LED EXIT SIGN WITH AUTOMATIC TEST

HXS Recessed Series – Pictogram, 180mm

First IEC 62034 Automatic Test in HK

Slim type

- For recessed mounting
- Pictogram only

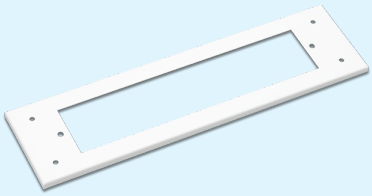
IEC 62034 automatic test system

- Commissioning Test
- Functional Test
- Duration Test

Mounting Plate

- Screw mounting type
- Simplify mounting work
- Easy maintenance





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FEATURES

- For recessed mounting
- Pictogram only
- Mounting plate — screw mounting type, simplified mounting work, easy maintenance
- IEC 62034:2012 automatic test system for HK FSD requirements
- Slim design with 4 mm bezel and 20 mm thickness
- Nichia LEDs with 15 years life at L70
- System power only 2 W
- Full solid-state design — no mechanical relays
- Constant brightness control for AC and DC operation
- Chemistry-aware charging for LiFePO4, NiCd and NiMH
- Precharge recovery for deeply discharged batteries
- Thermal charge protection with automatic resume
- Deep-discharge shutdown for battery protection
- Isolated low-voltage test switch
- Infrared remote for brightness control, changeover test, and Autotest
- Dual LED system status indication (optional LCD status module)
- Optional fire alarm input flashes the LED in response to external fire alarm signals
- Optional Wi-Fi connectivity enables centralized control and reporting of status, faults, and self-test results

ELECTRICAL CHARACTERISTICS

Rated supply voltage	220-240 VAC (-20%, +10%)
Supply frequency	50-60 Hz
Circuit power	< 3 W
Changeover time	< 0.5 sec
Recharge time	< 6 hrs
Rated discharge time	3 hrs
Lumen Maintenance (L70)	15 years
Ambient temperature (ta)	0 ... +50°C
Max. temperature rise (Δt)	< 5°C
Battery type	LiFePO4, NiCd/NiMH as option
Luminance	250 cd/m² max

IEC 62034 AUTOMATIC TEST

According to HK FSD, Technical Guidance May 2021 and FSD Circular Letter No. 5/2021, PPA/104(A), 5th Revision, emergency lighting with self-contained batteries shall be inspected periodically. For automatic testing devices, it shall be designed in accordance with IEC 62034:2012 — Automatic test systems for battery powered emergency escape lighting.

These inspections are normally carried out by hand and entered into a register. An automatic test system performs the same checks on schedule and keeps the results in the fitting, so the records are always ready for inspection.

The firmware supports full IEC 62034 — ATS Type S, so each sign tests and records by itself with no central controller or extra wiring.

IEC 62034 / BS EN 50172 / FSD Requirements	Automatic Test
Commissioning Testing	✅
Maintenance	
a. Once every month a functional test in accordance with BS EN 50172 not longer than 10% of rated duration should be carried out.	✅ 30 sec
b. Once every twelve months a full rated duration test, should be carried out and the results should be entered in a register.	✅
c. The luminaire should be functioning properly to maintain the stipulated lighting level and the normal power supply should be restored after the test.	✅
d. If automatic testing devices are used, the above item a – c should be complied with.	✅

AUTOMATIC TEST FLOWCHART

HXS built-in automatic test system performs three types of self-test to verify functionality and reliability without manual intervention. Testing starts automatically after 7 days of uninterrupted mains supply. A random delay per device staggers the tests so adjacent fittings do not test at the same time.

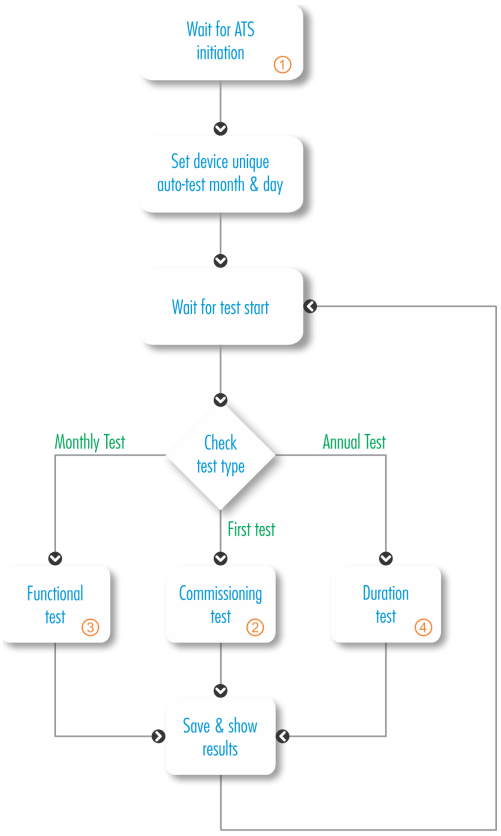
Functional test — performed once a month to check basic functionality, including hardware parameters such as voltage and current readings. Test duration is 30 seconds.

Duration test — performed once a year. It runs the same checks as the functional test, followed by a battery life check with a full discharge at rated load.

Commissioning test — the first duration test, typically performed after the device has been installed and configured.

During every test — the sign runs on battery supply while battery and lamp parameters are monitored.

Logging — Any fault found is saved in the system until the faulty component is replaced.



STATUS INDICATIONS

Two LED indicators provide a rich set of status indications for system status and faults. Operators can use the information to quickly identify and diagnose problems.

Normal Status
Charging
Battery charged
Functional test postponed
Duration test postponed
Fault Status
Lamp fault
Charger fault
Battery fault
Battery duration EOL



IR REMOTE CONTROL

The infrared remote makes maintenance easier. Adjust panel brightness, run a changeover test, and clear Autotest faults without opening the fitting.

- Panel brightness dimming in normal operation
- Restore default brightness
- System changeover test (simulates the traditional test button)
- Clear stored Autotest faults after the fault has been corrected

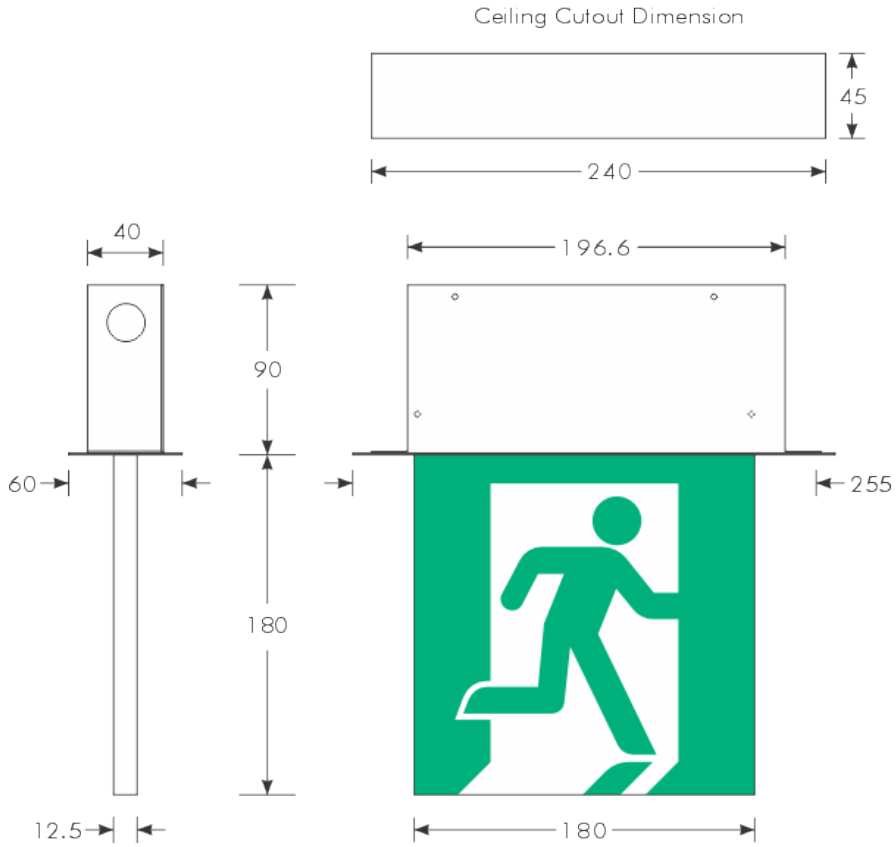
COMPLIANCES

FSD Circular Letter No. 5/2021 Fire Safety Requirements for Emergency Lighting Systems in Licensed/Registered Premises	IEC 62034:2012 Automatic test systems for battery powered emergency escape lighting
BS 5266-1:2016 Emergency lighting – Code of practice for the emergency lighting of premises	BS EN 1838:2013 Lighting applications. Emergency lighting
EN 61347-2-13 Lamp controlgear. Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	EN 62384 DC or AC supplied electronic control gear for LED modules. Performance requirements
EN 60598-1 Luminaires. General requirements and tests	EN 60598-2-22 Luminaires. Particular requirements. Luminaires for emergency lighting
EN 55015 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	EN 61000-3-2 Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3 Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection	EN 61547 Equipment for general lighting purposes. EMC immunity requirements

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DIMENSIONS



EMERGENCY EXIT LEGENDS



ORDERING INFORMATION

Model	Width (mm)	Legend	Illuminated Side
HXS-R2SA	188	A	Single
HXS-R2SB	188	B	Single
HXS-R2SC	188	C	Single

Pictogram LED exit signs with automatic self-test. Suitable for Hong Kong and Macau, as per PPA/104 (5th Revision). New automatic test system supports IEC 62034. | hoye.com/hxs-recessed-series-pictogram-led-exit-sign/