



## ULV 600 - 1200

### DYNAMIC BRAKING 600 W TO 1200 W (UL® RECOGNIZED)

Designed for larger electrical loads, the 600-1200 watt models are UL® recognized metal-clad, wire-wound, high power resistors for use in industrial drives and other applications. The rugged, extruded aluminum housing provides electrical isolation and simple two-screw mounting. These models are available with flying leads or tab terminals and can be ordered with inductive or non-inductive windings. All four package sizes are available with internally mounted, UL listed, thermostat circuits.

### GENERAL SPECIFICATIONS

Model	Power Rating on Heat Sink	Resistance Range (ohms)						Resistance Tolerance
		Inductive			Non-Inductive			
		Tab TP*	Tab TS*	Flying Leads	Tab TP*	Tab TS*	Flying Leads	
ULV600	600	0.1-9	9.1-94	0.1-94	0.1-5.3	5.4-21.2	0.1-21.2	±2.0(G)
ULV800	800	0.1-11	11.1-112	0.14-112	0.1-7.2	7.3-28.8	0.14-28.8	±5.0(J)
ULV1000	1000	0.1-18	18.1-90	0.17-140	0.1-9	9.1-36	0.17-36	±10(K)
ULV1200	1200	0.1-25	25.1-75	0.21-160	0.1-12	12.1-48	0.21-48	

NOTE: Tab TP: Tab Terminal Parallel Connection  
Tab TS: Tab Terminal Series Connection

All models available with thermostat circuit. Contact Isotek Technical Support for calibration temperatures.

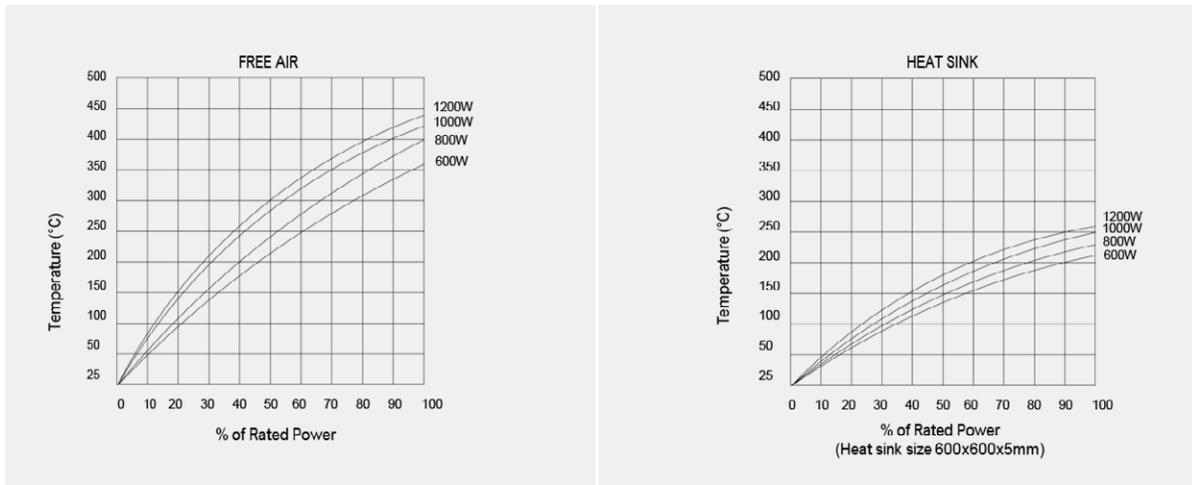
### CHARACTERISTICS

Values in [ ] indicate change in Ω after test

Temperature Range	-55°C to 200°C
Insulation Resistance	20MΩ minimum
Dielectric Strength	[1000V + (rated voltage x 2)] minimum
Temperature Coefficient	±260 ppm/°C maximum
Short Time Overload	± [2% + 0.05 Ω] 10 x power rating - 5 seconds
Moisture Resistance	± [3% + 0.05 Ω] 40°C, 95% Rh, DC100V case to terminal (500 hours)
Thermal Shock	± [2% + 0.05 Ω] Power rating - 30 minutes, -25°C - 15 minutes
Vibration	± [1% + 0.05 Ω] 10Hz - 55Hz - 10Hz (1 minute) 2 hours each direction
Moisture Load Life	± [3% + 0.05 Ω] 40°C, 95% Rh, 0.1 x power rating, 1.5 hours on, 30 minutes off, 500 hours
Load Life	± [5% + 0.05 Ω] Power rating 1.5 hours on, 30 minutes off, 500 hours

Applied voltage: AC RMS

### SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD



A mid-point bracket is required for 600-1200W models to ensure sufficient contact with the heat sink.

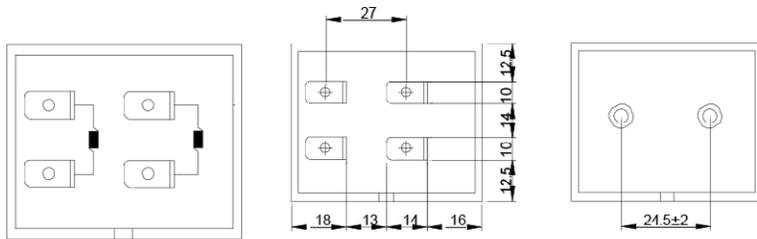


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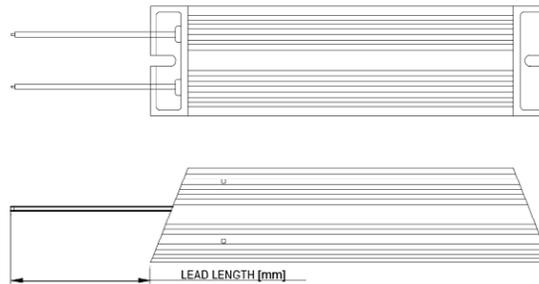
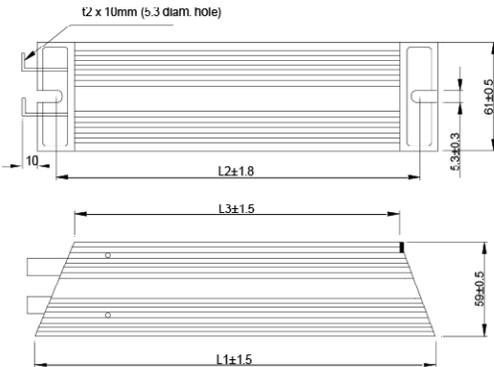
HIGH POWER METAL CLAD RESISTORS (UL® RECOGNIZED)

DIMENSIONS

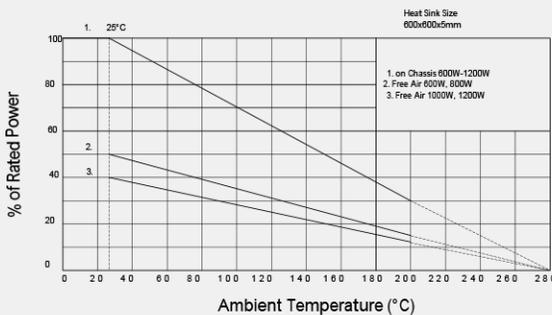
Model	Dimensions [mm]			Weight [g]	Flying Leads UL E120271(AWM), No. 3512 AWG10
	L1	L2	L3		
ULV600	235	216	195	1165	0.11 Ω ~
ULV800	285	266	245	1500	0.14 Ω ~
ULV1000	335	316	295	1835	0.17 Ω ~
ULV1200	05	386	365	2304	0.21 Ω ~



The ULV600-1200 series contain two identical, isolated elements, each with a set of terminals as shown. The two elements are connected in series or parallel with metal jumpers as requested (indicated by "S" or "P" in the part number). These connections must remain intact as the final resistance value, coupled with the configuration, determine the resistance of each element. The elements are internally configured when ordered with flying leads.



DERATING CURVE AND ORDERING PROCEDURE EXAMPLE



Ordering example with leads

ULV 1200 N 25Ω J FL500  
 Model Wattage Non-Ind. Resistance Tolerance Lead Length

Ordering example with terminals

ULV 1000 P 20Ω J  
 Model Wattage Non-Ind. Resistance Tolerance