



The machine GFA301000 has been developed to connect enameled wires and cables normally used in the electromechanical industry following the logic of a semiautomatic process combined with easiness of use, flexibility and high productivity so to get the best consistent and repetitive result.

Connection process, on which the GFA301000 machine is based, uses a connector or flag connector as a support for the connection and consists of two operations that happen in sequence: at first current passing through the crimping tools to warm the support and then, besides current, pressure is applied to the crimping tools to vaporize the wires' enamel and compact everything in a single body with high electrical and mechanical features.

The equipment was designed and built to answer to any specific request coming from "Automotive" field as Tracking and Data Management.

The most important part of the GFA301000 is the connecting head that allows to adapt to any single production need, in fact the head is height adjustable and turning of 90°. So it will be very simple to integrate the machine both on existing or new lines.

The interface based on a touch screen panel and the special functions able to control, check and compare the data between connection parameter and values during the process, make the use of the machine simple and immediate.

The main managed values are: Temperature, Pressure, Final Thickness, Current.

The machine is programmable directly from the touch screen panel or through a special software that allows to program the machine from PC. The GFA301000 can manage up to 249 different programs with different values, that can be linked in a single cycle able to repeat them in sequential and constant way. By a special interface the GFA301000 can transmit all data concerning every single connection to a data storage unit or back-up unit, server.

THE STANDARD SUPPORTED PROTOCOLS ARE: Profinet, Ethernet IP, Modbus TCP/IP.

THE OPTIONAL SUPPORTED PROTOCOLS ARE (additional module / software required): Profibus, Modbus RTU, OPC DA.

OPTIONALS: Welding Fume Extraction with or without Active Carbon Filter; Motorized Lifting Head System; Manual Turning head System; Closing Arms System with Brushless Jack size 10 ; Closing Arms System with Brushless Jack size 14; Upgraded Thermo-connecting Transformer 70 Kw; Toolings with different Diameters; Back-Up Key; Bar-Code Reader; Software for remote desktop Machine⇒PC; License for data storage (CSV file); Software and license for remote assistance; Led Light; Cold Air Generator.

## Technical Features

Voltage	: 400 V (±5%) 50-60Hz	Max. Power (duty factor)	: 25KVA (100%) 35,35KVA (50%)
Working Pressure	: 6 bar/0,6MP (CAG 7bar/0,7 MP)	Air Consumption	: 10,4 NL/min(CAG 700NL/min)**
Air Capacity Request	: ~930 NL/min (CAG +400 NL/min)**	Arms Closing Force	: 884 kg (6 Bar Pressure - 2std)**
Heating Temperature	: ~400°C	Heating Time	: Depends on kind of connection
Programs Set	: 249	Cycle Set	: 249
Range of Connections	: *Total section up to 185 mm <sup>2</sup>	Ø Tooling Range	: 6 ÷ 22mm
Temp. Range Working	: +10°C ÷ +40°C		
Humidity Range Working	: 0% ÷ 85% without condensation		
Dimensions	: (WxDxH) mm 1320x835x1770		
Weight	: ~470Kg		

\*Referred to the nominal section of the standard connectors model L-37P for unipolar cable 185mm<sup>2</sup>

\*\*Referred to the cylinder Ø100x50 2STD

IMPORTANT NOTE: Images are for product illustration purposes only. The manufacturer has the right to make changes (or technical improvements) without prior notice obligation.

