Explosion-proof Online Monitoring Analysis System
BXCQ Explosion-proof Overflow Static Grounding Control System



- Applied to explosive gas atmosphere Zone 1, Zone 2;
- Applied to IIA, IIB explosive gas atmosphere;
- Applied to temperature group T1~T6;
- Ambient temperature: -40℃~+60℃;
- Widely used in monitoring and protection in petroleum, chemical, gas station, oil depot product platform, tank car assembly and disassembly, overflow static protector and quantitative loading system interlocking control, avoid overflow accident, ensure safety static grounding.

Executive Standard

- EN60079-0, EN60079-1, EN60079-11, EN60079-31, EN60079-32.
- IEC60079-0, IEC60079-1, IEC60079-11, IEC60079-31, IEC60079-32.
- GB3836.1, GB3836.2, GB3836.3, GB3836.4, GB12158, GB12476.1, GB12476.5.

Catalogue number logic

BXCQ - □ □ C □ □

Intelligent Voice	II: with intelligent voice function optional
Function code	L: represent man motor double used type tank car is speeialized and optional
Control system	
Function code	J: represent static grounding control system optinal
Function code	Y: represent overflow test function optinal
Explosion-proof static elimination equipment	

Performance Features

- The controller enclosure is flameproof type, reliable explosion-proof performance.
- Static grounding clamp has tank car identification function, ensure its installed on tank car correctly, not other electric conductor, with no-spark type grounding clamp, no spark produced when equipment impact.
- Static grounding clamp has resistance inspection and liquid level monitoring function, provide local and remote audible and visual alarm and interlocking signal for “static” and overflow” status, which is convenient for operator to find out problem and avoid overflow accident.
- Grounding body resistance has inspection function, ensure reliable grounding of system, when electrostatic grounding is bad or grounding loop resistance >10Ω, provide alarm warning.
- With voice and LCD function, the intensity of the sound is 70~120db (the distance is 30cm).
- Relay signal output for DCS pump (valve), when grounding is not normal, cut off the operation, audible and visual alarm can still be remote controlled, remind operator the real-time status of on-site grounding.
- Red LED shows warning, green LED shows normal working, yellow LED shows standby status.
- Grounding clamp uses alloy aiding thimble, with the features of high hardness, good electric conduction, strong breaking paint and rust power, etc. ensure good grounding monitoring device.
- Grounding clamp is helix tube shrink design, with the capacities of strength anti-pull, anti-drop, etc.
- It can intelligently detect whether the human static voltage is conducted, when the human static voltage is in a dangerous value, sound and light alarm.

Zones 1&2

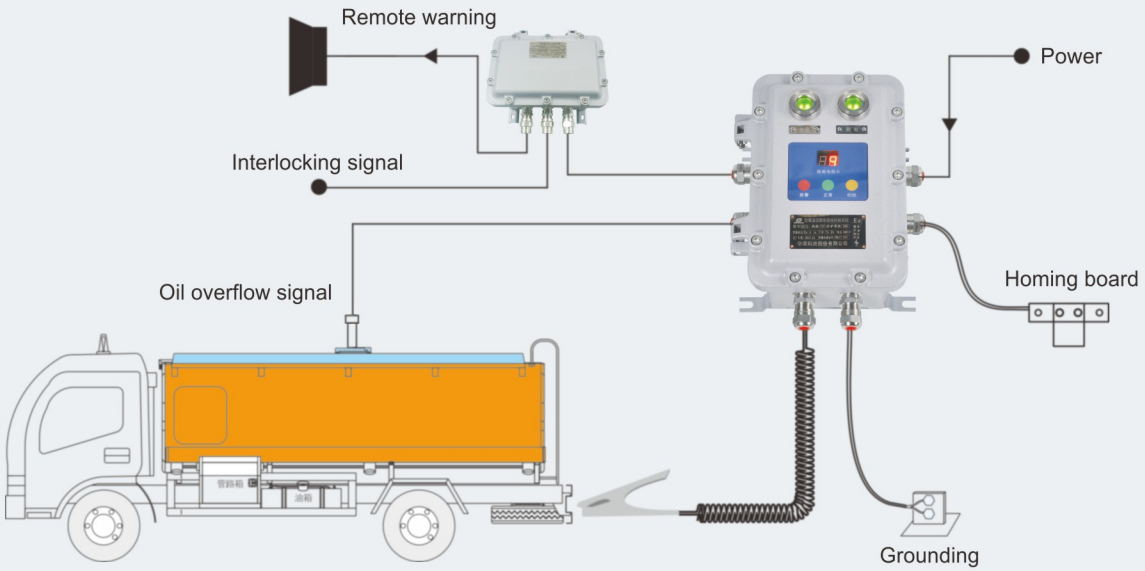
Explosion-proof Online Monitoring Analysis System
BXCQ Explosion-proof Overflow Static Grounding Control System

Configuration selection table of system equipment

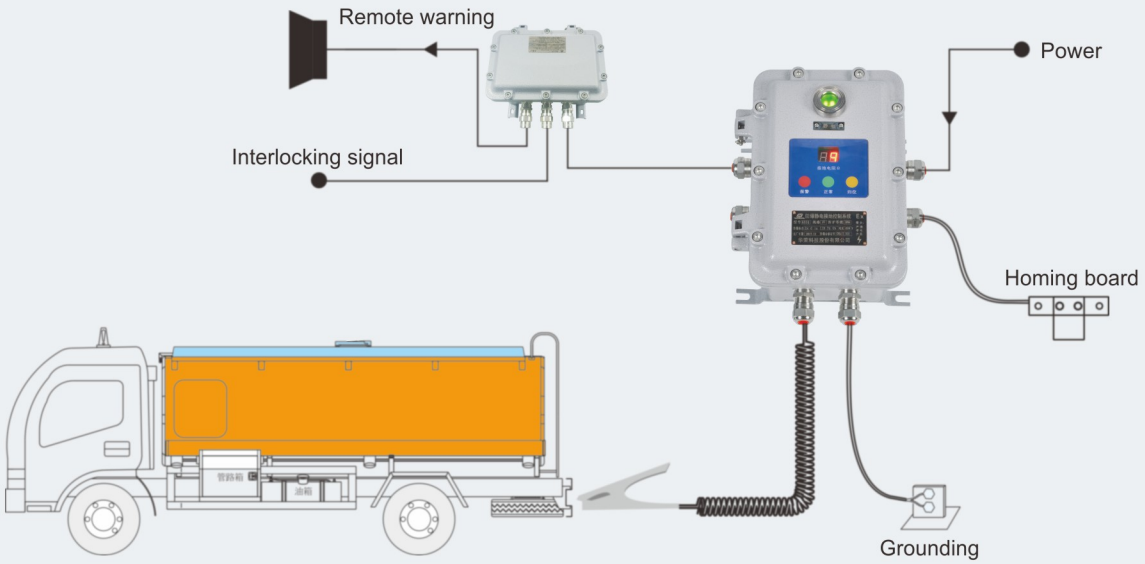
Legend	Type spec. and name	Parameters	Remark
	BXCQ-YJC Explosion-proof Overflow Static Grounding Controller	Ex mark: Ⓔx II 2 G Ex db [ia] IIB+H_2 T6 Gb Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66 Protection degree: IP66 Response time: <1S Test resistance: <10Ω Working voltage: 220VAC or 24VDC Working current: <20mA Warning method: Interlocking signal and three color light instruction Output signal: Relay output, NO NC is optional, 10A 30VDC or 10A 250VAC Enclosure size: 200 × 300 × 170 mm Installation dimension: 210 × 220 mm	Aluminium alloy enclosure
	BXCQ-JC Explosion-proof Static Grounding Controller	Ex mark: Ⓔx II 2 G Ex db [ia] IIB+H_2 T6 Gb Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66 Protection degree: IP66 Response time: <1S Test resistance: <10Ω Working voltage: 220VAC or 24VDC Working current: <20mA Warning method: sound and light alarm (optional) Output signal: Relay output, NO NC is optional, 10A 30VDC or 10A 250VAC Enclosure size: 200 × 300 × 170 mm Installation dimension: 210 × 220 mm	Aluminium alloy enclosure
	BXCQ-YC Explosion-proof Overflow Controller	Ex mark: Ⓔx II 2 G Ex db [ia] IIB+H_2 T6 Gb Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66 Protection degree: IP66 Response time: <1S Working voltage: 220VAC or 24VDC Working current: <20mA Warning method: Interlocking signal and three color light instruction Output signal: Relay output, NO NC is optional, 10A 30VDC or 10A 250VAC Enclosure size: 200 × 300 × 170 mm Installation dimension: 210 × 220 mm	Aluminium alloy enclosure
	BXCQ-JCL Explosion-proof Static Grounding Controller (dual purposes of man and motor)	Ex mark: Ⓔx II 2 G Ex db [ia] IIB T6 Gb Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66 Protection degree: IP66 Response time: <1S Test resistance: <10Ω Working voltage: 220VAC or 24VDC Working current: <20mA Warning method: sound and light alarm (optional) Output signal: Relay output, NO NC is optional, 10A 30VDC or 10A 250VAC Touching ball material: Electrostatic subconductor Touching ball diameter: 90mm Enclosure size: 200 × 300 × 170 mm Installation dimension: 210 × 220 mm	Aluminium alloy enclosure
	BXJ-IIB Series Explosion-proof Junction Box	Ex mark: Ⓔx II 2 G Ex db IIB+H_2 T6 Gb Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66 Protection degree: IP66	Aluminium alloy enclosure
	Static Grounding Clamp	Clamp tooth material: Tungsten alloy Opening range: Clamp body material: 304 (316 optional)	
	Corrosion Resistance Helical Line	Cable material: Copper wire Surface material: PU Standard equipment length: 7m	The length of helical Line is customized, the max length is 15m
	Homing board	Material: 304 stainless steel	

Dimension drawings (all dimensions in mm) - subject to alteration

BXCQ-YJC/(II)
Explosion-proof Overflow Static Grounding Control System (Voice prompt function)



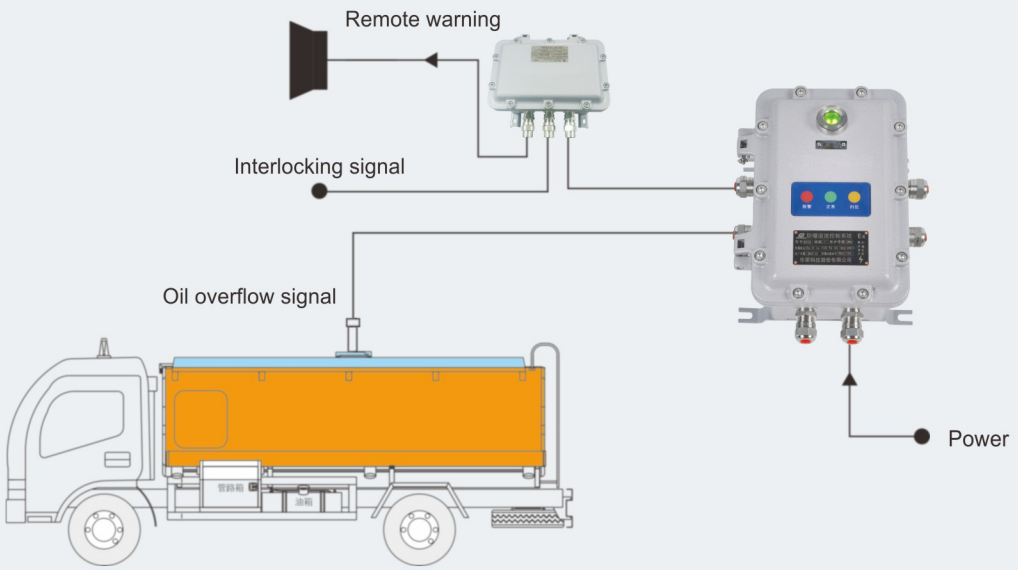
BXCQ-JC
Explosion-proof Static Grounding Control System



Explosion-proof Online Monitoring Analysis System
BXCQ Explosion-proof Overflow Static Grounding Control System

Dimension drawings (all dimensions in mm) - subject to alteration

BXCQ-YC
Explosion-proof Overflow Control System



BXCQ-JCL
Explosion-proof Static Grounding Control System (dual purposes of man and motor)

