

Product	Model	B10D (cycle)	MTTFD (year)	DC (%)	Category	PL	PFHD	SIL	Type for safety function			Supplement
									element	block	subsystem	
Emergency stop switch	1 XA series (unibody)	1.0E+05	-	-	-	-	-	-	✓			According to IEC60947-5-5 (NC contact conforms to IEC60947-5-1Annex K as Direct Opning Action)
	2 XA series (with removable contact block)		-	-	-	-	-	-	✓			
	3 X6 series (unibody)		-	-	-	-	-	-	✓			
	4 XW series (unibody)		-	-	-	-	-	-	✓			
	5 XW series (with removable contact block)		-	-	-	-	-	-	✓			
	6 XN series		-	-	-	-	-	-	✓			
	7 HW series (unibody)		-	-	-	-	-	-	✓			
	8 HW series (with removable contact block)		-	-	-	-	-	-	✓			
	9 YW series		-	-	-	-	-	-	✓			
Interlock switch	10 HS1B series	2.0E+06	-	-	-	-	-	-	✓			Type2 interlocking switch accoeding to ISO14119 (NC contact conforms to IEC60947-5-1Annex K as Direct Opning Action)
	11 HS2B series		-	-	-	-	-	-	✓			
	12 HS5B series		-	-	-	-	-	-	✓			
	13 HS5D series		-	-	-	-	-	-	✓			
	14 HS6B series		-	-	-	-	-	-	✓			
Interlock switch with guard locking	15 HS1C series	2.0E+06	-	-	-	-	-	-	✓			Type2 interlocking switch with guard locking accoeding to ISO14119 (NC contact conforms to IEC60947-5-1Annex K as Direct Opning Action)
	16 HS1E series		-	-	-	-	-	-	✓			
	17 HS1L series		-	-	-	-	-	-	✓			
	18 HS1T series		-	-	-	-	-	-	✓			
	19 HS5E series		-	-	-	-	-	-	✓			
	20 HS5L series		-	-	-	-	-	-	✓			
	21 HS5L-K series		-	-	-	-	-	-	✓			
	22 HS6E series		-	-	-	-	-	-	✓			
Non-contact door interlock switch	23 HS7A-DMC series	5.0E+07	-	-	-	-	-	-	✓			Type4 interlocking switch accoeding to ISO14119.
	24 HS7A-DMP series	-	-	-	-	-	-	-	✓			Type4 interlocking switch accoeding to ISO14119.
	25 HS3A-U21M4 (Multi code type)	-	100	99	4	e	2.47E-08	3			✓	Type4 interlocking switch accoeding to ISO14119.
	26 HS3A-U21U4 (Uni code type)	-	100	99	4	e	2.47E-08	3			✓	Type4 interlocking switch accoeding to ISO14119.
Enabling device	27 HE1B series	1.0E+05	-	-	-	-	-	-	✓			According to IEC60947-5-8
	28 HE2B series		-	-	-	-	-	-	✓			
	29 HE3B series		-	-	-	-	-	-	✓			
	30 HE5B series		-	-	-	-	-	-	✓			
	31 HE6B series		-	-	-	-	-	-	✓			
Grip type enabling switch	32 HE1G series	1.0E+05	-	-	-	-	-	-	✓			According to IEC60947-5-8
	33 HE2G series		-	-	-	-	-	-	✓			
	34 HE2G-X series(Explosive-protection)		-	-	-	-	-	-	✓			
Pressure-sensitive switch	35 E22BK1形	1.0E+05	-	-	-	-	-	-	✓			Pressure-sensitive protective devices accoeding to ISO13856-2
	36 E30BK1形		-	-	-	-	-	-	✓			
light curtain	37 SE4B series	-	-	-	-	e	2.98E-09	3			✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (EN62061) Detecting capability : φ30mm Protective height : 147 - 1617mm
	38 SE4D-H12	-	-	-	-		1.80E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 230mm
	39 SE4D-H16	-	-	-	-		2.00E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 310mm
	40 SE4D-H20	-	-	-	-		2.20E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 390mm
	41 SE4D-H24	-	-	-	-		2.40E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 470mm
	42 SE4D-H28	-	-	-	-		2.60E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 550mm
	43 SE4D-H32	-	-	-	-		2.80E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 630mm
	44 SE4D-H36	-	-	-	-		3.00E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 710mm
	45 SE4D-H40	-	100	99	4	e	3.20E-09	3			✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 790mm
	46 SE4D-H48	-	-	-	-		3.60E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 950mm
	47 SE4D-H56	-	-	-	-		4.00E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1110mm
	48 SE4D-H64	-	-	-	-		4.40E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1270mm
	49 SE4D-H72	-	-	-	-		4.80E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1430mm
	50 SE4D-H80	-	-	-	-		5.20E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1590mm
	51 SE4D-H88	-	-	-	-		5.60E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1750mm
	52 SE4D-H96	-	-	-	-		6.00E-09				✓	Type4 safety light curtain (EN61496-1/-2) Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) Detecting capability : φ25mm Protective height : 1910mm
Laser scanner	53 SE1L series	-	-	-	3	d	7.50E-09	2			✓	Type3 safety laser scanner (EN61496-1/-3) Cat.3/PL d (EN ISO13849-1) SIL2 (IEC61508)
	54 SE2L series	-	-	-	3	d	7.80E-08	2			✓	Type3 safety laser scanner (EN61496-1/-3) Cat.3/PL d (EN ISO13849-1) SIL2 (IEC61508) when master slave function is disabled
	55	-	-	-	-	-	1.60E-07	2			✓	Type3 safety laser scanner (EN61496-1/-3) Cat.3/PL d (EN ISO13849-1) SIL2 (IEC61508) when master slave function is enabled
Force guided relay	56 RF1V series	4.0E+05	-	-	-	-	-	-	✓			Forcibly guided contact according to EN50205 4 contact type/6 contact type
	57 RF2 series		-	-	-	-	-	-	✓			Forcibly guided contact according to EN50205 2 contact type
	58 RF3 series		-	-	-	-	-	-	✓			Forcibly guided contact according to EN50205 4 contact type/6 contact type
Safety relay module (HR1S series)	59 HR1S-AC	-	210.4	99	3	e	3.56E-09	3			✓	Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) This performance level and MTTFD values are suitable for nominal load and maximum 6,336 switching cycles per year or for low load and maximum 316,800 switching cycles per year.
	60 HR1S-AF	-	243	99	4	e	4.62E-09	3			✓	
	61 HR1S-AK	-	154.5	99	4	e	7.39E-09	3			✓	
	62 HR1S-ATE(Stop Cat.0)	-	134.8	99	4	e	6.81E-09	3			✓	
	63 HR1S-ATE(Stop Cat.1)	-	54.5	98.42	3	e	1.96E-08	2			✓	Cat.3/PL d (EN ISO13849-1) SIL 2 (IEC61508) This performance level and MTTFD values are suitable for nominal load and maximum 6,336 switching cycles per year or for low load and maximum 316,800 switching cycles per year. (See instruction manual)
	64 HR1S-DMB	-	83.1	99	4	e	3.92E-09	3			✓	Cat.4/PL e (EN ISO13849-1) SIL3 (IEC61508) The above mentioned performance level and MTTFD values are suitable for low load and maximum 1,900,800 switching cycles per year. (See instruction manual)
	65 HR1S-DME	-	84.2	99	4	e	3.97E-09	3			✓	(See instruction manual)
Safety relay module (HR2S series)	66 HR2S-301P	-	100	90	3	e	4.29E-08	-			✓	Cat.3/PL e according to EN ISO13849-1
	67 HR2S-301P(with SE4B)	-	100	90 (≦5A)	3	e	4.29E-08	-			✓	Cat.3/PL e according to EN ISO13849-1
		-	100	99 (≦3.6A)	4	e	2.47E-08	-			✓	Cat.4/PL e according to EN ISO13849-1
	69 HR2S-301N	-	100	90 (≦5A)	3	e	4.29E-08	-			✓	Cat.3/PL e according to EN ISO13849-1
	70	-	100	99 (≦3.6A)	4	e	2.47E-08	-			✓	Cat.4/PL e according to EN ISO13849-1
	71	-	100	90 (≦5A)	3	e	4.29E-08	-			✓	Cat.3/PL e according to EN ISO13849-1
	72 HR2S-332N-T	-	100	99 (≦3.6A)	4	e	2.47E-08	-			✓	Cat.4/PL e according to EN ISO13849-1

Product	Model		B10D (cycle)	MTTFD (year)	DC (%)	Category	PL	PFHD	SIL	Type for safety function			Supplement
										element	block	subsystem	
Safety relay module (HR3S series)	73	HR3S-301N	-	188	99	4	e	3.09E-10	-			a	Cat.4/PL e according to EN ISO13849-1
Safety relay module (HR5S series)	74	HR5S-C2S(Functional channel (Main))	-	330	90	2	c	-	-	✓			Cat.2/PL c according to EN ISO13849-1(Functional channel (Main))
	75	HR5S-C2S((Testing channel (TE))	-	210	-	-	-	-	-	✓			Cat.2/PL c according to EN ISO13849-1(Testing channel (TE))
	76	HR5S-C2B(Functional channel (Main))	-	330	90	2	d	-	-	✓			Cat.2/PL d according to EN ISO13849-1(Functional channel (Main))
	77	HR5S-C2B(Testing channel (TE))	-	210	-	-	-	-	-	✓			Cat.2/PL d according to EN ISO13849-1(Testing channel (TE))
	78	HR5S-C2D-T*** (Functional channel (Main))	-	330	90	2	d	-	-	✓			Cat.2/PL d according to EN ISO13849-1 OFF delay output type (Functional channel (Main))
	79	HR5S-C2D-T*** (Testing channel (TE))	-	210	-	-	-	-	-	✓			Cat.2/PL d according to EN ISO13849-1 OFF delay output type (Testing channel (TE))
Safety relay module (HR6S series)	80	HR6S-AB	-	91	-	1	c	1.18E-06	1			✓	Cat.1/PL c(EN ISO13849-1), SIL1(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 2A : 50,000 cycles AC-15、 AC 250V 3A : 50,000 cycles
	81	HR6S-AF	-	2000	99	4	e	1.13E-09	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 180,000 cycles AC-1、 250V 4A : 180,000 cycles AC-15、 250V 1A : 70,000 cycles / 250V 3A : 39,000 cycles
	82	HR6S-AK(NO contact)	-	2000	99	4	e	1.13E-09	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycle / DC 24V 3A : 180,000 cycle AC-1、 250V 4A : 180,000 cycle AC-15、 250V 1A : 70,000 cycle / 250V 3A : 39,000 cycle
	83	HR6S-AK(NC contact)	-	100	-	1	c	1.13E-09	1			✓	Cat.1/PL c(EN ISO13849-1), HFT=0/SIL1(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A:1,200,000 cycle / DC 24V 3A:180,000 cycle AC-1、 250V 4A:180,000 cycle AC-15、 250V 1A:70,000 cycle / 250V 3A:39,000 cycle
	84	HR6S-AT(Stop Cat. 0)	-	2400	99	4	e	9.4E-10	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. (Stop Category 0) DC-13、 DC 24V 1A:1,200,000 cycle / DC 24V 3A:180,000 cycle AC-1、 250V 4A:180,000 cycle AC-15、 250V 1A:70,000 cycle / 250V 3A:39,000 cycle
	85	HR6S-AT(Stop Cat.1 NO contact)	-	2300	99	4	e	9.5E-10	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. (Stop Category 1) DC-13、 DC 24V 1A:1,200,000 cycles / DC 24V 3A:275,000 cycles AC-1、 250V 4 A:90,000 cycles AC-15、 250V 1A:90,000 cycles / 250V 3A:60,000 cycles
	86	HR6S-AT(Stop Cat.1 NC contact)	-	100	-	1	c	9.5E-10	1			✓	Cat.1/PL c(EN ISO13849-1), HFT=0/SIL1(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. (Stop Category 1) DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 275,000 cycles AC-1、 250V 4 A : 90,000 cycles AC-15、 250V 1A : 90,000 cycles / 250V 3A : 60,000 cycles
	87	HR6S-S	-	2000	99	4	e	1.13E-09	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 180,000 cycles AC-1、 250V 4A : 180,000 cycles AC-15、 250V 1A : 70,000 cycles / 250V 3A : 39,000 cycles
	88	HR6S-DN(NO contact)	-	2500	99	4	e	8.8E-10	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 275,000 cycles AC-1、 AC250V 4 A : 90,000 cycles AC-15、 AC250V 1A : 90,000 cycles / AC250V 3A : 60,000 cycles
	89	HR6S-DN(NC contact)	-	100	-	1	c	8.8E-10	1			✓	Cat.1/PL c(EN ISO13849-1), HFT=0/SIL1(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 275,000 cycles AC-1、 AC250V 4 A : 90,000 cycles AC-15、 AC250V 1A : 90,000 cycles / AC250V 3A : 60,000 cycles
	90	HR6S-EP(Extension module NO contact)	-	2300	99	4	e	9.7E-10	3			✓	Cat.4/PL e(EN ISO13849-1), SIL3(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 275,000 cycles AC-1、 250V 4 A : 90,000 cycles AC-15、 250V 1A : 90,000 cycles / 250V 3A : 60,000 cycles
	91	HR6S-EP(Extension module NC contact)	-	100	-	1	c	9.7E-10	1			✓	Cat.1/PL c(EN ISO13849-1), HFT=0/SIL1(IEC61508) MTTFD is a reference value by Annex K of ISO13849-1 Maximum number of cycles over lifetime. DC-13、 DC 24V 1A : 1,200,000 cycles / DC 24V 3A : 275,000 cycles AC-1、 250V 4 A : 90,000 cycles AC-15、 250V 1A : 90,000 cycles / 250V 3A : 60,000 cycles

Product	Model		B10D (cycle)	MTTFD (year)	DC (%)	Category	PL	PFHD	SIL	Type for safety function			Supplement
										element	block	subsystem	
Safety relay barrier	92	EB3N(Nop = 5500)	-	100	99	4	e	2.47E-08	-			✓	Cat.4/PL e according to EN ISO13849-1
	93	EB3N(Nop = 8760)	-	64.5	99	4	e	4.22E-08	-			✓	
Safety controller	94	FS1A-C01S	-	100	high	4	e	6.20E-09	3			✓	Cat.4/PL e according to EN ISO13849-1 SIL3 according to IEC61508 8-logic model
	95	FS1A-C11S(dual channel outputs)	-	100	high	4	e	7.10E-09	3			✓	Cat.4/PL e according to EN ISO13849-1 SIL3 according to IEC61508 24-logic model
	96	FS1A-C11S(single channel outputs)	-	100	medum	3	d	1.60E-08	2			✓	Cat.3/PL d according to EN ISO13849-1 SIL2 according to IEC61508 24-logic model
	97	FS1A-C21S(dual channel outputs)	-	100	high	4	e	7.10E-09	3			✓	Cat.4/PL e according to EN ISO13849-1 SIL3 according to IEC61508 11-logic model
	98	FS1A-C21S(single channel outputs)	-	100	medum	3	d	1.60E-08	2			✓	Cat.3/PL d according to EN ISO13849-1 SIL2 according to IEC61508 11-logic model
	99	FS1B-C31S(dual channel outputs)	-	206	high	4	e	1.3E-10	3			✓	Cat.4/PL e according to EN ISO13849-1 SIL3 according to IEC61508 24-logic model
	100	FS1B-C31S(single channel outputs)	-	176	medum	3	d	6.7E-10	2			✓	Cat.3/PL d according to EN ISO13849-1 SIL2 according to IEC61508 24-logic model