

## Design Change Notification

January 6<sup>th</sup>, 2023To: Sanyo Denki America Cooling DistributorsSANYO DENKI CO.,LTD.  
Design Dept., Cooling Systems Div.

Product: BLDC FAN MOTOR

Model: San Ace 60 (9CR) 60mm sq. x 51mm thick  
(Please refer Attached Sheet for a complete part number list.)

Approved	Checked	Designed
		

SANYO DENKI America, Inc.  
Cooling Systems Division

No.	Contents	Before Change	After Change	Description
1	Motor drive IC, electronic parts, Motor Windings and PWB	Use motor drive IC manufactured by ON-Semiconductor.	Use motor drive IC manufactured by Rohm.	Change to the motor drive IC due to discontinuation of production by the semiconductor manufacturer. Also change to some electric parts except IC, Motor windings and PWB due to the change of the motor drive IC.
2	Specifications	See the Attached Sheet.	See the Attached Sheet.	
3	Implementation Date			Implementation Date: From June, 2023 production (Estimated). Please note that the changeover schedule to new IC may change according to the number of products in the inventory.

**No. A0053400 - Attached Sheet 1**

## [MODEL LIST]

San Ace 60 (9CR) – 60mm x 51mm thick

MODEL	Change contents
9CR0612G501 9CR0612G502	Attached Sheet 2
9CR0612H501 9CR0612H503 9CR0612H504 9CR0612H505 9CR0612H506	Attached Sheet 3
9CR0612P5G03 9CR0612P5G04 9CR0612P5G05 9CR0612P5G07 9CR0612P5G03-A02	Attached Sheet 4
9CR0612P5H03 1022-107499	Attached Sheet 5

**No. A0053400 - Attached Sheet 2**

[MODEL]

9CR0612G501, 9CR0612G502

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11867	BD69730
	Manufacture	On-semiconductor	Rohm
Operating voltage		No change	
Rated electrical current		No change	
Starting current		4.1 [A] nominal 4.5 [A] maximum	4.9 [A] nominal 5.4 [A] maximum
Speed		No change	
Operating temp.		No change	
Sound pressure level		No change	
Control terminal		Non-applicable	
Air flow – static pressure character		No change	
PWM duty cycle - Speed characteristic		Non-applicable	
Sensor spec. (*Note)		Vce: +13.8 [V DC] max.	Vce: +13.8 [V DC] max.
		Ic: 5 [mA] max.	Ic: 10 [mA] max.
		Vce(sat): 0.6 [V DC] max.	Vce(sat): 1.0 [V DC] max.
Life Expectancy		No change	

\*Note: This change applies only to pulse sensor specification products.  
Products without sensors are “Non- applicable”.

**No. A0053400 - Attached Sheet 3**

[MODEL]

9CR0612H501, 9CR0612H503, 9CR0612H504, 9CR0612H505, 9CR0612H506

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11867	BD69730
	Manufacture	On-semiconductor	Rohm
Operating voltage		No change	
Rated electrical current		No change	
Starting current		3.5 [A] nominal 3.9 [A] maximum	4.4 [A] nominal 4.9 [A] maximum
Speed		No change	
Operating temp.		No change	
Sound pressure level		No change	
Control terminal		Non-applicable	
Air flow – static pressure character		No change	
PWM duty cycle - Speed characteristic		Non-applicable	
Sensor spec. (*Note)		Vce: +13.8 [V DC] max.	Vce: +13.8 [V DC] max.
		Ic: 5 [mA] max.	Ic: 10 [mA] max.
		Vce(sat): 0.6 [V DC] max.	Vce(sat): 1.0 [V DC] max.
Life Expectancy		No change	

\*Note: This change applies only to pulse sensor specification products.  
Products without sensors are “Non- applicable”.

**No. A0053400 - Attached Sheet 4**

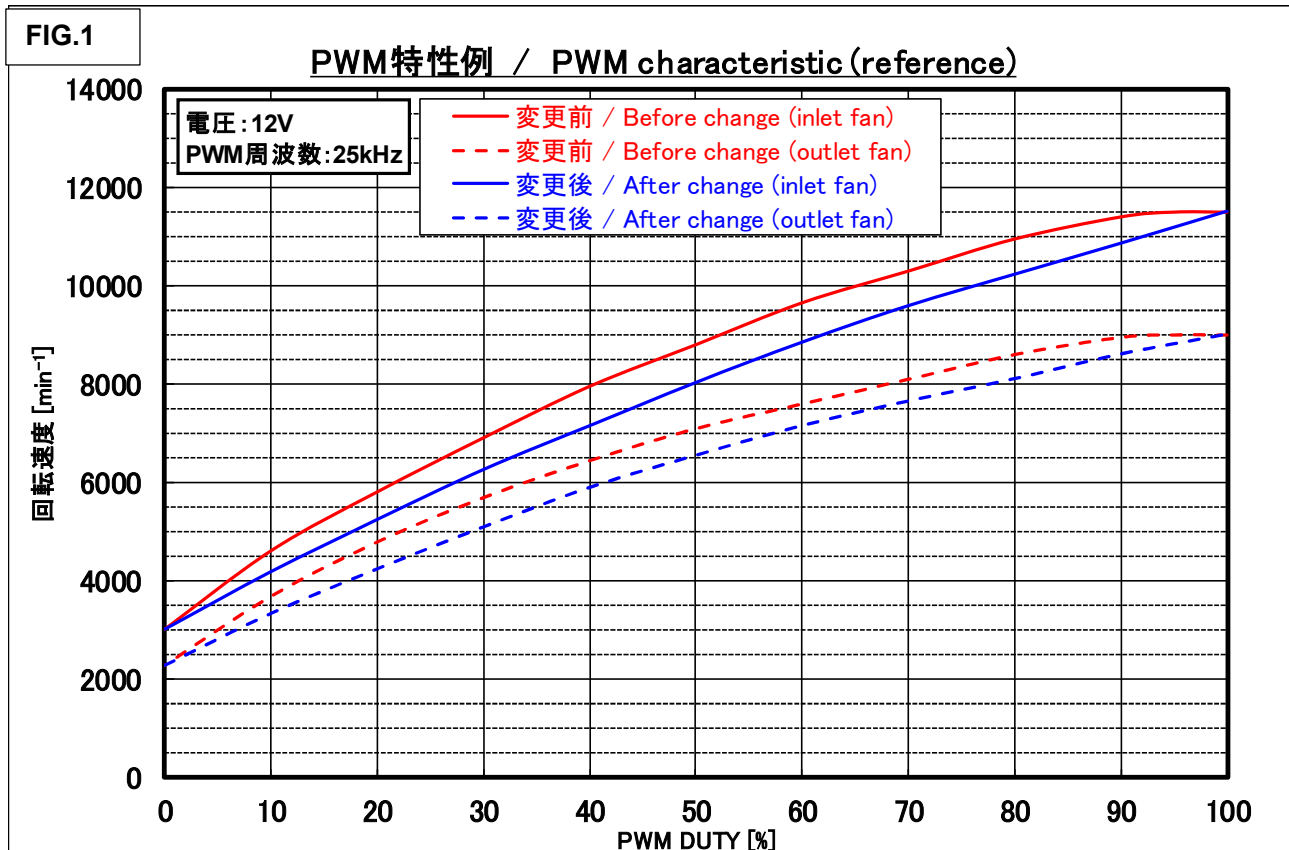
[MODEL]

9CR0612P5G03, 9CR0612P5G04, 9CR0612P5G05, 9CR0612P5G07, 9CR0612P5G03-A02

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11867	BD69730
	Manufacture	On-semiconductor	Rohm
Operating voltage		No change	
Rated electrical current		No change	
Starting current		4.1 [A] nominal 4.5 [A] maximum	4.9 [A] nominal 5.4 [A] maximum
Speed		No change	
Operating temp.		No change	
Sound pressure level		No change	
Control terminal		No change	
Air flow – static pressure character		No change	
PWM duty cycle - Speed characteristic		Refer to Fig.1	
Sensor spec. (*Note)		Vce: +13.8 [V DC] max.	Vce: +13.8 [V DC] max.
		Ic: 5 [mA] max.	Ic: 10 [mA] max.
		Vce(sat): 0.6 [V DC] max.	Vce(sat): 1.0 [V DC] max.
Life Expectancy		No change	

\*Note: This change applies only to pulse sensor specification products.  
Products without sensors are “Non- applicable”.



**No. A0053400 - Attached Sheet 5**

[MODEL]

9CR0612P5H03, 1022-107499

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11867	BD69730
	Manufacture	On-semiconductor	Rohm
Operating voltage		No change	
Rated electrical current		No change	
Starting current		3.5 [A] nominal 3.9 [A] maximum	4.4 [A] nominal 4.9 [A] maximum
Speed		No change	
Operating temp.		No change	
Sound pressure level		No change	
Control terminal		No change	
Air flow – static pressure character		No change	
PWM duty cycle - Speed characteristic		No change	
Sensor spec. (*Note)		Vce: +13.8 [V DC] max.	Vce: +13.8 [V DC] max.
		Ic: 5 [mA] max.	Ic: 10 [mA] max.
		Vce(sat): 0.6 [V DC] max.	Vce(sat): 1.0 [V DC] max.
Life Expectancy		No change	

\*Note: This change applies only to pulse sensor specification products.  
Products without sensors are “Non- applicable”.