EU Declaration of Conformity

Product:	***RightSight Photoelectric Sensors***

Name and address of the manufacturer:	*Name and address of the authorised representative:*
Rockwell Automation Inc. ***1201 South 2nd Street*** ***Milwaukee, WI 53204*** ***U.S.A.***	***Rockwell Automation NV*** ***Pegasus Park*** ***De Kleetlaan 12A*** ***1831 Diegem*** ***Belgium***

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Object of the declaration:	***Allen-Bradley 42EF Series*** *(reference the attached list of catalogue numbers)*

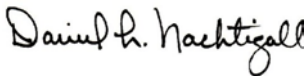
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

2014/35/EU	*Low Voltage Directive*	*(LVD)*
2014/30/EU	*EMC Directive*	*(EMC)*
2011/65/EU	*RoHS Directive*	*(RoHS)*

References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:

EN 60947-5-2:2007 + A1:2012	*Low voltage switchgear and controlgear – Part 5-2: Control circuit devices and switching elements – Proximity switches*
EN 60825-1:2007	*Safety of laser products – Part 1: Equipment classification and requirements*
EN 63000:2018	*Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*

Signed for and on behalf of the above named manufacturer:

Place and date of issue:	*Milwaukee, WI USA*	*31-Aug-2021*
Name, function:	*Daniel L. Nachtigall, Technical Leader – Product Compliance Engineering*	
Signature:		

Catalogue number [1]	Series [2]	Description	Directive [3]		
			LVD	EMC	RoHS
RightSight Photoelectric Proximity Sensors					
42EF-B1xxxx-x	B	Background Suppression sensing mode per Nomenclature	N/R	Yes	Yes
42EF-B1RxBx-x	B	Background Suppression sensing mode per Nomenclature	Yes	Yes	Yes
42EF-B1SxBx-x	B	Background Suppression sensing mode per Nomenclature	Yes	Yes	Yes
42EF-B1LDBx-x	A	Background Suppression sensing mode per Nomenclature	N/R	Yes	Yes
42EF-C2xBA-x	C	ClearSight sensing mode per Nomenclature	N/R	Yes	Yes
42EF-C2xBA-x	C	ClearSight sensing mode per Nomenclature	N/R	Yes	Yes
42EF-D1xBCK-x	A	Standard Diffuse sensing mode per Nomenclature	N/R	Yes	Yes
42EF-D1RxAK-x	B	Standard Diffuse sensing mode per Nomenclature	Yes	Yes	Yes
42EF-D1SxAK-x	B	Standard Diffuse sensing mode per Nomenclature	Yes	Yes	Yes
42EF-D2xxAK-x	D	Standard Diffuse sensing mode per Nomenclature	N/R	Yes	Yes
42EF-D8xBx-x	A	Standard Diffuse sensing mode per Nomenclature	N/R	Yes	Yes
42EF-S1xxA-x	B	Sharp Cutoff Diffuse sensing mode per Nomenclature	N/R	Yes	Yes
42EF-S1RxA-x	B	Sharp Cutoff Diffuse sensing mode per Nomenclature	Yes	Yes	Yes
42EF-S1SxA-x	B	Sharp Cutoff Diffuse sensing mode per Nomenclature	Yes	Yes	Yes
42EF-F2xBC-x	A	Color Mark sensing mode per Nomenclature	N/R	Yes	Yes
42EF-G1xxA-x	B	Infrared Glass Fiber Optic sensing mode per Nomenclature	N/R	Yes	Yes
42EF-G1RxA-x	B	Infrared Glass Fiber Optic sensing mode per Nomenclature	Yes	Yes	Yes
42EF-G1SxA-x	B	Infrared Glass Fiber Optic sensing mode per Nomenclature	Yes	Yes	Yes
42EF-P2xxB-x	D	Polarized Retroreflective sensing mode per Nomenclature	N/R	Yes	Yes
42EF-P2RxB-x	B	Polarized Retroreflective sensing mode per Nomenclature	Yes	Yes	Yes
42EF-P2SxB-x	B	Polarized Retroreflective sensing mode per Nomenclature	Yes	Yes	Yes
42EF-P8xBC-x	A	Polarized Retroreflective sensing mode per Nomenclature	N/R	Yes	Yes
42EF-U2xxB-x	B	Retroreflective sensing mode per Nomenclature	N/R	Yes	Yes
42EF-U2RxB-x	B	Retroreflective sensing mode per Nomenclature	Yes	Yes	Yes
42EF-U2SxB-x	B	Retroreflective sensing mode per Nomenclature	Yes	Yes	Yes
42EF-E1EZB-F4	B	Transmitted Beam Emitter sensing mode per Nomenclature	Yes	Yes	Yes
42EF-E1QZB-x	C	Transmitted Beam Emitter sensing mode per Nomenclature	Yes	Yes	Yes
42EF-E2EZB-x	D	Transmitted Beam Emitter sensing mode per Nomenclature	N/R	Yes	Yes
42EF-E8EZB-x	A	Transmitted Beam Emitter sensing mode per Nomenclature	N/R	Yes	Yes
42EF-R2xxBx-x	D	Transmitted Beam Receiver sensing mode per Nomenclature	N/R	Yes	Yes
42EF-R9MNBT-x	D	Transmitted Beam Receiver sensing mode per Nomenclature	N/R	Yes	Yes
42EF-R9RxBx-x	D	Transmitted Beam Receiver sensing mode per Nomenclature	Yes	Yes	Yes
42EF-R9SxBx-x	D	Transmitted Beam Receiver sensing mode per Nomenclature	Yes	Yes	Yes

1) *Not all combinations of nomenclature designations result in a valid catalogue number.*
2) *Products of the series level indicated, as well as succeeding series levels, are certified. If no series letter or number is given, then all series are certified.*
3) *Yes = Product is certified to this directive.*
N/R = This directive is not required for this product.

NOMENCLATURE:

Background Suppression

42EF	-	B	1	J	B	B	C	-	A2
1		2	3	4	5	6	7		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode B: Background suppression
3	Designates Light Source 1: Infrared LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET F: Source (PNP) power MOSFET N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment B: No sensitivity adjustment
7	Background Suppression Sensing Distance C – 50 mm E – 100 mm
8	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: AC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options Z*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

ClearSight

42EF	-	C	2	J	B	A	-	A2
1		2	3	4	5	6		7

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode C: ClearSight
3	Designates Light Source 2: Visible red LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP)
6	Designates Sensitivity Adjustment A: Adjustable sensitivity
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options Z*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

Standard Diffuse

42EF	-	D	2	J	B	A	K	-	Z31
1		2	3	4	5	6	7		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode D: Standard diffuse
3	Designates Light Source 1: Infrared LED 2: Visible red LED 8: Class 1 red laser (Compliant with EN 60825-1)
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET E: Sink (NPN) and Source (PNP), selectable F: Source (PNP) power MOSFET N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment A: Adjustable sensitivity C: Teachable
7	Designates Response Time K: 1 ms (DC); 8.3 ms (AC/DC)
8	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) A#H: Integral cable, 600V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: AC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

Sharp Cut-off Diffuse

42EF	-	S	1	R	C	A	-	A5H
1		2	3	4	5	6		7

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode S: Sharp cutoff diffuse
3	Designates Light Source 1: Infrared LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET F: Source (PNP) power MOSFET N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment A: Adjustable sensitivity
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) A#H: Integral cable, 600V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: AC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

Color Mark

42EF	-	F	2	J	B	C	-	A2
1		2	3	4	5	6		7

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode F: Color Mark
3	Designates Light Source 2: Visible red LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP)
6	Designates Sensitivity Adjustment C: Teachable
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m)1 F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options

Infrared Glass Fiber Optic

42EF	-	G	1	M	P	A	-	Y4
1		2	3	4	5	6		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode G: Glass fiber optic
3	Designates Light Source 1: Infrared LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET F: Source (PNP) power MOSFET N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment A: Adjustable sensitivity
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: AC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

Polarized Retroreflective:

42EF	-	P	2	M	E	B	-	F4
1		2	3	4	5	6		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode P: Polarized retroflective
3	Designates Light Source 2: Visible red LED 8: Class 1 red laser (Compliant with EN 60825-1)
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET E: Sink (NPN) and Source (PNP), selectable F: Source (PNP) power MOSFET N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment B: No sensitivity adjustment C: Teachable
8	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) A#H: Integral cable, 600V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: AC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options K*: Integral cable, 300V, where # is a number signifying Wago type connector option and brackets

Retroreflective

42EF	-	U	2	R	F	B	-	A2
1		2	3	4	5	6		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode U: Retroreflective
3	Designates Light Source 2: Visible red LED
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET F: Source (PNP) power MOSFET
6	Designates Sensitivity Adjustment B: No sensitivity adjustment
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options

Transmitted Beam Emitter

42EF	-	E	8	E	Z	B	-	A2
1		2	3	4	5	6		7

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode E: Transmitted beam emitter
3	Designates Light Source 1: Infrared LED 2: Visible red LED 8: Class 1 red laser (Compliant with EN 60825-1)
4	Designates Operating Voltage/Mode E: DC, transmitted beam source Q: AC/DC, transmitted beam source
5	Designates Output Type Z: None (light source)
6	Designates Sensitivity Adjustment B: No sensitivity adjustment
7	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options Z*: Pico QD connector, where * is a number and/or letter signifying pin/connector options

Transmitted Beam Receiver

42EF	-	R	2	M	P	B	T	-	A5
1		2	3	4	5	6	7		8

1	Designates Product Family 42EF: RightSight photoelectric proximity switch
2	Designates Sensing Mode R: Transmitter beam receiver
3	Designates Light Source 2: Visible red LED 9: None (Infrared LED receiver)
4	Designates Operating Voltage/Mode J: DC, light operate K: DC, dark operate M: DC, 2 complementary light/dark outputs R: AC/DC, light operate S: AC/DC, dark operate
5	Designates Output Type B: Sink (NPN) and Source (PNP) C: Sink (NPN) power MOSFET E: Sink (NPN) and Source (PNP), selectable N: Sink (NPN) P: Source (PNP)
6	Designates Sensitivity Adjustment B: No sensitivity adjustment
7	Designates Sensing Distance Blank: 20m T: 8m
8	Designates Connection Type A#: Integral cable, 300V, where # is a number signifying cable length (m) H#: Integral cable, 600V, where # is a number signifying cable length (m) F*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options G*: DC Micro QD connector, where * is a number and/or letter signifying pin/connector options Y*: Pico QD connector, where * is a number and/or letter signifying pin/connector options Z*: Pico QD connector, where * is a number and/or letter signifying pin/connector options