

KWK RESISTORS INDIA



KCBR SERIES - DYNAMIC BRAKING RESISTOR

The KCBR is a high quality, high stability Dynamic Braking Resistor series, designed to suit inverter drives of various makes. A wide range of resistance values are available in 0.5kW to 12kW Braking Resistors.

The specially designed Helical Coil type resistor elements are used for high efficiency and faster cooling.

Design of higher wattage resistors for special application can be done with ease.

Features:

- Medium to High resistance values with high overload capacity.
- Stainless Steel enclosure with separate terminals compartment.
- IP20 enclosure.
- Easy to install and use - base or wall mountable.
- Thermal cutoff offered as an option.
- Drip proof cover & enclosure can be provided.
- Axial fan can be fitted on request.



ELECTRICAL SPECIFICATIONS

Characteristics	Condition	Compliance
Rated Power	0.5kW to 12kW	Continuous power
Peak Power	5 x Rated power	For up to 12% Duty cycle (of 120sec cycle max)
Resistance Tolerance	±5% and ±10%	
Insulation Resistance	Dry/Normal @500V DC	>500MΩ
Hipot Test	2000V AC	For 1 minute
Environmental Protection	IP20	

DUTY CYCLE vs POWER CURVE

The Peak power at different duty cycles is given in the graph:

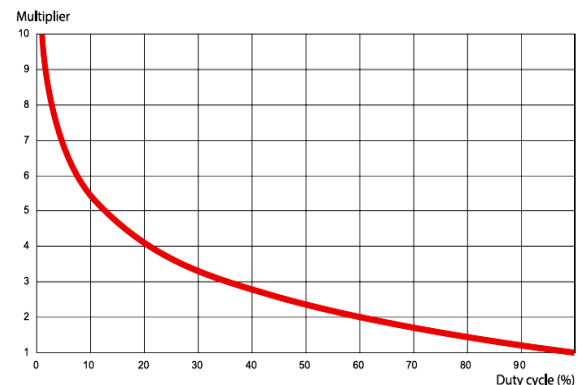
$$\text{Peak Power@ duty cycle} = \text{Rated Continuous power} \times \text{Multiplier}$$

Refer Curve to decide peak power for a given duty cycle.

As an example:

Consider KCBR10,

1. Rated Power is 1000 W
2. At a 10% Duty Cycle, Multiplier is 5.5
3. So Peak Power is $1000W \times 5.5 = 5500W$ for 12 secs max
4. Similarly,
 - @40% duty cycle Peak power will be 2750W for 48sec.
 - @80% duty cycle Peak power will be 1500W for 96sec.



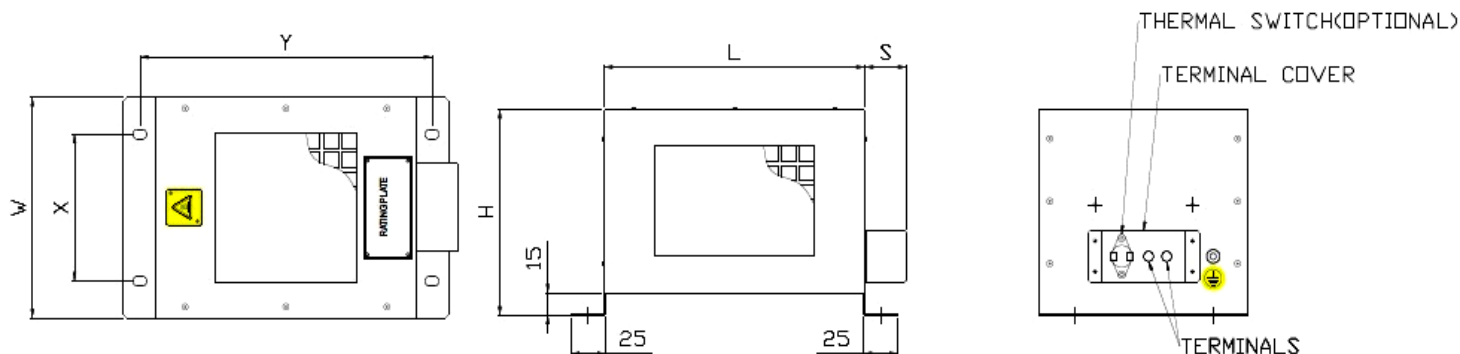
Maximum Duty considered as 120secs

KWK RESISTORS INDIA



KCBR SERIES - DYNAMIC BRAKING RESISTOR

RESISTANCE RANGE AND DIMENSIONAL DETAILS



Note: All dimension are in mm.

Series	Rated Power (W)	Resistance Range	L ±3	W ±3	H ±3	X ±1	Y ±1	S	Connector suitable for max cable size
KCBR 05	500	14Ω - 250Ω	187	125	115	95	210	35	2 Way, ceramic terminal block Stranded Wire: 2.5sq.mm Solid wire: 4.0sq.mm
KCBR 10	1000	14Ω - 120Ω	187	150	140	100	210	35	
KCBR 15	1500	14Ω - 160Ω	187	220	140	170	210	35	
KCBR 20	2000	8Ω - 100Ω	187	200	185	150	210	35	2 Way, ceramic terminal block Stranded Wire: 4.0sq.mm Solid wire: 6.0sq.mm
KCBR 30	3000	8Ω - 100Ω	187	250	225	200	210	40	
KCBR 40	4000	6Ω - 80Ω	372	200	185	150	395	40	
KCBR 50	5000	4Ω - 80Ω	372	250	225	200	395	40	2 Way, ceramic terminal block Stranded Wire: 10.0sq.mm Solid wire: 16.0sq.mm
KCBR 60	6000	3Ω - 60Ω	372	250	225	200	395	40	
KCBR 90	9000	2.8Ω - 45Ω	372	410	365	310	395	40	
KCBR 120	12000	2.8Ω - 28Ω	372	510	365	410	395	40	

ORDERING DETAILS

KCBRseries R T S

KCBRseries- Series Model #

R - Resistance Value

T - Tolerance Code (±5% - J, ±10% - K)

S - Thermal Switch to be included. By default, not included.

Example: KCBR1020RJS - KCBR10 20R ±5% WITH THERMAL SWITCH

Disclaimer: Product specifications, data and dimensions are subject to change without any prior notice to improve performance, reliability and design.

Please feel free to contact us for any assistance required to choose the right solution. We are also able to design Custom Resistive Solutions.

KWK Resistors India Pvt. Ltd.

Reg. Office: B-81, Industrial Estate, Rajajinagar, Bengaluru-560044.India

Works: #72, 3rd main, 2nd stage, Industrial suburb, Yeshwanthpur, Bengaluru-560022.India

Ph.:+91-80-23370038, Tele/Fax:+91-80-23370046 Email: contact@kwk-resistors.in

