

Product

Copper Flat C 200 PLUS



Features

Section: flat

Material: copper

Thermal class: 220

Enamel polymer: PEI+PAI

Grades: 1-2

Crass section: 1 - 75 mm²

It is an enamelled strip with high mechanical, thermal and chemical properties. Structurally, the insulation consists of a POLYESTER or POLYESTER-IMIDE base varnish and a POLYAMIDE-IMIDE top layer. Each layer of varnish gives the final wire excellent properties for the industry. Mechanically, its stand-out features are its excellent resistance to abrasion, high flexibility and adhesion to copper, meaning it is capable of withstanding the demanding deformations, stretching and crushing that occur even in the most modern manufacturing and winding processes in the industry.

Thermally, the wire is capable of withstanding high working temperatures, occasional overloads and long thermal shock cycles. Chemically, the wire is compatible with most commercial impregnation resins and oils, coolants and cleaning fluids.

Despite being a complete wire, there may be applications that require a specific improvement, which is why we have a qualified technical team to study specific cases and prepare a project tailored to any need.



Application

E-mobility, transformers,
generators and electric motors.



Standard

IEC / DIN EN 60317-29
NEMA MW38-C
UL E93551



Range & grade

Grades: 1-2
Diameters: 1 - 75 mm²

Technical Specifications

Mechanical Properties

Parameter	Unit	Point IEC	Test conditions	IEC value	Actual value (9,50x2,50mm)
Conductor dimension Width	mm	4.1	-	9,430 - 9,570	or within the range defined by customer
Conductor dimension Thickness	-	-	-	2,470 - 2,530	or within the range defined by customer
Overall dimension Width	mm	4.3	-	9,550 - 9,740	or within the range defined by customer
Overall dimension Thickness	-	-	-	2,590 - 2,700	or within the range defined by customer
Increase in dimension Width and Thickness	mm	-	-	0,120 - 0,170	or within the range defined by customer
Elongation	%	6	-	≥32	44
Springiness	°C	7.1	-	≤5	<5
Flexibility and adherence	-	8	-	15% <1xWidth	Lack of adherence <1xWidth
Mandrel winding test on Width	-	-	-	Mandrel 4 x Width	Mandrel 3 x Width
Mandrel winding test on Thickness	-	-	-	Mandrel 4 x Thickness	Mandrel 3 x Thickness

Electrical Properties

Parameter	Unit	Point IEC	Test conditions	IEC value	Actual value (9,50x2,50mm)
Breakdown voltage	V	13.2	Steel ball bath	≥2000	≥3000
Electrical Conductivity	MS/m	5	-	≥58	-
Continuity of insulation	Faults	14	-	-	<7 in 100m

The information in this data sheet is based on information provided by our supplier. It does not represent any specification or agreement with respect to conditions or properties. The values indicated are standard values. Deviations from these values due to production and application cannot be excluded. The information in this data sheet is intended for use by experts at their own discretion and risk. We do not guarantee results, nor do we accept responsibility for the specifications stated or the results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed in the safety data sheet. Last updated: 14/1/20

Thermal Properties

Parameter	Unit	Point IEC	Test conditions	IEC value	Actual value (9,50x2,50mm)
Temperature index	°C	15	-	200	220
Dielectric dissipation factor (tg δ)	°C	-	-	-	-
Heat shock	-	9	220°C 30 min	Mandrel 6 x Thickness	Ok

Chemical Properties

Parameter	Unit	Point IEC	Test conditions	IEC value	Actual value (9,50x2,50mm)
Solderability	°C	17	-	Not applicable	Not applicable
Resistance to transformer oil	-	20	-	-	Yes
Resistance to refrigerants	-	16	-	-	Yes
Resistance to solvents	-	-	-	>H	4H
Heat bonding	-	-	-	-	-

[1] Due to the variety of individual applications, we cannot make any generally binding commitments regarding compatibility. We recommend testing compatibility with the materials used.



For further information: **SEEER**

Industrial Zone St Gobain, Megrine
TUNISIE

Site : www.seeer.com.tn

Tel : +216 79297571 / +216 71349692 /
+216 92699416

Fax : +216 79297557 / +216 71336104

E-mail : seeer.service@gmail.com

