

Design Change Notification

April 25th, 2022

To: Sanyo Denki America Cooling Distributors

Product: BLDC FAN MOTOR

Model: San Ace 80 (9GA) 80mm sq. x 38mm thick
(Please refer Attached Sheet for a complete part number list.)SANYO DENKI CO., LTD.
Design Dept., Cooling Systems Div.

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 Microchip.	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 December, 2022 production (Estimated). Please note that the changeover schedule to new IC may change according to the number of products in the inventory.

No. A0052795 - Attached Sheet 1 – 1/2

[MODEL LIST]

San Ace 80(9GA) – 80mm x 38mm thick

MODEL	Change contents
9GA0812S163 9GA0812S1D61 9GA0812S1D63 9GA0812H162 9GA0812H1D61	Attached Sheet 2
9GA0812P1G61 9GA0812P1G611 9GA0812P1G64 9GA0812P1G65 9GA0812P1G66 9GA0812P1G69 9GA0812P1G691 9GA0812P1G70 9GA0812P1G71 9GA0812P1G711 9GA0812P1G72 9GA0812P1G721 9GA0812P1G731 9GA0812P1G74 9GA0812P1G741 9GA0812P1G75 9GA0812P1G761 9GA0812P1G771 1023-118408 1023-121322 1023-121323 1023-118407	Attached Sheet 3

MODEL	Change contents
9GA0812P1S61 9GA0812P1S611 9GA0812P1S64 9GA0812P1S65 9GA0812P1S651 9GA0812P1S66 9GA0812P1S661 9GA0812P1S681 9GA0812P1S691 9GA0812P1S70 9GA0812P1S71 9GA0812P1S72 9GA0812P1S73 9GA0812P1S74 9GA0812P1S75 9GA0812P1S76 9GA0812P1S77 9GA0812P1S78 9GA0812P1SD611 9GA0812P1SD63 109-U0012-01 (9GA0812P1S67) 109-U0012-01F (9GA0812P1S67) 109-U0013-01 (9GA0812P1S68) 109-U0013-01F (9GA0812P1S68) 109-U0054-01 (9GA0812P1S75) 109-U0056-01 (9GA0812P1S76) 1022-115884 1022-116233 9GA0812P1S61-A01 9GA0812P1S61-A02 9GA0812P1S61-A03 9GA0812P1S61-A04 9GA0812P1S611-A01	Attached Sheet 4

No. A0052795 - Attached Sheet 1 – 2/2

[MODEL LIST]

San Ace 80 (9GA) – 80mm x 38mm thick

MODEL	Change contents
9GA0812P1H61	Attached Sheet 5
9GA0812P1H611	
9GA0812P1H64	
9GA0812P1H641	
9GA0812P1H66	
9GA0812P1H661	
9GA0812P1H671	
9GA0812P1H68	
9GA0812P1H681	
9GA0812P1H69	
9GA0812P1H691	
9GA0812P1H70	
9GA0812P1H701	
9GA0812P1H71	
9GA0812P1H72	
9GA0812P1H73	
9GA0812P1H61-A01	
9GA0812P1H611-A01	
9GA0824S161	Attached Sheet 6
9GA0824S162	
9GA0824S163	
9GA0824S1641	
9GA0824H161	
9GA0824H162	
9GA0824H1D61	
9GA0824H1D63	
9GA0824H1E61	

MODEL	Change contents
9GA0824P1S61	Attached Sheet 7
9GA0824P1S611	
9GA0824P1S631	
9GA0824P1S64	
9GA0824P1S641	
9GA0824P1S65	
9GA0824P1S651	
9GA0824P1S66	
9GA0824P1S661	
9GA0824P1S67	
9GA0824P1S671	
9GA0824P1S68	
9GA0824P1S681	
9GA0824P1S69	Attached Sheet 8
9GA0824P1S61-A01	
9GA0824P1H61	
9GA0824P1H611	
9GA0824P1H631	Attached Sheet 8
9GA0824P1HD61	
9GA0824P1HD63	Attached Sheet 8
9GA0824P1H61-A02	
9GA0848P1S61	Attached Sheet 9

No. A0052795 - Attached Sheet 2 - 1/1

[MODEL]

9GA0812S163, 9GA0812S1D61, 9GA0812S1D63,

9GA0812H162, 9GA0812H1D61

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 3 - 1/1

[MODEL]

9GA0812P1G61, 9GA0812P1G611, 9GA0812P1G64, 9GA0812P1G65, 9GA0812P1G66, 9GA0812P1G69,
 9GA0812P1G691, 9GA0812P1G70, 9GA0812P1G71, 9GA0812P1G711, 9GA0812P1G72, 9GA0812P1G721,
 9GA0812P1G731, 9GA0812P1G74, 9GA0812P1G741, 9GA0812P1G75, 9GA0812P1G761, 9GA0812P1G771,
 1023-118408, 1023-121322, 1023-121323, 1023-118407

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 4 - 1/1

[MODEL]

9GA0812P1S61, 9GA0812P1S611, 9GA0812P1S64, 9GA0812P1S65, 9GA0812P1S651, 9GA0812P1S66,
 9GA0812P1S661, 9GA0812P1S681, 9GA0812P1S691, 9GA0812P1S70, 9GA0812P1S71, 9GA0812P1S72,
 9GA0812P1S73, 9GA0812P1S74, 9GA0812P1S75, 9GA0812P1S76, 9GA0812P1S77, 9GA0812P1S78,
 9GA0812P1SD611, 9GA0812P1SD63,
 109-U0012-01 (9GA0812P1S67), 109-U0012-01F (9GA0812P1S67), 109-U0013-01 (9GA0812P1S68),
 109-U0013-01F (9GA0812P1S68), 109-U0054-01(9GA0812P1S75), 109-U0056-01 (9GA0812P1S76),
 1022-115884, 1022-116233, 9GA0812P1S61-A01, 9GA0812P1S61-A02, 9GA0812P1S61-A03,
 9GA0812P1S61-A04, 9GA0812P1S611-A01

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 5 - 1/1

[MODEL]

9GA0812P1H61, 9GA0812P1H611, 9GA0812P1H64, 9GA0812P1H641, 9GA0812P1H66, 9GA0812P1H661,
 9GA0812P1H671, 9GA0812P1H68, 9GA0812P1H681, 9GA0812P1H69, 9GA0812P1H691, 9GA0812P1H70,
 9GA0812P1H701, 9GA0812P1H71, 9GA0812P1H72, 9GA0812P1H73,
 9GA0812P1H61-A01, 9GA0812P1H611-A01

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 6 - 1/1

[MODEL]

9GA0824S161, 9GA0824S162, 9GA0824S163, 9GA0824S1641,

9GA0824H161, 9GA0824H162, 9GA0824H1D61, 9GA0824H1D63, 9GA0824H1E61

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 7 - 1/1

[MODEL]

9GA0824P1S61, 9GA0824P1S611, 9GA0824P1S631, 9GA0824P1S64, 9GA0824P1S641, 9GA0824P1S65,
 9GA0824P1S651, 9GA0824P1S66, 9GA0824P1S661, 9GA0824P1S67, 9GA0824P1S671, 9GA0824P1S68,
 9GA0824P1S681, 9GA0824P1S69,
 9GA0824P1S61-A01

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 8 - 1/1

[MODEL]

9GA0824P1H61, 9GA0824P1H611, 9GA0824P1H631,
 9GA0824P1HD61, 9GA0824P1HD63,
 9GA0824P1H61-A02

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	

No. A0052795 - Attached Sheet 9 - 1/1

[MODEL]

9GA0848P1S61

[Contents of change]

		Before Change	After Change
Motor drive IC	Type name	LB11850	PIC16F1823
	Manufacture	On-semiconductor	Microchip
Operating voltage		No change	
Electrical current		No change	
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.		No change	