

FORM-0085 REV A

Change Description:	Honeywell HOA1887 end-of-life replacement	
Motor(s) Affected:	Driver Designer's Kits	
Customer Classification Level(s)*:	1	

The following tests are included in this report:		
⊠ Fit	□ Process	
⊠ Form	☐ Manufacturing Location	
□ Function	☐ Temperature Test	
☐ Performance (electrical, mechanical, etc)	□ Noise Test	
☐ Strength Testing	☐ Destructive Testing	
☐ Waterproof Testing	☐ Other: Trigger test of optical switch using Arduino	

Date of Implementation:	7/20/2022
ECN #, RMA, MRR, or unique #:	ECN 56387

Below are approval signatures for this Risk Assessment Disposition:

Title:	Sales Manager	Quality Manager	Engineering Manager	Production Manager
Name:	Belal Azim	Sooraj Kumar	Harlan Nguyen	Alec Nguyen
E-Signature:	Calle	Huser 3.4	Harlan Nguyen	Alec Nguyen
Date:	Aug 10, 2022	Aug 9, 2022	Aug 9, 2022	Aug 9, 2022

Note(s):

4715450000165 to be up-reved, and description updated to new P/N OPB841W51Z in place of HOA1887.

^{*}See <u>QMS-5021 Customer Notice Procedure</u> for the customer classification levels and definitions.



Risk Assessment Matrix					
Consequences	1. Negligible	2. Low	3. Moderate	4. Significant	5. Catastrophic
1. Improbable (<10% Chance)	1	2	3	4	5
2. Remote (10% - 25% chance)	2	4	6	8	10
3. Occasional (25% - 50% chance)	3	6	9	12	15
4. Probable (50% - 75% chance)	4	8	12	16	20
5. Frequent (>75% chance)	5	10	15	20	25

^{*}Low: 1-6, Medium: 8-12, and High: 15-25.

^{*}Refer to <u>QMS-0038 Risk Management Procedure</u>, for further understanding of Consequences.

Risk Level, Justification, and Mitigation		
Risk Level (Low, Medium, or High) and associated number from Risk Assessment Matrix:	Low – 1	
Justification for Risk Level: Reason for rating Risk Level.	Confirmed via testing the form/fit/function are identical. Configured Arduino circuit to energize a LED when optical switch is triggered. Verified functionality with HOA1887 switch then replaced with OPB841W51Z switch. No difference was observed.	
Risk Mitigation: *Refer to <i>QMS-0038 Risk Management Procedure</i> , for further understanding of Risk Mitigation.	No risks with using the replacement. Limited stock available for last-buy upon request.	



Questions: (any that pertains to the change, the following 3 questions should be the minimum)		
Does this change affect FORM ?	No.	
The part description usually is a good example of form. For complete motor, the shape, size, dimensions, mass, weight and other visual parameters are considered.		
Does this change affect FIT?	No.	
When part is changed, does it still assemble correctly and without degrading the initial design?		
Does this change affect FUNCTION ?	No.	
Does the change affect the intended performance of the part or the complete motor?		
Other questions?		

Detail of Change Description:

Honeywell HOA1887 is no longer available from the manufacturer, we must source a replacement.

Supplier recommended TT Electronic OPB841W51Z slotted optical switch, we have conducted testing regarding its form, fit, and function and determined it is a suitable drop-in replacement.

There is no risk with using the new optical switch OPB841W51Z in place of HOA1887. A limited quantity is available as last-buy upon request.

Affected P/N:

4696327000003	DRV DESIGN KIT W/RS485-RS232 FOR SP 17C
4696327000008	DRV DESIGNER KIT W/USB485 FOR SP 17C
4696311000399	R256-02RO DRV
4696327000017	DRV DESIGN KIT W/RS485-RS232 FOR SP 23C
4696327000039	DRV MCMASTER KIT W/USB485 FOR SP 17C
4611110016925	CO-4118M-06P-01
4611110016940	CO-4118S-09-01
4611110016945	CO-4118L-07S-01
4696327000043	DRV RS232KIT
4696327000049	DRV USB485 DESIGN KIT 17C/23C/R256/R356
4611112301509	CE-5718X-01PD-22RO
4611112301510	CE-5718M-02PD-26RO
4611112301511	CE-5718L-01PD-64RO
4696311000417	R356-07RO DRV

FUNCTION

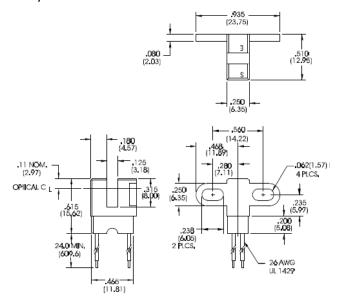
Function check performed by using an Arduino circuit and the if(), digitalread(), and digitalwrite() functions.

A LED is commanded to turn on upon HIGH signal from the emitter pin of the optical switch, by interrupting the switch with an opaque object. The Honeywell HOA1887 switch is connected in the circuit and verified response from the LED. Then the optical switch is replaced with TT Electronic OPB841W51Z switch and verified the same level of response.



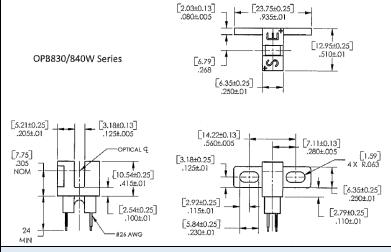
FORM

Honeywell HOA 1887



TT Electronic OPB841W51Z

DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



Supporting Documents:

N/A

Conclusion:

No risk to use OPB841W51Z as replacement for HOA1887, part is up-reved to new supplier and model number. A limited quantity is available as last-buy upon request. Please contact your sales representative or email at pcna@linengineering.com for more information.