



SIZE: 80 (L) x 96 (W) x 43 (H) mm
WEIGHT: 500 grams MAX

Application:	Small jets, helicopters, etc.
Function:	The control unit provides power to heating elements while monitoring the temperature of the windshield. It contains two independent channels, each rated for providing 1.4 kW to windshield heating elements.
Characteristics:	<ul style="list-style-type: none"> • Temperature Range: -55°C to +85°C. • Maximum weight: 600 gr, Typically 500 gr. • Dimensions of case: 96mm (W) x 80mm (L) x 43mm (H). • Dual control channel, each with 2 independent temperature sens or inputs.
Features:	<ul style="list-style-type: none"> • Status reporting via an ARINC 429 on single bus at 100 kHz with 100 ms transmission cycle. • Continuous BIT for high reliability operation. • Protection against over-current due to wiring or heater elements short circuit and open circuit. • Protection against over temperature and failure of sensors. • External fail safe contactor control.

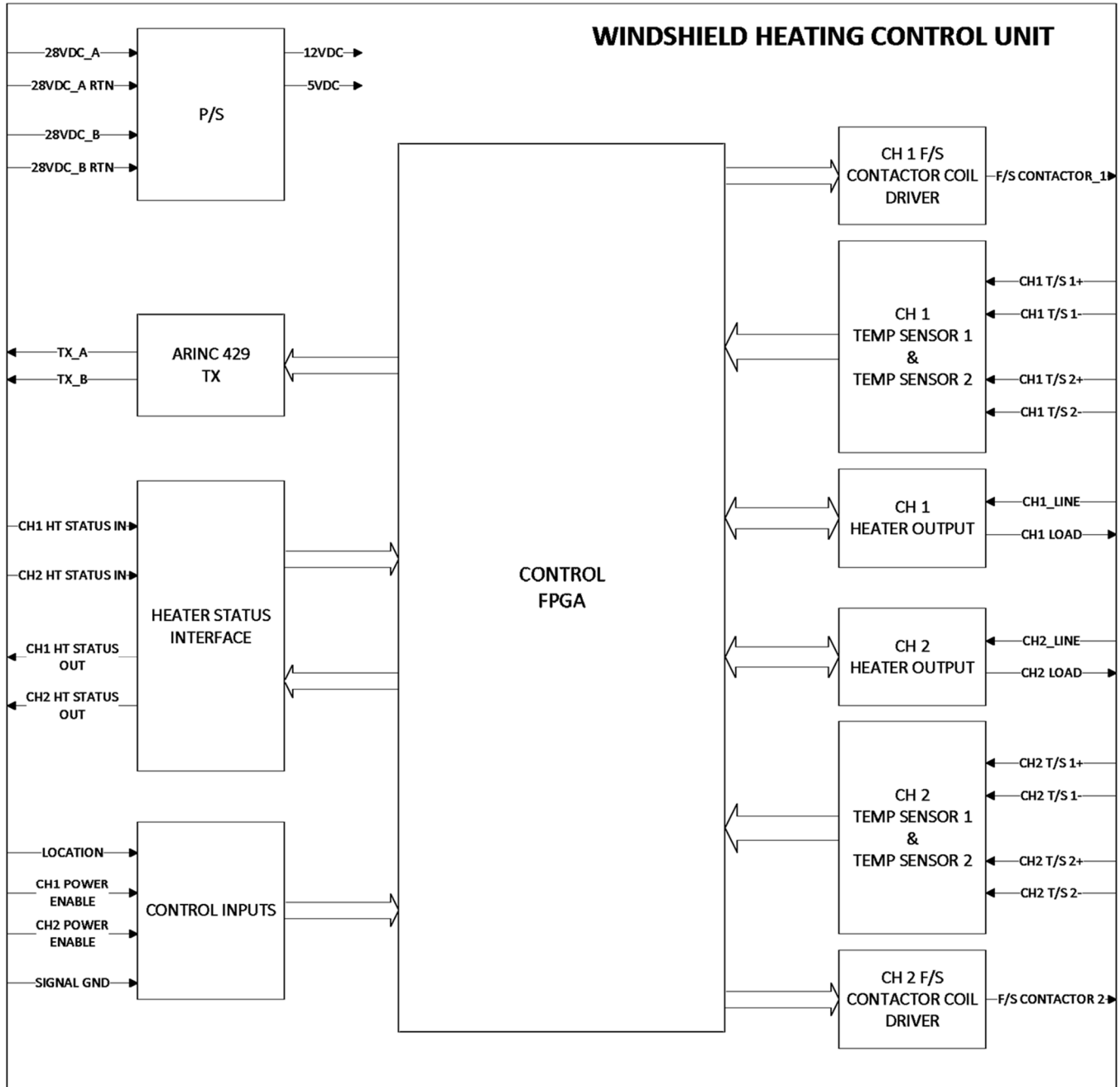
GENERAL ELECTRICAL SPECIFICATIONS

Supply Voltage according to MIL-STD-704E	16 to 32 Vdc
Bias current (per channel)	< 50mA
Limiting inrush current	< 60 A
Switching rise time	5 ms
Turn on voltage drop (per channel)	< 250 mV at 40 A
Maximum current (per channel)	50 A
Turn on voltage drop (for fail-safe-contact control FET)	< 5 mV at 150 mA
Maximum current sink (for fail-safe-contact control)	150 mA

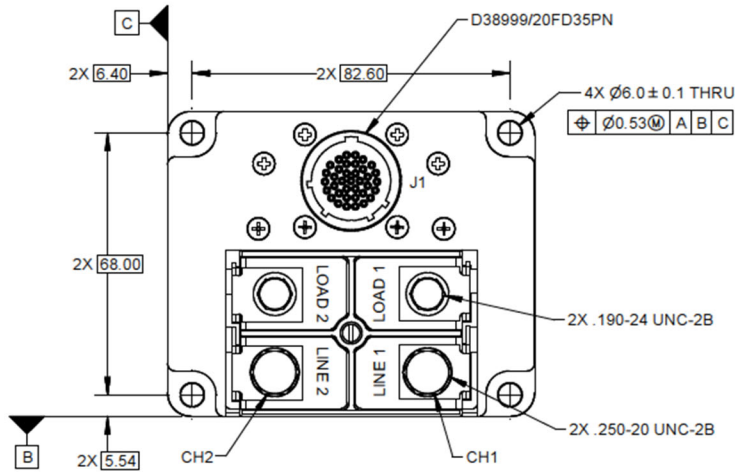
ELECTRICAL CHARACTERISTICS

MTBF:	40000 Hrs plus
Altitude	15000 ft. max
Humidity: DO160 section 6 category A	
Vibration: DO160 section 5 category C	
Voltage Spike: DO160 section 17 category A	
Shock: DO160 section 7 category E	
Waterproofness: DO160 section 10 category W	
Fungus Resistance: DO160 section 13 category F	
Magnetic Effect: DO160 section 15 category Z	
Power input: DO160 section 16 category Z	
Audio Frequency Conducted Susceptibility: DO160 section 18 category Z	
Induced Signal Susceptibility: DO160 section 19 category Z	
Radio Frequency Susceptibility: DO160 section 20 category V	
Lightning: DO160 section 22 category A3C3	
Electrostatic Discharge: DO160 section 25 category A	

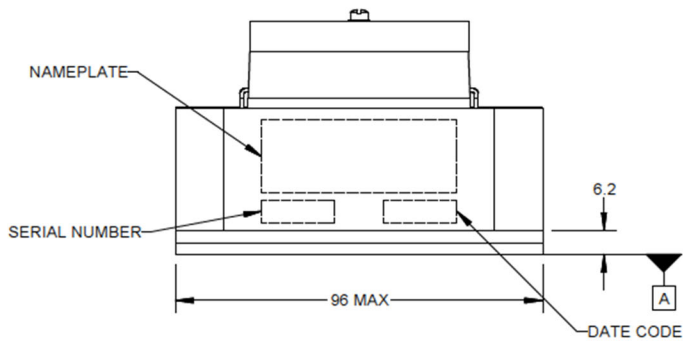
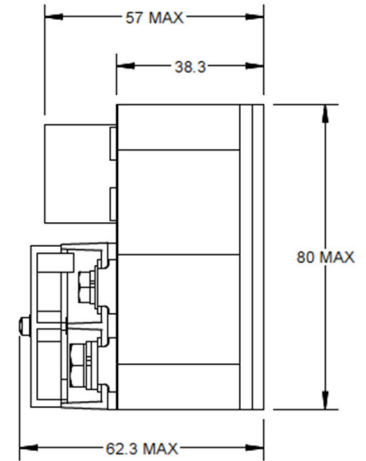
BLOCK DIAGRAM



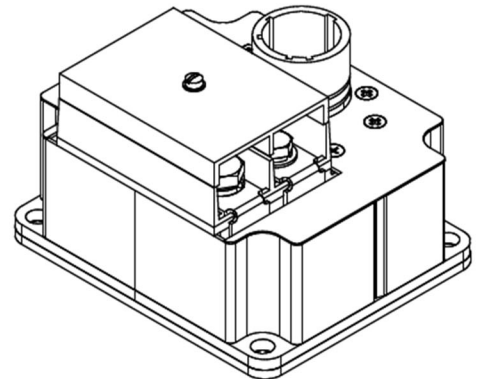
MOUNTING



TOP VIEW
(TERMINAL COVER REMOVED FOR CLARITY)



FRONT VIEW
ESD MARKING FAR SIDE



ISOMETRIC VIEW
(REFERENCE ONLY)