

TECNA[®]

INDUSTRIAL RESISTANCE WELDING SYSTEMS

M.F. RESISTANCE WELDING INVERTER



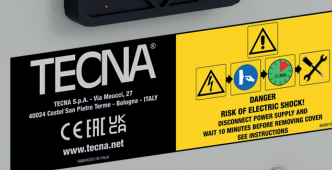
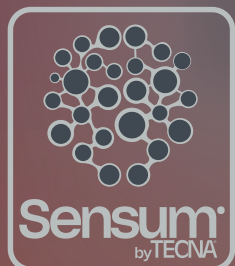
WEB USER INTERFACE

OUTPUT CURRENT FROM
300A UP TO 2800A

SWITCHING FREQUENCY
UP TO 10 kHz

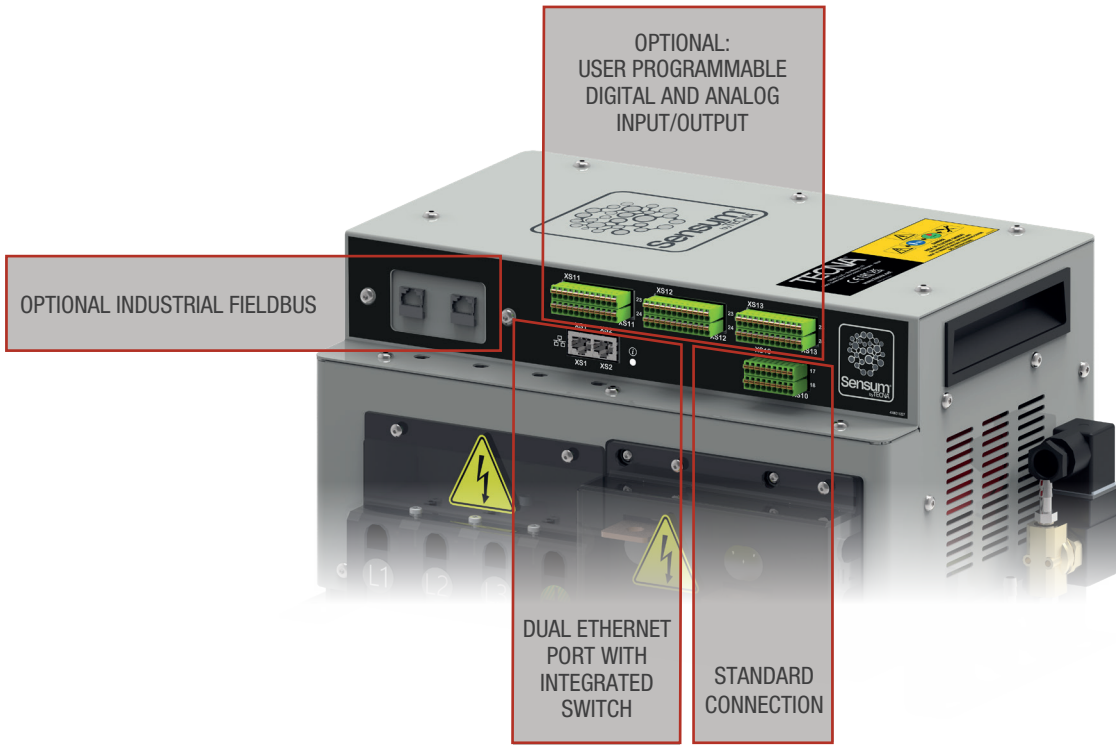
MULTIPLE INSTALLATION
AND WIRING OPTIONS

OPTIONAL INDUSTRIAL
FIELBUS INTERFACES



the REVOLUTIONARY WELDING EXPERIENCE

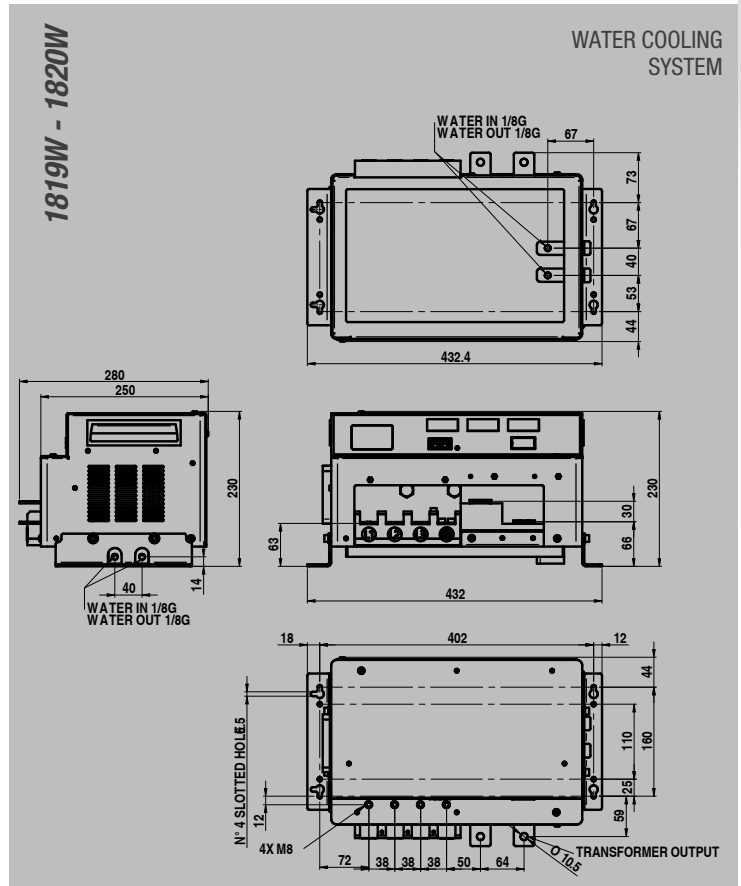
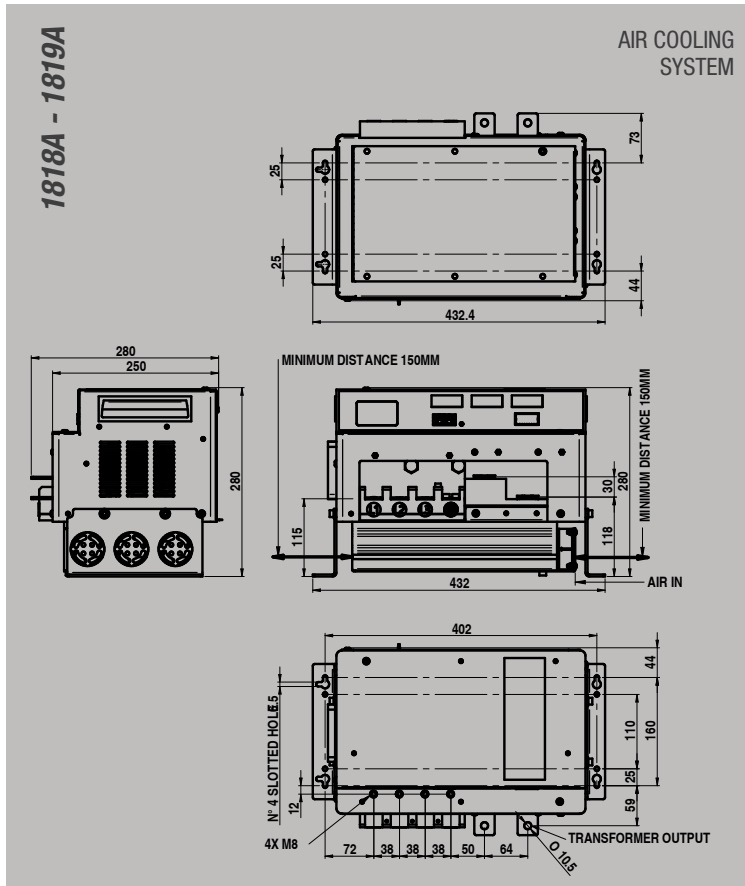
1818 - 1819 - 1820



maximum output current

	1818A				1819A	1819W	1820W
	AIR COOLING				WATER COOLING heavy duty		
TRANSFORMER	25 kVA	32 kVA	51 kVA	56 kVA	56 kVA	90 kVA	
I _{max}	9000 A	19000 A	19000 A	25000 A	25000 A	32000 A	

dimensions



how to order



ITEM NUMBER: **18S02**,
SYMBOL "**R1**"
ELECTRONIC BOARD BUS **RJ45** FOR
INVERTER 300-500-700 A **ETHERCAT**



ITEM NUMBER: **18S04**,
SYMBOL "**R2**"
ELECTRONIC BOARD BUS **RJ45** FOR
INVERTER 300-500-700 A **PROFINET**



ITEM NUMBER: **18S06**,
SYMBOL "**R3**"
ELECTRONIC BOARD BUS **RJ45** FOR
INVERTER 300-500-700 A **ETHERNET/IP**

18	IS	C	E	FB	/VF
family code					
inverter size (only air version) 18 - 300 A 19 - 500 A (only water version) 20 - 700 A					
cooling systems (for size 18 and 19) A - air (for size 19 and 20) W - water					
expansion board N - no IO expansion board E - IO expansion board					
fielbus type 00 - without field bus R1 - RJ45-EtherCAT R2 - RJ45-PROFINET R3 - RJ45-EtherNet/IP					
voltage / frequency /1 - 380 - 415 V / 50 - 60 Hz /2 - 440 - 480 V / 50 - 60 Hz					
code example: 1818AER2/1 1819WNR1/1					

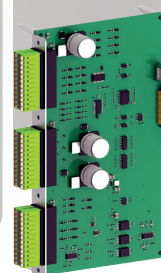
AIR COOLING
SYSTEM



WATER COOLING
SYSTEM



ITEM NUMBER: **18A01**, SYMBOL "**E**"
KIT EXPANSION BOARD
7 ANALOG IN
21 DIGITAL IN
5 SOLENOID VALVES OUT
8 DIGITAL OUT
3 ANALOG OUT



INCLUDED



ITEM NUMBER: **18A02**
WATER VALVE KIT FOR INVERTER SIZE S - M - L

OPTIONAL



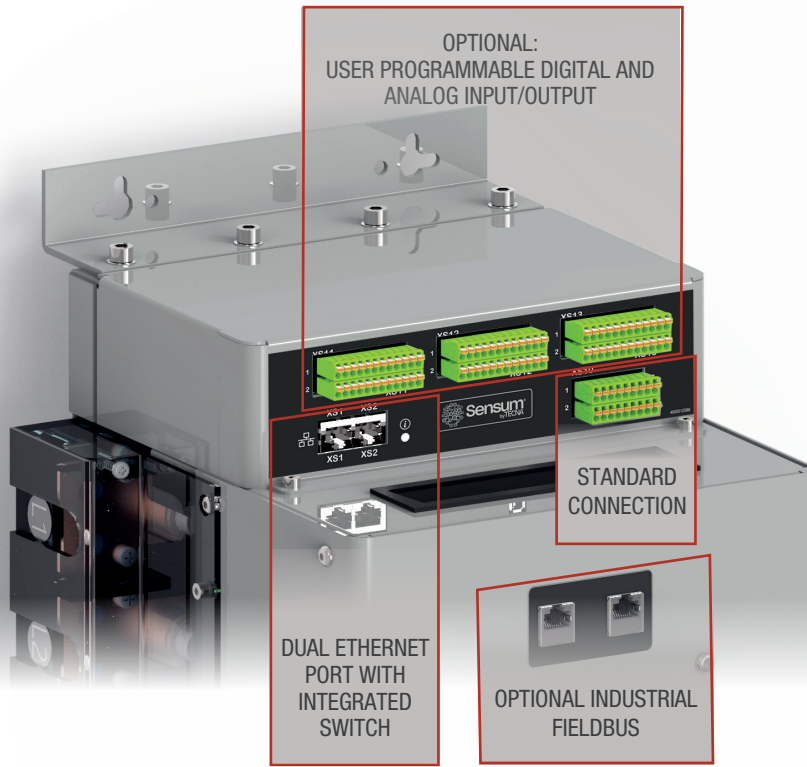
ITEM NUMBER: **18S32**
90° OUTPUT PROTECTION KIT
FOR INVERTER 300 A - 500 A - 700 A



ITEM NUMBER: **18S33**
KIT LOW BRACKETS EXTERNAL
RADIATOR WHEELBASE 150 INVERTER S

Order the options separately or contact TECNA for special item numbers to be ordered

1821 - 1822

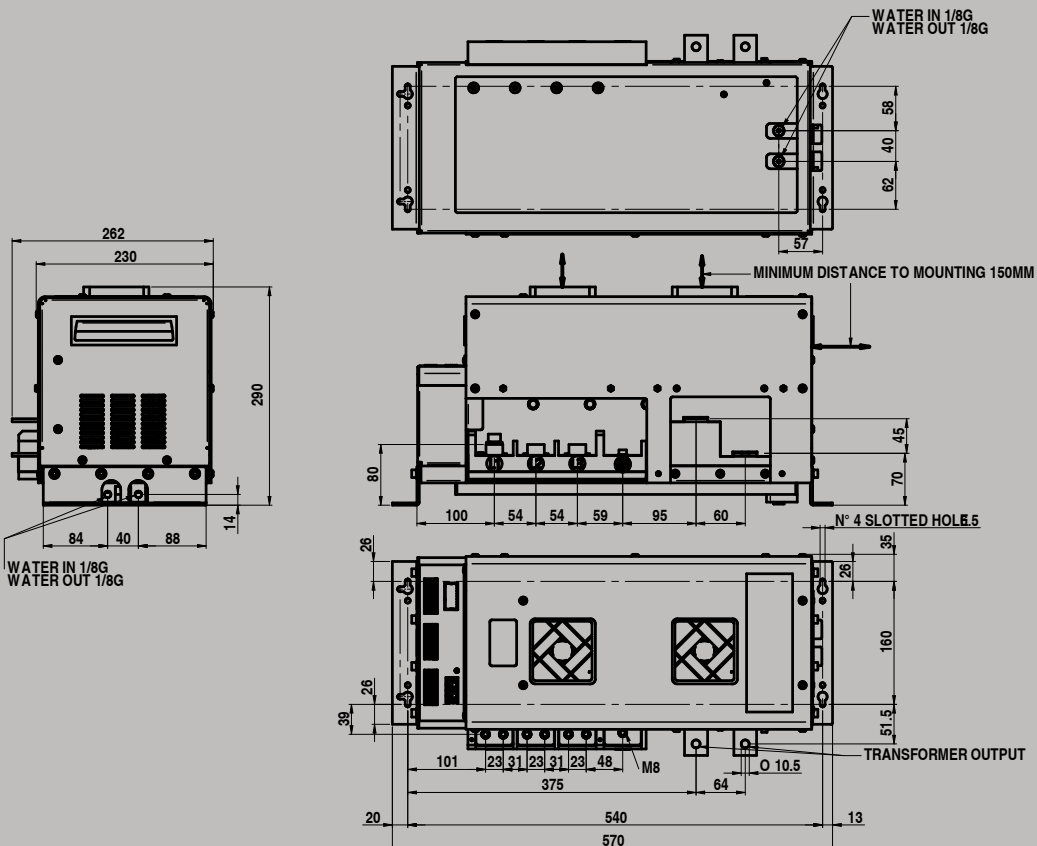


maximum output current

	1821W	1822W
	WATER COOLING heavy duty	
TRANSFORMER	160 kVA	200 kVA
I_{max}	42000 A	64000 A

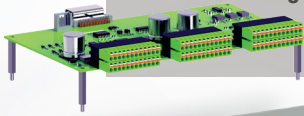
dimensions

1821W - 1822W



how to order

ITEM NUMBER: **18A01**, SYMBOL "E"
 KIT EXPANSION BOARD
 7 ANALOG IN
 21 DIGITAL IN
 5 SOLENOID VALVES OUT
 8 DIGITAL OUT
 3 ANALOG OUT



18	IS	C	E	FB	/VF
family code					
inverter size 21 - 1000 A 22 - 1500 A					
cooling systems W - water					
expansion board N - no IO expansion board E - IO expansion board					
fielbus type 00 - without field bus R1 - RJ45-EtherCAT R2 - RJ45-PROFINET R3 - RJ45-EtherNet/IP					
voltage / frequency /1 - 380 - 415 V / 50 - 60 Hz /2 - 440 - 480 V / 50 - 60 Hz					
code example: 1821WER2/1					



ITEM NUMBER: **18M08**,
 SYMBOL "R1"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER 1000 - 1500 A **ETHERCAT**



ITEM NUMBER: **18M10**,
 SYMBOL "R2"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER 1000 - 1500 A **PROFINET**



ITEM NUMBER: **18M12**,
 SYMBOL "R3"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER M15 **ETHERNET/IP**



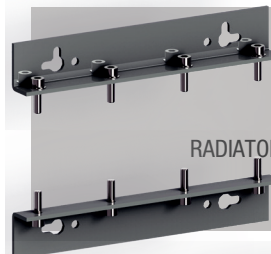
INCLUDED

ITEM NUMBER: **18A02**
 WATER VALVE KIT FOR
 INVERTER SIZE S - M - L

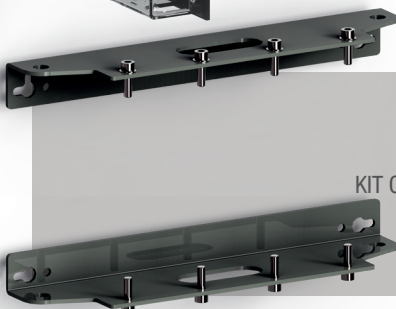
OPTIONAL



ITEM NUMBER: **18M32**
 90° OUTPUT PROTECTION KIT
 FOR INVERTER 1000 A - 1500 A



ITEM NUMBER: **18M33**
 KIT OF LOW EXTERNAL
 RADIATOR BRACKETS, WHEELBASE 150 INVERTER M



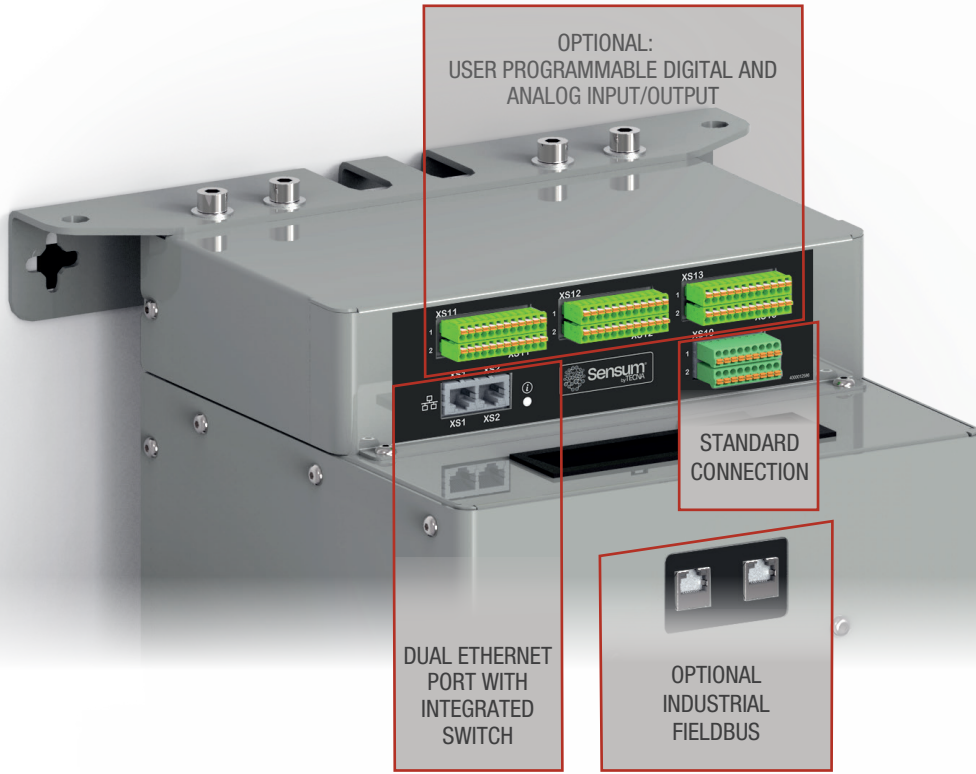
ITEM NUMBER: **18M35**
 KIT OF HIGH WIDEBRACKETS WITH
 INTERAXIS 285



ITEM NUMBER: **18M36**
 BRACKETS KIT FOR ITEMS 6151-6159
 WHEELBASE 250

Order the options separately or contact TECNA for special item numbers to be ordered

1823 - 1824



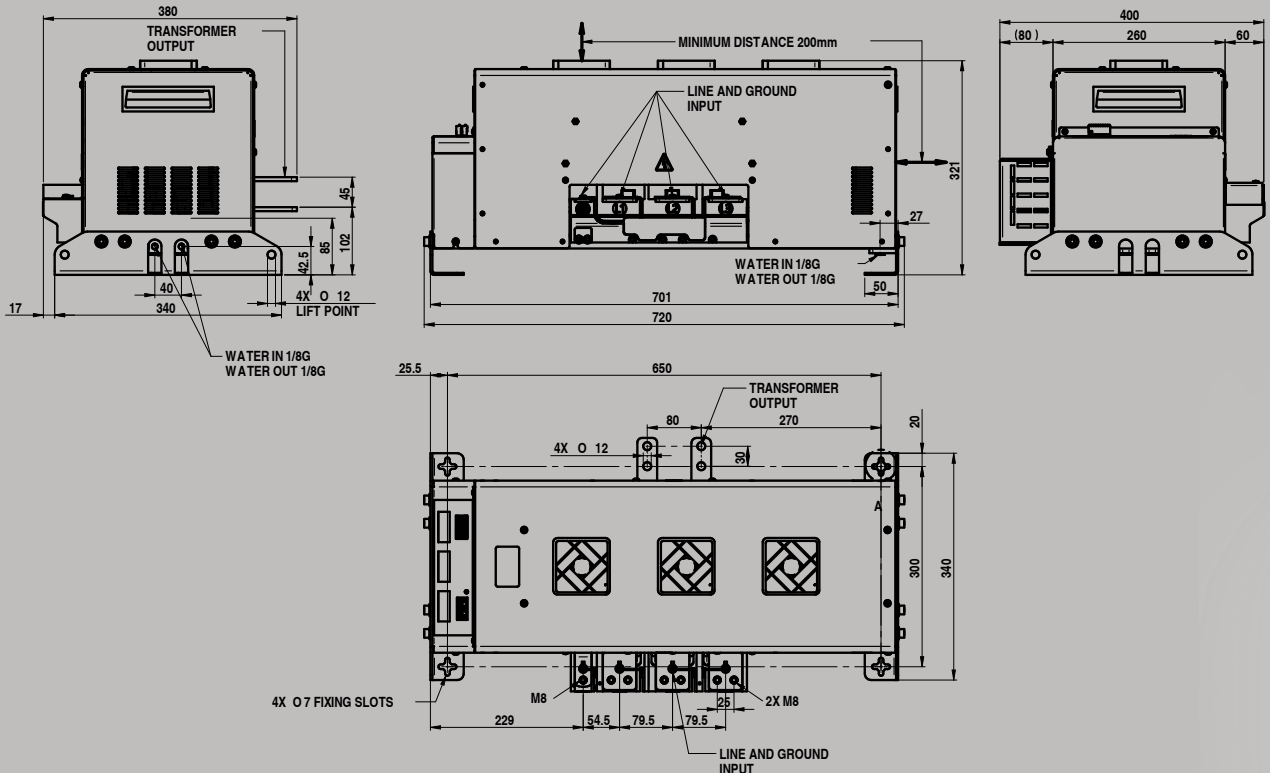
maximum output current

	1823W	1824W
	WATER COOLING heavy duty	
TRANSFORMER	240 kVA	315 kVA
I_{max}	88000 A	100000 A

dimensions

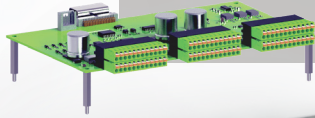
1823W - 1824W

WATER COOLING SYSTEM



how to order

ITEM NUMBER: **18A01**, SYMBOL "E"
 KIT EXPANSION BOARD
 7 ANALOG IN
 21 DIGITAL IN
 5 SOLENOID VALVES OUT
 8 DIGITAL OUT
 3 ANALOG OUT



18	IS	C	E	FB	/VF
family code					
inverter size 23 - 2000 A 24 - 2800 A					
cooling systems W - water					
expansion board N - no IO expansion board E - IO expansion board					
fielbus type 00 - without field bus R1 - RJ45-EtherCAT R2 - RJ45-PROFINET R3 - RJ45-EtherNet/IP					
voltage / frequency /1 - 380 - 415 V / 50 - 60 Hz /2 - 440 - 480 V / 50 - 60 Hz					
code example: 1823WER2/1					



ITEM NUMBER: **18M08**,
 SYMBOL "R1"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER 1000 - 1500 A **ETHERCAT**



ITEM NUMBER: **18M10**,
 SYMBOL "R2"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER 1000 - 1500 A **PROFINET**



ITEM NUMBER: **18M12**,
 SYMBOL "R3"
 ELECTRONIC BOARD BUS RJ45 FOR
 INVERTER M15 **ETHERNET/IP**

INCLUDED

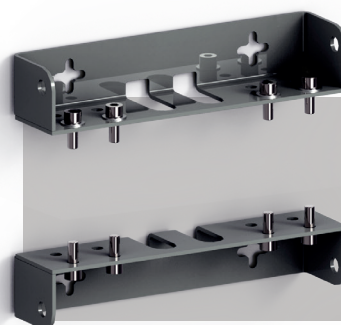


ITEM NUMBER: **18A02**
 WATER VALVE KIT FOR
 INVERTER SIZE S - M - L

OPTIONAL



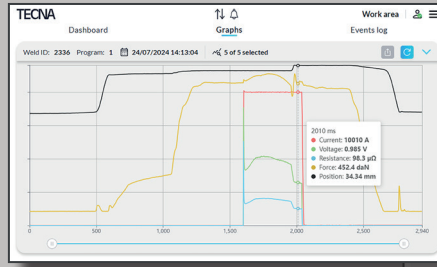
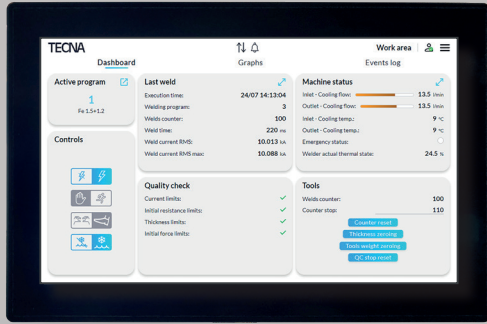
ITEM NUMBER: **18L32**
 90° INPUT PROTECTION KIT
 FOR INVERTER 2000 A - 2800 A



ITEM NUMBER: **18L33**
 BRACKET KIT DISTANCE 155
 FOR INVERTER 2000 A - 2800 A

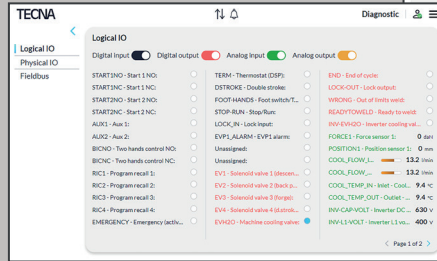
Order the options separately or contact TECNA for special item numbers to be ordered

display for multiple controls



Welds log

Weld time	Welding program	Weld time	Weld current RMS	QC
02/07/2024 14:13:04	3	220 ms	10.013 ka	✓
02/07/2024 14:13:04	1	150 ms	9.201 ka	✓
02/07/2024 14:13:04	1	150 ms	9.059 ka	✓
02/07/2024 14:13:04	3	220 ms	10.013 ka	✓
02/07/2024 14:13:04	1	150 ms	8.85 ka	✓
02/07/2024 14:13:04	1	150 ms	8.889 ka	✓
02/07/2024 14:13:04	2	220 ms	12.6 ka	✓



TECNA Diagnostic - Fieldbus

Modbus TCP/IP

- Modbus port: 502
- Modbus slave ID: 1
- Fieldbus module: Operational
- Module FW version: 1.3.28
- Module revision: 3C
- Module type: EtherCat

EtherCAT

- EtherCAT cyclical TXC
- EtherCAT cyclical RXC
- EtherCAT ES file

Built-in user interface based on web technologies.
Local and remote access by any web browser.
Easy integration in machine user interface.
Support for different users and roles.
Multilingual support.

accessories for welding control unit

38938	Current transducer - Ø 600 mm	7730000005	Load cell 1500 daN
39236	Current transducer - Ø 800 mm	7730000006	Load cell 8000 daN
45681	Current transducer - Ø 800 mm (only for 1824W)	2040510018	Position sensor 100 mm
2050010002	DIN RAIL Power Supply 24V cc, 5A	2040510019	Position sensor 200 mm

	1818A	1819A	1819W	1820W	1821W	1822W	1823W	1824W
MAINS SUPPLY	400 V - 440 V - 460 V - 480 V THREE PHASE -20%							
INPUT FREQUENCY	50 / 60 Hz							
WORKING FREQUENCY	up to 10000 Hz							
NOMINAL OUTPUT CURRENT	300 A	500 A	500 A	700 A	1000 A	1500 A	2000 A	2800 A
OUTPUT VOLTAGE	520 V - 550 V - 600 V							
DUTY CYCLE MAX	20%							
ADJUSTMENT TYPE	COSTANT CURRENT							
COOLING TYPE	AIR	AIR	WATER	WATER	WATER	WATER	WATER	WATER
LITERS/MINUTE	--	--	4	4	4	4	4	4
WATER PRESSURE	4 bar max							
AMBIENT TEMPERATURE	5°C -40°C							
RELATIVE HUMIDITY	90% max							
DIMENSIONS	432x280x280(h) mm		432x280x230(h) mm		570x265x290(h) mm		720x400x321(h) mm	
WEIGHT	16 kg	16 kg	16 kg	16 kg	25 kg	25 kg	42kg	42kg



... you got the feeling



TECNA®

Resistance Welding Systems & Balancers

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