Product Change Notification

Document No. I-0357 Issued: February 21, 2019 NIDEC COPAL CORPORATION Quality Assurance Group

To valuable customers:

This notice to announce the change of manufacturing location and brand logo.

- 1) Description and Purpose:
 - · Change of Production location

In order to maintain stable supply, we have decided to integrate our DC motor manufacturing site in Ichinoseki, Japan, into Vietnam where our main plant for DC motor is located.

As we have many years of experience at the Vietnam facility, it is no problems with the change in all aspects including quality and production.

- · Change of Brand logo
- Due to brand log standardization among Nidec group, nameplate will be changed as blow.
- 2) Implementation: We will begin manufacturing in September, 2019
 - We are able to start earlier than the above schedule with your approval. Please contact your reginal sales office if you agree on the earlier implementation.
 - Production site of products can be traced by lot number in the nameplate of each product.

3) Evaluation Result

Evaluation Results	IIΤ			
Initial Evaluation	Document	Refer to 4) List of Affected Models		
	Evaluation items	Initial evaluation was conducted by both directions (CW+CCW) checking 10 basic performances below. 1. Starting Current 2. Starting Torque 3. No Load Rotational Speed 4. No Load Current 5. Rated Load Rotational Speed 6. Rated Load Current 7. Load Rotation Speed (reference only) 8. Load Current (reference only) 9. Noise 10. Vibration		
	Result	PASSED		
	Conclusion	Evaluation result shows that function and performance satisfy required standards. There's no difference between products made in Ichinoseki and Vietnam. Process capability index is above 1.33 points which is Pass borderline.		
Reliability Test	Document	QA document No. 190039		
	Test details	Test was conducted using MG16B-500-AC-00 as substitute in 7 categories specified in production specification. 1) Life Test 2) Humidity Storage 3) High Temperature Storage 4) Low Temperature Storage 5) Thermal shock test 6) Vibration Resistant 7) Shock		
	Tested period	1) Jan. 25, 2019- Feb. 4, 2019 2)-7) Jan. 25, 2019 - Jan. 31, 2019		
	Result	PASSED		

Conclusion	No abnormality was detected and evaluation result shows that figures of both before and after the tests satisfy the all required standards. No abnormality was detected during tests and results satisfy required standards specified in specification. We concluded the device passed the evaluation based on the evaluation data result.
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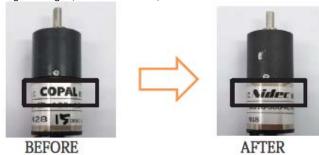
^{*}Evaluation result data is available upon request.

4) List of Affected Models: HG16 series (15 models)

No.	Voltage	MODEL	INITIAL EVALUATION	RESULT	REMARKS
1	DC6V	MG16B-015-AA-00	-	(PASS)	
2		MG16B-030-AA-00	-	(PASS)	
3		MG16B-060-AA-00	-	(PASS)	
4		MG16B-120-AA-00		(PASS)	Tested No.5 as
5		MG16B-240-AA-00	QA Document No. 190030	PASS	substitute
6		MG16B-300-AA-00	-	(PASS)	
7		MG16B-500-AA-00		(PASS)	
8		MG16B-650-AA-00	-	(PASS)	
9	DC12V	MG16B-015-AB-00	-	(PASS)	
10		MG16B-030-AB-00		(PASS)	
11		MG16B-060-AB-00	-	(PASS)	
12		MG16B-120-AB-00	-	(PASS)	Tested No.14 as
13		MG16B-240-AB-00	-	(PASS)	substitute
14		MG16B-300-AB-00	QA Document No. 190026	PASS	
15		MG16B-500-AB-00	-	(PASS)	
16		MG16B-650-AB-00		(PASS)	
17		MG16B-015-AC-00	-	(PASS)	
18		MG16B-030-AC-00	-	(PASS)	
19		MG16B-060-AC-00	-	(PASS)	
20	DC24V	MG16B-120-AC-00	-	(PASS)	Tested No.23 as
21		MG16B-240-AC-00	-	(PASS)	substitute
22		MG16B-300-AC-00	-	(PASS)	
23		MG16B-500-AC-00	QA Document No. 190022	PASS	
24		MG16B-650-AC-00	-	(PASS)	

^{*}Evaluation result data is available upon request.

5) Logo Change (COPAL → Nidec)



6) Further Information

Equipment: No change. The current equipment in Ichinoseki factory will be transferred to Vietnam.

Material: No change in material. We purchase from same suppliers.

Workers: Experienced workers in Ichinoseki factory properly train workers in Vietnam based on the work instruction used in Ichinoseki factory. Also, workers in Vietnam factory already have enough skills and experience in manufacturing of similar products.

Therefore, we conclude that relocation of production site will not impact any of function or quality of products.