RESISTANCE WELDING CONTROLLERS & INVERTERS

Main Features

TECNA Weldcon brings you the latest and most sophisticated Welding Controller Units built by TECNA.

TECNA has a range of Welding Controller Units that are designed and built keeping various application areas in mind.

All control Units are invariably Microprocessor Controlled and manufactured using the latest technology in electronics.

Compliance with RoHS is ensured during the production stage and Silicone Based Compounds are totally eliminated in contents to ensure compliance with Sheet Metal Workshop Manufacturing Requirements.

To ensure modularity and scalability, each control unit is designed to have some basic built - in functions, that can be extended by addition of optional accessories, which enhance and add new functions and capability to the control unit.

Firmware of control units is very easily upgradable. This ensures that customer works with the latest software that is possible.

Control Units are easily integrated on to the existing machines for improved performance and additional functionality.
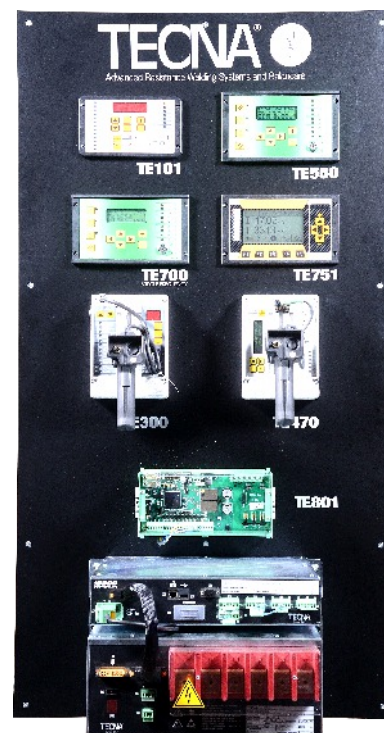
They can also be supplied in Kit Form for System Integrators manufacturing automated welding machines

A full fledged welding controller cabinet, complete with SCR and required add - ons can also be built and supplied, for Ready to Install situations.

Base Control Units

Control Unit	Description
TE90	Microprocessor based Welding Controller Unit, with Simple SCR Firing Angle Control, for Manual and Pneumatically Operated Machines With Current Compensation Function
TE91	Microprocessor based Welding Controller Unit, with Simple SCR Firing Angle Control Specially Built for Multi Spot Welding Head Machines, having Cascade and Concurrent Function With Current Compensation Function
TE101	A Simple Microprocessor based Welding Controller Unit, with Simple SCR Firing Angle Control With Built - in Ammeter for display of actual measured Welding Current.
TE550	A Full Fledged Micro - processor Based Welding Control Unit with Constant Current and Direct Secondary Feedback Function Extensible by multiple add - ons like, Networking, Robot Handshaking Protocols, Constant Energy Function, Proportional Valve Etc
TE800	A Full Fledged Micro - processor Based Welding Control Unit with Constant Current and Direct Secondary Feedback Function Specially meant for Networked Operation using PLC

Accessories And Enhancements For Control Units

Item No.	Description	
31170	Current compensation Feedback Coil	TE90, TE91, TE101
38208	Supply Power Transformer 415V/24V, 50VA	ALL
50110	Fully Solid State, Optically Isolated SCR Firing Module for Single Pair of SCR	ALL
38938	Flexible Flat Current Measurement Coil for Constant Current Controllers L=250 mm	TE550, TE800
39236	Flexible Flat Current Measurement Coil for Constant Current Controllers L= 350 mm	TE550, TE800
50200	Add on Board for Control Units, facilitates adding External Switch for Weld On/Off, Error Reset Functions, Electrode Dressing Alarm functions	TE550
50220	Add-on Board for Control Units, facilitates connection of Proportional Valve to Change Input Line Air Pressure, upon change in welding program	TE550
50189 & 72735	Set of Add-on Boards, to enable Functionality of Setting Pressure (Maximum & Minimum) Limits. Pressure Limits set in the Control Unit are evaluated before Welding Current is passed through a work-piece	TE550
50189 & 72434	Set of Add-on Boards, to enable Functionality of Weld Penetration Measurement in real time.	TE550
50200 & 50097	Set of Add-on Boards, to enable Functionality of Constant Energy. In the normal course when only Current transducer is installed the Control Unit will measure and control only Welding Current. With addition of these boards, It is equipped to measure and control the Welding Energy (12Rt) in real time.	TE550
50299	Expansion Board for controlling the functionality of Control Unit via ETHERNET	TE550, TE800
72223	Expansion Board for controlling the functionality of Control Unit via PROFIBUS DPV1	TE550, TE800
72224	Expansion Board for controlling the functionality of Control Unit via DEVICENET	TE550, TE800
72225	Expansion Board for controlling the functionality of Control Unit via CANOPEN	TE550, TE800
72226	Expansion Board for controlling the functionality of Control Unit via ETHERCAT	TE550, TE800
3224X	Rigid Epoxy Encapsulated Cylindrical Current Transducers for use with Constant Current Controllers for Installations on Square Welding Current Conductors (Dimensions on Request)	TE550, TE800
32978	Rigid Epoxy Encapsulated Cylindrical Current Transducers for use with Constant Current Controllers for Installations on Square Welding Current Conductors (Dimensions on Request)	TE550, TE800
72278	Add-on Board for Control Units, facilitates performing Program Backup and Welding Data Logging on USB Pen Drive	TE550
50214	Isolated RS-232 Interface Board for Data Logging and Printing. In case of TE800 Inherently Networked Controller, it is possible to Program, Actuate and Communicate with Controller	TE101. TE550 TE800
50209	Isolated RS-485 Interface Board for Data Logging and Printing. In case of TE800 Inherently Networked Controller, it is possible to Program, Actuate and Communicate with Controller	TE101, TE550 TE800

Parameters

Control units	TE90	TE91	TE550	TE550 50189	TE550 50189/ 72735	TE550 50200	TE550 50200/ 50097	TE800	TE800 7222x	TE800 50299	TE800 7226x
Parameters N°	8	8	26	26	26	26	26	16	16	16	16
Programs N°	2	2	250	250	250	250	250	250	250	250	250
PLC recallable programs	–	–	127	127	127	127	127	127	127	127	127
RS232 interface	–	–	S	S	S	S	S	–	–	–	–
RS485 interface	–	–	O	O	O	O	O	S	S	S	S
ETHERNET interface board	–	–	O	O	O	O	O	–	–	–	–
USB interface	–	–	O	O	O	O	O	–	–	–	–
Built-in ammeter	–	–	S	S	S	S	S	S	S	S	S
Current limits	–	–	S	S	S	S	S	S	S	S	S
Pressure limits	–	–	O	O	O	O	O	O	O	O	O
Stepper function	–	–	S	S	S	S	S				
Constant current	–	–	S	S	S	S	S				
Constant energy	–	–	O	O	O	O	S	–	–	–	–
Secondary current compensation	S	S	–	–	–	–	–	–	–	–	–
Welds counter	–	–	S	S	S	S	S	S	S	S	S
Two-hands input	–	–	S	S	S	S	S	S	S	S	S
N° of managed solenoid valves	1	1	4	4	4	4	4	–	–	–	–
Low force squeeze	–	–	S	S	S	S	S	–	–	–	–
Forge program	–	–	S	S	S	S	S	–	–	–	–
Electrode force program	–	–	O	O	O	O	O	–	–	–	–

– = Not Available, S = Std, O = Optional