

# SCUDO 3000 series

## Self Powered Sirens



### SCUDO 3000F (code HE30-EF)

*Flasher with two filament lamps*

### SCUDO 3000S (code HE30-ES)

*Flasher with xenon strobe lamp*

DT01179HE1101R00



### Description

Microprocessor controlled self powered sirens for outdoor application. Designed to adequately complete a security system, these sirens are provided with special technical features to meet the most recent European regulations.

Special attention has been given to the design and to an user-friendly and easy installation and service.

Both models SCUDO 3000F and SCUDO 3000S, being microprocessor controlled, allow several installation options, increasing the flexibility which helps in solving most of installation problems. It is possible to select the most suitable triggering criteria, choosing among the following options:

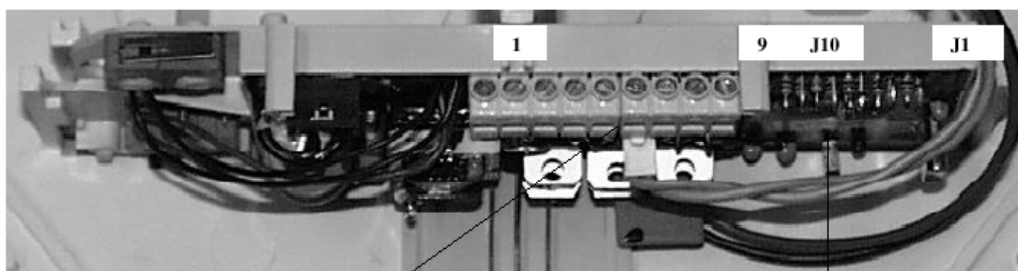
- 2-wires mode: the siren operates when the power input is removed
- 4-wires mode: the siren operates when the trigger input is activated (by N.C. circuit or unbalancing a EOL resistor)

Eight different siren tones are also available, selectable by cutting appropriate jumpers.

SCUDO-3000 is available in two models: SCUDO 3000F which has two filament lamps, and SCUDO 3000S which has a Xenon strobe lamp.

For both models it is possible to select the flash rate operation by choosing between two different modes: the lamp can flash while the siren is sounding and then it stops flashing or it can continue flashing at a lower rate after the siren stops as memory mode. A specific input controls the memory reset.

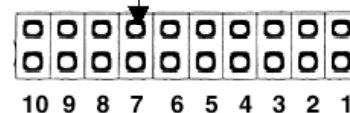
Siren series SCUDO 3000 also has an Open Collector fault output and a self-test circuit with LED output



terminals



J: Jumper (by resistor)



### The board

Function	Terminals	Description
Tamper output	1 and 2	Connect to 24h zone of control panel
Power input and trigger 2 wires mode (see J3)	3	Power + 13,8 Vd.c.
	4, 6 and 8	Negative, circuit ground
4 wires mode: trigger input (see J3 and J1)	5	N.C. to ground or N.C. to ground by EOL
Memory by flasher: reset input (see J4 and J2)	7	N.O. connect momentary to ground by short circuit or by EOL
Trouble output	9	Open collector output. Connect to supervision zone in control panel

EOL: 4,7 Kohm resistor

### Programming by jumper

- Siren Trigger mode**

Jumper	Not cut	cut
<b>J3</b>	<b>2 wires mode:</b> The siren operates when the power input is removed (terminal 3 and 4). The siren is powered by the battery and it stops when power is restored or if power is not restored, it times out. (See J8 and J9)	<b>4 wires mode:</b> The siren operates when the trigger input (terminal 5) is activated. The siren stop when the trigger input returns to normal or, if the input remain active, it times out. (See J8 and J9)
<b>J1</b>	<b>4 wires mode with EOL:</b> A 4,7Kohm resistor must be connected to the input for it to be balanced. While balanced, the circuit is held in the un-triggered state. It is triggered when the input becomes unbalanced.	<b>4 wires mode without EOL:</b> The terminal 5 must be normally close to ground.

- Flasher mode**

Jumper	Not cut	cut
<b>J4</b>	<b>Flasher follow siren:</b> The lamps flash 45 times per minute while the siren operates. When the siren is stopped by terminating the alarm condition, the lamps stop flashing.	<b>Flasher follow siren + memory mode:</b> The lamps flash 45 times per minute while the siren operates. The lamps flash slowly (9 times per minute) after terminating the alarm condition. The lamps will flash indefinitely until they are reset. This is done by momentarily balancing the lamp reset input. (See J2).  <b>Note:</b> If the lamps are flashing slowly because the siren had timed out, and the alarm condition still exists, they cannot be reset until the alarm condition is terminated.
<b>J2</b>	<b>Memory reset with EOL</b> The reset input is balanced when a 4.7KOhm EOL resistor is connected between terminals 7 and ground. Normally this input is unbalanced. When the lamp is to be reset, this input can be momentarily balanced by pressing a normally open pushbutton which is connected to these terminals in series with a 4.7K resistor.	<b>Memory reset without EOL:</b> The terminal 7 must be momentary connected to ground.

- **Siren Tone Selection. Jumper J5, J6 and J7**

8 tones are available. They are selected by cutting the appropriate jumpers. A test button is provided to allow the tones to be heard without having to cut jumpers. This makes tone selection easy. After the desired tone is heard, the jumpers can be cut.

*Test procedure:*

1. Press the test button the number of times corresponding to the tone number show in the chart below. Do not press the button press too fast, about twice per second works well.
2. Hold the last button press down for about 2 seconds until the siren sounds. The siren sounds until the button is released.

Tone	Cut Jumpers	Siren tone description
1	None	High to low sweep,, then jumps high and repeats,, slow
2	J7	High to low sweep,, then jumps high and repeats,, fast
3	J6	Low to high sweep,, then jumps high and repeats,, slow
4	J6 and J7	Low to high sweep,, then jumps high and repeats,, fast
5	J5	Undulating,, sinusoidal sweep,, slow
6	J5 and J7	Undulating,, sinusoidal sweep,, fast
7	J5 and J6	2 Tone: high,, low,, then repeats,, slow
8	J5, J6 and J7	2 Tone: high,, low,, then repeats,, fast

- **Siren timeout selection. Jumper J8 and J9**

Time minutes	Cut jumpers
2	None
4	J8
8	J9
16	J8 and J9

**J10. Optional kits: K2000AT (anti-drilling) and/or K2000AS (anti-foam):**

<b>J10 not cut</b>	Kits disable
<b>J10 cut</b>	Kits enable

**J11: Limit of alarms**

<b>J11 not cut</b>	Alarm limit disable
<b>J11 cut</b>	Alarm limit enable

**Note:** If you enable the limit of alarms the siren will operate 5 times max in 24 hours. The count is reset every 24 hours.

**LED indicator and trouble output**

During the 60 second initialization period after power is applied, it is on steadily. During normal operation, it flashes if there are any faults. The number of flashes indicate the type of troubles.

LED: Number of flashes	Trouble output (terminal 9)	Type of trouble
None	Closed to ground	None
1 (*)	Open collector	Power loss
2 (*)	Open collector	Low battery
3 (*)	Open collector	No battery connected
4 (*)	Open collector	Lamp failure (#)

(\*) about every 2 seconds.

(#) Lamps: both filaments open. Strobe: strobe fail to flash.

**Note:** more than one fault can be displayed at the same time. For example, Low battery and lamp failure: it flashes twice followed by pause, then it flashes 4 times. After another pause, it repeats.

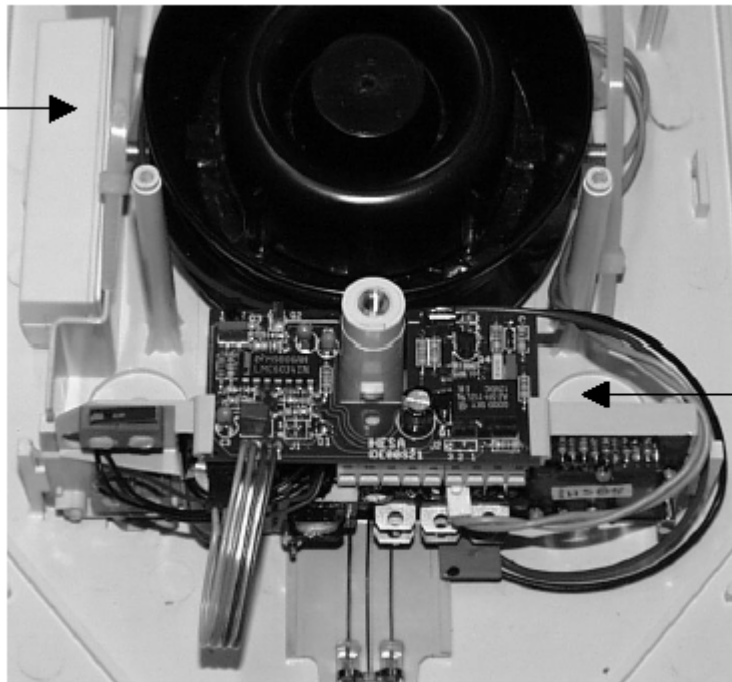
**Tamper output (terminals 1 and 2)**

Any of the following cause a tamper condition:

- Either or both cabinet tamper switches open
- Drilling of cabinet (if K2000AT optional kit is installed)
- Sabotage by foam (if K2000AS optional kit is installed)

## Optional kits

**K2000AT**  
Anti-drilling



**K2000AS**  
Anti-foam

Connector on siren board for wiring of optional Kits



(pin 1 is near terminal 1)

Pin 1: N.C. from K2000AT or K2000AS  
Pin 2: Com from K2000AT or K2000AS  
Pin 3: +12Vd.c.  
Pin 4: Ground

## Specifications

- **Input Voltage:** 13.8Vd.c.
- **Operating time:** Selectable among 2, 4, 8 and 16 minutes
- **Sound power:** 102 dB at 3 meters
- **Flash rate:** 45 per minute; (9 during alarm mode).
- **IP rate:** 34
- **Operating temperature:** -25°C to +55°C
- **Battery:** 12V 2Ah
- **Current consumption:** SCUDO 3000F: 4A (alarm); SCUDO 3000S: 3.5A (alarm)
- **Low battery voltage:** =/< 11Vd.c.
- **Size:** mm 300x215x125



**HESA** S.p.A.  
Via Triboniano 25 - 20156 Milano  
Tel. 02 38036 1 • Fax 02 38036 701  
[www.hesa.com](http://www.hesa.com) e-mail: [hesa@hesa.com](mailto:hesa@hesa.com)

AZIENDA CON SISTEMA QUALITÀ  
CERTIFICATO DA DNV  
== UNI EN ISO 9001 ==

**Roma** Via Val Grana 14  
Tel. 06 8861 415 • Fax 06 8861 391

**Padova** Via G. Dupré 11/13  
Tel. 049 8641 940 • Fax 049 8640 651

**Tavarnelle V. P.** (FI) Via B. Cellini 178  
Tel. 055 8070 303 • Fax 055 8070 505

**Bari** Tel. 080 5227 181 • Fax 080 5227 181