

# Design Change Notification

May 22nd, 2019

To: Sanyo Denki America Cooling Distributors

Product: BLDC FAN MOTOR

Model: San Ace 172 9L type

(Please refer Attached Sheet #1 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	Current Design	Modification	Description
1	Electronic parts and PWB	Use both lead type components and surface mount device.	Use only surface mount device.	Change to the surface mount device from lead type components due to the some production parts are discontinued and aging of the electronic component mounting equipment. Also change the PWB due to the change of electronic parts.
2	Circuit	See the attached sheet for circuit diagram.	See the attached sheet for circuit diagram.	Circuit changes as electronic parts are changed.
3	Motor	See the attached sheet for motor spec.	See the attached sheet for motor spec.	Change the motor of some models due to the change of the electronic parts.
4	Starting current	See the attached sheet for starting current.	See the attached sheet for starting current.	Change the starting current spec. of some models due to the change of the electronic parts.
5	Implementation Date			Implementation Date: From the production in January 2020. Please note that the schedule might be changed due to existing component availability.

**[Attached Sheet #1: Applicable Model List]**

San Ace 172 9L type

Model	Reference Attached Sheet No.
109L1712H501	Attached Sheet #2
109L1712H502	Attached Sheet #2
109L1712H5D01	Attached Sheet #2
109L1712M501	Attached Sheet #2
109L1712M502	Attached Sheet #2
109L1712M5D01	Attached Sheet #2
109L5712H501	Attached Sheet #2
109L5712H502	Attached Sheet #2
109L5712H5D01	Attached Sheet #2
109L5712M501	Attached Sheet #2
109L5712M502	Attached Sheet #2
109L5712M5D01	Attached Sheet #2

Model	Reference Attached Sheet No.
109L1748H501	Attached Sheet #4
109L1748H502	Attached Sheet #4
109L1748H502-C	Attached Sheet #4
109L1748H5D01	Attached Sheet #4
109L1748M501	Attached Sheet #4
109L1748M502	Attached Sheet #4
109L1748M5D01	Attached Sheet #4
109L5748H501	Attached Sheet #4
109L5748H502	Attached Sheet #4
109L5748H5D01	Attached Sheet #4
109L5748M501	Attached Sheet #4
109L5748M502	Attached Sheet #4
109L5748M5D01	Attached Sheet #4

Model	Reference Attached Sheet No.
109L1724H501	Attached Sheet #3
109L1724H502	Attached Sheet #3
109L1724H504	Attached Sheet #3
109L1724H5D01	Attached Sheet #3
109L1724H5D03	Attached Sheet #3
109L1724M501	Attached Sheet #3
109L1724M502	Attached Sheet #3
109L1724M503	Attached Sheet #3
109L1724M504	Attached Sheet #3
109L1724M5D01	Attached Sheet #3
109L5724H501	Attached Sheet #3
109L5724H502	Attached Sheet #3
109L5724H5D01	Attached Sheet #3
109L5724H5D01-C	Attached Sheet #3
109L5724M501	Attached Sheet #3
109L5724M502	Attached Sheet #3
109L5724M5D01	Attached Sheet #3

**[Attached Sheet #2]**

[Applicable Models]

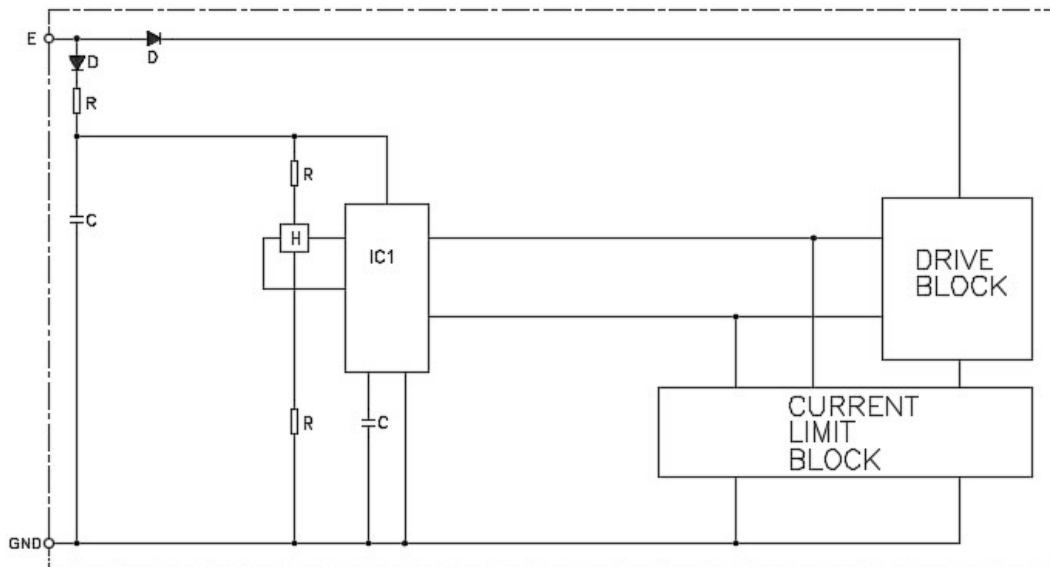
109L5712H5xx, 109L5712H5Dxx, 109L5712M5xx, 109L5712M5Dxx

109L1712H5xx, 109L1712H5Dxx, 109L1712M5xx, 109L1712M5Dxx

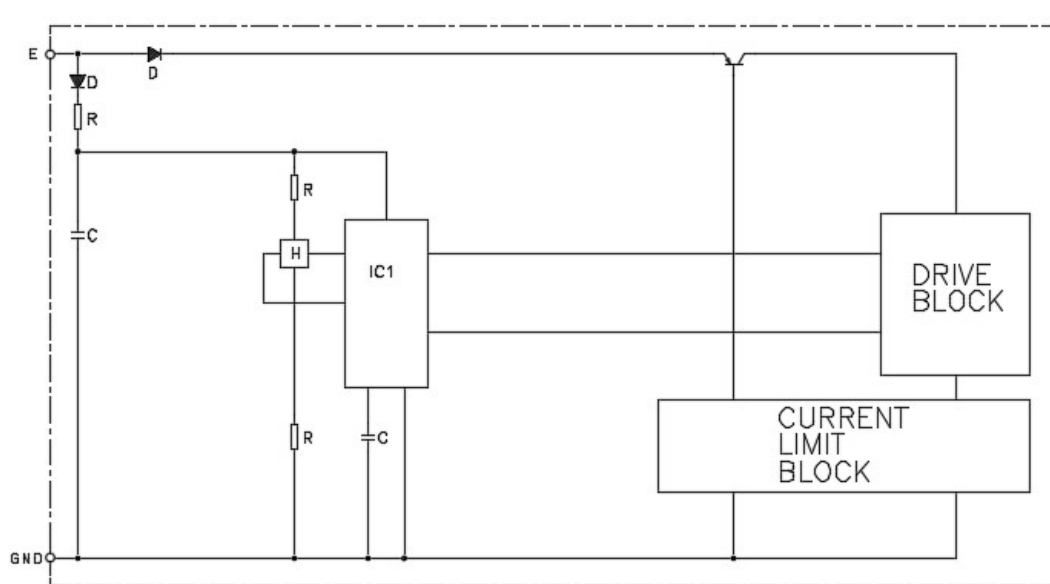
[Contents of change]

	MODEL	Current Design	Modification
Motor	109L5712H5xx, 109L5712H5Dxx 109L1712H5xx, 109L1712H5Dxx	$\phi 0.5 \times 86$ turns	$\phi 0.5 \times 96$ turns
	109L5712M5xx, 109L5712M5Dxx 109L1712M5xx, 109L1712M5Dxx	$\phi 0.45 \times 125$ turns	$\phi 0.4 \times 180$ turns
Starting current	109L5712H5xx, 109L5712H5Dxx 109L1712H5xx, 109L1712H5Dxx	Nom.: 2.7A Max.: 3.0A	Nom.: 2.85A Max.: 3.45A

Schematic circuit diagram before change



Schematic circuit diagram after change



**[Attached Sheet #3]**

[Applicable Models]

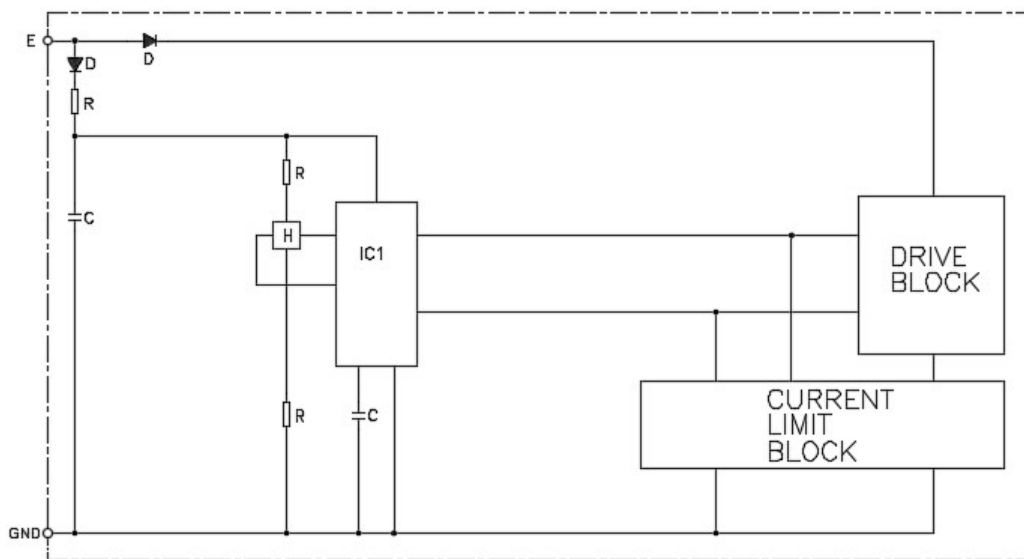
109L5724H5xx, 109L5724H5Dxx, 109L5724M5xx, 109L5724M5Dxx

109L1724H5xx, 109L1724H5Dxx, 109L1724M5xx, 109L1724M5Dxx

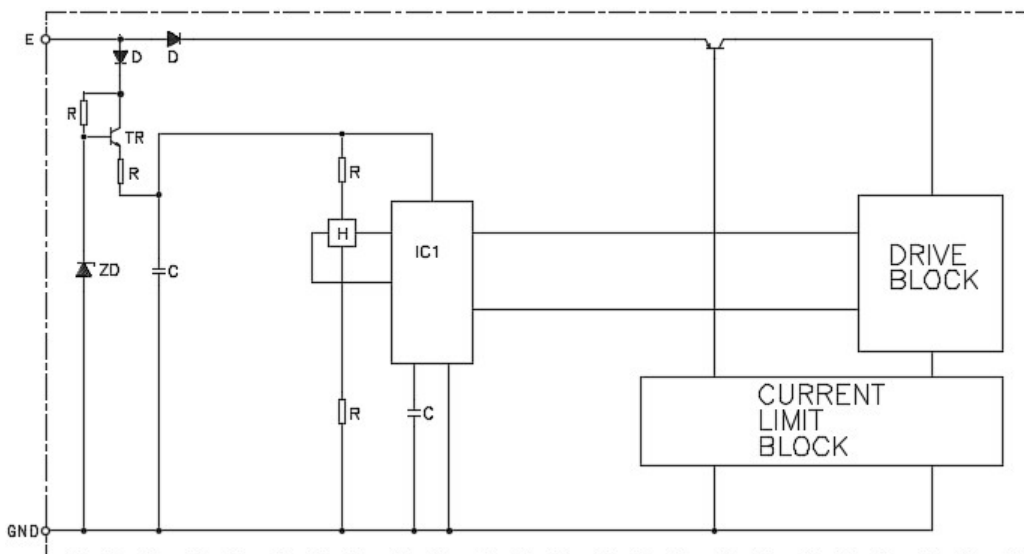
[Contents of change]

	MODEL	Current Design	Modification
Motor	109L5724H5xx, 109L5724H5Dxx 109L1724H5xx, 109L1724H5Dxx	$\phi 0.35 \times 180$ turns	$\phi 0.35 \times 190$ turns
	109L5724M5xx, 109L5724M5Dxx 109L1724M5xx, 109L1724M5Dxx	$\phi 0.3 \times 295$ turns	$\phi 0.29 \times 335$ turns

Schematic circuit diagram before change



Schematic circuit diagram after change



**[Attached Sheet #4]**

[Applicable Models]

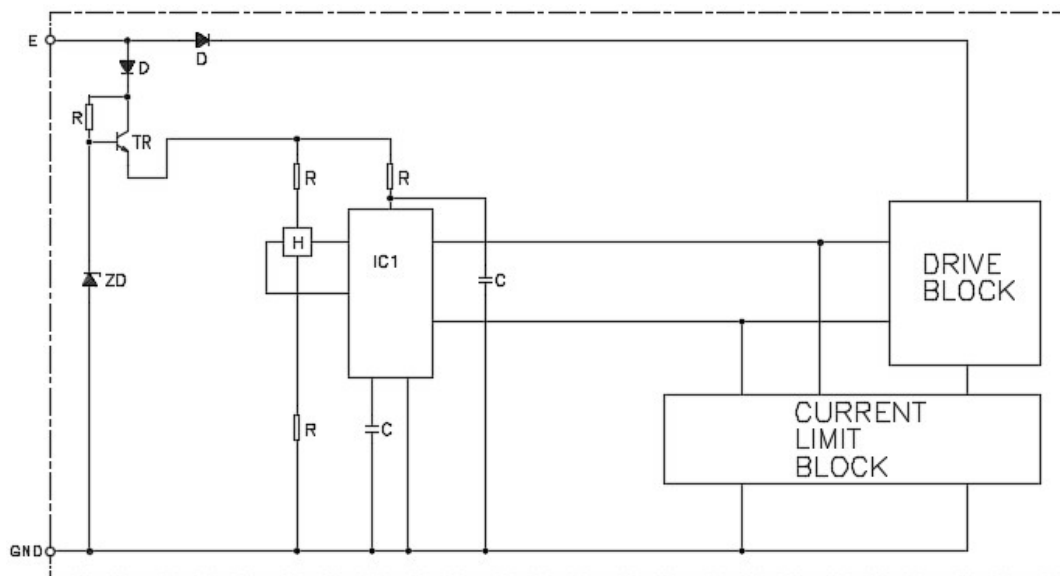
109L5748H5xx, 109L5748H5Dxx, 109L5748M5xx, 109L5748M5Dxx

109L1748H5xx, 109L1748H5Dxx, 109L1748M5xx, 109L1748M5Dxx

[Contents of change]

	MODEL	Current Design	Modification
Motor	109L5748H5xx, 109L5748H5Dxx 109L1748H5xx, 109L1748H5Dxx	$\varnothing 0.24 \times 400$ turns	$\varnothing 0.24 \times 420$ turns
	109L5748M5xx, 109L5748M5Dxx 109L1748M5xx, 109L1748M5Dxx	$\varnothing 0.19 \times 600$ turns	$\varnothing 0.18 \times 710$ turns

Schematic circuit diagram before change



Schematic circuit diagram after change

