Design Change Notification

December 20th, 2022

To: Sanyo Denki America Cooling Distributors

Product: BLDC FAN MOTOR

Model: San Ace 40W (9WL) 40mm sq. x 28mm thick

(Please refer Attached Sheet for a complete part number list.)

SANYO DENKI CO., LTD. Design Dept., Cooling Systems Div.

| | , - 3 | |
|------------------------|-----------------------|-----------------------|
| Approved | Checked | Designed |
| <u>渡辺</u> '22.12.16 道徳 | 中村 '22.12.16 俊之 | 高桑 '22.12.16 宗仙 |

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 or Nisshinbo-Micro-Devices. | 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 February, 2023 production (Estimated). Please note that the changeover schedule to new IC may change according to the number of products in the inventory. |

[MODEL LIST]

San Ace 40W (9WL) - 40mm x 28mm thick

| , |) – 40mm x 28mm thick | |
|----------------|-----------------------|--|
| MODEL | Change contents | |
| 9WL0412J3001 | | |
| 9WL0412J3002 | | |
| 9WL0412J3003 | | |
| 9WL0412J3D003 | | |
| 9WL0412G3001 | Attached Sheet 2 | |
| 9WL0412G3002 | | |
| 9WL0412G3003 | | |
| 9WL0412G3005 | | |
| 9WL0412G3006 | | |
| 9WL0412G3D001 | | |
| 9WL0412P3J001 | | |
| 9WL0412P3J004 | | |
| 9WL0412P3J005 | | |
| 9WL0412P3J006 | | |
| 9WL0412P3J007 | Attached Sheet 3 | |
| 9WL0412P3G001 | , maorioa orioot o | |
| 9WL0412P3G003 | | |
| 9WL0412P3G004 | | |
| 9WL0412P3G006 | | |
| 9WL0412P3GD001 | | |
| 9WL0424J3001 | | |
| 9WL0424J3002 | | |
| 9WL0424J3D003 | Attached Chart 4 | |
| 9WL0424G3001 | Attached Sheet 4 | |
| 9WL0424G3002 | | |
| 9WL0424G3003 | | |
| 9WL0424P3J001 | | |
| 9WL0424P3J004 | | |
| 9WL0424P3J005 | | |
| 9WL0424P3J006 | A | |
| 9WL0424P3J-3 | Attached Sheet 5 | |
| 9WL0424P3JD001 | | |
| 9WL0424P3G001 | | |
| 9WL0424P3G003 | | |

[MODEL]

9WL0412J3001, 9WL0412J3002, 9WL0412J3003, 9WL0412J3D003, 9WL0412G3001, 9WL0412G3002, 9WL0412G3003, 9WL0412G3005, 9WL0412G3006, 9WL0412G3D001

| | | Before Change | After Change |
|---------------------------------------|----------------------------------|------------------|-------------------|
| Motor drive IC | Pulse sensor Or sensor-less type | LB11868 | BD69730 or BD6973 |
| | Lock sensor type | | BD69740 or BD6974 |
| | Manufacture | On-semiconductor | Rohm |
| Operating voltage No change | | ange | |
| Electrical current No change | | nge | |
| Speed | | No change | |
| Operating temp. | | No change | |
| Sound pressure level No change | | ange | |
| Control terminal Non-applicable | | licable | |
| Air flow – static pressure character | | No change | |
| PWM duty cycle - Speed characteristic | | Non-applicable | |
| Sensor spec. | | No change | |

[MODEL]

9WL0412P3J001, 9WL0412P3J004, 9WL0412P3J005, 9WL0412P3J006, 9WL0412P3G001, 9WL0412P3G003, 9WL0412P3G004, 9WL0412P3G006, 9WL0412P3GD001

| | | Before Change | After Change | |
|---------------------------------------|-------------------------------------|------------------|-------------------|--|
| Motor drive IC | Pulse sensor Or sensor-less type | LB11868 | BD69730 or BD6973 | |
| | Lock sensor type | | BD69740 or BD6974 | |
| | Manufacture | On-semiconductor | Rohm | |
| Operating voltage No change | | ange | | |
| Electrical current No change | | ange | | |
| Speed | | No change | | |
| Operating temp. | | No cha | No change | |
| Sound pressure level No change | | ange | | |
| Control terminal | | No change | | |
| Air flow – static pressure character | | No change | | |
| PWM duty cycle - Speed characteristic | | No change | | |
| Sensor spec. | | No change | | |

[MODEL]

9WL0424J3001, 9WL0424J3002, 9WL0424J3D003, 9WL0424G3001, 9WL0424G3002, 9WL0424G3003

| | | Before Change | After Change |
|---------------------------------------|------------------------|------------------|-------------------------|
| Motor drive IC | Type name | LV8860 | NJW4320 |
| | Manufacture | On-semiconductor | Nisshinbo-Micro-Devices |
| Operating voltage | | No change | |
| Electrical current | | No change | |
| Speed | | No change | |
| Operating temp. | | No change | |
| Sound pressure lev | /el | No change | |
| Control terminal | | Non-applicable | |
| Air flow – static pressure character | | No change | |
| PWM duty cycle - Speed characteristic | | Non-applicable | |
| Sensor spec. | Sensor spec. No change | | ange |

[MODEL]

9WL0424P3J001, 9WL0424P3J004, 9WL0424P3J005, 9WL0424P3J006, 9WL0424P3J-3, 9WL0424P3JD001, 9WL0424P3G001, 9WL0424P3G003

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|---------------------------------------|------------------|---|--|
| | | Before Change | After Change |
| Motor drive IC | Type name | LV8860 | NJW4320 |
| | Manufacture | On-semiconductor | Nisshinbo-Micro-Devices |
| Operating voltage | oltage No change | | nange |
| Electrical current | | No change | |
| Speed | d No change | | nange |
| Operating temp. | | No change | |
| Sound pressure lev | vel | No change | |
| Control terminal | | Source current: 1 mA MAX. Refer to below drawing | Source current: 2 mA MAX. Refer to below drawing |
| Air flow – static pressure character | | No change | |
| PWM duty cycle - Speed characteristic | | No change | |
| Sensor spec. | | No change | |
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