

High Power 1 GHz Communication Passives

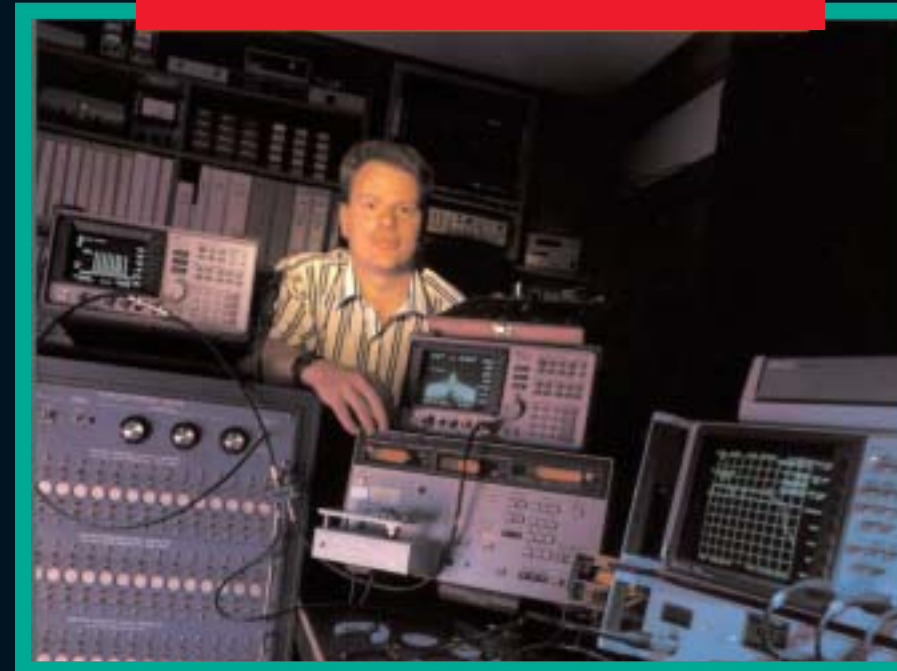


100

Revolutionary Technologies from Lindsay Electronics
Create the New Standard for System Symmetry



Going the extra mile ... for the last mile



Going the Last Mile

Tomorrow's architectures for sending or receiving information around the world or down the street will require a new era of communication equipment...now available from Lindsay Electronics.

Established in 1953, Lindsay is a leading manufacturer and global provider of RF distribution products for the CATV and wired communication industries. With our 150,000 square foot North American manufacturing facility, 300 dedicated employees, and a worldwide distribution network, we are committed to the growth and advancement of your business.

Focused on the last mile, our Hardline Passives, Subscriber Amplifiers, Apartment Amplifiers, Power Passing Multitaps, and Distribution Amplifiers all work from a 1 GHz platform. Our revolutionary new technology creates communications equipment to solve system problems before they become subscriber problems. This is achieved through applied ISO continuous improvement disciplines, innovation and strict attention to details.

A quarter century of proven reliability and superior performance under the most severe climatic conditions result in fewer service interruptions, less maintenance and thus better service at lower operating cost.



Going the extra mile ... for the last mile

Since 1953

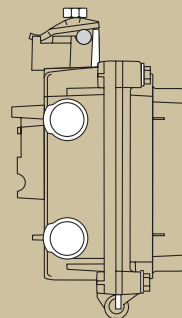
50 Mary Street West, Lindsay, Ontario, Canada K9V 4S7 E-mail: techinfo@hq.lindsayelec.com
Tel: (705) 324 2196 Tel: (800) 465 7046 Fax: (705) 324 5474

Model	Description	Block Diagram
LHI100	Power Inserter	
LHS102	2 Way Line Splitter	
LHS103 LHS103B	3 way Line Splitter Balanced 3 way Line Splitter	
LHC108 LHC112 LHC116	8dB Directional Coupler 12dB Directional Coupler 16dB Directional Coupler	
LHI108 LHI112 LHI116	8dB Status Picker/Power Inserter 12dB Status Picker/Power Inserter 16dB Status Picker/Power Inserter	
LHI100D	Dual Power Inserter	
Special Variation No AC		
LDC108S LDC112S	8dB Directional Couplers - 2 Way Splitter 12dB Directional Couplers - 2 Way Splitter	
Special Variation No RF		
LACS100	Central Node Power Inserter	

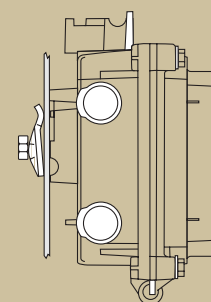
Dimensions
6 3/8" X 5 3/4" X 2 15/16"
(16.2 X 14.6 X 7.5 CM)

Weight
1Kg (2.2 Lb.)

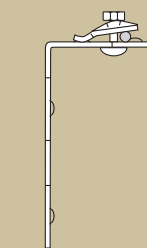
Mounting
Arrangements



Aerial Mount



Pedestal Mount



Hanger Bracket

THE STANDARDS WE MEET:

ELECTROMAGNETICS AND SAFETY
Electromagnetic Compatibility and Electrical Safety- Generic Criteria
Bellcore-GR-1089-CORE Type 1

EMI Isolation better than 100 dB

RELIABILITY
Reliability Prediction Procedure for Electronic Equipment
Bellcore-TRNWT 000332
Black Box Method 1 Case1
(Results on file)

SURVIVABILITY
I.E.E.E. Guide for Surge Voltages in Low Voltage AC Power Circuits
ANSI/IEEE-C62.41.1991 Category B3
(Combination Wave)

WEATHERING
A.S.T.M. Standard Test Method of Salt Spray (Fog) Testing
ASTM-B117-90
(Results on File)

HIGH CURRENT SURVIVABILITY
25 Amperes for 2 hours

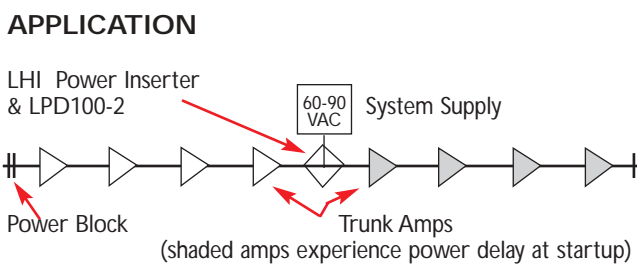
COMPARE BANDWIDTH POWER HANDLING CAPABILITY AND NON-DISRUPTION OF SERVICE . . . ALL THIS AND MORE FROM THE PEOPLE WHO CREATED THE STANDARD

Performance Specifications		5 to 1000 MHz					15 Ampere Rating									
Model		5	10	20	40	60	100	150	200	300	400	500	600	700	800	1000
LHI100	No. 2	0.46	0.36	0.26	0.25	0.25	0.20	0.25	0.30	0.35	0.50	0.70	0.90	0.90	0.70	0.70
	ISO AC	88	84	87	85	84	40	40	40	40	40	47	47	48	48	MIN
LHI102	No. 2&3	3.05	3.05	3.50	3.50	3.50	3.00	3.00	3.00	4.00	4.00	4.25	4.40	4.25	4.40	MAX
	ISO AC	3.75	3.80	3.80	3.50	3.00	3.80	3.85	4.05	4.20	4.50	4.50	4.50	4.50	4.75	MAX
		20	28	37	37	38	23	22	21.5	21	21	21	21	21	21	MIN
LHI103	No. 4	3.05	3.05	3.50	3.50	3.50	3.70	3.85	4.00	4.20	4.30	4.65	4.85	4.65	4.85	TYP
	No. 2&3	3.75	3.75	3.80	3.50	3.00	3.00	4.05	4.15	4.40	4.55	4.90	4.90	4.90	MAX	
	ISO AC	8.80	7.05	6.85	6.80	6.80	6.85	7.15	7.25	7.50	7.85	8.25	8.25	8.25	MAX	
LHI103B	No. 4	5.50	5.50	5.40	5.35	5.35	5.75	5.95	6.15	6.25	6.40	6.80	6.80	6.80	TYP	
	No. 2&3	5.50	5.70	5.55	5.50	5.50	5.90	6.20	6.35	6.50	6.70	7.20	7.20	7.20	MAX	
	ISO AC	5.90	6.80	6.55	6.50	6.45	6.90	7.25	7.40	7.60	8.10	8.50	8.50	8.50	MAX	
LHI108	No. 2	2.00	2.15	1.90	1.85	1.80	1.90	2.10	2.15	2.30	2.40	2.65	2.65	2.65	TYP	
	No. 3	2.10	2.30	2.10	2.00	2.00	2.10	2.30	2.40	2.50	2.75	2.75	2.75	2.75	MAX	
	ISO AC	9.2	9.2	9.2	9.1	9.1	9.0	9.0	9.1	9.2	9.3	9.3	9.3	9.3	MAX	
LHI112	No. 2	1.05	1.20	1.00	1.00	0.95	1.05	1.30	1.40	1.60	1.85	2.20	2.60	2.60	TYP	
	No. 3	1.25	1.35	1.10	1.10	1.10	1.20	1.40	1.60	1.85	2.20	2.60	2.60	2.60	MAX	
	ISO AC	12.0	12.2	12.2	12.1	12.1	12.1	12.0	12.1	12.2	12.3	12.3	12.3	12.3	MAX	
LHI116	No. 2	0.95	1.15	0.95	0.90	0.90	0.85	1.05	1.10	1.10	1.20	1.50	1.70	1.70	TYP	
	No. 3	1.10	1.30	1.10	1.05	1.05	1.10	1.20	1.30	1.30	1.35	1.70	1.70	1.70	MAX	
	ISO AC	15.7	16.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.8	16.8	16.8	MAX	
LHI118	No. 2	0.95	1.15	0.95	0.90	0.90	0.85	1.05	1.10	1.10	1.20	1.50	1.70	1.70	TYP	
	No. 3	1.10	1.30	1.10	1.05	1.05	1.10	1.20	1.30	1.30	1.35	1.70	1.70	1.70	MAX	
	ISO AC	15.7	16.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.8	16.8	16.8	MAX	
LHI100	No. 2	0.46	0.36	0.26	0.25	0.25	0.20	0.25	0.30	0.35	0.50	0.70	0.90	0.90	0.70	TYP
	ISO AC	88	84	87	85	84	40	40	40	40	40	47	47	48	MIN	
RETURN LOSS:		18	18	18	18	20	20	20	20	20	20	20	20	20	20	MIN
HUM MODULATION:		Average of 5, 10 and 50 MHz:					Average of 300, 450, 550, 750 and 1000 MHz:									
⑩ 10 Amperes:		-75					-60									
⑫ 12 Amperes:		-70					-75									
⑮ 15 Amperes:		-75					-70									
-40 to +90 °C																
Special Variations (Return Loss of 18 dB for LDC1085 and LDC1125)																
Model		5	10	20	40	50	100	150	200	300	400	500	600	700	800	1000
LDC1085	No. 2&3	5.20	5.10	5.00	4.90	4.90	5.15	5.45	5.55	5.90	6.30	6.85	7.40	7.40	7.40	MAX
	No. 4	5.50	5.40	5.20	5.10	5.10	5.35	5.65	5.80	6.25	6.70	7.40	7.40	7.40	7.40	MAX
	ISO AC	9.60	9.00	8.80	8.80	8.80	8.75	8.45	8.05	7.95	7.40	7.25	7.25	7.25	7.25	MAX
LDC1125	No. 2&3	4.30	4.15	4.00	4.00	4.00	4.30	4.50	4.70	5.15	5.60	6.40	6.40	6.40	6.40	TYP
	No. 4	4.70	4.50	4.30	4.30	4.30	4.55	4.75	4.95	5.40	5.95	7.00	7.00	7.00	7.00	MAX
	ISO AC	12.20	12.10	12.00	12.00	12.00	11.70	11.40	11.30	10.85	10.75	10.45	10.45	10.45	10.45	MAX
LDC1100	AC Current Rating:	25 Amperes														
	Resistance between Ports:	25 mΩ max														

All Specifications subject to change without notice

As an inrush current protection device, the Lindsay LPD100-2 Power Delay circuit is used to delay the supply of power to one portion of the system. Its use is recommended where the required start-up surge is greater than the maximum current rating of the AC power supply. By inserting the LPD module in the AC path, the load is partitioned into segments, each with lower start-up current. When AC power is applied to the system the LPD circuit is activated and completes the AC path only after an approximate delay of 4 seconds.

SPECIFICATIONS	
Voltage	40 - 110 VAC sine wave, 50-60 Hz
Line Current	10 Amps, max. continuous, 250 Amps peak
Line Voltage Drop	1 volt
Current Consumption	0.3 A RMS
Delay (approx.)	4 seconds
Detection Time	1 Cycle (50-60 Hz)

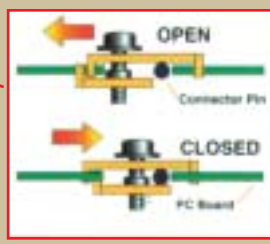
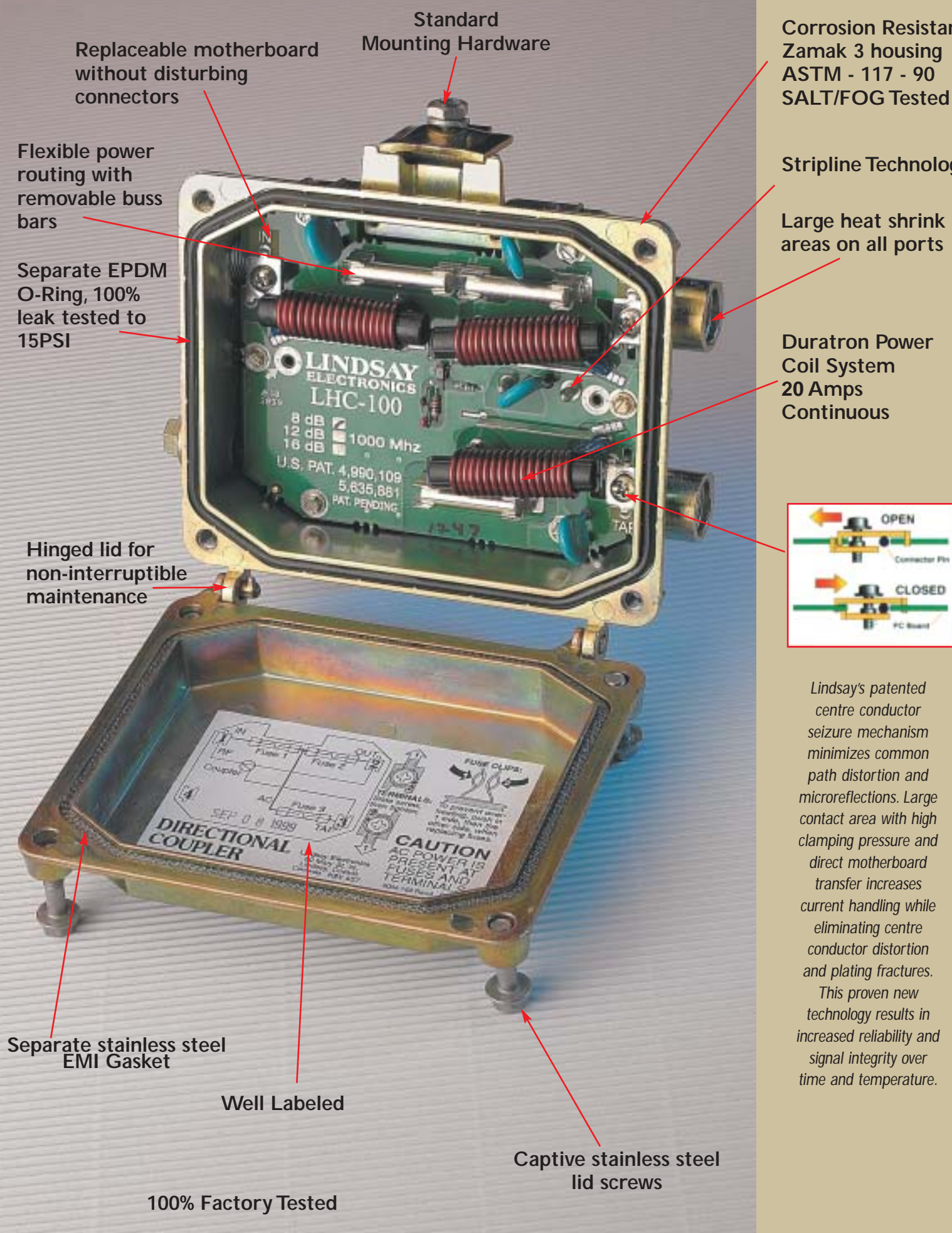
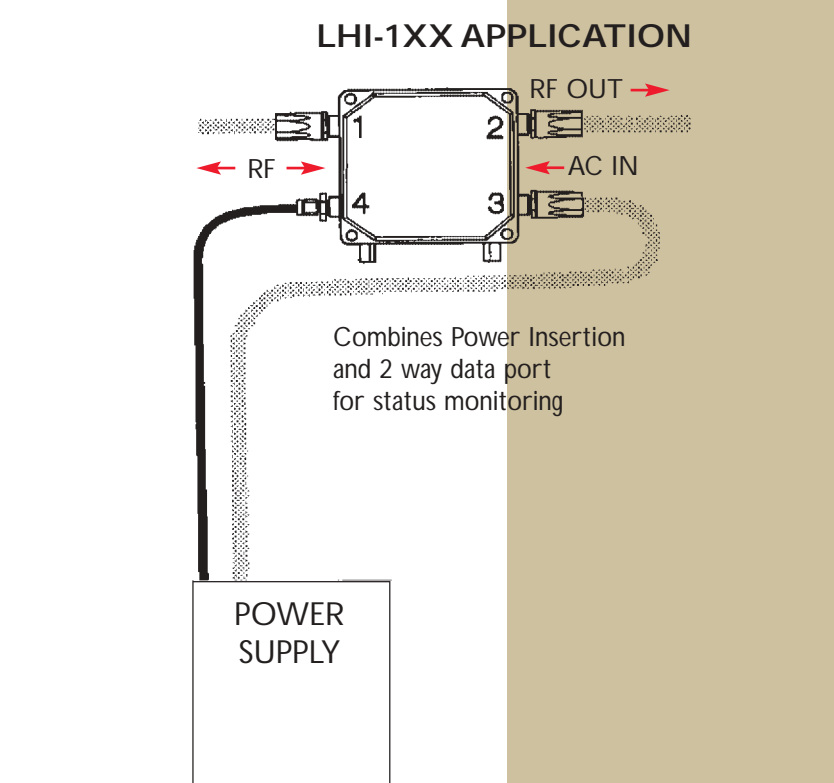
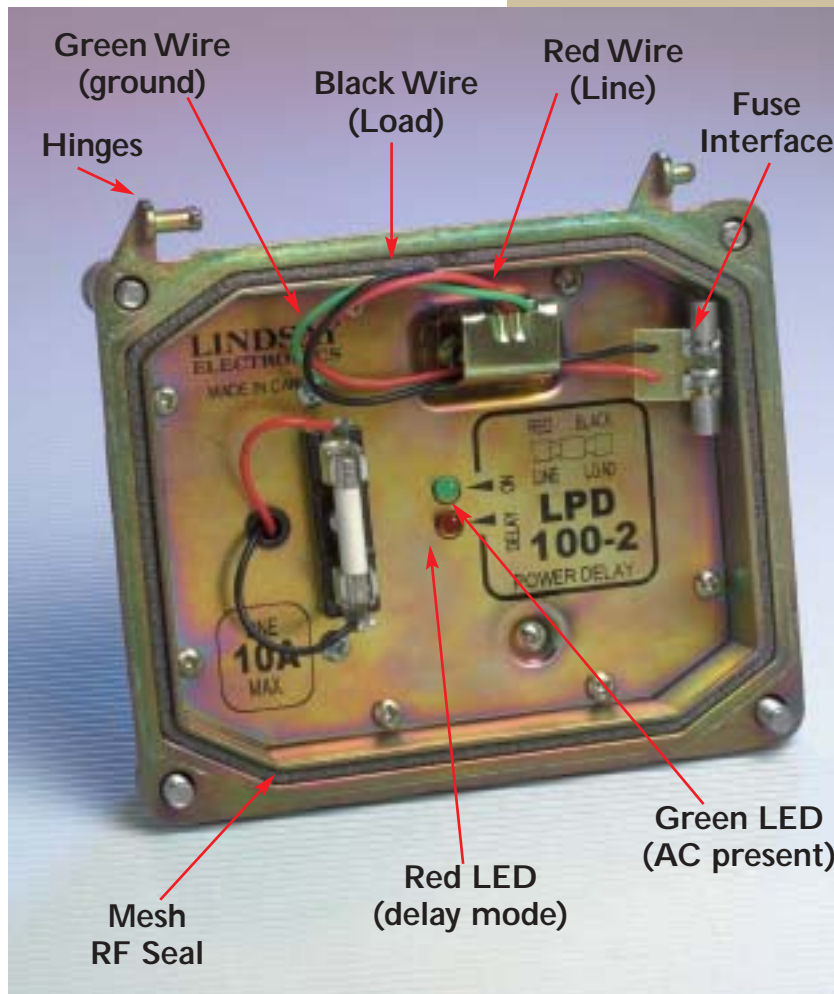


6-444 LINDSAY SURGE CLAMP



Constant - Repetitive AC RMS S4070 device.....70 A Max.
Voltage (Forward & Reverse) AC RMS.....400 V Max.
Rate of "turn off" voltage1500 V/uSec.
Rate of "commutation" voltage (dv/dt).....40 V/uSec.
Voltage Triggering range (before activated).....140-170 V AC.
Current (1 cycle) Non-Repetitive (60 Hz).....950 A Max.
Current (1 cycle) Non-Repetitive (50 Hz).....800 A Max.
Fuse action current (8.3 mSec).....3745 A*Sec Max.

Engineered Solutions
LPD100-2 POWER DELAY MODULE



Lindsay's patented centre conductor seizure mechanism minimizes common path distortion and microreflections. Large contact area with high clamping pressure and direct motherboard transfer increases current handling while eliminating centre conductor distortion and plating fractures. This proven new technology results in increased reliability and signal integrity over time and temperature.