

Type CJH Series

Key Features

Up to 5000W
power rating

Aluminium
enclosure

Vibration
resistant

Applications

Power supplies

Inverters

Servo Motors
and Drives

Warehouse
Automation

Electrical
systems in
difficult
environments



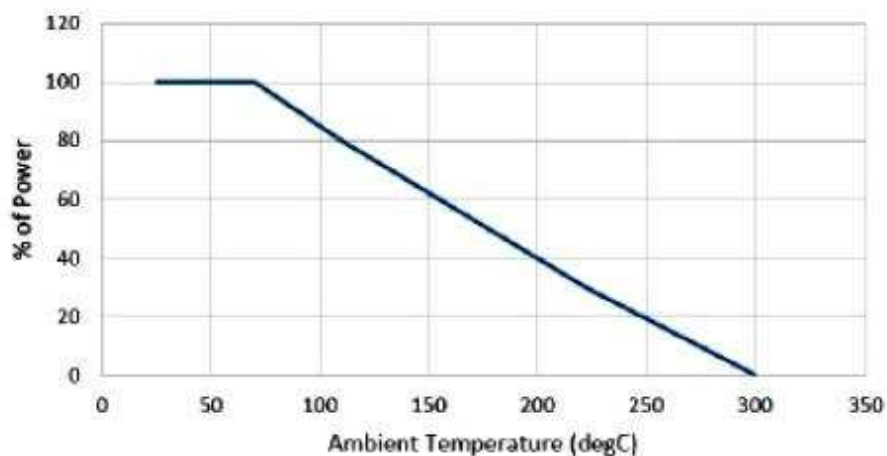
The CJH Series of resistors are an economical and compact aluminium housed resistor with good electrical stability and reliability. With power ratings up to 5000W they are suited to a range of electrical circuits including power supplies inverters and servo systems. With very good durability and mineral filled construction they are particularly good for braking and other pulse applications.

Characteristics – Electrical

Type	CJH1250	CJH1500	CJH2000	CJH3000	CJH4000	CJH5000
Rated Power (free air) W	1250	1500	2000	3000	4000	5000
Ohmic Value (Min.) Ω	2.0	6.0	10	10	18	20
Ohmic Value (Max.) Ω	2.0K	2.0K	1.0K	1.2K	1.8K	2.2K
Tolerance	5%					
Temperature Coefficient of Resistance (TCR)	$\pm 200\text{PPM}/^{\circ}\text{C}$ Max.					
Short Term Overload	10 x Rated Power for 5 Seconds					
Limiting element voltage	600V AC/ 850V DC					
Dielectric Strength	3kVAC					
Insulation resistance	$>1000\text{M}\Omega$ @500VDC					
Operating Temperature	$-25 \sim 250^{\circ}\text{C}$					
Weight (g)	2000	2100	3500	3500	4160	4860

Operating Voltage= $\sqrt{P \cdot R}$ or Max. operating voltage listed above, whichever is lower.

Derating Curve

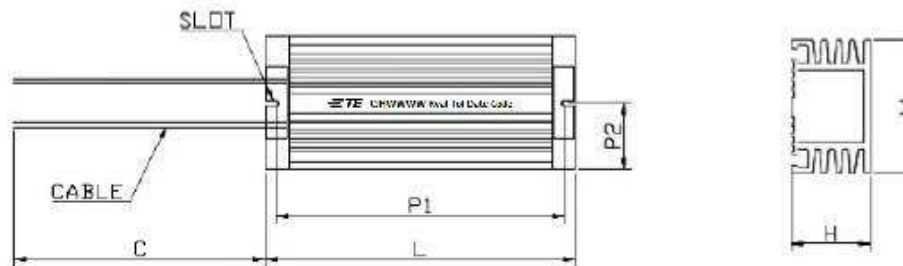


Environmental Characteristics

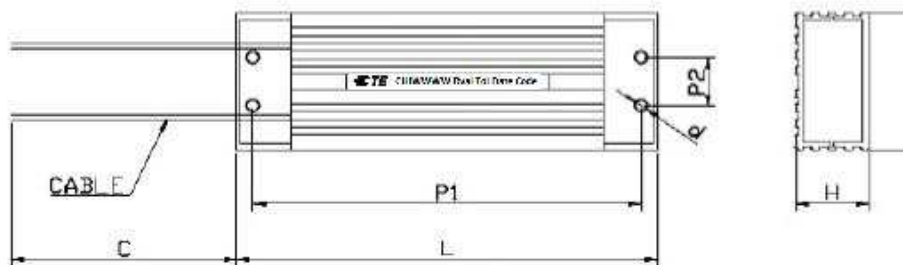
Characteristics	Limits	Test Methods
Insulation Resistance	Insulation resistance is 100M Ω min.	Dry / Normal 500VDC
Dielectric Withstand Voltage	No evidence of flashover, mechanical damage, arcing, or insulation breakdown	3000VAC for 1 minute
Short Time Overload	$\Delta R \pm (2\% + 0.05\Omega)$ Max. with no evidence of mechanical damage	Permanent resistance change after the application voltage at $\leq 60W$ - 5 x Rated Power for 5sec $> 60W$ - 10 x Rated Power for 5 sec
Humidity	$\Delta R < \pm(3\% + 0.05\Omega)$	40°C, 90% Rh, 240Hrs
Load Life	$\Delta R \pm (2\% + 0.05\Omega)$ Max. with no evidence of mechanical damage	Permanent resistance change after 500 hours operating at RCWV with duty cycle of (1.5 hours "on", 0.5 hour "off") at room temperature
Vibration	No Mechanical or Electrical Damage	In accordance with IEC 60068-2-6 / Vibration Test as per IEC 61373:2010, Category 1, Class B

Dimensions (mm)

CJH1250 / 1500



CJH2000 – CJH5000



Model	L±1	W±1	H±1	C±1	P1±0.5	P2±0.5
CJH1250	400	67	38	290	385	---
CJH1500	495	67	38	290	480	---
CJH2000	400	103	52	290	390	40
CJH3000	400	103	52	290	390	40
CJH4000	450	103	52	290	440	40
CJH5000	550	103	52	290	540	40

Mounting

Model	Mounting Detail ±0.5
CJH1250	7 x 10 SLOT
CJH1500	7 x 10 SLOT
CJH2000	Holes $\varnothing 6\text{mm}$
CJH3000	Holes $\varnothing 6\text{mm}$
CJH4000	Holes $\varnothing 6\text{mm}$
CJH5000	Holes $\varnothing 6\text{mm}$

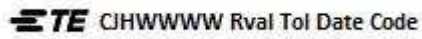


Connection Cable

Termination Cables: UL Approved FEP cables for the terminations, based on the resistor current rating (see chart below) With E5 ring terminals

Current Rating	Cable Size used
≤ 15A	16 AWG
>15A & ≤25A	14 AWG
>25A & ≤35A	12 AWG

Marking:



- 1 Company name or Logo
- 2 TE Series Number
- 3 Resistance Value
- 4 Tolerance
- 5 Date Code (YYWW)

Style of Marking – Laser

How To Order

CJH	2000	J	1K0	J
Common Part	Power Rating	Tolerance	Resistance Value	Connecti on
CJH – Aluminium Housed Power resistor	1250 1250W 1500 1500W 2000 2000W Etc.	J - ±5%	1 Ω- 1R0 10Ω- 10R 100Ω - 100R 1000Ω (1KΩ)- 1K0	J - Lead

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

[CJH1250J100RJ](#) [CJH1250J10RJ](#) [CJH1250J120RJ](#) [CJH1250J12RJ](#) [CJH1250J150RJ](#) [CJH1250J15RJ](#)
[CJH1250J180RJ](#) [CJH1250J18RJ](#) [CJH1250J1K0J](#) [CJH1250J1K2J](#) [CJH1250J1K5J](#) [CJH1250J1K8J](#) [CJH1250J220RJ](#)
[CJH1250J22RJ](#) [CJH1250J270RJ](#) [CJH1250J27RJ](#) [CJH1250J2R2J](#) [CJH1250J2R7J](#) [CJH1250J330RJ](#)
[CJH1250J33RJ](#) [CJH1250J390RJ](#) [CJH1250J39RJ](#) [CJH1250J3R3J](#) [CJH1250J3R9J](#) [CJH1250J470RJ](#)
[CJH1250J47RJ](#) [CJH1250J4R7J](#) [CJH1250J560RJ](#) [CJH1250J56RJ](#) [CJH1250J5R6J](#) [CJH1250J680RJ](#)
[CJH1250J68RJ](#) [CJH1250J6R8J](#) [CJH1250J820RJ](#) [CJH1250J82RJ](#) [CJH1250J8R2J](#) [CJH1500J100RJ](#)
[CJH1500J10RJ](#) [CJH1500J120RJ](#) [CJH1500J12RJ](#) [CJH1500J150RJ](#) [CJH1500J15RJ](#) [CJH1500J180RJ](#)
[CJH1500J18RJ](#) [CJH1500J1K0J](#) [CJH1500J1K2J](#) [CJH1500J1K5J](#) [CJH1500J1K8J](#) [CJH1500J220RJ](#) [CJH1500J22RJ](#)
[CJH1500J270RJ](#) [CJH1500J27RJ](#) [CJH1500J330RJ](#) [CJH1500J33RJ](#) [CJH1500J390RJ](#) [CJH1500J39RJ](#)
[CJH1500J470RJ](#) [CJH1500J47RJ](#) [CJH1500J560RJ](#) [CJH1500J56RJ](#) [CJH1500J680RJ](#) [CJH1500J68RJ](#)
[CJH1500J6R8J](#) [CJH1500J820RJ](#) [CJH1500J82RJ](#) [CJH1500J8R2J](#) [CJH2000J100RJ](#) [CJH2000J10RJ](#)
[CJH2000J120RJ](#) [CJH2000J12RJ](#) [CJH2000J150RJ](#) [CJH2000J15RJ](#) [CJH2000J180RJ](#) [CJH2000J18RJ](#)
[CJH2000J1K0J](#) [CJH2000J220RJ](#) [CJH2000J22RJ](#) [CJH2000J270RJ](#) [CJH2000J27RJ](#) [CJH2000J330RJ](#)
[CJH2000J33RJ](#) [CJH2000J390RJ](#) [CJH2000J39RJ](#) [CJH2000J470RJ](#) [CJH2000J47RJ](#) [CJH2000J560RJ](#)
[CJH2000J56RJ](#) [CJH2000J680RJ](#) [CJH2000J68RJ](#) [CJH2000J820RJ](#) [CJH2000J82RJ](#) [CJH3000J100RJ](#)
[CJH3000J10RJ](#) [CJH3000J120RJ](#) [CJH3000J12RJ](#) [CJH3000J150RJ](#) [CJH3000J15RJ](#) [CJH3000J180RJ](#)
[CJH3000J18RJ](#) [CJH3000J1K0J](#)