



## Brazing alloy BrazeTec S18

TD EN S18 REV. 3

### Composition (% in weight)

Ag	Cu	Zn	Sn	Si	P	Mn	Ni	Other	ISO 17672:2010	EN 1044:1999	ISO 3677
18	75	-	-	-	7	-	-	-	CuP 286	CP 101	B-Cu75AgP-645

### Technical data:

Melting range (°C)	645
Working temperature (°C)	650
Melting range according to DSC measurement (°C)	-
Min. brazing temperature (°C)	-
Electrical conductivity (m/Ω mm <sup>2</sup> )	-
Elongation %	10
Density (g/cm <sup>3</sup> )	8,4
Shear strength (MPa)	-
Tensile strength DIN EN 12797 (MPa)	with Cu:250
Operating temperature of brazed joint (min/max) ± (°C)	-55/+150

### Applications

Refrigeration, air conditioning and electrical industry, plumbing technology

### Operating conditions

Silver based brazing alloy, containing phosphorus. Excellent flow, capillarity and mechanical strength characteristics. Used for joining copper and copper alloys. It is not allowed to use this alloy for joining steels, iron, nickel and cobalt as it will be formed brittle phases in the joint. Brazing alloy not allowed to be used while operating in sulphur containing atmosphere, due to the crevice corrosion phenomena.

### Recommended fluxes

Due to its phosphorus content, it is not necessary to use an additional flux for brazing only copper to copper.

### Heat sources

Flame, induction heating, resistance, furnace under protective atmosphere

### Delivery forms

Wire, rods, rings, preforms, powder

### Notes

In refrigeration and air conditioning industries it can be used for service temperatures down to -50°C.

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