

ECO design information

The equipment has been designed in order to be compliant with the Directive 2009/125/EC.

Efficiency and idle state power consumption:

P/number	Product name	Condition	Efficiency	Idle power consumption
601597000L 601595000L 601447000L 601423000L	IRON-MIG 221 MULTI IRON-MIG 221P MULTI IRON-MIG 221 MULTI 16A IRON-MIG 221P MULTI 16A	STICK/TIG LIFT/ MIG mode	89%	15W

(*Idle State.

Operating state in which the power is switched on and the welding circuit is not energized.

In Stick welding equipment/Stick mode, welding circuit is always energized, there is no idle state, but a welding state preceding arc striking.

Idle power consumption limit not Applicable to Stick/MMA mode.

The value of efficiency and consumption in idle state have been measured by method and conditions defined in the product standard EN IEC 60974-1:20XX.

Typical gas usage for MIG/MAG equipment:

Material type	Wire diameter (mm)	DC electrode positive		Wire Feeding (m/min)	Shielding Gas	Gas flow (l/min)
		Current (A)	Voltage (V)			
Carbon, low alloy steel	0,9 ÷ 1,1	95 ÷ 200	18 ÷ 22	3,5 – 6,5	Ar 75%, CO2 25%	12
Aluminium	0,8 ÷ 1,6	90 ÷ 240	18 ÷ 26	5,5 – 9,5	Argon	14 ÷ 19
Austenic stainless steel	0,8 ÷ 1,6	85 ÷ 300	21 ÷ 28	3 - 7	Ar 98%, O2 2% / He 90%, Ar 7,5% CO2 2,5%	14 ÷ 16
Copper alloy	0,9 ÷ 1,6	175 ÷ 385	23 ÷ 26	6 - 11	Argon	12 ÷ 16
Magnesium	1,6 ÷ 2,4	70 ÷ 335	16 ÷ 26	4 - 15	Argon	24 ÷ 28

Tig Process:

In TIG welding process, gas usage depends on cross-sectional area of the nozzle. For commonly used torches:

Helium: 14-24 l/min

Argon: 7-16 l/min

Notice: Excessive flow rates causes turbulence in the gas stream which may aspirate atmospheric contamination into the welding pool.

Notice: A cross wind or draft moving can disrupt the shielding gas coverage, in the interest of saving of protective gas use screen to block air flow.