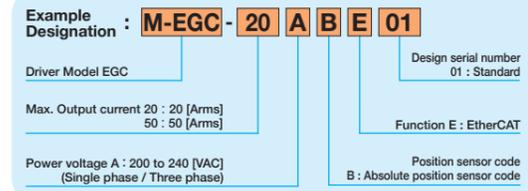


Driver Model EGC

Appearance



Designation



Specifications

Item	M-EGC-20ABE01	M-EGC-50ABE01	
Main Circuit Power Voltage *1	Three phase/Single phase : 200 to 240 [VAC] +10/-15 [%]		
Control Circuit Power Voltage *1	Single phase : 200 to 240 [VAC] +10/-15 [%]		
Power Capacity [kVA] *2	0.9	1.3	
Rotational position resolution [count/revolution]	4,194,304		
Control modes	Position/Speed/Torque (by parameter switching)		
Positioning operation	EtherCAT, Jog, Homing		
Input signal	Control input (Digital isolator)×6, Control input (Opto-coupler)×2		
Output signal	Control output (Open collector)×2, Position feedback (Phase φA/φB/φZ)		
Alarm	Output power device error (Over current), Current detection error, Safe Torque Off error, Cooling fan stop, Overload, Regeneration overload, Continuous rotation speed excess, Overheat error, External error, Driver temperature error, Over voltage, Main circuit voltage low voltage, Main circuit power supply open phase, Main circuit voltage detection error, In-rush prevention time error, Control power error, Control circuit voltage low, Resolver error, Over velocity, Velocity control error, Velocity feedback error, Model following vibration suppression error, Excessive position deviation, Position command error, Inter-axis sync difference excess, Inter driver communication error, Excessive position deviation difference, Memory error, CPU error, Parameter error, Control circuit error, Task process error		
Monitor	Analog monitor ×2		
Communication	EtherCAT, USB		
Environmental condition	Operating ambient temperature [°C]	0 to +55	
	Storage temperature [°C]	-20 to +65	
	Operating / storage humidity [%RH]	95% or less with no moisture	
	Altitude [m]	1000 or less	
	Vibration [m/s ²]	6	
Compatible safety regulation	UL	UL 61800-5-1	
	CE	LVD	IEC 61800-5-1, EN 61800-5-1
		EMC	EN 61000-6-2, IEC 61800-3, EN 61800-3
	KC	KS C 9610-6-2, KS C 9610-6-4	
Weight [kg]	0.80	1.50	
Dimensions (H×W×D) [mm]	160×40×130	160×85×130	

*1 The power supply voltage must be within the specification range.

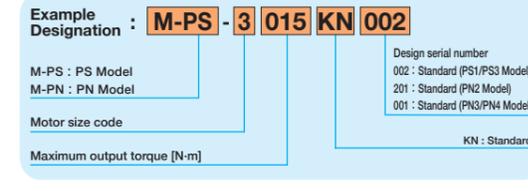
*2 The value at the rated output operation of the maximum combination motor.

Motor

Appearance



Designation



Driver Model EGC / Motor Correspondence Table

Driver	M-EGC-20ABE01	M-EGC-50ABE01
Motor	M-PS1006KN*** M-PS1012KN*** M-PS1018KN*** M-PS3015KN*** M-PS3030KN*** M-PN2012KN***	M-PS3060KN*** M-PS3090KN*** M-PN3045KN*** M-PN4135KN*** M-PN4180KN***

Above motors in blue text are scheduled to be supported progressively.

Specification

Items	M-PS3015KN002	M-PN4135KN001
Motor outer diameter [mm]	φ150	φ280
Maximum output torque [N·m]	15	135
Rated output torque [N·m]	5	45
Axial runout accuracy (A) [μm]	50 (10, 5) *3	30 (10, 5) *3
Radial runout accuracy (B) [μm]	50 (10, 5) *3	50 (10, 5) *3
Motor height [mm]	85	95
Motor hollow diameter [mm]	φ56	φ50
Maximum rotational speed [s ⁻¹]	10	3
Rated rotational speed [s ⁻¹]	5	1
Resolution of position sensor [count/revolution]	4,194,304	4,194,304
Absolute positioning accuracy [arc-sec] *4	60 (±30)	60 (±30)
Repeatability [arc-sec]	±2	±2
Allowable Axial load [N] *5	2,000	9,500
Allowable Radial Load [N] *6	1,700	9,500
Allowable Moment Load [N·m]	42	160
Rotor Inertia [kg·m ²]	0.011	0.057
Allowable Load Inertia [kg·m ²]	0 to 1.65	0.057 to 8.55
Mass [kg]	5.5	26
Environmental condition	Ambient temperature 0 to 40°C, humidity 20 to 80%, use indoor. Free from dust, condensation, and corrosive gases. IP30 or equivalent.	

*3 Motor dimensions of products with runout accuracy shown in parentheses () may vary. Please contact NSK for details.

*4 At ambient temperature of 25±5°C.

*5 With no radial load.

*6 With no axial load.

· Please consult NSK if the motor bears radial, axial, and moment loads at the same time.

· If motor sees an unbalanced load, the moment and radial loads generated by centrifugal force should be less than the allowable load.

· For oscillating operation less than 45°, rotate the motor 90° or more at least once a day.

· Use the dowel pin hole for tooling positioning only.

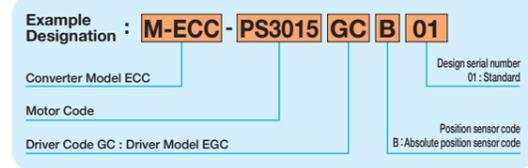
· Do not use for load-bearing purposes.

Converter Model ECC

Appearance



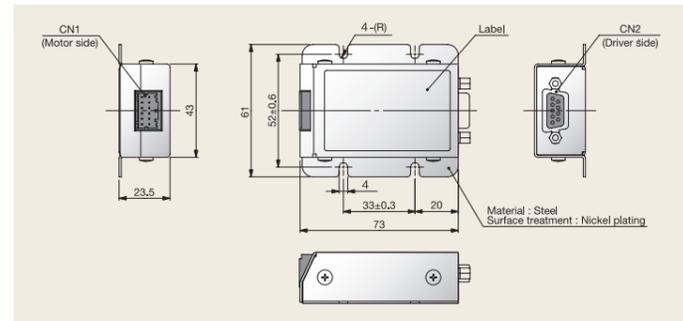
Designation



Motor Code / Motor Correspondence Table

Motor Code	Motor Code
PS1006	M-PS1006KN***
PS1012	M-PS1012KN***
PS1018	M-PS1018KN***
PS3015	M-PS3015KN***
PS3030	M-PS3030KN***
PN2012	M-PN2012KN***
PS3060	M-PS3060KN***
PS3090	M-PS3090KN***
PN3045	M-PN3045KN***
PN4135	M-PN4135KN***
PN4180	M-PN4180KN***

Dimension



Dimension

