

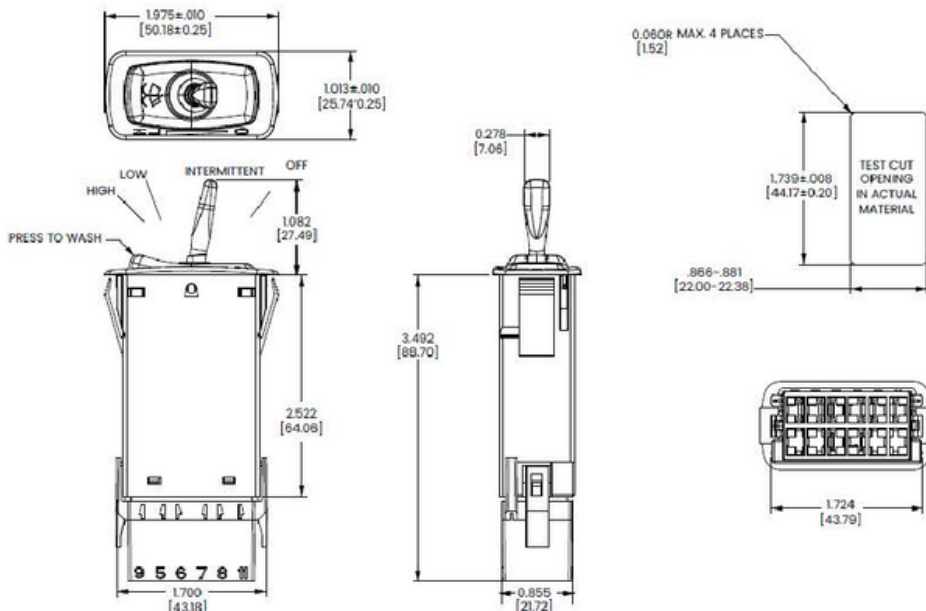
LW-Series

Wiper / Washer Controls



Dimensional Specs

inches [millimeters]



Principles of operation:

From the OFF position, moving the toggle one step up puts the function into the intermittent slower mode (18 sec.). Moving the toggle another step up reduces the delay time by 3 sec for each of the next six steps. The seventh step up puts the motor into a continuous low-speed mode and the last step up puts the motor into the high-speed mode. Reversing the previous steps puts the motor finally into the stop/parking mode. During the OFF position, intermittent and low-speed modes, pressing the wash button activates the wash function. Wipe function starts after a two second delay from the onset of the washing and continues for three continuous wipes after the wash button is released. For convenience, the wash function is not active during the high-speed mode.

The Wiper Control is designed to interface with single or dual relay systems for intermittent delay and the park function. The high speed is driven directly via a power transistor internal to the module. The coil of the relay is pulled down to ground during the intermittent, low-speed and high-speed modes respectively. (Contact Carling Technologies for wiring diagrams)

Tech Specs

Electrical

	8 amps, 14VDC 4 amps, 28VDC 2 as 1 amps, 14VDC 1 amps, 28VDC
Terminals	18 4mm i Cnne erminains sanar
Protection	eerse polarit protection er oltae protection Col cranin protection accordin to 14, ections 411111 an 411121 Transient oltae protection which includes load dump and inductie switchin accordin to 14, sec 41122 lectrostatic dischare protection accordin to 14 ec 411221 Dischare a 1 p capacitor that has een chared to a potential o 1V throuh 1 hm resistor Meets all other EMI/EMC reuirements or class C trucs

Mechanical

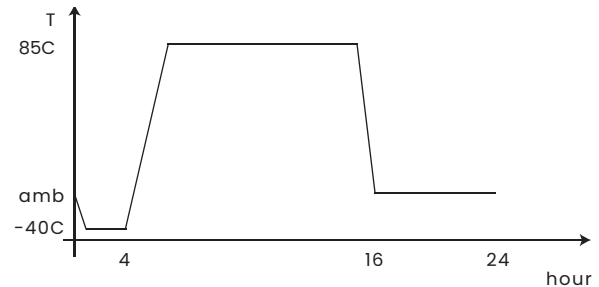
Mechanical	Sinusoidal Vibration 11 , D, one minuteccle, three hours/axis Random Vibration: Three hours/ axis, three mutuall pependicular axes with a test leel 4 s
	Frequency Amplitude 12/ 11 2/ dB/octae rollo Tests were conducted accordin to SE 14, Sec and Sec 44 Shoc: MISTD22 Method 21B, Test Condition , s, 11 ms
Endurance	ccordin to SE 24, March for windshield washer switch for Trucs, Buses and Multipurpose Vehicles 2, ccle minimum

Physical

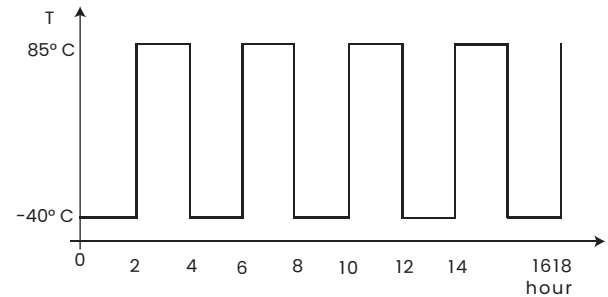
Illumination	ED, rated 1, hours 1/2 lie
Coer	cetate
asher ctuator	Silicone
Tole ctuator	lon / lass lled
rac et	lon /
Connector	lon / rated 8C polaried
Washer Function	Momentar
Tole Function	Maintained Intermittent
Operation	Momentar
Wei ht	44 rams

Environmental

Operatin Temp	2C to 8C
Temperature Ccle	ccordin to SE 14, Sec 411 See Fiure elow



Thermal Shoc	ccordin to SE 14, Sec 412 See Fiure elow
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umidit	ccordin to SE 14, Sec 42 ccles or 8 hrs with maimum temperature o 8C and relatie humidit
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Dust Bombardment	ccordin to SE 14, Sec 4 with dust concentration o 88m/m or 24 hours
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Salt Spra	MISTD22, Method 11D or hours
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