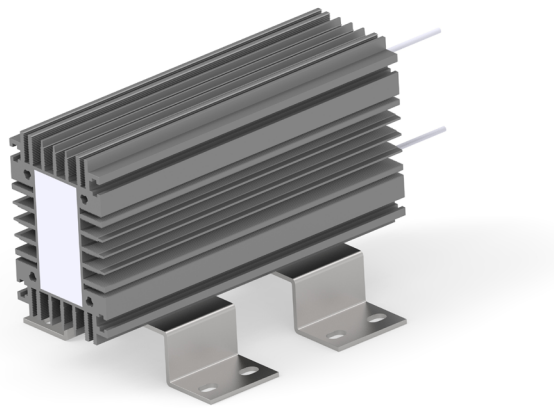
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ALUMINIUM HOUSED RESISTOR

TYPE CJB SERIES

INTRODUCTION

TE Connectivity (TE) introduces its multiple mounting option wire wound resistor, the CJB Series. Manufactured with aluminium sections and with no need of additional heatsinking, this resistor can be used in applications where space is limited. These resistors are designed to absorb high power overloads which makes them suitable for braking applications. This high impulse absorption capability also makes them a good choice for a range of power electronic circuits including frequency convertors, servo drives and robotic controls. The performance of this resistor is greatly improved with forced air cooling.



FEATURES

- Multiple mounting options
- High power overload absorption
- Good for limited application space
- Ingress protection to IP65

APPLICATIONS

- Braking
- Frequency converters
- Servo drives
- Robotic controls

ELECTRICAL CHARACTERISTICS

TE Part Number	CJB315	CJB400	CJB525	CJB650	CJB1000	CJB1230	CJB1475	CJB1700
Rated Power@40°C (Watts) vertical mount	315	400	525	650	1000	1230	1475	1700
Max Temp Rise (°C)	265	270	275	280	285	295	305	310
Ohmic Value Min (Ω)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Ohmic Value Max (Ω)*	1000	1000	1000	1000	1000	1000	1000	1000
Max. Operating Voltage (AC) (f=50 Hz)	690VAC							
Max. Operating Voltage (DC)	1100VDC							
Insulation Resistance	>20MΩ							
Tolerance	±5%							
Dielectric Strength (f=50Hz, 1 Min)	3500VAC for 1 minute							
Temperature Coefficient of Resistance (TCR)	≤200ppm/°C							
Operating temperature range	-40°C ~ 200°C							
Resistor Element	Wire Wound							
Cable	300mm Standard; Insulated AWG16; 600V; 200°C							
Resistor Body	Anodized Extruded Aluminium Profile							
Mounting Orientation	Mounting feet, screws and washers are supplied in a kit form for user to fit as per mounting requirements in their application.							
Net Weight (GR's)	1357	1679	2147	2605	3057	3816	4490	5274

Note:

1) Horizontal Mounting Derating : 80% of rated Power

*Preferred resistance range up to 100Ω, Resistances above 100Ω available on request

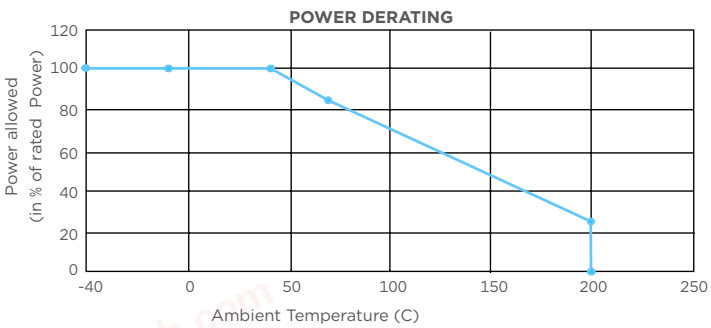
ALUMINIUM HOUSED RESISOR
TYPE CJB SERIES

ENVIRONMENTAL CHARACTERISTICS

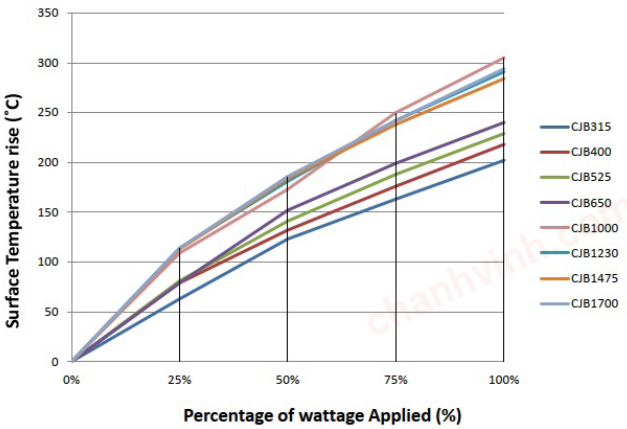
Characteristics	Specification	Test Methods
Load Life	ΔR±10%	1000hrs @ room temperature vertical orientation RCWV applied
Damp Heat Steady State	ΔR±5%	RH 90-95% 56 days
Insulation Resistance	>20MΩ	1000VDC
Dielectric Strength	No Breakdown within 60 seconds. Leakage Current < 10mA	3500VAC for 60 secs terminal to housing
Temperature Co-efficient of Resistance	+/- 200ppm/C	-40°C / 25°C / 70°C / 125°C
Ingress Protection - IP65	No trace of dust & water droplets interference in the unit & performance of resistor. No breakdown should occur when Dielectric test conducted at 3500VAC.	Resistors tested to confirm that they can meet IP65 rating. This test confirms that the resistors are dustproof and can withstand low pressure water jets from any angle without any impact on the electrical properties of the resistor. Dielectric test conducted at 3500VAC. IEC 60529
Overload Capability	ΔR ±10% See Pulse Rating Chart	1, 5, and 40 second overload within 120 second duty cycle Number of cycles – 10,000 min.
Low Temperature performance	ΔR±5%	IEC 60115-1 Method 10.2 1 cycle

Item	Temperature	Time	Power
Measure	Room Temp	-	-
Cool and stabilise	Room Temp ~ -40°C	1.5h	Unpowered
Maintain	-40°C	1h	Unpowered
Maintain	-40°C	45m	Rated Power
Maintain	-40°C	15m	Unpowered
Heat and stabilise	-40 ~ Room Temp		Unpowered
Recovery	Room Temp	24h	Unpowered
Measure	Room Temp	-	-

DERATING CURVE



TEMPERATURE RISE CHART



Note:

1. Horizontal Mounting Derating : 80% of rated Power

ALUMINIUM HOUSED RESISOR
TYPE CJB SERIES

PULSE RATING FOR VERTICAL CONFIGURATION

Type	Power Rating (Watts)	Resistance Value (Ω)	Pulse Load Rating W @ 40°C Ambient, Cycle Time=120 Sec		
			1 Sec	5 Sec	40 Sec
CJB315	315	4.7	12000	2700	900
CJB315	315	6.8	12000	2700	900
CJB315	315	10	12000	2700	900
CJB315	315	15	12000	2700	900
CJB315	315	22	10800	2600	900
CJB315	315	33	9500	2500	900
CJB315	315	47	9100	2400	900
CJB315	315	68	7500	2400	900
CJB315	315	100	7000	2400	900
CJB400	400	4.7	17500	5200	1150
CJB400	400	6.8	17500	5200	1150
CJB400	400	10	17800	5200	1150
CJB400	400	15	17500	5200	1150
CJB400	400	22	17250	5200	1150
CJB400	400	33	16500	5000	1150
CJB400	400	47	16500	4200	1050
CJB400	400	68	12000	3200	1000
CJB400	400	100	9500	3200	1000
CJB525	525	4.7	30500	8300	1600
CJB525	525	6.8	30500	8300	1600
CJB525	525	10	25500	7400	1600
CJB525	525	15	25000	7500	1600
CJB525	525	22	25000	7600	1600
CJB525	525	33	25000	7500	1600
CJB525	525	47	25000	7600	1600
CJB525	525	68	22500	6000	1450
CJB525	525	100	22500	5600	1450
CJB650	650	4.7	38400	11400	2400
CJB650	650	6.8	38400	11400	2400
CJB650	650	10	33000	11200	2400
CJB650	650	15	35000	11300	2400
CJB650	650	22	28000	10000	2400
CJB650	650	33	35000	10500	2400
CJB650	650	47	35000	10500	2400
CJB650	650	68	32000	10500	2400
CJB650	650	100	28000	10500	2400
CJB1000	1000	4.7	40500	12900	2900
CJB1000	1000	6.8	40500	12900	2900
CJB1000	1000	10	39000	12900	2900
CJB1000	1000	15	37500	12900	2900

ALUMINIUM HOUSED RESISOR
TYPE CJB SERIES

Type	Power Rating (Watts)	Resistance Value (Ω)	Pulse Load Rating W @ 40°C Ambient, Cycle Time=120 Sec		
			1 Sec	5 Sec	40 Sec
CJB1000	1000	22	35000	12900	2900
CJB1000	1000	33	36500	12000	2700
CJB1000	1000	47	41000	12000	2700
CJB1000	1000	68	39000	12000	2700
CJB1000	1000	100	35000	11000	2700
CJB1230	1230	4.7	55000	16100	3600
CJB1230	1230	6.8	55000	16100	3600
CJB1230	1230	10	49100	15000	3600
CJB1230	1230	15	46000	15000	3600
CJB1230	1230	22	47000	15500	3600
CJB1230	1230	33	41000	15000	3600
CJB1230	1230	47	46000	15000	3600
CJB1230	1230	68	49100	15000	3600
CJB1230	1230	100	49100	15000	3600
CJB1475	1475	4.7	70000	19600	4400
CJB1475	1475	6.8	70000	19600	4400
CJB1475	1475	10	60600	17500	4400
CJB1475	1475	15	55000	16500	4400
CJB1475	1475	22	60000	17500	4400
CJB1475	1475	33	49000	16000	4200
CJB1475	1475	47	49000	16000	4200
CJB1475	1475	68	60600	16500	4200
CJB1475	1475	100	60600	16500	4200
CJB1700	1700	4.7	105000	23400	5200
CJB1700	1700	6.8	105000	23400	5200
CJB1700	1700	10	75000	23400	5200
CJB1700	1700	15	74000	23400	5200
CJB1700	1700	22	72000	23400	5000
CJB1700	1700	33	63000	23400	5000
CJB1700	1700	47	68000	23400	5000
CJB1700	1700	68	68000	23400	5000
CJB1700	1700	100	65000	23400	5000

MARKING

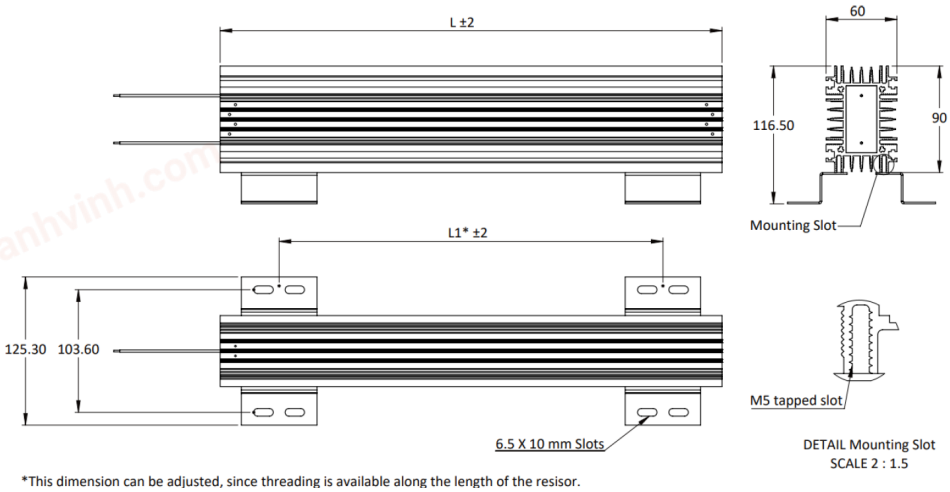
1. Company name or Logo
2. TE Series Number
3. Resistance Value
4. Tolerance
5. Date Code

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ALUMINIUM HOUSED RESISOR
TYPE CJB SERIES

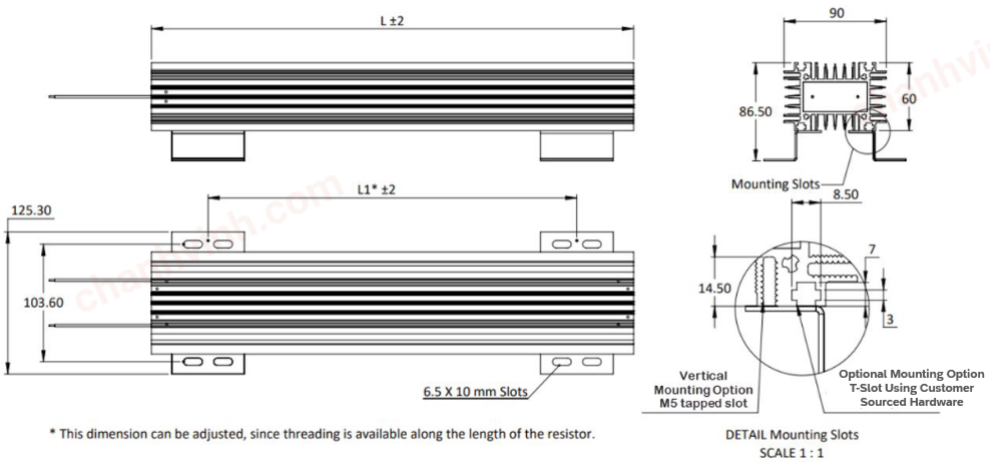
DIMENSIONS (mm)

Vertical Mounting (preferred)



*This dimension can be adjusted, since threading is available along the length of the resisor.

Horizontal Mounting



* This dimension can be adjusted, since threading is available along the length of the resistor.

Note:

1. Note larger models (CJB1230 and upward) supplied with 6 feet

	CJB315	CJB400	CJB525	CJB650	CJB1000	CJB1230	CJB1475	CJB1700
L (mm)	175	225	295	365	425	525	625	725
L1 (mm)	75	125	195	265	325	425	525	625

PACKAGING

All resistors are individually boxed, including the mounting kit, then packaged in a shipping carton as below.

SHIPPER CARTON DIMENSIONS (mm)

	CJB315	CJB400	CJB525	CJB650	CJB1000	CJB1230	CJB1475	CJB1700
Length	345	345	485	485	645	645	845	845
Width	245	245	245	245	245	245	245	245
Height	180	180	180	180	105	105	105	105
Qty Per Box	4	4	4	4	2	2	2	2
Gross Weight (GR's)	7077	8285	10864	12575	7879	9337	11264	12772

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PRODUCT CODE STRUCTURE



Type

CJB	Aluminium Housed Resistor

Model type

315	315W
400	400W
525	525 – 525W Etc...

Tolerance

J	5%

Resistance Value

6R8	6.8Ω
10R	10Ω
100R	100Ω

Connection

J	Lead

te.com

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1-1773309-0 REV:B 10/23