

## 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 |
|--------------------------|-------------------------------|-----------------------------|------------|------------------------|
| 601434000L<br>601428000L | IRON-MIG 303<br>IRON-MIG 303P | STICK/TIG LIFT/<br>MIG mode | 85%        | 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% /<br>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.