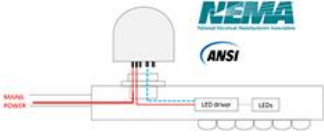
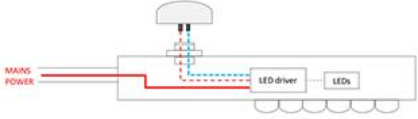

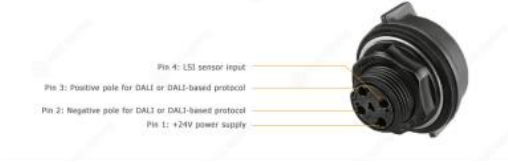


	NEMA	Zhaga
Standard	US-based trade association that set standards for electrical equipment	International consortium that develops specifications for LED luminaires and light engines
Compatibility	Defines specific product types and performance requirements	Defines standardized interfaces for LED lighting components
Electrical architectures	Power goes to the Socket, that then supplies driver 	Power goes to the driver, that then supplies controller 
Electrical contacts	3-pin, 5-pin, or 7-pin contacts that include high-voltage lines 	4-4-pin contacts that do not include high-voltage lines 
Dimming support	Analog dimming or DALI communication with limited compatibility	DALI communication by default design with high compatibility
Auxiliary power	Provided from the LED driver on the 7-pin contact with low support and stability	Provided from the LED driver on the pin 1 by default design with high support and stability
Interoperability	Low interoperability with other standards or products	Allows for greater flexibility and interchangeability between different products, as long as they meet the same Zhaga interface requirements
Product lifetime	NEMA controllers connect directly to the AC power supply but have a shorter lifespan than Zhaga controllers due to the components' failure caused by voltage fluctuations and surges.	Zhaga Controllers have a significant better lifetime and reliability because they are based on DC input
Performance Requirements	Focuses on specific product types and performance metrics	Focuses on more flexible and adaptable performance requirements
Cost	NEMA controllers typically have more components, which can make them more expensive.	A Zhaga luminaire may be more expensive as it requires a driver with enhanced capabilities.

Size	NEMA controllers typically require more components, which often results in a larger physical size.	Zhaga controllers are typically much smaller than conventional NEMA controllers, often only half to one-third the size.
Innovation	May have less innovation and slower adoption of new technologies	May have greater innovation and faster adoption of new technologies