Technical Data

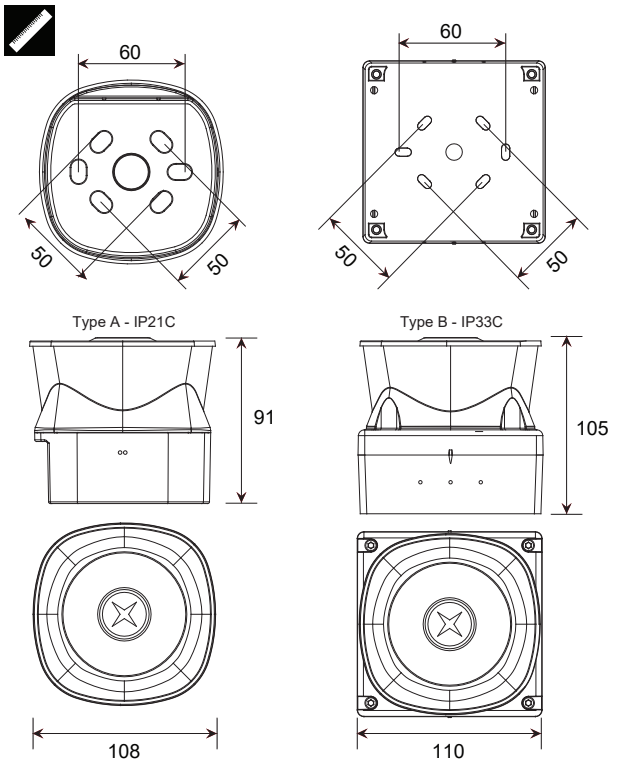
	Symphoni HO Symphoni HO/WP
CE	05 2831 DoP0066

	SYHO & SYHO/WP	
	EN54-3	
Operating voltage	18 - 28Vdc	9 - 28Vdc
Current @ 24V	250mA	260mA
Cable size	0.28 - 2.5mm²	0.28 - 2.5mm²
Ambient temperature (min/max)	-25°C to +70°C	-25°C to +70°C
Material	ABS V0	ABS V0
Environmental category (IP rating)	SYMPHONI HO = IP21C SYMPHONI HO/WP = IP33C	SYMPHONI HO = IP21C SYMPHONI HO/WP = IP33C
Tones	6	32

V(b). SYHO Sounder Tones Specification

Switch Setting	P3 & P4 SYHO/C & SYHO/C/WP Wall Sounder	
	Tone No.	Description
3	3	Sweep 800-970Hz in 1s
7	7	Slow Whoop 500Hz-1200Hz in 3.5s - 0.5s silence (NEN2575:2000)
8	8	Sweep 1200Hz-500Hz in 1s (DIN 33 404:2000)
14	14	Continuous 970Hz steady
29	29	Alternating 990Hz 250mS/650Hz 250mS
30	30	Alternating 510Hz 250mS/610Hz 250mS

Attenuation Level	P3 & P4 SYHO/C & SYHO/C/WP Wall Sounder
1	None
2	~10dB Attenuation
3	~15dB Attenuation
4	~20dB Attenuation



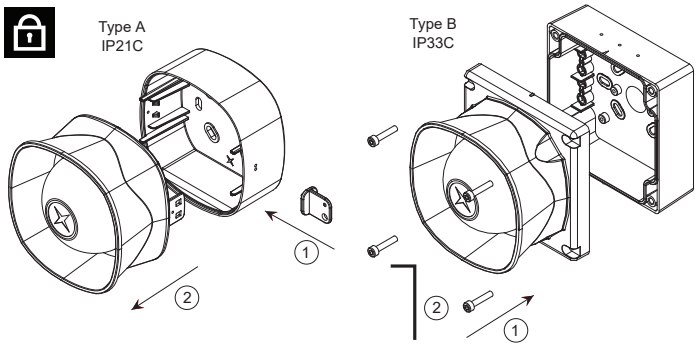
Fire Alarm Device - Sounder for indoor (type A) and outdoor[1] (type B) use

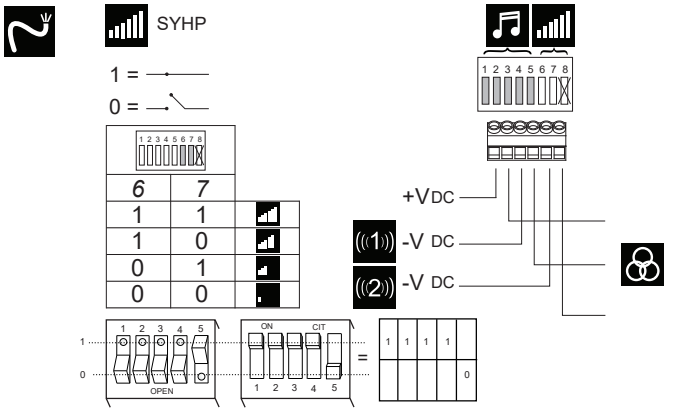
Essential Characteristics

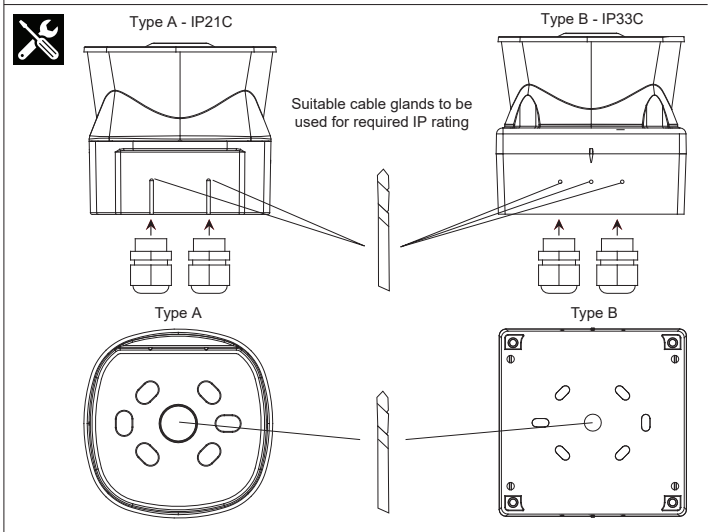
Harmonized Technical Specification: EN54-3:2001+A1:2002+A2:2006

Clause(s)	Performance
4.2, 4.3, 5.2, 5.3	Pass
4.4, 4.5, 4.6, 5.4	Pass
5.5, 5.6[1], 5.7, 5.8, 5.9	Pass
5.8, 5.9, 5.10[1]	Pass
5.11	Pass
5.12, 5.13, 5.14, 5.15	Pass
5.16	Pass
5.17	Pass

[1] Only applicable to Symphoni/WP







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((1))	((2))	1 2 3 4					24V @20°C		
							@24Vdc		EN54-3 Min SPL @ 28Vdc @ Max Volume @ Loudest node dB(A) @1M
							mA	dB(A)	
1	14	11111		800 & 970Hz	2Hz (250ms~250ms)	BS Fire Tone	240	113	*
2	14	11110		800 ~ 970Hz	7Hz (7/s)	BS Fire Tone	230	113	*
3	14	11101		800 ~ 970Hz	1Hz (1/s)	BS Fire Tone	240	114	111
4	14	11100		2850Hz	Steady		210	119	*
5	4	11011		2400 ~ 2850Hz	7Hz		210	118	*
6	4	11010		2400 ~ 2850Hz	1Hz		210	120	*
7	14	11001		500 ~ 1200Hz	3s Sweep, 0.5s silence, then repeat	Dutch Fire Tone	240	113	110
8	14	11000		1200 ~ 500Hz	1Hz	DIN Tone	240	112	110
9	4	10111		2400 & 2850Hz	2Hz (250ms~250ms)		210	117	*
10	14	10110		970Hz	0.5Hz (1s On / 1s Off)		250	113	*
11	14	10101		800 & 970Hz	1Hz (500ms~500ms)	BS Fire Tone	230	113	*
12	4	10100		2850Hz	0.5Hz (1s On / 1s Off)		210	117	*
13	14	10011		970Hz	0.8Hz (250ms On / 1s Off)		260	113	*
14	14	10010		970Hz	Steady	BS Fire Tone	250	112	109
15	14	10001		554 & 440Hz	100ms ~ 400ms	French Fire Tone	200	108	*
16	16	10000		660Hz	3.3Hz (150ms On / 150ms Off)	Swedish Fire Tone	230	111	*
17	17	01111		660Hz	0.28Hz (1.8s On / 1.8s Off)	Swedish Fire Tone	230	111	*
18	18	01110		660Hz	0.05Hz (13s Off / 6.5Hz On)	Swedish Fire Tone	240	111	*
19	19	01101		660Hz	Steady	Swedish Fire Tone	220	110	*
20	20	01100		554 & 440Hz	0.5Hz (1s On / 1s Off)	Swedish Fire Tone	210	108	*
21	21	01011		660Hz	1Hz (500ms ~ 500ms)	Swedish Fire Tone	230	111	*
22	14	01010		2850Hz	4Hz (150ms On / 100ms Off)	Pelican Crossing	210	116	*
23	14	01001		800 ~ 970Hz	50Hz	BS Fire Tone	230	112	*
24	4	01000		2400 ~ 2850Hz	50Hz		190	116	*
25	25	00111		970Hz	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201	260	113	*
26	26	00110		2850Hz	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201	220	117	*
27	27	00101		4000Hz	Steady		220	108	*
28	10	00100		800 & 970Hz	2Hz (250ms ~ 250ms)	BS Fire Tone	230	113	*
29	33	00011		990 & 650Hz	2Hz (250ms ~ 250ms) (Symphoni Tones)	BS Fire Tone	230	111	108
30	35	00010		510 & 610Hz	2Hz (250ms ~ 250ms) (Squashni Micro Tones)	BS Fire Tone	190	111	110
31	31	00001		300 ~ 1200Hz	1Hz		230	111	*
32	32	00000		4000Hz	Steady		220	108	*

I. Tones certified under the CPR (Fire Alarm Applications) are shown in the column marked EN54-3

II. All other SPL measurements are taken 'on axis' & are not third party verified.

III. Detailed EN54-3 polar SPL measurements are available in M96-002

IV. A SPL of at least 65dB(A) is achieved in at least one direction at minimum volume/voltage.

I. Les tons certifiés dans le cadre de la RPC (application alarme incendie) sont indiqués dans la colonne intitulée EN54-3.

II. Toutes les autres mesures NPA sont relevées « sur axe » et ne sont pas vérifiées par un tiers.

III. Les mesures NPA polaires détaillées EN54-3 sont disponibles dans M96-002

I. Die nach CPR (Feuermelderanwendung) zertifizierten Töne sind in Spalte EN54-3.

II. Alle anderen Schalldruckmessungen wurden vom akustischen Mittelpunkt ab gelesen und von keiner unabhängigen Stelle verifiziert.

III. Detaillierte Polar-SPL-Messungen gemäß EN54-3 sind erhältlich in M96-002

I. I toni della sirena certificati CPR (applicazione allarme antincendio) sono indicate nella colonna contrassegnata con EN54-3.

II. Tutte le altre misurazioni SPL sono state rilevate "sull'asse" e non sono state verificate da terzi.

III. Le misurazioni SPL polari ai sensi della norma EN54-3 sono disponibili in M96-002

I. U vindt tonen die onder CPR (brandalarmtoepassing) zijn gecertificeerd, in de kolom waar EN54-3 staat vermeld.

II. Alle andere SPL-afmetingen zijn via de 'as' gedaan en niet door derden geverifieerd.

III. Uitgebreide polaire SPL-afmetingen voor EN54-3 zijn beschikbaar in M96-002

I. Los sonidos certificados por el CPR (aplicación para alarmas de incendios) se muestran en la columna marcada con EN54-3.

II. Cualquier otra medida del SPL (nivel de intensidad acústica) se toma "sobre el eje" y no está verificada por terceras partes.

III. Las medidas detalladas del SPL polar EN54-3 están disponibles en M96-002

I. Signaler som är certifierade för CPR (brandvarnare) visas i kolumnen märkt EN54-3.

II. Alla övriga mätningar av ljudtrycket har genomförts "direkt intill" och är inte bekräftade av tredje part.

III. Detaljerade polära mätningar av ljudtrycket enligt EN54-3 finns under M96-002

I. Sygnały dźwiękowe zgodne z CPR (do zastosowań pożarowych) wskazane są w kolumnie EN54-3.

II. Pomiary SPL wszystkich pozostałych sygnałów zostały wykonane „w osi" i nie były poddane weryfikacji przez stronę trzecią.

III. Szczegółowe dane pomiarów kątowych SPL wg EN54-3 dostępne są w dokumencie M96-002.

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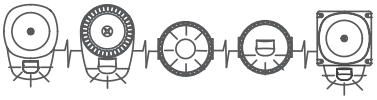
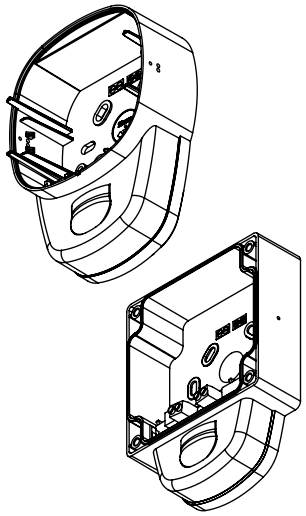
Technical Data



CNBOP-PIB 2800/2016 VdS G214071 CE 0333



DoP0002a
DoP0002b

(EN) EN54-23 Fire alarm devices visual alarm device for use in & around buildings

(FR) Dispositifs incendie EN54-23 dispositifs visuels alarme feu pour utilisation à l'intérieur et autour des bâtiments

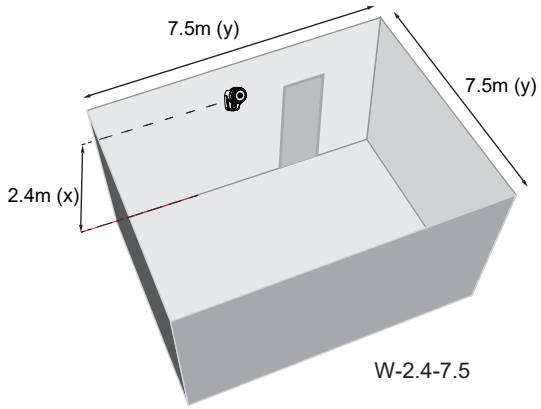
(DE) EN54-23 Feuermeldevorrichtung Optischer Signalgeber zur Innen-und Aussenmontage

(PL) EN54-23 Pożarowe urządzenia alarmowe sygnalizatory optyczne do pomieszczeń i na zewnątrz budynków.

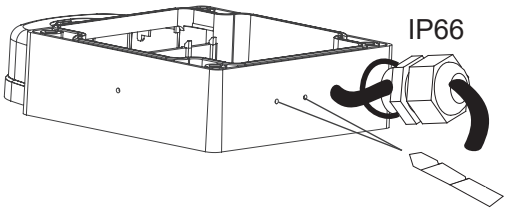
(IT) Dispositivi di allarme antincendio EN54-23 dispositivo di allarme visivo per uso all'interno e nelle vicinanze degli edifici

EN54-23:2010	ABS FR & Polycarbonate
9 - 60Vdc	Type A (IP21C) & B (IP66)
-25°C to +70°C	1.5W (max)
2.4m (max)	100mS ON / 900mS OFF 50mS ON / 950mS OFF
< 120% for 10mS	0.5 - 2.5mm²

			High Power 1 Hz	High Power 0.5Hz	Low Power 1 Hz	Low Power 0.5Hz
	White & Red		W-2.4-7.5 7.5m (135m³)		White: W-2.2-2.3 2.5m (15m³)	
					Red: W-2.1-2.2 2.5m (15m³)	
White Flash Flash Blanc Weisser Blitz		12V	51mA	27mA	35mA	19mA
		24V	25mA	16mA	16mA	10mA
		48V	18mA	11mA	11mA	9mA
Red Flash Flash Rouge roter Blitz		12V	51mA	27mA	35mA	19mA
		24V	25mA	16mA	16mA	10mA
		48V	18mA	11mA	11mA	9mA



W-2.4-7.5



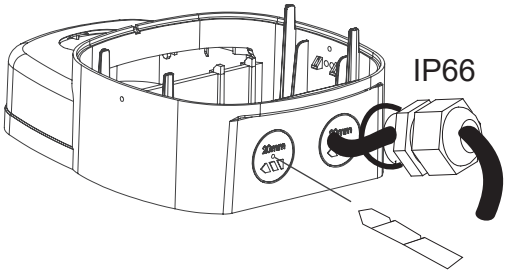
(EN) Drilling diameter must be adjusted to the diameter of the cable glands.

(FR) Le diamètre de perçage doit être adapté au diamètre des presses-étoupes.

(DE) Bohrdurchmesser muss dem Kabeldurchmesser angepasst sein.

(PL) Średnica wiercenia musi być dostosowana do średnicy dławików kablowych.

(IT) È necessario adattare il diametro di perforazione in base al diametro del pressacavi.



(EN) Cable glands must be compatible with declared cable size.

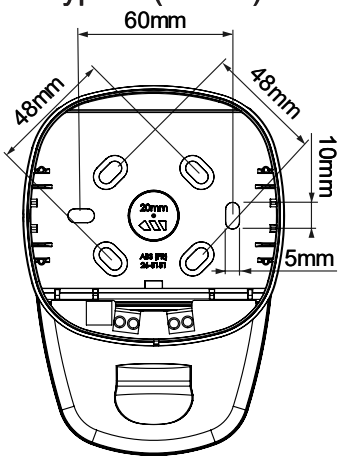
(FR) Les presses-étoupes doivent être adaptés à la section des câbles déclarée.

(DE) Kabeldurchfuehrungen muessen mit den angegebenen Kabelabmessungen kompatibel sein.

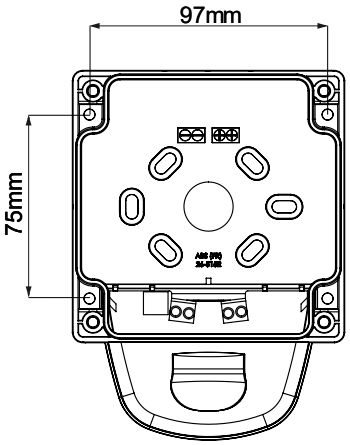
(PL) Dławiki kablowe muszą pasować do zadeklarowanego rozmiaru kabla.

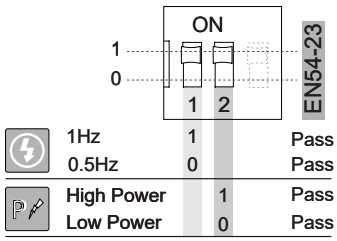
(IT) È necessario che i pressacavi siano compatibili con la dimensione del cavo indicata.

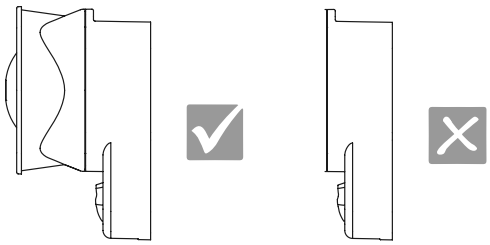
Type A (IP21C)

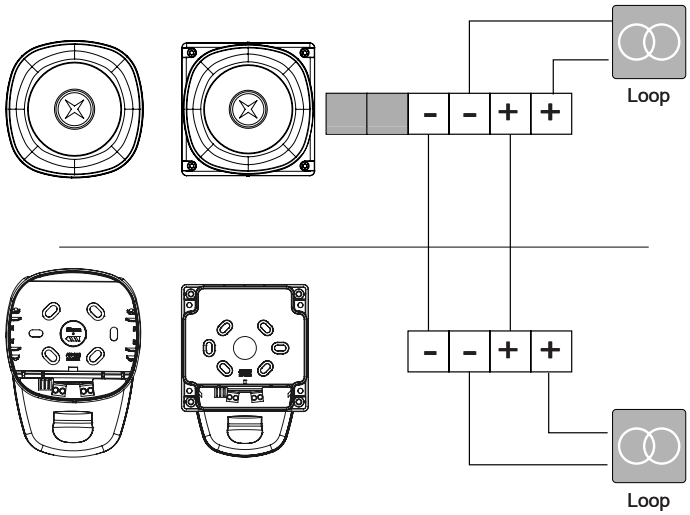


Type B (IP66)









* (EN) Product manual M12-002
** (EN) POŻAR label must be applied if product used in Poland
(PL) Naklejka "POŻAR" musi być użyta jeżeli produkt jest stosowany w Polsce.

	Symphoni LX Wall base	Symphoni LX Wall base (WP)
CE	17 0333 DoP0002a	17 0333 DoP0002b

Essential Characteristics		
EN54-23:2010	Clause	Performance
Operational Reliability		
Duration of operation	4.2.1	PASS
Provision for external conductors	4.2.2	PASS
Flammability of materials	4.2.3	PASS
Enclosure protection	4.2.4	PASS
Access	4.2.5	PASS
Manufacturer's adjustments	4.2.6	PASS
On-site adjustment of behaviour	4.2.7	PASS
Requirements for software controlled devices	4.2.8	PASS
Performance parameters under fire condition		
Coverage Volume	4.3.1	PASS
Variation of light output	4.3.2	PASS
Minimum/maximum light intensity	4.3.3	PASS
Light colour	4.3.4	WHITE / RED
Light pattern & frequency of flashing	4.3.5	0.5 / 1Hz
Marking & Data	4.3.6	PASS
Synchronisation	4.3.7	PASS

Temperature Resistance		
Dry heat (operational)	4.4.1.1	PASS
Dry heat (endurance)	4.4.1.2	PASS
Cold (operational)	4.4.1.3	PASS
Humidity Resistance		
Damp heat, cyclic (operational)	4.4.2.1	PASS
Damp heat, steady state (endurance)	4.4.2.2	PASS
Damp heat, cyclic (endurance)	4.4.2.3	PASS
Shock & Vibration & Resistance		
Shock (operational)	4.4.3.1	PASS
Impact (operational)	4.4.3.2	PASS
Vibration (operational)	4.4.3.3	PASS
Vibration (endurance)	4.4.3.4	PASS
Corrosion Resistance		
SO2 corrosion (endurance)	4.4.4	PASS
Electrical Stability		
EMC immunity (operational)	4.4.5	PASS

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