

EQUIPMENT FOR AIR PLASMA CUTTING

Type ARC PLASMA 45



It is intended for cutting the metals: iron, steel, stainless, aluminium, copper, with maximum width of 45 mm, for an operating duration DA= 35 % and a cutting cycle duration DC = 10 min.

The equipment is provided with the possibility of cutting current step control, covering 3 ranges of currents with electronic surveillance of supply phase lack, cooling air pressure, equipment overtemperature and electrode soldering in pistol.

EQUIPMENT ELEMENTS

- Direct current source
- Electronic plate for protection, adjustment, control
- Dividing pistol with the cable length of 6 m, type Bernstein
- Protection circuit of direct current source
- Electronic plate supply transformer
- Switching and signaling circuit
- Fan
- Air filter
- High voltage and high frequency generator
- Magnet valves for air plasma and cooling
- Pressure regulator and manometer for pressure indication
- Voltage multiplier 24 VDA \pm 7.5 kV DA-import
- Pneumatic circuit –FESTO Austria





TECHNICAL CHARACTERISTICS

Supply voltage	3 x 380 V 50 Hz
DC Source no-load voltage	235 VDC
Maximum cutting current	150 A
Maximum current taken from the network	45 A
Arc voltage at	
DA = 35 %; I ₂ = 150 A	145 V
DA = 60 %; I ₂ = 120 A	140 V
DA = 100 %; I ₂ = 90 A	135 V
Power factor cos φ at	
DA = 35 %	0.72
DA = 60 %	0.70
DA = 100 %	0.65
Mains input power at	
DA = 35 %	35 kVA
DA = 60 %	28.5 kVA
DA = 100 %	21.5 kVA
Cutting current control	3 steps (60 A ; 100 A; 150 A)
Air supply pressure	5.5 +8 bar
Rated power	24 kVA
Output current	
DA = 100 %	60 A
DA = 60 %	100 A
DA = 35 %	150 A
Overall dimensions	600 x 385 x 810 mm
Weight	150 kg
Protection degree	IP 22

ADVANTAGES

Short time of dividing

Low energy consumption per divided length unit

Minimum waste of material

High efficiency of dividing

High cutting speed leads to productivity increase also in case of special metals