## CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-L87056-11-41301991-3<br>Report Reference E87056-19910314<br>Date 22-Sep-2021<br>Issued to: Pepperl+Fuchs SE<br>Lilienthalstrasse 200 Mannheim<br>Germany 68307

## This is to certify that representative samples of

NRKH - Proximity Switches
See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

## Standard(s) for Safety: UL 60947-1 - Low-Voltage Switchgear and Controlgear Part 1: General Rules

UL 60947-5-2 - Low-voltage Switchgear and Controlgear Part 5-2: Control Circuit Devices and Switching Elements Proximity Switches

## Additional Information:

See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

| Model | Category Description |
| :---: | :---: |
| M5 Series, ACX@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, ACY@ | Proximity switches for connection to Class 2 power supply only |
| DF, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| DK, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ <br> W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, <br> V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| FLT, may be followed by any number, may be followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| FLT-D@ | Proximity switches |
| GD, may be followed by any number, may be followed by -6, -6-G, $-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers | Proximity switches for connection to Class 2 power supply only |

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| separated by a "-" , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D,-$ V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| GL, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| $-6,-6-G,-8,-8-H,-8-H W,-8-H S,-8-H G U,-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | 2 power supply only |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-" , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| GLE, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, | Proximity switches for connection to Class 2 power supply only |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a " - ", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| $\checkmark$ or HT, followed by a number/letter combination. |  |
| GLE@ | Proximity switches |
| GLV, may be followed by any number, may be followed | Proximity switches for connection |
| by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, |  |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a " - , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| GV, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H, -8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8- | 2 power supply only |
| W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-" may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |

Bruce Mahrenholz, Director North American Certification Program
UL LLC

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HDM-H, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-$ V, $-8-\mathrm{HV},-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination.

| HDM-H@ |
| :---: |
| M5 Series, INX@ |
| M5 Series, INY@ |
| LD, may be followed by any number, may be followed by | $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, V or HT, followed by a number/letter combination.

LD28, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, V or HT , followed by a number/letter combination. LS610-DA, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-$ V, -8-HV, -8-W, -54, -54-G, $-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. LS611-DA, may be followed by any number, may be followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-

Proximity switches for connection to Class 2 power supply only

| Proximity switches |
| :---: |
| Proximity switches for connection to Class <br> 2 power supply only |
| Proximity switches for connection to Class <br> 2 power supply only |
| Proximity switches for connection to Class <br> 2 power supply only |

Proximity switches for connection to Class
2 power supply only
Proximity switches for connection to Class 2 power supply only

Proximity switches for connection to Class

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| V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, <br> may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, |  |
| :---: | :---: |
| LS611-DA@ | Proximity switches |
| LT, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | 2 power supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a "-" may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | 2 power supply only |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a - " , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV28, may be followed by any number, may be followed | Proximity switches for connection to Class |
| $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-$ LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a - " , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV28@ | Proximity switches |
| M, may be followed by any number, may be followed by - | Proximity switches for connection to Class |
| 6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8- | 2 power supply only |
| W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-" , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |

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| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R1},-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| MLV, may be followed by any number, may be followed by -6, $-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, <br> V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MLV14@ | Proximity switches for connection to Class 2 power supply only |
| MS, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, <br> -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D,-$ V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| MV, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MV14@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MV5@ | Proximity switches for connection to Class 2 power supply only |
| MV71@ | Proximity switches for connection to Class 2 power supply only |
| MV7@ | Proximity switches for connection to Class 2 power supply only |
| MVE7, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a | Proximity switches for connection to Class 2 power supply only |

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| number range consisting of two sets of numbers separated by a "-" , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,--P C B,-R 1,-L 1,-M D,-S D$, <br> V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| MVE7@ | Proximity switches |
| NBB15-30GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBB20-C3-V12 | Proximity switches for connection to Class 2 power supply only |
| NBB20-C3-V93 | Proximity switches for connection to Class 2 power supply only |
| NBB20-L3M-U | Proximity switches for connection to Class 2 power supply only |
| NBB20-U1-A0 | Proximity switches for connection to Class 2 power supply only |
| NBB20-U10-A2 | Proximity switches for connection to Class 2 power supply only |
| NBB30-U1-A0 | Proximity switches for connection to Class 2 power supply only |
| NBB30-U1-A2 | Proximity switches for connection to Class 2 power supply only |
| NBB4-12GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBB8-18GM50-E2 | Proximity switches for connection to Class 2 power supply only |
| NBB8-18GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBN12-18GM60-E2-V1 | Proximity switches for connection to Class <br> 2 power supply only |
| NBN3-F31-E8 followed by alphanumeric characters | Class 2 proximity switches |
| NBN3-F31-N4 followed by alphanumeric characters | Class 2 proximity switches |
| NBN3-F31-U8 followed by alphanumeric characters | Class 2 proximity switches |
| NBN8-12GM55-ES-V1 | Proximity switches for connection to Class 2 power supply only |
| M5 Series, O@ | Proximity switches for connection to Class 2 power supply only |
| PB1-003-4+ | AC palm buttons |
| PB1-003-5+ | AC palm buttons |
| PB1-003-6+ | AC palm buttons |
| PB1-008-6+ | AC palm buttons |
| PB1-010-9+ | AC palm buttons |
| PB2-003-4+ | DC palm buttons |
| PB2-003-5+ | DC palm buttons |
| PB2-003-6+ | DC palm buttons |

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| RL, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| :---: | :---: |
| RL28, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R1},-\mathrm{L1},-\mathrm{MD},-\mathrm{SD},-$ V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, <br> $-8-W,-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a "-" , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG28, may be followed by any number, may be followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, $-8-H G U,-8-$ V, $-8-H V,-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG28@ | Proximity switches |
| Series C, N, P, IA, R, S, and M@ | Proximity switches |
| ST-54.1, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-$ V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of | Proximity switches for connection to Class 2 power supply only |

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# CERTIFICATE OF COMPLIANCE 

## Certificate Number <br> Report Reference <br> UL-US-L87056-11-41301991-3 <br> Date <br> E87056-19910314 <br> 22-Sep-2021



Bruce Mahrenholz, Director North American Certification Program
UL LLC

# CERTIFICATE OF COMPLIANCE 

| Certificate Number | UL-US-L87056-11-41301991-3 |
| ---: | :--- |
| Report Reference | E87056-19910314 |
| Date | $22-S e p-2021$ |


| $-\mathrm{S},-\mathrm{M},-$ MS, - -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, - SD, - |  |
| :---: | :---: |
| V or HT, followed by a number/letter combination. |  |
| WTS10@ | Proximity switches |

# CERTIFICATE OF COMPLIANCE 

Certificate Number<br>UL-CA-L87056-31-41301991-3<br>Report Reference<br>E87056-19910314<br>Date 22-Sep-2021<br>Issued to: Pepperl+Fuchs SE Lilienthalstrasse 200 Mannheim<br>Germany 68307

## This is to certify that representative samples of <br> NRKH7 - Proximity Switches Certified for Canada <br> See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 60947-1-13 - Low-Voltage Switchgear and Controlgear - Part 1: General Rules

CSA C22.2 NO. 60947-5-2-14 - Low-voltage Switchgear and Controlgear - Part 5-2: Control Circuit Devices and Switching Elements - Proximity Switches

Additional Information: See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

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Certificate Number<br>Report Reference<br>UL-CA-L87056-31-41301991-3<br>E87056-19910314<br>Date<br>22-Sep-2021

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

| Model | Category Description |
| :---: | :---: |
| M5 Series, ACX@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, ACY@ | Proximity switches for connection to Class 2 power supply only |
| DF, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| DK, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ <br> W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, <br> V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| FLT, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| FLT-D@ | Proximity switches |
| GD, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers | Proximity switches for connection to Class 2 power supply only |

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| separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD},-$ V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| GL, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| $-6,-6-G,-8,-8-H,-8-H W,-8-H S,-8-H G U,-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a "-" , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| GLE, may be followed by any number, may be followed | Proximity switches for connection to Class |
| by -6, -6-G, $-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-" , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| GLE@ | Proximity switches |
| GLV, may be followed by any number, may be followed | Proximity switches for connection to |
| by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, |  |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a " - " , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| GV, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H, -8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8- | 2 power supply only |
| W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a " - , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |

Bruce Mahrenholz, Director North American Certification Program
UL LLC

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| HDM-H, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-$ V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| :---: | :---: |
| HDM-H@ | Proximity switches |
| M5 Series, INX@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, INY@ | Proximity switches for connection to Class 2 power supply only |
| LD, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a "-", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, V or HT, followed by a number/letter combination. |  |
| LD28, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, | Proximity switches for connection to Class 2 power supply only |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a "-" may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT, followed by a number/letter combination. |  |
| LS610-DA, may be followed by any number, may be | Proximity switches for connection to Class |
| followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8- | 2 power supply only |
| V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter |  |
| combination, or a number range consisting of two sets of |  |
| numbers separated by a " - ", may be followed by -AS- |  |
| I, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, |  |
| -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, |  |
| -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, |  |
| -SD, -V or HT, followed by a number/letter combination. |  |
| LS611-DA, may be followed by any number, may be | Proximity switches for connection to Class |
| followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8- | 2 power supply only |

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| V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. |  |
| :---: | :---: |
| LS611-DA@ | Proximity switches |
| LT, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | 2 power supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a " - ", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV, may be followed by any number, may be followed by | Proximity switches for connection to Class |
| -6, -6-G, -8, -8-H,-8-HW, -8-HS, -8-HGU, -8-V, -8-HV, -8W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | 2 power supply only |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-" , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV28, may be followed by any number, may be followed | Proximity switches for connection to Class |
| $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be |  |
| followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a " - ", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| V or HT, followed by a number/letter combination. |  |
| LV28@ | Proximity switches |
| M, may be followed by any number, may be followed by - | Proximity switches for connection to Class |
| $6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, $54-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{T},-\mathrm{R}, \mathrm{LL}$ may be | 2 power supply only |
| W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a |  |
| number range consisting of two sets of numbers |  |
| separated by a "-", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |

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| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R1},-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| M5@ | Proximity switches |
| M71@ | Proximity switches for connection to Class 2 power supply only |
| M7@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MA14@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MD14@ | Proximity switches for connection to Class 2 power supply only |
| ME7, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be | Proximity switches for connection to Class 2 power supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a " - ", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D,-$ V or HT, followed by a number/letter combination. |  |
| ML, may be followed by any number. May be followed by | Proximity switches for connection to Class |
| $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL. May be | 2 power supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a-. May be followed by -AS-I, -E, -F, -IR, - |  |
| L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, - |  |
| IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, -V or HT. Followed by a number/letter combination. |  |
| M5 Series, ML5@ | Proximity switches for connection to Class 2 power supply only |
| ML71@ | Proximity switches for connection to Class 2 power supply only |
| ML7@ | Proximity switches for connection to Class 2 power supply only |
| ML8@ | Proximity switches for connection to Class 2 power supply only |
| MLE7, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, | Proximity switches for connection to Class 2 power supply only |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a " - " , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |

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# CERTIFICATE OF COMPLIANCE 

Certificate Number<br>Report Reference<br>UL-CA-L87056-31-41301991-3<br>E87056-19910314<br>22-Sep-2021

| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R1},-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| MLV, may be followed by any number, may be followed by -6, $-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, <br> V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MLV14@ | Proximity switches for connection to Class 2 power supply only |
| MS, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, <br> -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a "- " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D,-$ V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| MV, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MV14@ | Proximity switches for connection to Class 2 power supply only |
| M5 Series, MV5@ | Proximity switches for connection to Class 2 power supply only |
| MV71@ | Proximity switches for connection to Class 2 power supply only |
| MV7@ | Proximity switches for connection to Class 2 power supply only |
| MVE7, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a | Proximity switches for connection to Class 2 power supply only |

[^11]
## CERTIFICATE OF COMPLIANCE

## Certificate Number <br> Report Reference <br> UL-CA-L87056-31-41301991-3 <br> E87056-19910314 <br> 22-Sep-2021

| number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT , followed by a number/letter combination. |  |
| :---: | :---: |
| MVE7@ | Proximity switches |
| NBB15-30GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBB20-C3-V12 | Proximity switches for connection to Class 2 power supply only |
| NBB20-C3-V93 | Proximity switches for connection to Class 2 power supply only |
| NBB20-L3M-U | Proximity switches for connection to Class 2 power supply only |
| NBB20-U1-A0 | Proximity switches for connection to Class 2 power supply only |
| NBB20-U10-A2 | Proximity switches for connection to Class 2 power supply only |
| NBB30-U1-A0 | Proximity switches for connection to Class 2 power supply only |
| NBB30-U1-A2 | Proximity switches for connection to Class 2 power supply only |
| NBB4-12GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBB8-18GM50-E2 | Proximity switches for connection to Class 2 power supply only |
| NBB8-18GM50-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBN12-18GM60-E2-V1 | Proximity switches for connection to Class 2 power supply only |
| NBN3-F31-E8 followed by alphanumeric characters | Class 2 proximity switches |
| NBN3-F31-N4 followed by alphanumeric characters | Class 2 proximity switches |
| NBN3-F31-U8 followed by alphanumeric characters | Class 2 proximity switches |
| NBN8-12GM55-ES-V1 | Proximity switches for connection to Class 2 power supply only |
| M5 Series, O@ | Proximity switches for connection to Class 2 power supply only |
| PB1-003-4+ | AC palm buttons |
| PB1-003-5+ | AC palm buttons |
| PB1-003-6+ | AC palm buttons |
| PB1-008-6+ | AC palm buttons |
| PB1-010-9+ | AC palm buttons |
| PB2-003-4+ | DC palm buttons |
| PB2-003-5+ | DC palm buttons |
| PB2-003-6+ | DC palm buttons |

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## CERTIFICATE OF COMPLIANCE

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| RL, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| :---: | :---: |
| RL28, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R1},-\mathrm{L1},-\mathrm{MD},-\mathrm{SD},-$ V or HT , followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, <br> $-8-W,-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a "-" , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-\mathrm{S},-\mathrm{B} 3 \mathrm{~B},-\mathrm{FFP},-\mathrm{PCB},-\mathrm{R} 1,-\mathrm{L} 1,-\mathrm{MD},-\mathrm{SD}$, V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG28, may be followed by any number, may be followed by -6, -6-G, -8, -8-H,-8-HW, -8-HS, $-8-H G U,-8-$ V, $-8-H V,-8-W,-54,-54-G,-55,-55-G,-P,-T,-R,-L L$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - ", may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. | Proximity switches for connection to Class 2 power supply only |
| RLG28@ | Proximity switches |
| Series C, N, P, IA, R, S, and M@ | Proximity switches |
| ST-54.1, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-$ V, -8-HV, -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be followed by any number and/or letter combination, or a number range consisting of two sets of | Proximity switches for connection to Class 2 power supply only |

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# CERTIFICATE OF COMPLIANCE 

## Certificate Number <br> Report Reference <br> UL-CA-L87056-31-41301991-3 <br> E87056-19910314 <br> Date <br> 22-Sep-2021

| numbers separated by a " - " , may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, -SD, -V or HT, followed by a number/letter combination. |  |
| :---: | :---: |
| ST-54.1@ | Proximity switches |
| ST-H.1, may be followed by any number, may be followed by -6, -6-G, -8, -8-H,-8-HW, $-8-\mathrm{HS},-8$-HGU, -8 - | Proximity switches for connection to Class 2 power supply only |
| V, $-8-H V,-8-W,-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -ASI, -E, -F, -IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, -EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, $-Z,-A,-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D$, SD, -V or HT, followed by a number/letter combination |  |
| SU, may be followed by any number, may be followed by $-6,-6-G,-8,-8-H,-8-H W,-8-H S,-8-H G U,-8-\mathrm{V},-8-\mathrm{HV},-8-$ W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be | Proximity switches for connection to Class 2 power supply only |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers separated by a " - " , may be followed by -AS-I, -E, -F, IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, $-S,-M,-M S,-S,-B 3 B,-F F P,-P C B,-R 1,-L 1,-M D,-S D$, <br> V or HT, followed by a number/letter combination. |  |
| M5 Series, U@ | Proximity switches for connection to Class 2 power supply only |
| VDM, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, | Proximity switches for connection to Class 2 power supply only |
| $-8-\mathrm{W},-54,-54-\mathrm{G},-55,-55-\mathrm{G},-\mathrm{P},-\mathrm{T},-\mathrm{R},-\mathrm{LL}$, may be |  |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a " - ", may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |
| -S, -M, -MS, -S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, <br> V or HT, followed by a number/letter combination. |  |
| WTS, may be followed by any number, may be followed by $-6,-6-\mathrm{G},-8,-8-\mathrm{H},-8-\mathrm{HW},-8-\mathrm{HS},-8-\mathrm{HGU},-8-\mathrm{V},-8-\mathrm{HV}$, | Proximity switches for connection to Class 2 power supply only |
| -8-W, -54, -54-G, -55, -55-G, -P, -T, -R, -LL, may be |  |
| followed by any number and/or letter combination, or a number range consisting of two sets of numbers |  |
| separated by a - " , may be followed by -AS-I, -E, -F, - |  |
| IR, -L, -RT, -UV, -LAS, -3K, -P, -IBS, -EIP, -PN, -SSI, - |  |
| EHB, -IO, -F1, -F2, -F3, -F4, -D, -LL-G, -LL-K, -R, -Z, -A, |  |

Bruce Mahrenholz, Director North American Certification Program
UL LLC

# CERTIFICATE OF COMPLIANCE 

| Certificate Number | UL-CA-L87056-31-41301991-3 |
| ---: | :--- |
| Report Reference | E87056-19910314 |
| Date | $22-S e p-2021$ |


| $-\mathrm{S},-\mathrm{M},-\mathrm{MS},-$ S, -B3B, -FFP, -PCB, -R1, -L1, -MD, -SD, - |  |
| :---: | :---: |
| V or HT, followed by a number/letter combination. |  |
| WTS10@ |  |

## Barmely

# CERTIFICATE OF COMPLIANCE 

## Certificate Number <br> Report Reference <br> UL-CA-2133367-0 <br> Date <br> E87056-19910314 <br> 22-Sep-2021

Issued to:
Pepperl+Fuchs SE Lilienthalstrasse 200 Mannheim Germany 68307

## This is to certify that representative samples of

NRKH7 - Proximity Switches Certified for Canada
See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 60947-1-13 - Low-Voltage Switchgear and Controlgear - Part 1: General Rules

CSA C22.2 NO. 60947-5-2-14 - Low-voltage Switchgear and Controlgear - Part 5-2: Control Circuit Devices and Switching Elements - Proximity Switches

Additional Information: See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

## CERTIFICATE OF COMPLIANCE

Certificate Number<br>Report Reference<br>UL-CA-2133367-0<br>Date<br>E87056-19910314<br>22-Sep-2021

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements


UL LLC

## CERTIFICATE OF COMPLIANCE

## Certificate Number UL-CA-2133367-0 <br> Report Reference E87056-19910314 <br> Date 22-Sep-2021

| MV8@ | Proximity switches |
| :---: | :---: |
| MV9@ | Proximity switches |
| N@ | Proximity switches |
| O@ | Proximity switches |
| P@ | Proximity switches |
| R@ | Proximity switches |
| RL28@ | Proximity switches |
| RL29@ | Proximity switches |
| S@ | Proximity switches |
| ST-H.1@ | Proximity switches |
| VDM100@ | Proximity switches |
| VDM28@ | Proximity switches |
| VDM70@ | Proximity switches |


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[^5]:    Bruce Mahrenholz, Director North American Certification Program

[^6]:    Bruce Mahrenholz, Director North American Certification Program

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