

Technical Characteristics

Materials

Shells and backshells	Aluminium alloy
Latch ring	Aluminium alloy
Insulators	Insulators - glass reinforced PPS Finger proof components - glass reinforced Nylon 66
Contacts	Copper alloy
Socket wires	Copper beryllium alloy
Crimp lugs	Copper alloy
EMI shielding	Conductive fluorosilicone seal
Latch pins and springs	Stainless steel
Fasteners	Stainless steel
O rings & seals	Fluorosilicone elastomer
Transit caps	Vinyl

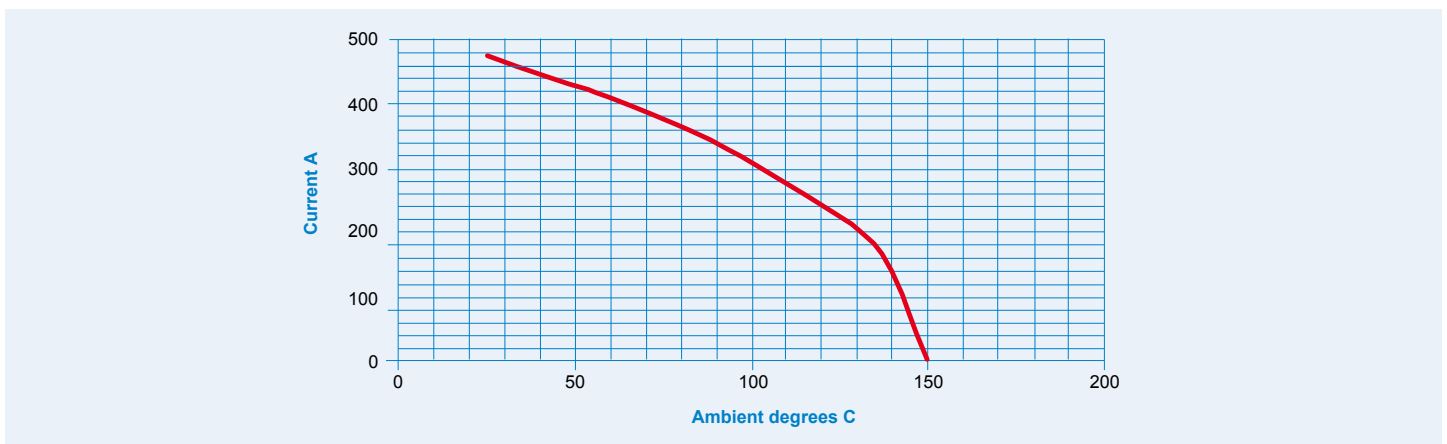
Protective finishes

Contacts	Gold over Electroless Nickel 3 - 5µm; ISO 27874, AMS-C-26074 Class 1
Stainless steel parts	Passivated, SAE-AMS-QQ-P-35
Shells	Zinc/cobalt, ASTM-B-840 Grade 6 Type C, over AMS-C-26074 class 4 grade B or Electroless nickel, AMS-C-26074 class 4 grade B or Zinc nickel black, ASTM-B-841 Class 1, Grade 10, over AMS-C-26074 class 4 grade B
Latch ring	Sulphuric acid anodised and dyed black. Defence standard O3-25/3
Crimp lugs	5 - 10µm tin, MIL-T-10727C over 0.25µm copper MIL-C-14550
EMI shielding	Conductive Fluorosilicone seal.

Electrical performance and current derating

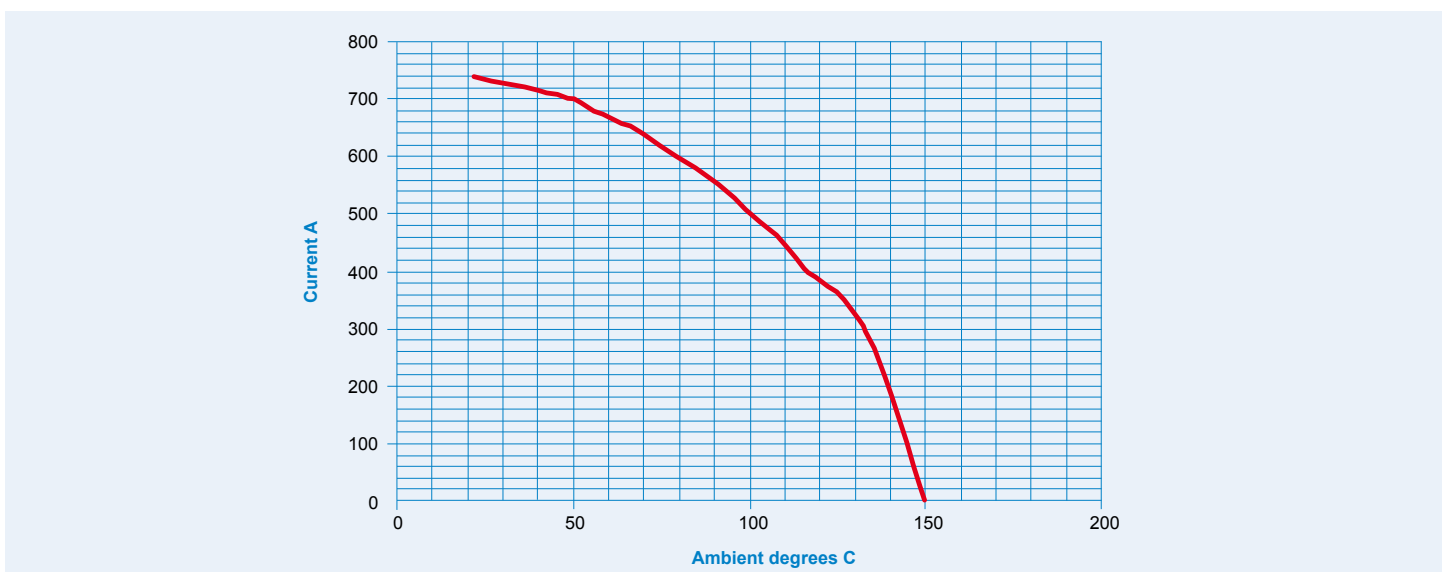
	Size 17 - 300 Amp connector	Size 21 - 500 Amp connector
Dielectric Withstand Voltage @ sea level, volts dc	2250	
Voltage rating @ sea level, volts dc	750	
Current rating, continuous, Amps	300	500
Surge current	6 kA for 1 second	10 kA for 1 second
Contact resistance (EIA-364-06C), mΩ max	0.1	0.05
Insulation resistance, GΩ minimum	5	

HBB size 17 - 300 A derating



Data from test using connectors each cabled with 1.2 metre length of 70 sq mm cable. Further derating may be necessary depending on the application. Derating curves generated according to EIA-364-70B Method 2.

HBB size 21 - 500 A derating



Data from test using connectors each cabled with 1.2 metre length of 120 sq mm cable. Further derating may be necessary depending on the application. Derating curves generated according to EIA-364-70B Method 2.

Mechanical performance

	Size 17 - 300 Amp connector	Size 21 - 500 Amp connector
Connector mating / unmating force (N max)	350	350
Endurance (mating & unmating cycles, min)	5000 cycles	

Environmental performance

Temperature range (operational & storage)	-55 to +150 deg C
Humidity (days @ 90/95 % RH at 40 °C)	56
Salt spray (hours)	ZnCo plated - 300 ZnNi plated - 500 Electroless nickel plated - 48
Temperature life (hrs @ °C)	1000 at 125°C
Sealing, mated	BS EN 60529 IPx7 ISO 20653:2006 IP6K9K
Panel sealing level	BS EN 60529 IPx7
Random vibration (EIA-364-28E)	Test Condition V, Test Condition Letter E (0.2 g ² /Hz), duration 1.5 hours
Mechanical shock (EIA-364-27B)	25g, 11ms, half sine wave