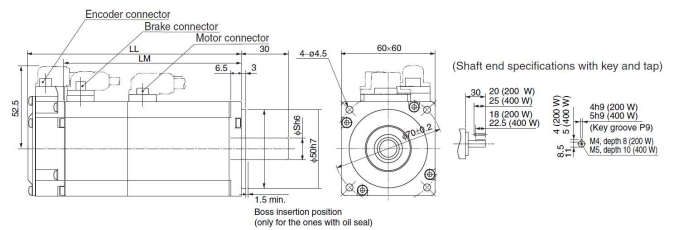


R88M-K20030S-□/-K40030S-□
-K20030T-□/-K40030T-□
Without brake



Model	Dimensions (mm)		
	LL	LM	S
R88M-K20030□	79.5	56.5	11
R88M-K40030□	99	76	14

With brake

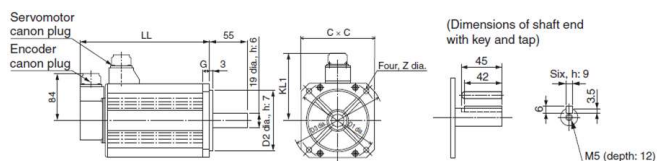


Model	Dimensions (mm)		
	LL	LM	S
R88M-K20030□-B□	116	93	11
R88M-K40030□-B□	135.5	112.5	14

Note. The standard models have a straight shaft. Models with a key and tap are indicated with S2 at the end of the model number.
Models with an oil seal are indicated with O at the end of the model number. The motor dimensions do not change.

Product discontinuation
R88M-G□

R88M-G1K030T-□/-G1K530T-□

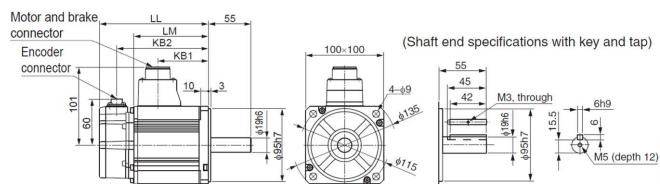


Model	Dimensions (mm)						
	LL	D1	D2	D3	G	KL1	Z
R88M-G1K030□	175	100	80	90	120	7	98
R88M-G1K530□	180	115	95	100	135	10	103
R88M-G1K030□-B□	200	100	80	90	120	7	98
R88M-G1K530□-B□	205	115	95	100	135	10	103

Note The standard models have a straight shaft. Models with a key and tap are indicated with "S2" at the end of the model number.

Recommendable replacement
R88M-K□

R88M-G1K030T-□/-G1K530T-□



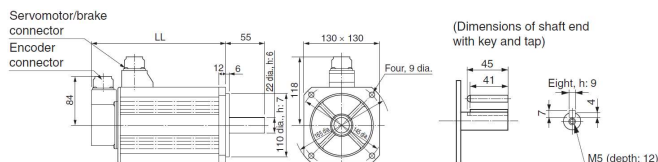
Model	Dimensions (mm)			
	LL	LM	KB1	KB2
R88M-K1K030□	141	97	66	119
R88M-K1K530□	159.5	115.5	84.5	137.5
R88M-K1K030□-B□	168	124	66	146
R88M-K1K530□-B□	186.5	142.5	84.5	164.5

Note. The standard models have a straight shaft. Models with a key and tap are indicated with S2 at the end of the model number.

Models with an oil seal are indicated with O at the end of the model number. The motor dimensions do not change.

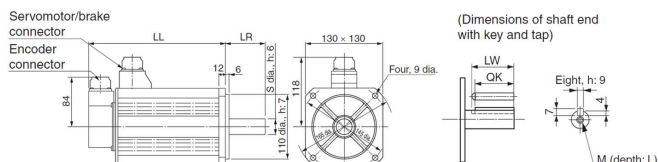
Product discontinuation
R88M-G□

R88M-G1K020T-□/-G1K520T-□



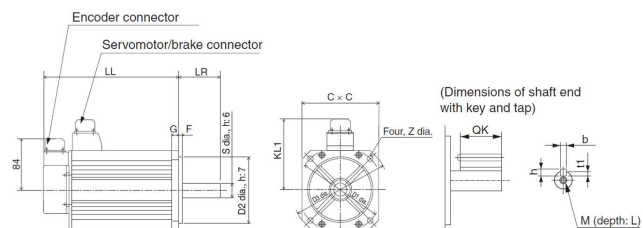
Model	Dimensions (mm)
	LL
R88M-G1K020□	150
R88M-G1K520□	175
R88M-G1K020□-B□	200
R88M-G1K520□-B□	200

R88M-G2K020T-□



Model	Dimensions (mm)						
	LL	LR	S	LW	QK	M	L
R88M-G2K020□	200	55	22	45	41	M5	12
R88M-G2K020□-B□	225	55	22	45	41	M5	12

R88M-G90010T-□

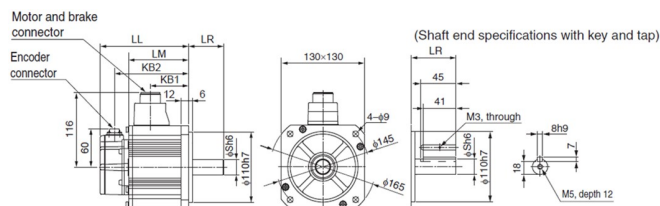


Model	Dimensions (mm)																
	LL	LR	S	D1	D2	C	D3	F	G	KL1	Z	QK	b	h	t1	M	L
R88M-G90010□	175	70	22	145	110	130	165	6	12	118	9	41	8h9	7	4	M5	12
R88M-G90010□-B□	200	70	22	145	110	130	165	6	12	118	9	41	8h9	7	4	M5	12

Note The standard models have a straight shaft. Models with a key and tap are indicated with "S2" at the end of the model number.

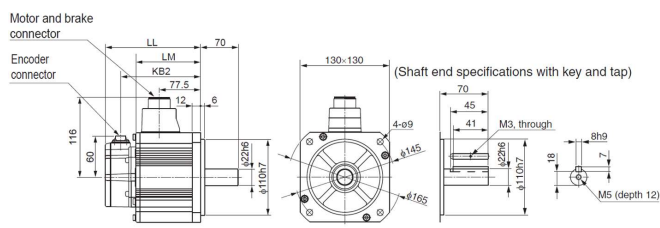
Recommendable replacement
R88M-K□

R88M-K1K020T-□/-K1K520T-□/-K2K020T-□



Model	Dimensions (mm)					
	LL	LR	LM	S	KB1	KB2
R88M-K1K020□	138	55	94	22	60	116
R88M-K1K520□	155.5	55	111.5	22	77.5	133.5
R88M-K2K020□	173	55	129	22	95	151
R88M-K1K020□-B□	166	55	122	22	60	144
R88M-K1K520□-B□	183.5	55	139.5	22	77.5	161.5
R88M-K2K020□-B□	201	55	157	22	95	179

R88M-K90010T-□



Model	Dimensions (mm)		
	LL	LM	KB2
R88M-K90010□	155.5	111.5	133.5
R88M-K90010□-B□	183.5	139.5	161.5

Note. The standard models have a straight shaft. Models with a key and tap are indicated with S2 at the end of the model number.

Models with an oil seal are indicated with O at the end of the model number. The motor dimensions do not change.

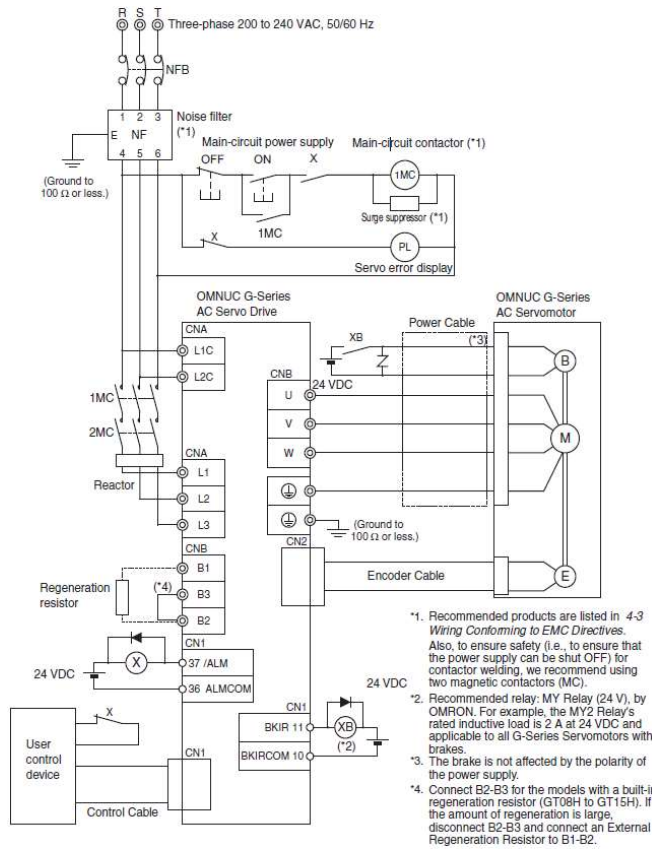
[Wire connection]

Wire connection of power supply, motor and peripheral equipment

Product discontinuation R88D-GT[]	Recommendable replacement R88D-KT[]
<p>R88D-GT02L/-GT04L R88D-GT01H/-GT02H/-GT04H -GT08H/-GT10H/-GT15H (Single-phase Input)</p> <p>The cables are not same for G series and G5 series.</p> <p>*1. Recommended products are listed in 4-3 Wiring Conforming to EMC Directives. Also, to ensure safety (i.e., to ensure that the power supply can be shut OFF) for contactor welding, we recommend using two magnetic contactors (1MC).</p> <p>*2. Recommended relay: MY Relay (24 V), by OMRON. For example, the MY2 Relay's rated inductive load is 2 A at 24 VDC and applicable to all G-Series Servomotors with brakes.</p> <p>*3. The brake is not affected by the polarity of the power supply.</p> <p>*4. Connect B2-B3 for the models with a built-in regeneration resistor (GT04L, GT08H, GT10H, and GT15H). If the amount of regeneration is large, disconnect B2-B3 and connect an External Regeneration Resistor to B1-B2.</p> <p>*5. The models GTA5L to GT02L and GT01H to GT04H do not have a built-in regeneration resistor. If the amount of regeneration is large, an External Regeneration Resistor must be connected to B1-B2.</p>	<p>R88D-KT02L/-KT04L R88D-KT01H/-KT02H/-KT04H -KT08H/-KT10H/-KT15H (Single-phase Input)</p> <p>*1. Recommended products are listed in 4-3 Wiring Conforming to EMC Directives.</p> <p>*2. Recommended relay: MY relay by OMRON (24-V). For example, MY2 relay by OMRON can be used with all G5-series motors with brakes because its rated inductive load is 2 A (24 VDC).</p> <p>*3. There is no polarity on the brakes.</p> <p>*4. The Built-in Regeneration Resistor (KT04L, KT08H, KT10H and KT15H) shorts B2 and B3. When the amount of regeneration is large, remove the connection between B2 and B3 and connect the Regeneration Resistor between B1 and B2.</p> <p>*5. There is no Internal Regeneration Resistor for KTA5L to KT02L, and KT01H to KT04H. When the amount of regeneration is large, connect the necessary Regeneration Resistor between B1 and B2.</p>

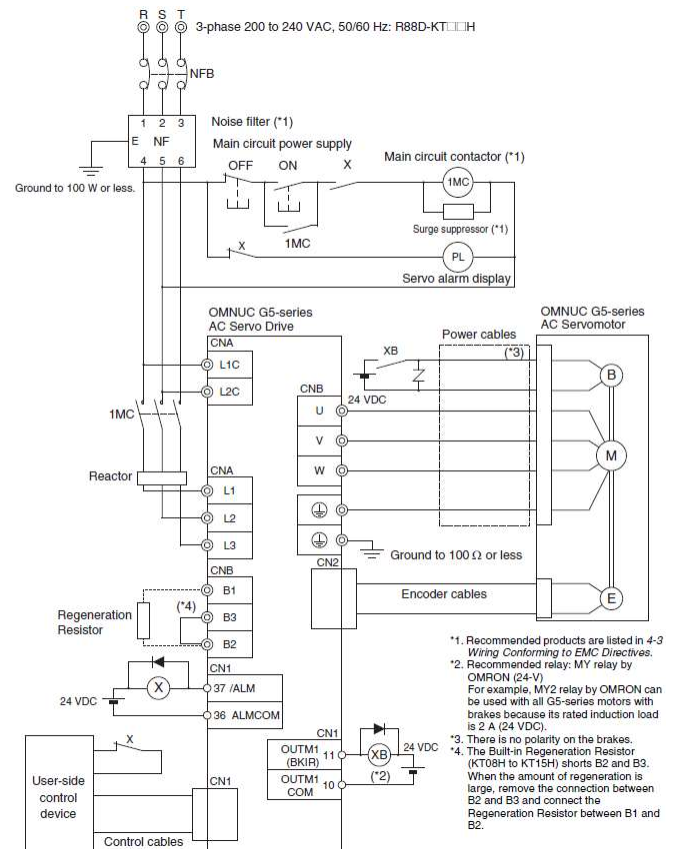
**Product discontinuation
R88D-GT[]**

R88D-GT08H/-GT10H/-GT15H (3-phase Input)



**Recommendable replacement
R88D-KT[]**

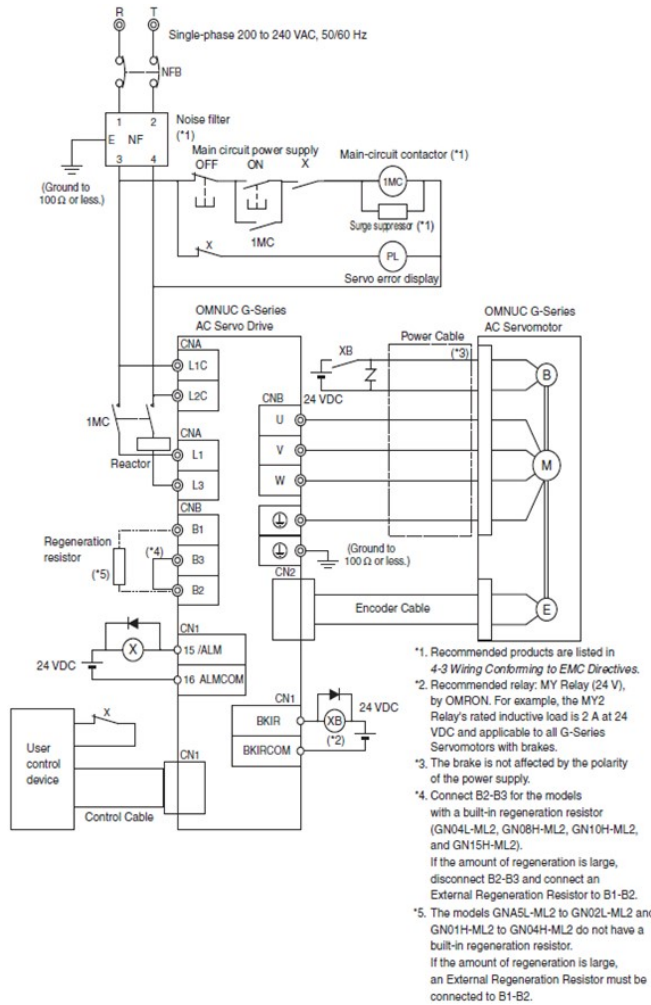
R88D-KT08H/-KT10H/-KT15H (3-phase Input)



Product discontinuation
R88D-GN[]-ML2

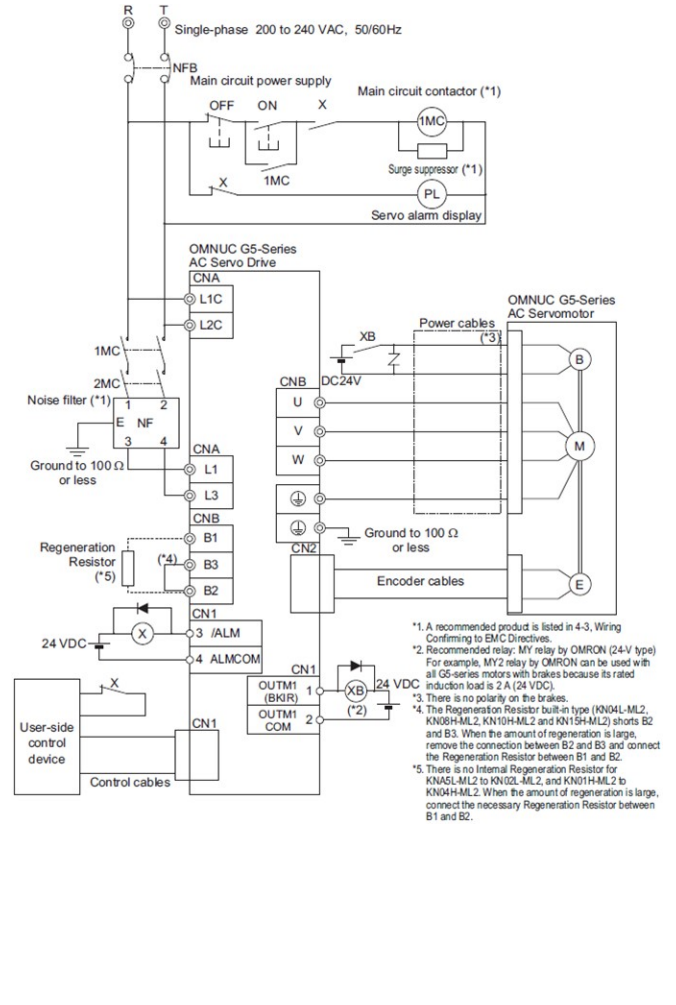
R88D-GN01H-ML2/-GN02H-ML2/-GN04H-ML2
-GN08H-ML2/-GN10H-ML2/-GN15H-ML2
(Single-phase Input)

The cables are not same for G series and G5 series.



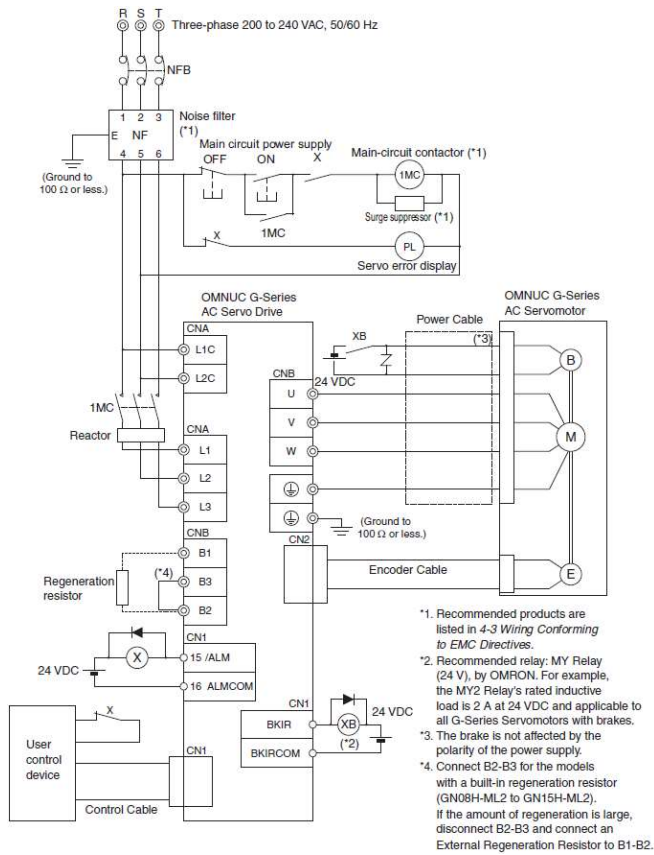
Recommendable replacement
R88D-KN[]-ML2

R88D-KN01H-ML2/-KN02H-ML2/-KN04H-ML2
-KN08H-ML2/-KN10H-ML2/-KN15H-ML2
(Single-phase Input)



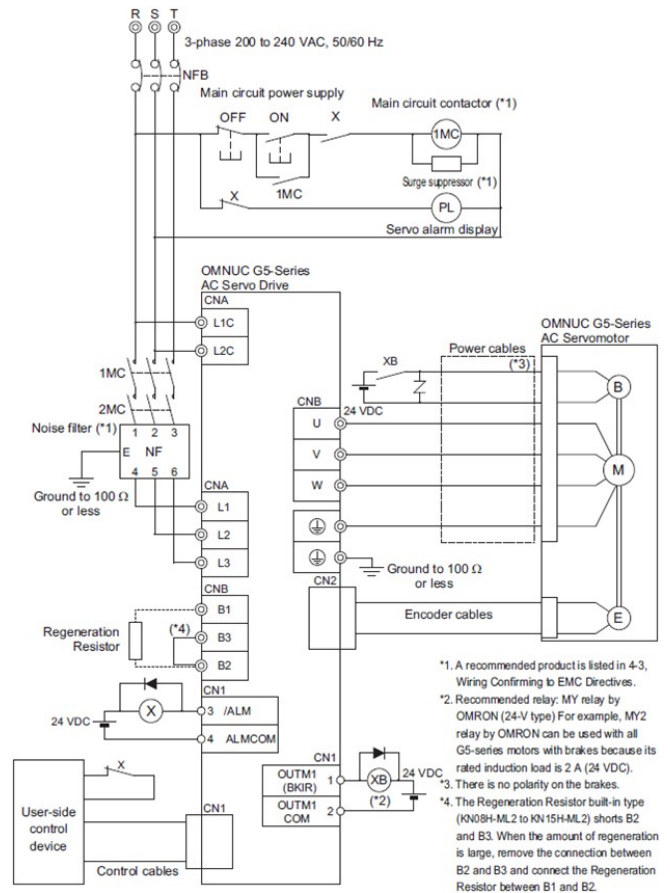
Product discontinuation
R88D-GN[]-ML2

R88D-GN08H-ML2/-GN10H-ML2/-GN15H-ML2
(3-phase Input)



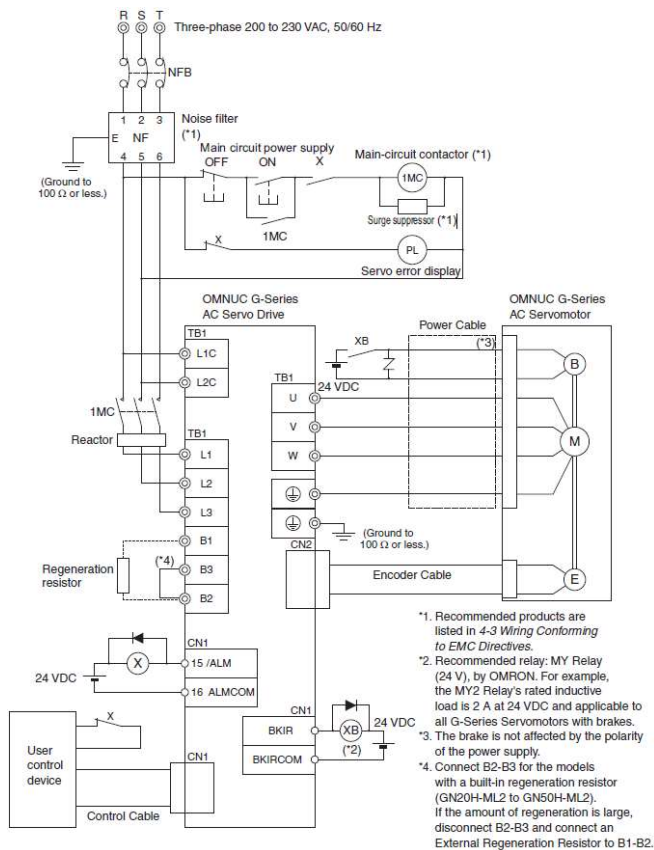
Recommendable replacement
R88D-KN[]-ML2

R88D-KN08H-ML2/-KN10H-ML2/-KN15H-ML2
(3-phase Input)



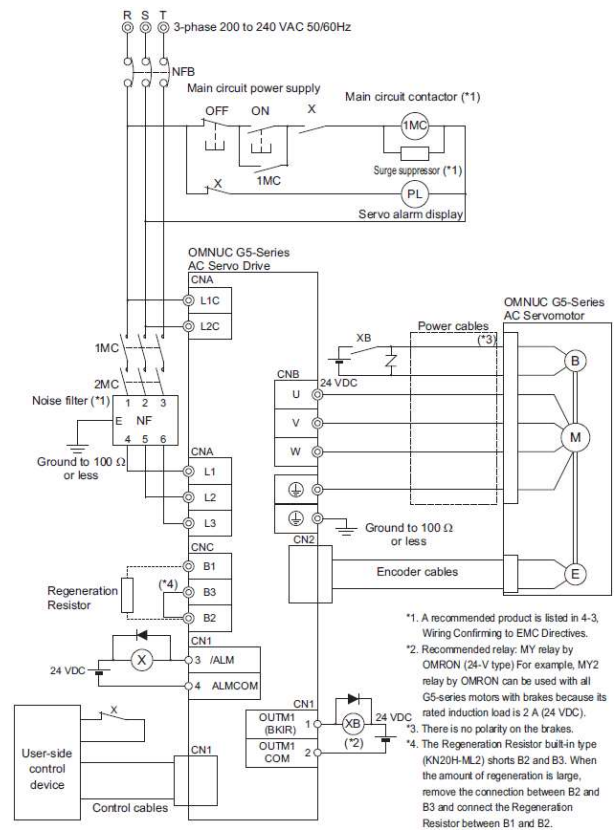
Product discontinuation
R88D-GN[]-ML2

R88D-GN20H-ML2/-GN30H-ML2

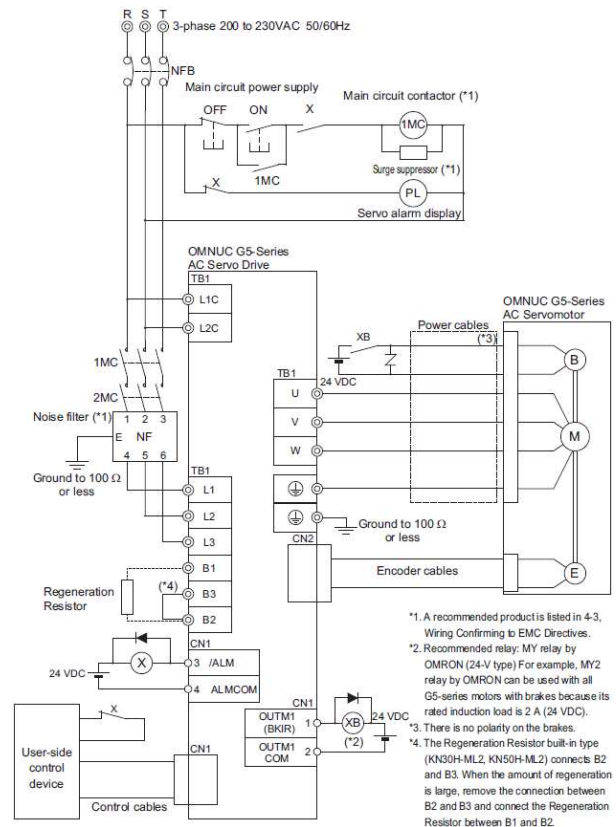


Recommendable replacement
R88D-KN[]-ML2

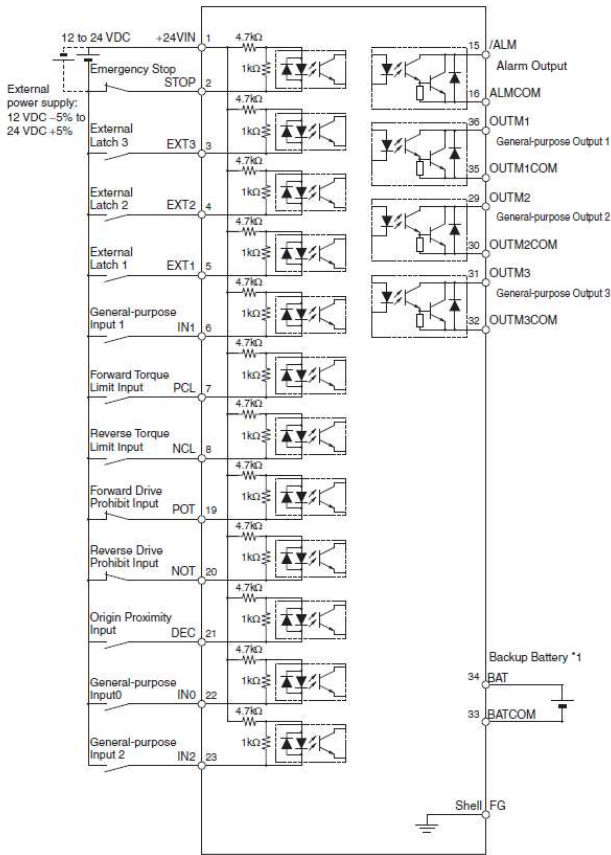
R88D-KN20H-ML2



R88D-KN30H-ML2



Product discontinuation
R88D-GN[-]ML2



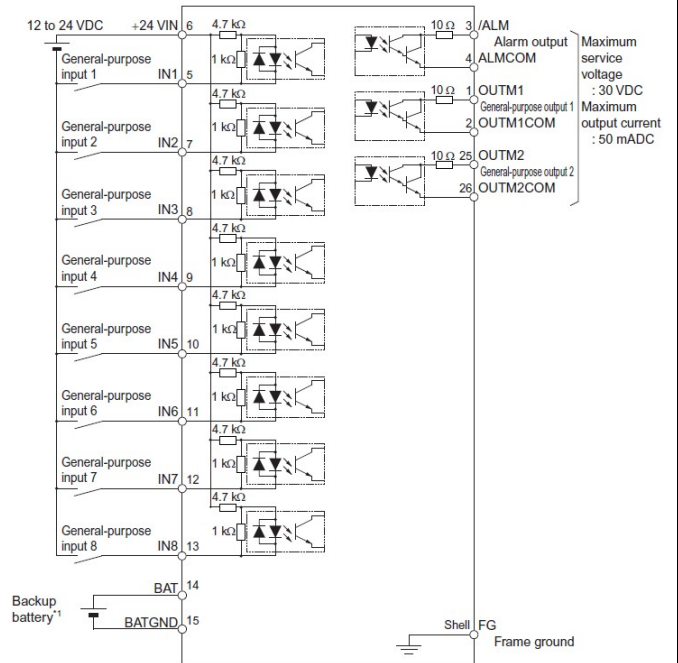
- *1. If a backup battery is connected, a cable with a battery is not required.
- *2. Inputs for pins 19 and 20 are determined by parameter settings. The diagram shows the default configuration.

CN1 Pin Arrangement

2	STOP	Emergency Stop Input	1	+24VIN	12 to 24-VDC Power Supply Input	20	NOT	Reverse Drive Prohibit Input	19	POT	Forward Drive Prohibit Input
4	EXT2	External Latch Signal 2	3	EXT3	External Latch Signal 3	21	IN0	External General-purpose Input 0	21	DEC	Origin Proximity Input
6	IN1	External General-purpose Input 1	5	EXT1	External Latch Signal 1	22			23	IN2	External General-purpose Input 2
8	NCL	Reverse Torque Limit Input	7	PCL	Forward Torque Limit Input	24			25		
10			9			26			27		
12			11			28			29	OUTM2	General-purpose Output 2
14			13			30	OUTM2COM	General-purpose Output 2 Common	31	OUTM3	General-purpose Output 3
16	ALMCOM	Alarm Output	15	/ALM	Alarm Output	32	OUTM3COM	General-purpose Output 3 Common	33	BATCOM	Backup Battery Input
18			17			34	BAT	Backup Battery Input	35	OUTM1COM	General-purpose Output 1 Common
			18			36	OUTM1	General-purpose Output 1			

- Note1.** Do not connect anything to unused pins (*).
- Note2.** Inputs for pins 19 and 20 are determined by parameter settings. The diagram shows the default configuration.

Recommendable replacement
R88D-KN[-]ML2



- *1. Inputs type for pins 5, and 7 to 13 can be determined by parameter setting.
- *2. Outputs type for pins 1, 2, 25 and 26 can be determined by parameter setting.
- *3. A cable equipped with a battery is not required, when a backup battery is connected.
- *4. It is not necessary to wire input pins that are not being used.

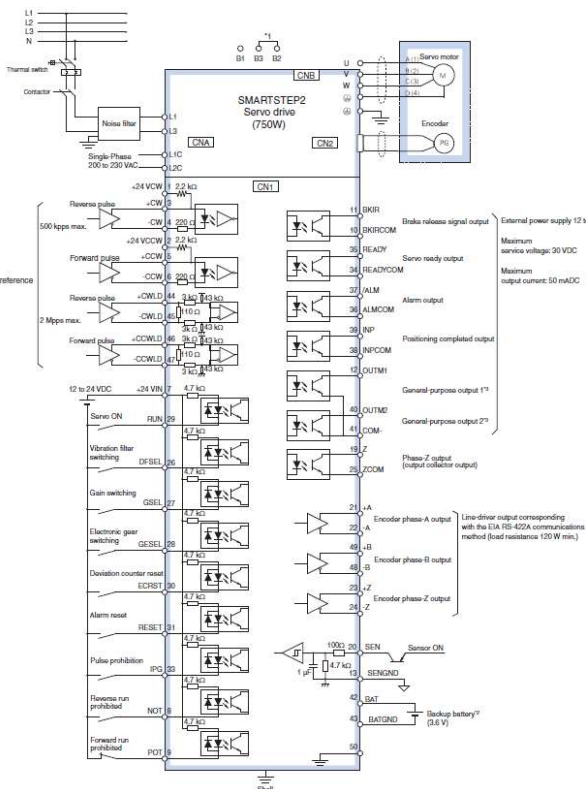
CN1 Pin Arrangement

2	OUTM1COM	General-purpose Output 1 Common	1	OUTM1 (BKIR)	General-purpose Output 1 (Brake Interlock Output)	15	BATGND	Absolute Encoder Backup Battery Input	14	BAT	Absolute Encoder Backup Battery Input
4	ALMCOM	Alarm Output Common	3	/ALM	Alarm Output	17		*	16		*
6	+24 VIN	12 to 24-VDC Power Supply Input	5	IN1 (STOP)	General-purpose Input 1 (Emergency Stop Input)	19		*	18		*
8	IN3 (NOT)	General-purpose Input 3 (Reverse Drive Prohibition Input)	7	IN2 (POT)	General-purpose Input 2 (Forward Drive Prohibition Input)	21		*	20		*
10	IN5 (EXT3)	General-purpose Input 5 (External Latch Input 3)	9	IN4 (DEC)	General-purpose Input 4 (Origin Proximity Input)	23		*	22		*
12	IN7 (EXT1)	General-purpose Input 7 (External Latch Input 1)	11	IN6 (EXT2)	General-purpose Input 6 (External Latch Input 2)	25	OUTM2 (READY)	General-purpose Output 2 (Servo Ready Output)	24		*
			13	IN8 (MON0)	General-purpose Input 8 (Monitor Input 0)	26	OUTM2COM	General-purpose Output 2 Common	26	OUTM2COM	General-purpose Output 2 Common

Note Do not connect anything to unused pins (those marked with *).

Wire connection of power supply, motor, peripheral equipment and control I/O connector

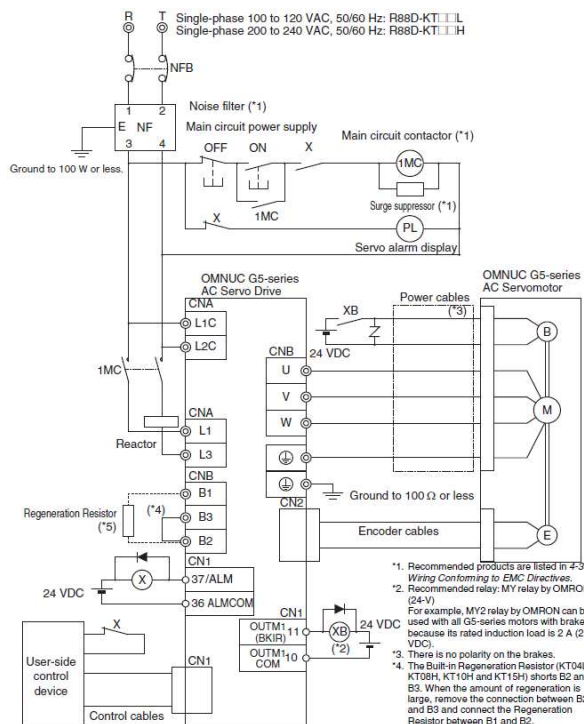
Product discontinuation
R88D-GP08H



- *1 B3-B2 are short-circuited. If the internal regenerative resistor is insufficient, remove the wire between B2 and B3 and connect an external regenerative resistor between B1 and B2.
- *2 Use only when an absolute encoder. If a backup battery is connected, an encoder cable with a battery is not required.
- *3 The default values are ZSP (zero-speed detection) for OUTM1 and T-LIMIT (at torque limit) for OUTM2.

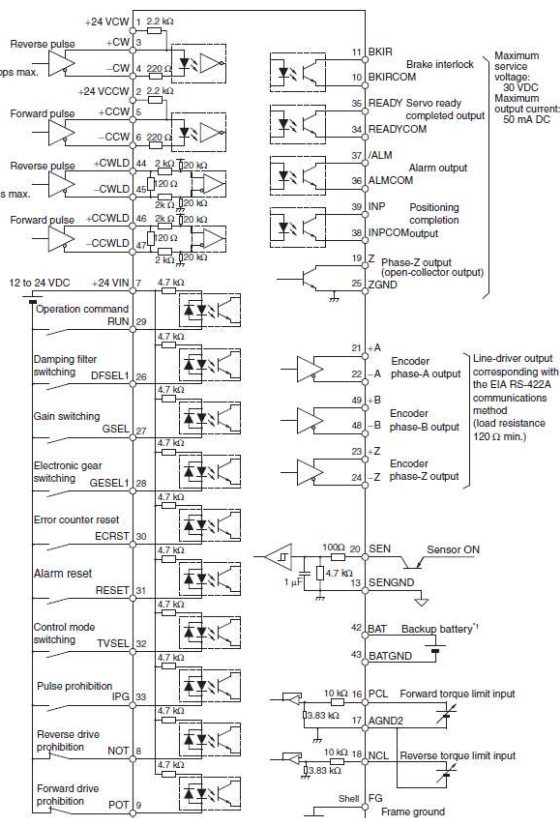
Recommendable replacement
R88D-KT08H

Power supply, motor and peripheral equipment



- *1. Recommended products are listed in 4-3 Wiring Conforming to EMC Directives.
- *2. Recommended relay: MY relay by OMRON (24-V).
- *3. There is no polarity on the brakes.
- *4. The Built-in Regeneration Resistor (KT04L, KT08H, KT10H and KT15H) shorts B2 and B3. When the amount of regeneration is large, remove the connection between B2 and B3 and connect the Regeneration Resistor between B1 and B2.
- *5. There is no internal Regeneration Resistor for KTASL to KT02L and KT01H to KT04H. When the amount of regeneration is large, connect the necessary Regeneration Resistor between B1 and B2.

Control I/O



*1. A cable equipped with a battery is not required if a backup battery is connected.

[Characteristics]

Servo Drive

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2		Recommendable replacement R88D-KT[]/R88D-KN[]-ML2	
	02L	04L	02L	04L
Continuous output current (rms)	2.4 A	4.9 A	2.5 A	4.6 A
Main circuit power supply voltage	Single-phase 100 to 115 VAC (85 to 127 V), 50/60 Hz		Single-phase 100 to 120 VAC (85 to 132 V) 50/60 Hz	
Control circuit power supply voltage	Single-phase 100 to 115 VAC (85 to 127 V), 50/60 Hz		Single-phase 100 to 120 VAC (85 to 132 V) 50/60 Hz	
Applicable Servomotors	G20030S GP20030S	G40030S GP40030S	K20030S	K40030S

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2			Recommendable replacement R88D-KT[]/R88D-KN[]-ML2		
	01H	02H	04H	01H	02H	04H
Continuous output current (rms)	1.16 A	1.6 A	2.7 A	1.2 A	1.6 A	2.6 A
Main circuit power supply voltage	Single-phase 200 to 240 VAC (170 to 264 V), 50/60 Hz			Single-phase or 3-phase 200 to 240 VAC (170 to 264 V) 50/60 Hz		
Control circuit power supply voltage	Single-phase 200 to 240 VAC (170 to 264 V), 50/60 Hz			Single-phase 200 to 240 VAC (170 to 264 V) 50/60 Hz		
Applicable Servomotors	G05030T G10030T GP10030T	G20030T GP20030T	G40030T GP40030T	K05030T K10030T	K20030T	K40030T

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2 R88D-GP08H			Recommendable replacement R88D-KT[]/R88D-KN[]-ML2		
	08H (GP08H)	10H	15H	08H	10H	15H
Continuous output current (rms)	4.0 A	5.9 A	9.8 A	4.1 A	5.9 A	9.4 A
Main circuit power supply voltage	Single-phase or three-phase 200 to 240 VAC (170 to 264 V), 50/60 Hz			Single-phase or 3-phase 200 to 240 VAC (170 to 264 V) 50/60 Hz		
Control circuit power supply voltage	Single-phase 200 to 240 VAC (170 to 264 V), 50/60 Hz			Single-phase 200 to 240 VAC (170 to 264 V) 50/60 Hz		
Applicable Servomotors	G75030T	G1K020T	G1K030T G1K530T G1K520T G90010T	K75030T	K1K020T	K1K030T K1K530T K1K520T K90010T

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2		Recommendable replacement R88D-KT[]/R88D-KN[]-ML2	
	20H	30H	20H	30H
Continuous output current (rms)	14.3 A	17.4 A	13.4 A	18.7 A
Main circuit power supply voltage	Three-phase 200 to 230 VAC (170 to 253 V), 50/60 Hz		3-phase 200 to 230 VAC (170 to 253 V) 50/60 Hz	
Control circuit power supply voltage	Single-phase 200 to 230 VAC (170 to 253 V), 50/60 Hz		Single-phase 200 to 230 VAC (170 to 253 V) 50/60 Hz	
Applicable Servomotors	G2K030T G2K020T	G3K030T G3K020T G2K010T	K2K030T K2K020T	K3K030T K3K020T K2K010T

General Specifications of Servo Drive

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2	Recommendable replacement R88D-KT[]/R88D-KN[]-ML2
Ambient operating temperature and operating humidity	0 to 55°C, 90% RH max. (with no condensation)	0 to +55°C, 20 to 85% max. (with no condensation)
Storage ambient temperature and humidity	-20 to 65°C, 90% RH max. (with no condensation)	-20 to +65°C, 20 to 85% max. (with no condensation) Maximum allowable temperature: 80°C for 72 hours maximum (with no condensation)
Operating and storage atmosphere	No corrosive gasses	No corrosive gases
Vibration resistance	Smaller of either 10 to 60 Hz with double amplitude of 0.1 mm or acceleration of 5.88 m/s ² max. in X, Y, and Z directions.	10 to 60 Hz and at an acceleration of 5.88 m/s ² or less (Not to be run continuously at the resonance point)
Insulation resistance	Between power supply/power line terminals and frame ground: 0.5 MΩ min. (at 500 VDC)	Between power supply terminals/power terminals and FG terminal: 0.5 MΩ min. (at 500 VDC)
Dielectric strength	Between power supply/power line terminals and frame ground: 1,500 VAC for 1 min. at 50/60 Hz Between each control signal and frame ground: 500 VAC for 1 min.	Between power supply terminals/power line terminals and FG terminal: 1,500 VAC for 1 min at 50/60 Hz
Protective structure	Built into panel (IP10).	Built into panel
High-response frequency	1kHz	2kHz

Servomotor

Item	Product discontinuation R88M-G[]				Recommendable replacement R88M-K[]			
	05030T	10030S	20030S	40030S	05030T	10030S	20030S	40030S
Applied voltage	100 VAC				100 VAC			
Rated output [W]	50	100	200	400	50	100	200	400
Rated torque [N·m]	0.16	0.32	0.64	1.3	0.16	0.32	0.64	1.3
Rated rotation speed [r/min]	3000				3000			
Maximum rotation speed [r/min]	5000				6000			
Momentary maximum torque [N·m]	0.45	0.93	1.78	3.6	0.48	0.95	1.91	3.8
Rated current [A]	1.1(rms)	1.7(rms)	2.5(rms)	4.6(rms)	1.1(rms)	1.6(rms)	2.5(rms)	4.6(rms)
Momentary maximum current [A]	3.4(rms)	5.1(rms)	7.6(rms)	13.9(rms)	4.7(0-p)	6.9(0-p)	10.6(0-p)	19.5(0-p)
Rotor inertia [kg·m ² (GD ² /4)]	Without brake				2.5×10 ⁻⁶	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵
	With brake	2.5×10 ⁻⁶	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵	2.7×10 ⁻⁶	5.4×10 ⁻⁶	1.6×10 ⁻⁵
Applicable load inertia	30 times the rotor inertia max.				30 times the rotor inertia max.			
Radiator plate dimensions (material)	100×80×t10 (Al)		130×120×t12 (Al)		100×80×t10 (Al)		130×120×t12 (Al)	
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)				0 to +40°C, 20% to 85% (with no condensation)			
Ambient storage temperature and humidity	-20 to 65°C, 85% RH max. (with no condensation)				-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature: 80°C for 72 hours maximum (standard humidity)			
Storage and operating atmosphere	No corrosive gases				No corrosive gases			
Vibration resistance	10 to 2,500 Hz and acceleration of 49 m/s ² max. in the X, Y, and Z directions				Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped			
Impact resistance	Acceleration of 98 m/s ² max. 3 times each in the X, Y, and Z directions				Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions			
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal				Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)			
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal				1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.			
Insulation grade	Type B				Type B			
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)				IP67 (except for through-shaft parts and motor and encoder connector pins)			

Item	Product discontinuation R88M-G[]				Recommendable replacement R88M-K[]				
	05030T	10030T	20030T	40030T	05030T	10030T	20030T	40030T	
Applied voltage	200 VAC				200 VAC				
Rated output [W]	50	100	200	400	50	100	200	400	
Rated torque [N·m]	0.16	0.32	0.64	1.3	0.16	0.32	0.64	1.3	
Rated rotation speed [r/min]	3000				3000				
Maximum rotation speed [r/min]	5000				6000				
Momentary maximum torque [N·m]	0.45	0.90	1.78	3.67	0.48	0.95	1.91	3.8	
Rated current [A]	1.1(rms)	1.1(rms)	1.6(rms)	2.6(rms)	1.1(rms)	1.1(rms)	1.5(rms)	2.4(rms)	
Momentary maximum current [A]	3.4(rms)	3.4(rms)	4.9(rms)	7.9(rms)	4.7(0-p)	4.7(0-p)	6.5(0-p)	10.2(0-p)	
Rotor inertia [kg·m ² (GD ² /4)]	Without brake	2.5×10 ⁻⁶	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵	2.5×10 ⁻⁶	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵
	With brake					2.7×10 ⁻⁶	5.4×10 ⁻⁶	1.6×10 ⁻⁵	2.8×10 ⁻⁵
Applicable load inertia	30 times the rotor inertia max.				30 times the rotor inertia max.				
Radiator plate dimensions (material)	100×80×t10 (Al)		130×120×t12 (Al)		100×80×t10 (Al)		130×120×t12 (Al)		
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)				0 to +40°C, 20% to 85% (with no condensation)				
Ambient storage temperature and humidity	-20 to 65°C, 85% RH max. (with no condensation)				-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature: 80°C for 72 hours maximum (standard humidity)				
Storage and operating atmosphere	No corrosive gases				No corrosive gases				
Vibration resistance	10 to 2,500 Hz and acceleration of 49 m/s ² max. in the X, Y, and Z directions				Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped				
Impact resistance	Acceleration of 98 m/s ² max. 3 times each in the X, Y, and Z directions				Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions				
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal				Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)				
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal				1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.				
Insulation grade	Type B				Type B				
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)				IP67 (except for through-shaft parts and motor and encoder connector pins)				

Item	Product discontinuation R88M-G[]			Recommendable replacement R88M-K[]			
	75030T	1K030T	1K530T	75030T	1K030T	1K530T	
Applied voltage	200 VAC			200 VAC			
Rated output [W]	750	1000	1500	750	1000	1500	
Rated torque [N·m]	2.4	3.18	4.77	2.4	3.18	4.77	
Rated rotation speed [r/min]	3000			3000			
Maximum rotation speed [r/min]	4500	5000		6000	5000		
Momentary maximum torque [N·m]	7.05	9.1	12.8	7.1	9.55	14.3	
Rated current [A]	4(rms)	7.2(rms)	9.4(rms)	4.1(rms)	6.6(rms)	8.2(rms)	
Momentary maximum current [A]	12.1(rms)	21.4(rms)	28.5(rms)	17.4(0-p)	28(0-p)	35(0-p)	
Rotor inertia [kg·m ² (GD ² /4)]	Without brake	8.7×10 ⁻⁵	1.69×10 ⁻⁴	2.59×10 ⁻⁴	8.7×10 ⁻⁵	2.03×10 ⁻⁴	2.84×10 ⁻⁴
	With brake				9.7×10 ⁻⁵	2.35×10 ⁻⁴	3.17×10 ⁻⁴
Applicable load inertia	20 times the rotor inertia max.	15 times the rotor inertia max.		20 times the rotor inertia max.	15 times the rotor inertia max.		
Radiator plate dimensions (material)	170×160×t12 (Al)		320×300×t30 (Al)	170×160×t12 (Al)	320×300×t20 (Al)		
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)			0 to +40°C, 20% to 85% (with no condensation)			
Ambient storage temperature and humidity	-20 to 65°C, 85% RH max. (with no condensation)	-20 to 80°C, 85% RH max. (with no condensation)		-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature: 80°C for 72 hours maximum (standard humidity)			
Storage and operating atmosphere	No corrosive gases			No corrosive gases			
Vibration resistance	10 to 2,500 Hz and acceleration of 49 m/s ² max. in the X, Y, and Z directions	10 to 2,500 Hz and acceleration of 24.5 m/s ² max. in the X, Y, and Z directions		Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped			
Impact resistance	Acceleration of 98 m/s ² max. 3 times each in the X, Y, and Z directions			Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions			
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal			Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)			
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal			1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.			
Insulation grade	Type B	Type F		Type B	Type F		
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)			IP67 (except for through-shaft parts and motor and encoder connector pins)			

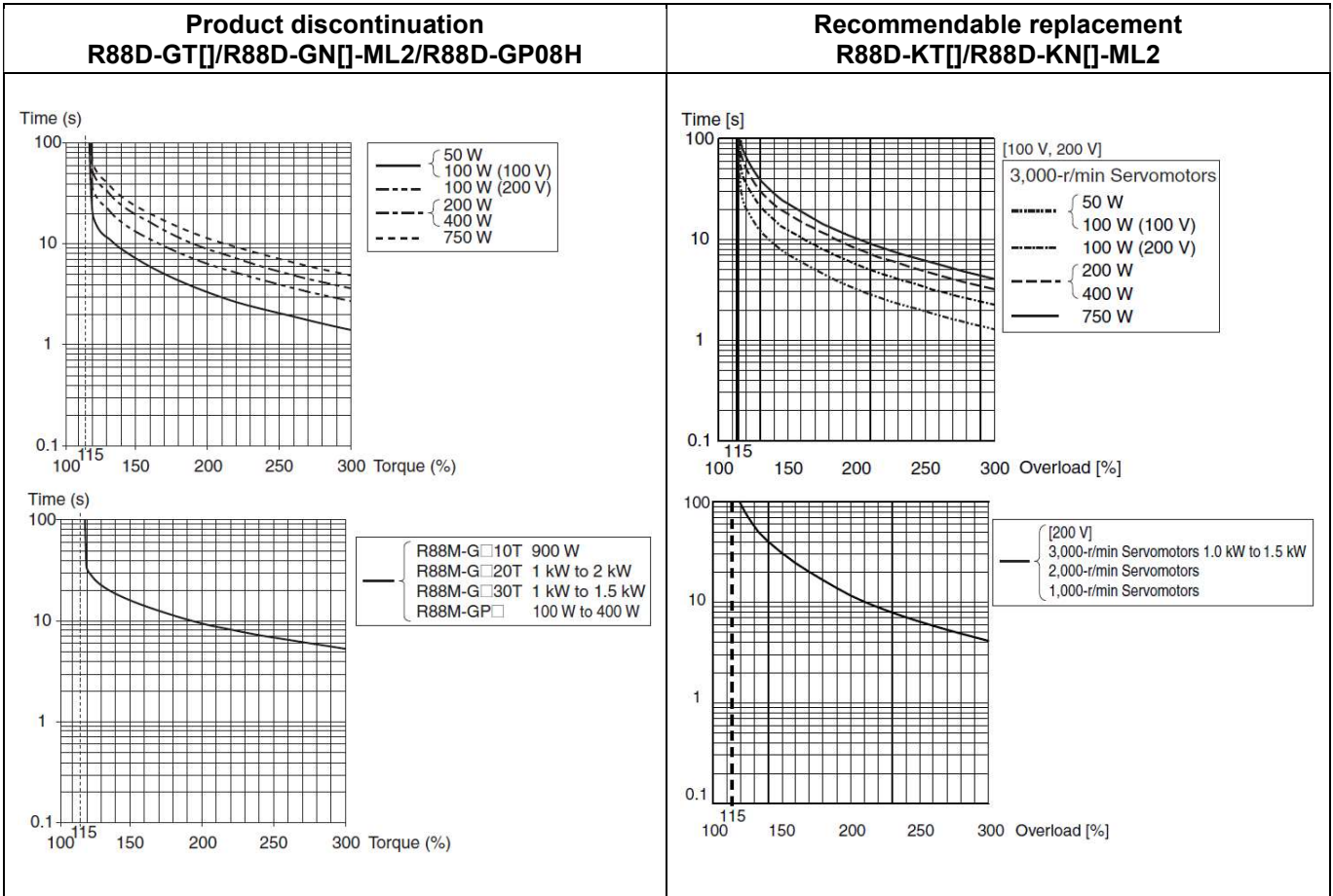
Item	Product discontinuation R88M-G[]			Recommendable replacement R88M-K[]			
	P10030S	P20030S	P40030S	10030S	20030S	40030S	
Applied voltage	100 VAC			100 VAC			
Rated output [W]	100	200	400	100	200	400	
Rated torque [N·m]	0.32	0.64	1.3	0.32	0.64	1.3	
Rated rotation speed [r/min]	3000			3000			
Maximum rotation speed [r/min]	5000		4500	6000			
Momentary maximum torque [N·m]	0.84	1.8	3.6	0.95	1.91	3.8	
Rated current [A]	1.6(rms)	2.5(rms)	4.4(rms)	1.6(rms)	2.5(rms)	4.6(rms)	
Momentary maximum current [A]	4.9(rms)	7.5(rms)	13.3(rms)	6.9(0-p)	10.6(0-p)	19.5(0-p)	
Rotor inertia [kg·m ² (GD ² /4)]	Without brake	1.0×10 ⁻⁵	3.5×10 ⁻⁵	6.5×10 ⁻⁵	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵
	With brake				5.4×10 ⁻⁶		
Applicable load inertia	20 times the rotor inertia max.			30 times the rotor inertia max.			
Radiator plate dimensions (material)	130×120×t10 (Al)	170×160×t12 (Al)		100×80×t10 (Al)	130×120×t12 (Al)		
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)			0 to +40°C, 20% to 85% (with no condensation)			
Ambient storage temperature and humidity	-20 to 80°C, 85% RH max. (with no condensation)			-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature:80°C for 72 hours maximum (standard humidity)			
Storage and operating atmosphere	No corrosive gases			No corrosive gases			
Vibration resistance	10 to 2,500 Hz and acceleration of 49 m/s ² max. in the X, Y, and Z directions			Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped			
Impact resistance	Acceleration of 98 m/s ² max. 3 times each in the X, Y, and Z directions			Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions			
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal			Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)			
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal			1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.			
Insulation grade	Type B			Type B			
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)			IP67 (except for through-shaft parts and motor and encoder connector pins)			

Item	Product discontinuation R88M-G[]			Recommendable replacement R88M-K[]			
	P10030T	P20030T	P40030T	10030T	20030T	40030T	
Applied voltage	200 VAC			200 VAC			
Rated output [W]	100	200	400	100	200	400	
Rated torque [N·m]	0.32	0.64	1.3	0.32	0.64	1.3	
Rated rotation speed [r/min]	3000			3000			
Maximum rotation speed [r/min]	5000			6000			
Momentary maximum torque [N·m]	0.86	1.8	3.65	0.95	1.91	3.8	
Rated current [A]	1(rms)	1.6(rms)	2.5(rms)	1.1(rms)	1.5(rms)	2.4(rms)	
Momentary maximum current [A]	3.1(rms)	4.9(rms)	7.5(rms)	4.7(0-p)	6.5(0-p)	10.2(0-p)	
Rotor inertia [kg·m ² (GD ² /4)]	Without brake	1.0×10 ⁻⁵	3.5×10 ⁻⁵	6.4×10 ⁻⁵	5.1×10 ⁻⁶	1.4×10 ⁻⁵	2.6×10 ⁻⁵
	With brake				5.4×10 ⁻⁶		
Applicable load inertia	20 times the rotor inertia max.			30 times the rotor inertia max.			
Radiator plate dimensions (material)	130×120×t10 (Al)	170×160×t12 (Al)		100×80×t10 (Al)	130×120×t12 (Al)		
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)			0 to +40°C, 20% to 85% (with no condensation)			
Ambient storage temperature and humidity	-20 to 80°C, 85% RH max. (with no condensation)			-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature:80°C for 72 hours maximum (standard humidity)			
Storage and operating atmosphere	No corrosive gases			No corrosive gases			
Vibration resistance	10 to 2,500 Hz and acceleration of 49 m/s ² max. in the X, Y, and Z directions			Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped			
Impact resistance	Acceleration of 98 m/s ² max. 3 times each in the X, Y, and Z directions			Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions			
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal			Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)			
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal			1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.			
Insulation grade	Type B			Type B			
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)			IP67 (except for through-shaft parts and motor and encoder connector pins)			

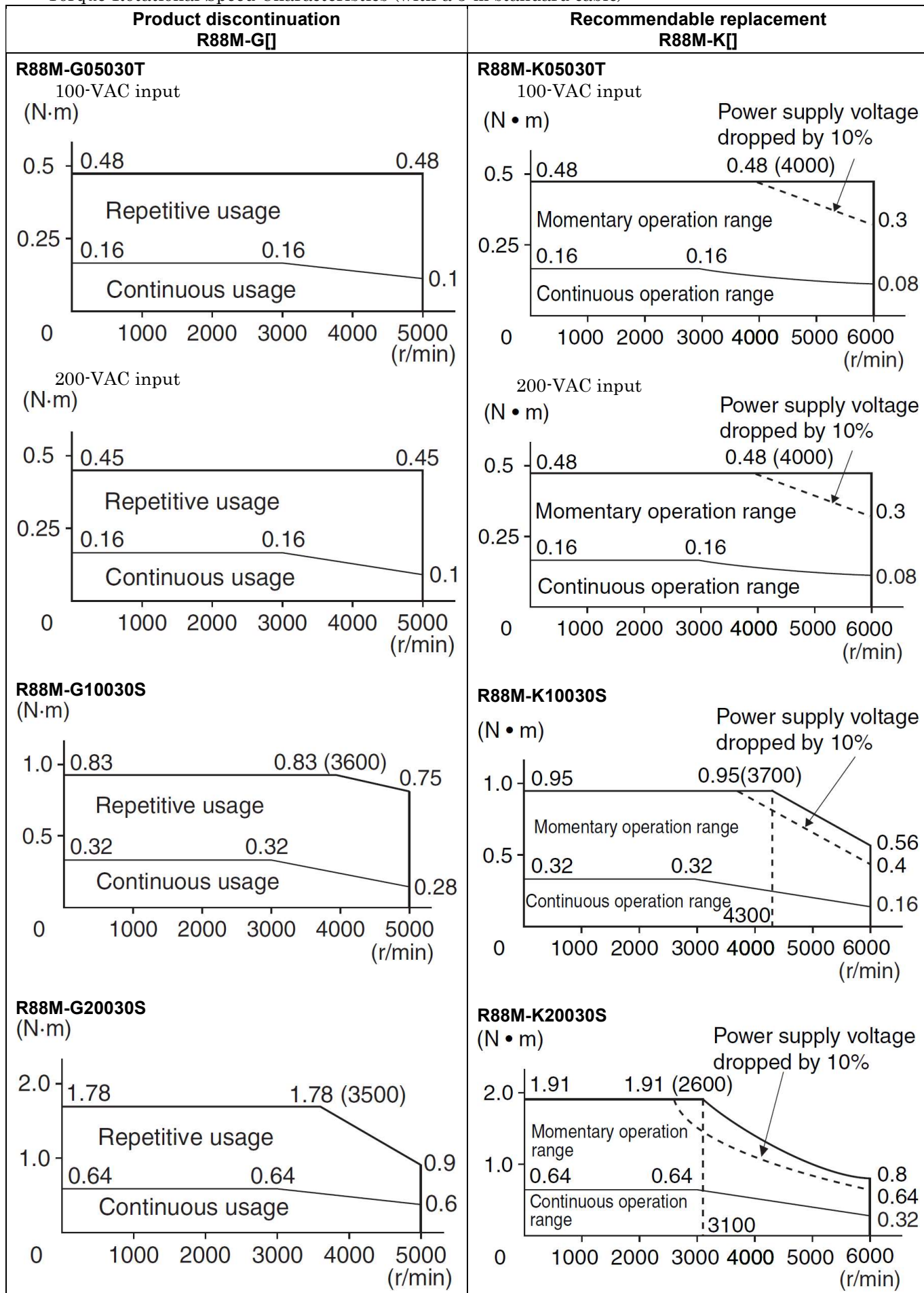
Item	Product discontinuation R88M-G[]				Recommendable replacement R88M-K[]				
	1K020T	1K520T	2K020T	90010T	1K020T	1K520T	2K020T	90010T	
Applied voltage	200 VAC				200 VAC				
Rated output [W]	1000	1500	2000	900	1000	1500	2000	900	
Rated torque [N·m]	4.8	7.15	9.54	8.62	4.77	7.16	9.55	8.59	
Rated rotation speed [r/min]	2000			1000	2000			1000	
Maximum rotation speed [r/min]	3000			2000	3000			2000	
Momentary maximum torque [N·m]	13.5	19.6	26.5	18.4	14.3	21.5	28.6	19.3	
Rated current [A]	5.6(rms)	9.4(rms)	12.3(rms)	7.6(rms)	5.7(rms)	9.4(rms)	11.5(rms)	7.6(rms)	
Momentary maximum current [A]	17.1(rms)	28.5(rms)	37.1(rms)	17.1(rms)	24(0-p)	40(0-p)	49(0-p)	24(0-p)	
Rotor inertia [kg·m ² (GD ² /4)]	Without brake	6.17×10 ⁻⁴	1.12×10 ⁻³	1.52×10 ⁻³	1.12×10 ⁻³	4.60×10 ⁻⁴	6.70×10 ⁻⁴	8.72×10 ⁻⁴	6.70×10 ⁻⁴
	With brake					5.90×10 ⁻⁴	7.99×10 ⁻⁴	10.0×10 ⁻⁴	7.99×10 ⁻⁴
Applicable load inertia	10 times the rotor inertia max.				10 times the rotor inertia max.				
Radiator plate dimensions (material)	275×260×t15 (Al)				275×260×t15 (Al)				
Ambient operating temperature and operating humidity	0 to 40°C, 85% RH max. (with no condensation)				0 to +40°C, 20% to 85% (with no condensation)				
Ambient storage temperature and humidity	-20 to 80°C, 85% RH max. (with no condensation)				-20 to +65°C, 20% to 85% (with no condensation) Maximum allowable temperature:80°C for 72 hours maximum (standard humidity)				
Storage and operating atmosphere	No corrosive gases				No corrosive gases				
Vibration resistance	10 to 2,500 Hz and acceleration of 24.5 m/s ² max. in the X, Y, and Z directions				Acceleration of 49 m/s ² 24.5 m/s ² max. in X, Y, and Z directions when the motor is stopped				
Impact resistance	Acceleration of 98 m/s ² max. 2 times vertically				Acceleration of 98 m/s ² max. 3 times each in X, Y, and Z directions				
Insulation resistance	20 MΩ min. at 500 VDC between the power terminals and FG terminal				Between power terminal and FG terminal: 20 MΩ min. (at 500 VDC)				
Dielectric strength	1,500 VAC (50 or 60 Hz) for 1 minute between the power terminals and FG terminal				1,500 VAC between power terminal and FG terminal for 1 min. 1,000 VAC between brake terminal and FG terminal for 1 min.				
Insulation grade	Type F				Type F				
Protective structure	IP65 (excluding the output shaft rotating section and lead wire ends)				IP67 (except for through-shaft parts and motor and encoder connector pins)				

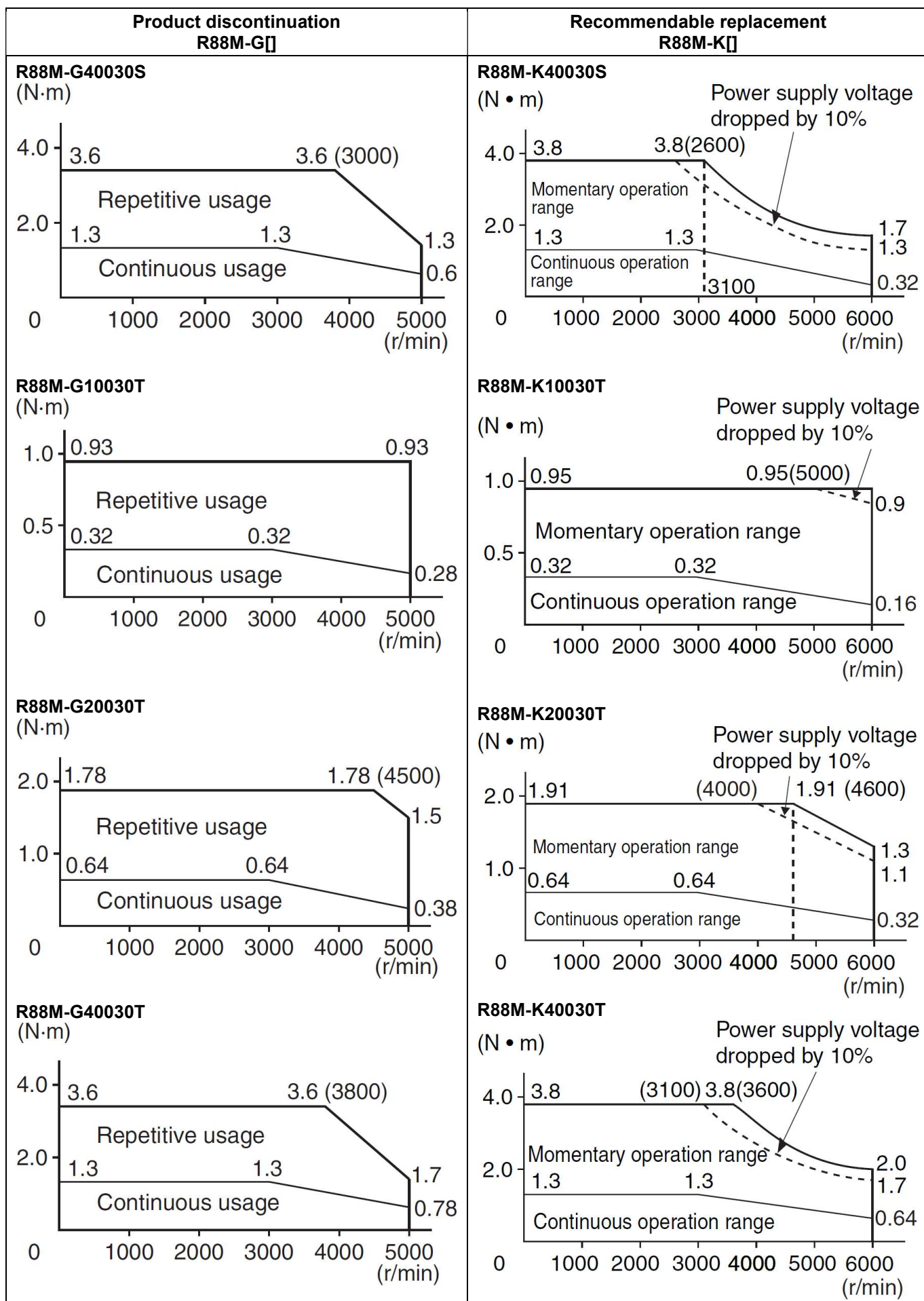
[Operation ratings]

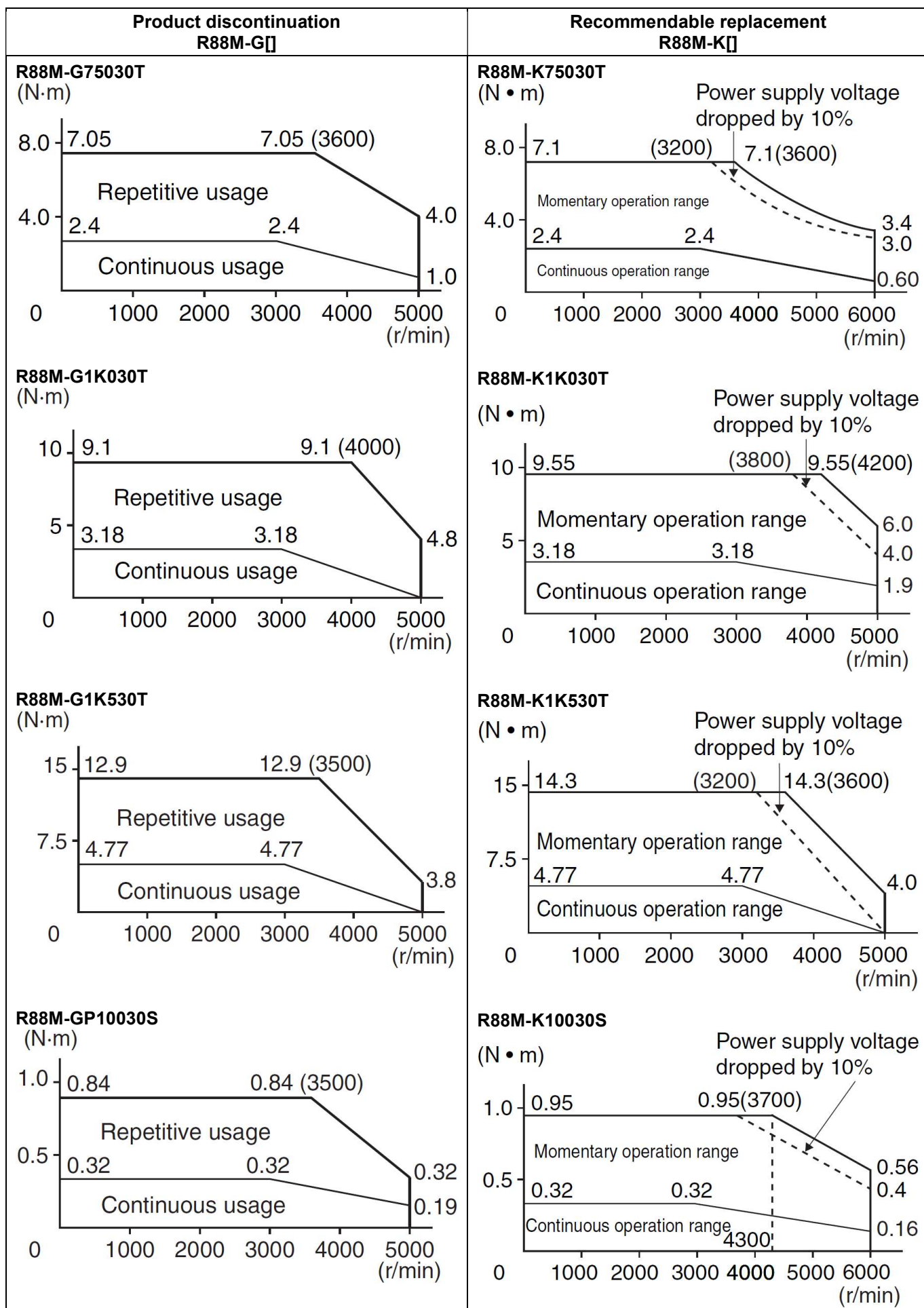
Overload Characteristics



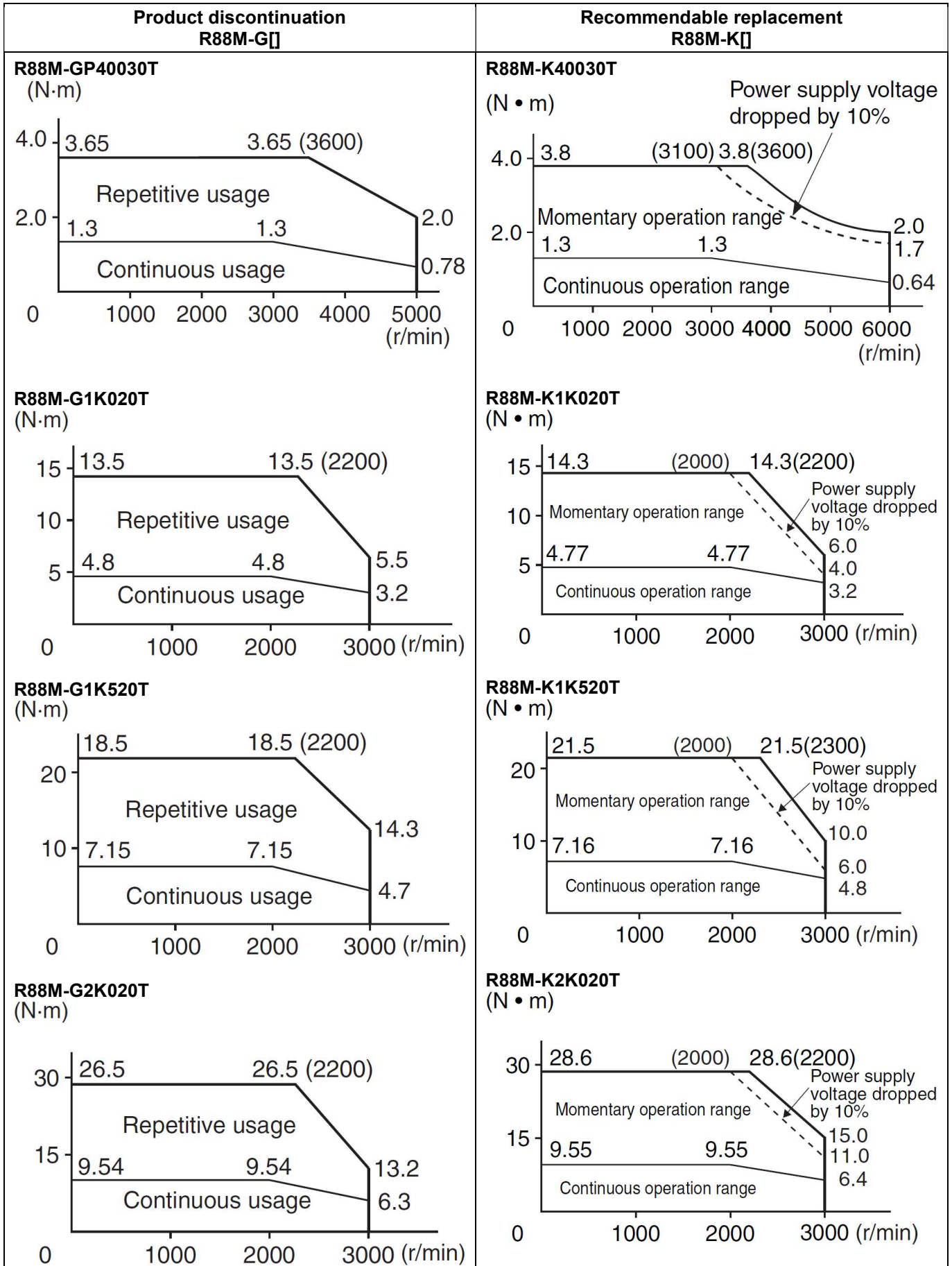
Torque-Rotational Speed Characteristics (with a 3-m standard cable)

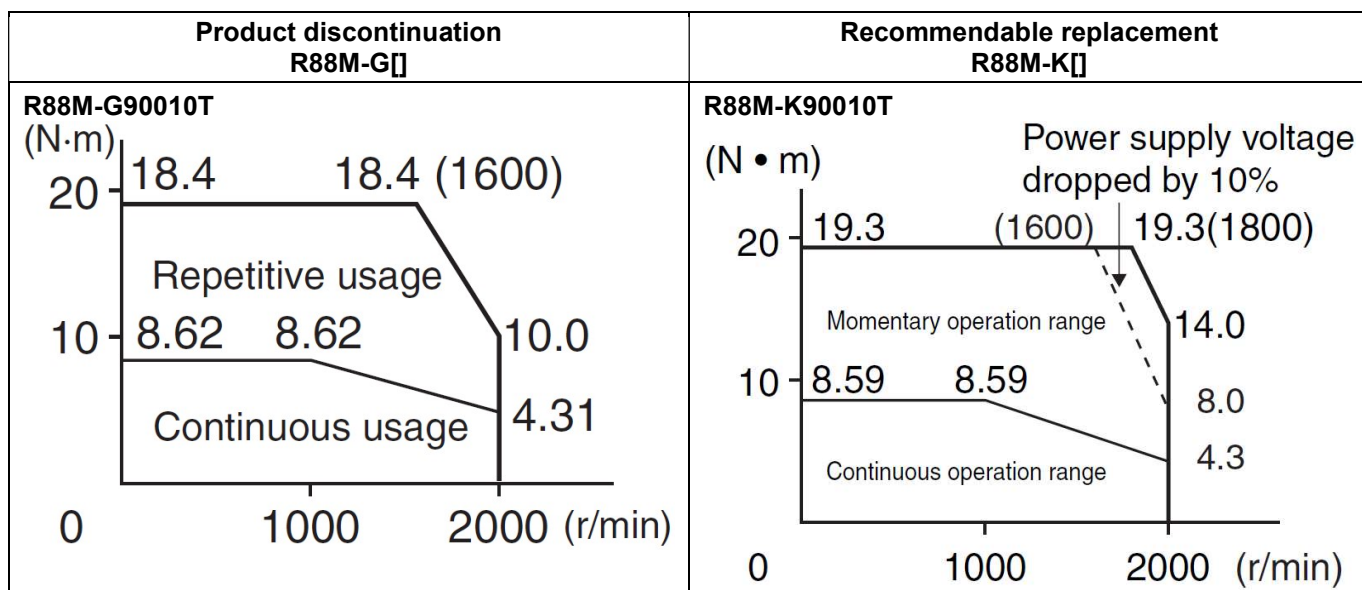






Product discontinuation R88M-G□	Recommendable replacement R88M-K□
<p>R88M-GP20030S (N·m)</p> <p>Repetitive usage: 1.8 (3400)</p> <p>Continuous usage: 0.64</p> <p>0.38</p> <p>0 1000 2000 3000 4000 5000 (r/min)</p>	<p>R88M-K20030S (N·m)</p> <p>Power supply voltage dropped by 10%</p> <p>Momentary operation range: 1.91 (2600)</p> <p>Continuous operation range: 0.64</p> <p>0.8</p> <p>0.64</p> <p>0.32</p> <p>0 1000 2000 3000 4000 5000 6000 (r/min)</p>
<p>R88M-GP40030S (N·m)</p> <p>Repetitive usage: 3.6 (3300)</p> <p>Continuous usage: 1.3</p> <p>1.5</p> <p>0.78</p> <p>0 1000 2000 3000 4000 4500 (r/min)</p>	<p>R88M-K40030S (N·m)</p> <p>Power supply voltage dropped by 10%</p> <p>Momentary operation range: 3.8 (2600)</p> <p>Continuous operation range: 1.3</p> <p>1.7</p> <p>1.3</p> <p>0.32</p> <p>0 1000 2000 3000 4000 5000 6000 (r/min)</p>
<p>R88M-GP10030T (N·m)</p> <p>Repetitive usage: 0.86</p> <p>Continuous usage: 0.32</p> <p>0.19</p> <p>0 1000 2000 3000 4000 5000 (r/min)</p>	<p>R88M-K10030T (N·m)</p> <p>Power supply voltage dropped by 10%</p> <p>Momentary operation range: 0.95 (5000)</p> <p>Continuous operation range: 0.32</p> <p>0.9</p> <p>0.16</p> <p>0 1000 2000 3000 4000 5000 6000 (r/min)</p>
<p>R88M-GP20030T (N·m)</p> <p>Repetitive usage: 1.8 (4500)</p> <p>Continuous usage: 0.64</p> <p>0.38</p> <p>0 1000 2000 3000 4000 5000 (r/min)</p>	<p>R88M-K20030T (N·m)</p> <p>Power supply voltage dropped by 10%</p> <p>Momentary operation range: 1.91 (4000)</p> <p>Continuous operation range: 0.64</p> <p>1.3</p> <p>1.1</p> <p>0.32</p> <p>0 1000 2000 3000 4000 5000 6000 (r/min)</p>





Incremental Encoder Specifications (Absolute encoder specifications are same)

Item	Product discontinuation R88M-G[]	Recommendable replacement R88M-K[]
Encoder system	Optical encoder	Optical encoder 20 bits
Number of output pulses	Phases A and B: 2,500 pulses/rotation Phase Z: 1 pulse/rotation	Phases A and B: 262,144 pulses/rotation Phase Z: 1 pulse/rotation
Power supply voltage	5 VDC ±5%	5 VDC ±5%
Power supply current	180 mA (max.)	180 mA (max.)
Output signals	+S, -S	+S, -S
Output interface	RS-485 compliance	RS-485 compliance

[Operation methods]

Item	Product discontinuation R88D-GT[]/R88D-GN[]-ML2	Recommendable replacement R88D-KT[]/R88D-KN[]-ML2
Parameter Unit	OMNUC G Series can be operated or monitored with the Parameter Unit. Also, OMNUC G Series can be set up the parameters with the PC Tools.	OMNUC G5 Series doesn't support the Parameter Unit. Please set up the parameters with the PC Tools.
RS232/485 communications	Available	Not available (Substitute with USB)

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.