# // Precision Electronic Components Mfg. Co.

Premium Grade Components

For Original, Innovative and Cost-Effective Solutions to demanding Specifications

# **ALUMINIUM HOUSED RESISTOR**

dissipating high power where space is at a premium and heat sinking is
available. The resistor is capable of absorbing high overloads in
relation to its size.
The resistors are ideal for use in some drives 9 controllers and

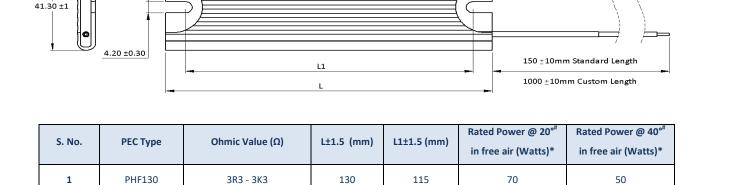
The PHF resistors are designed in an ultra thin package capable of

The resistors are ideal for use in servo drives & controllers and frequency inverters. They are used for motor braking, dummy loads and in conventional power resistor applications.

TECHNICAL DATA				
Resistor Type	PHF			
Tolerance	±5%, ±10% (±1%, ±2% Possible on Request)			
Maximum Operating Voltage V <sub>AC</sub> (f=50Hz)	1000V; In accordance with UL 508 specification reduced to 600V			
Maximum Operating Voltage V <sub>DC</sub>	1414V; In accordance with UL 508 specification reduced to 848V			
Surge Voltage Capability (V) (Between active part and housing)	4000 V; in accordance with IEC 61800-5-1			
Insulation Resistance	≥100MΩ @ 500 V <sub>DC</sub>			
Dielectric Strength (f=50Hz, 1Min)	2200 VAC for 1 Minute			
TCR	-80 to 200ppm/°C			
Resistor Element	Wire Wound Resistor			
Cable	Standard insulated 18AWG,600V,200°C			
Resistor Body	Anodized Extruded Aluminium Profile			
UL File Number	E514636			

## **COMPONENT DRAWING:**

7.25 ±0.20



\*Resistor is placed vertically, and its surface temperature is not exceeding 275°C. Maximum allowed temperature rise is 250°C. <sup>#</sup>Ambient Temperature specified at 20°C/40°C.

165

Aluminium Housing

4R7 – 5K6

PHF165

2

150

65



Since 1972

Insulated

cable, 18 AWG

600V, 200 °C

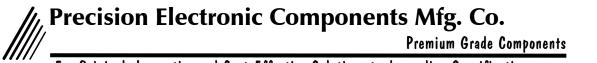
Sleeve

50 ±5

100

**CNUS** PHF





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# ALUMINIUM HOUSED RESISTOR

40

60

PHF165, Heatsink Mounted \*\*

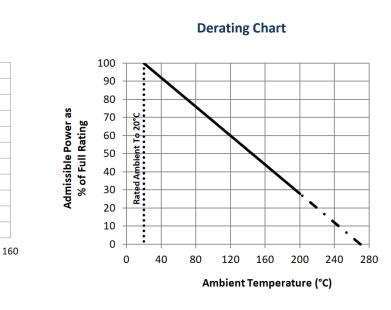
PHF130, Heatsink Mounted \*\*

80

Nominal Power (W)

PHF165, Without Heatsink, Vertically Mounted

PHF130, Without Heatsink, Vertically Mounted



CNUS PHF

# **Power VS Surface Temperature Rise**

100

120

140

\*\* All tests are conducted using a 0.5°C/W rated heat sink. A thermal transfer compound must be applied to ensure low thermal resistance between resistor and heat sink. The heat sink must be flat to ensure good contact with the resistor.

#### **ORDERING CODE:**

275

250

225

200

175

150

125

100

75

50

25

0

\_ \_ \_

0

20

Surfaec Temperature Rise (°C)

PEC Type	Ohmic Value	Tolerance	Dielectric Voltage	Termination	Cable Length
PHF165	4.3Ω - 4R3 10Ω - 10R 5000Ω - 5K	5%-Ј 10%-К	Standard -S	Cable- C Special - M	Standard-X Custom-M-Length
PHF130	3.3Ω - 3R3 100Ω - 100R 3300Ω - 3K3	5%-Ј 10%-К	Standard -S	Cable- C Special - M	Standard-X Custom-M-Length

#### FULL PART NUMBER: PHF165-47R-KSCX

#### PHF130-110R-KSCX





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