

TECNA[®]

INDUSTRIAL RESISTANCE WELDING SYSTEMS

M.F. RESISTANCE WELDING INVERTER



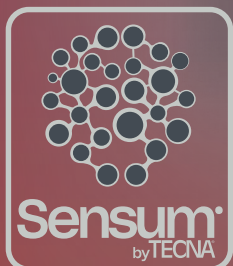
WEB USER INTERFACE

OUTPUT CURRENT FROM
300A UP TO 2800A

SWITCHING FREQUENCY
UP TO 10 kHz

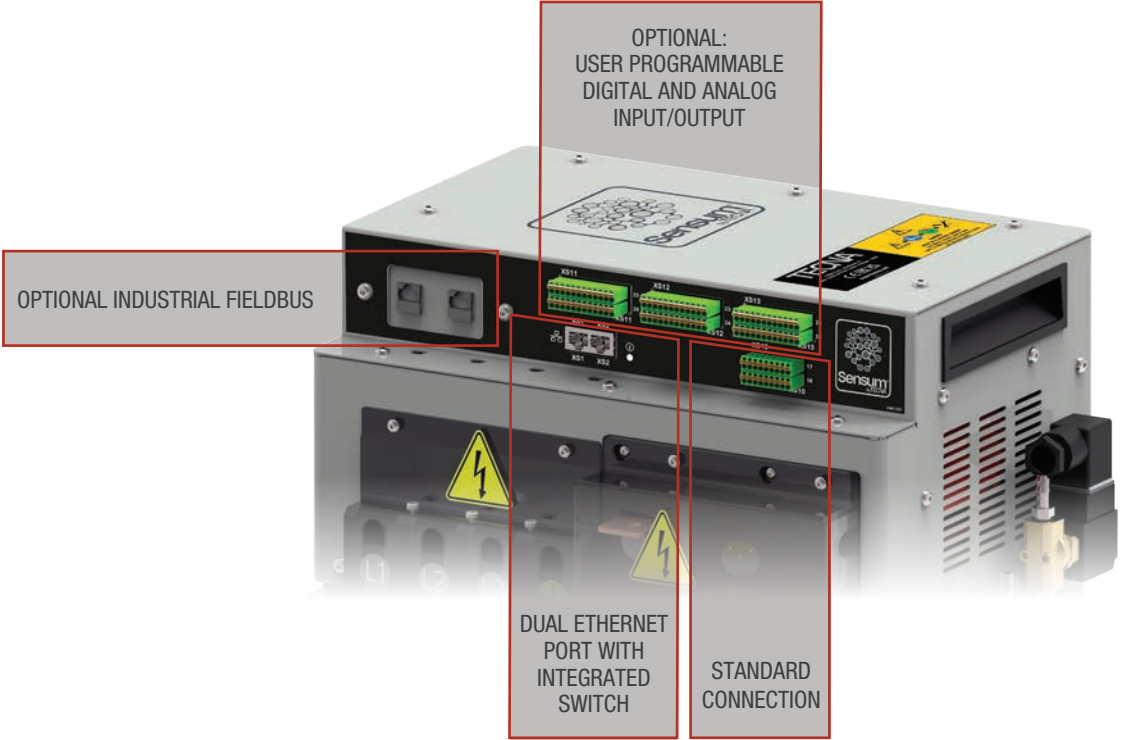
MULTIPLE INSTALLATION
AND WIRING OPTIONS

OPTIONAL INDUSTRIAL
FIELD BUS INTERFACES



the REVOLUTIONARY WELDING EXPERIENCE

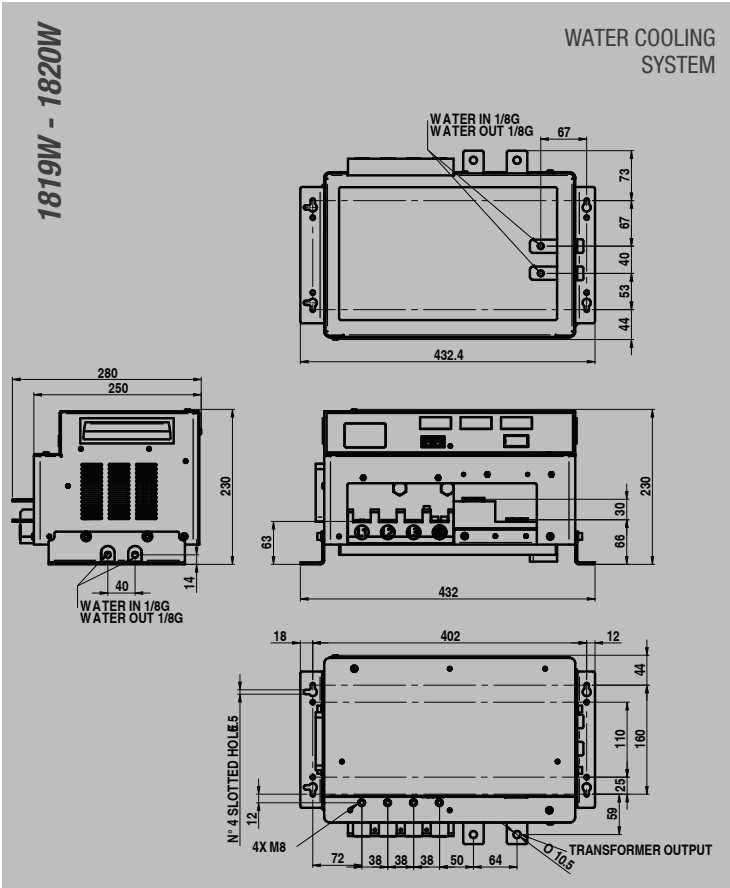
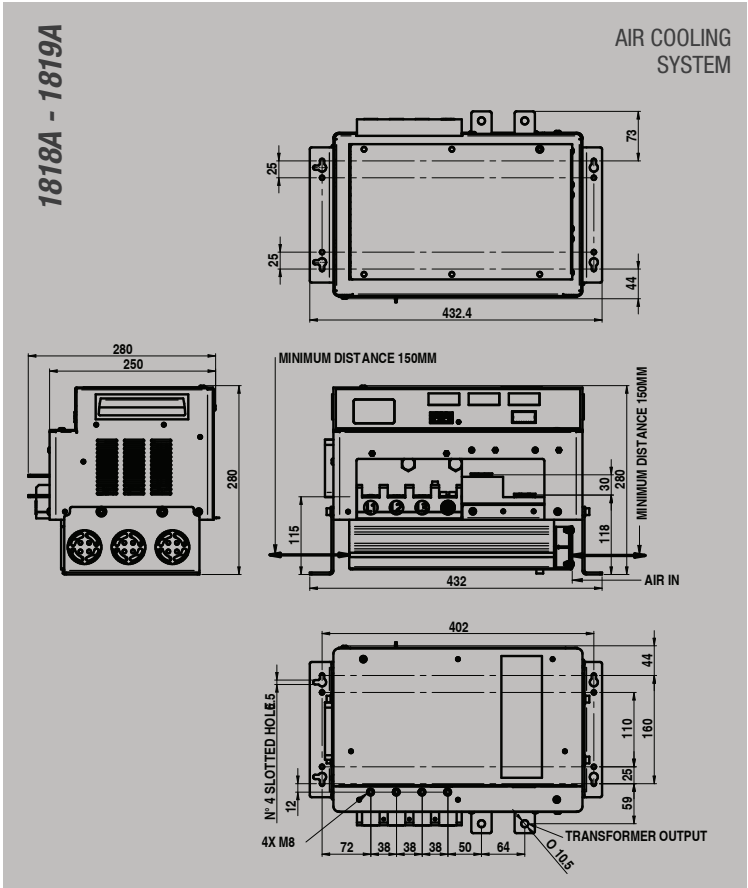
1818 - 1819 - 1820



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**

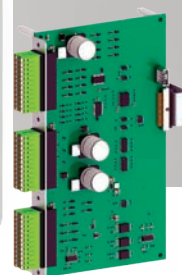
18	IS	C	E	FB	/VF
family code					
inverter size (only air version)	18 - 300 A 19 - 500 A (only water version)				
cooling systems (for size 18 and 19) A - air (for size 19 and 20) W - water					
expansion board N - no IO expansion board E - IO expansion board					
fielbus type 00 - without fieldbus R1 - 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

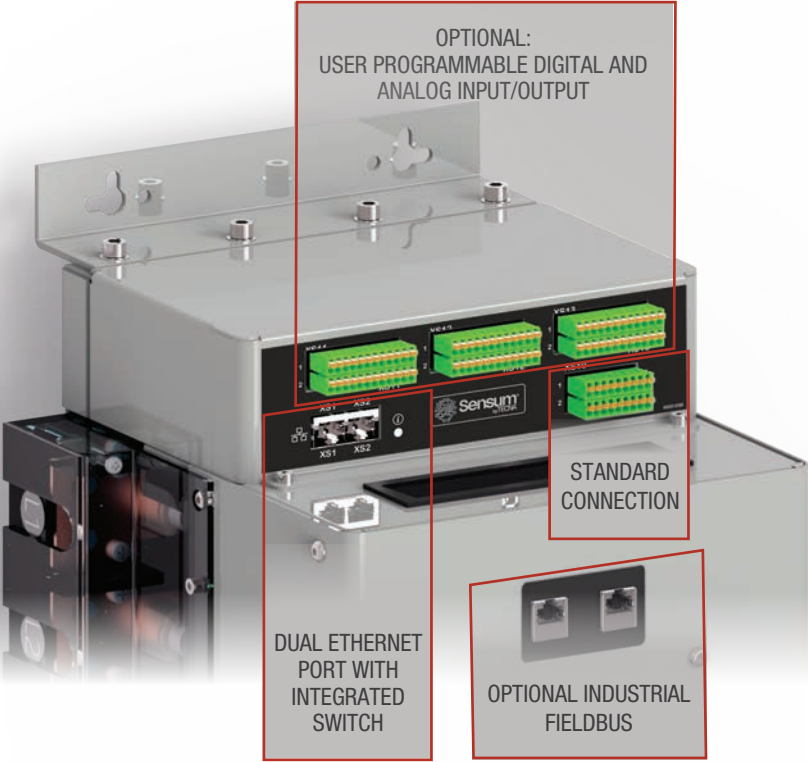


ITEM NUMBER: **18S32**
90° OUTPUT PROTECTION KIT
FOR INVERTER 300 A - 500 A - 700 A



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

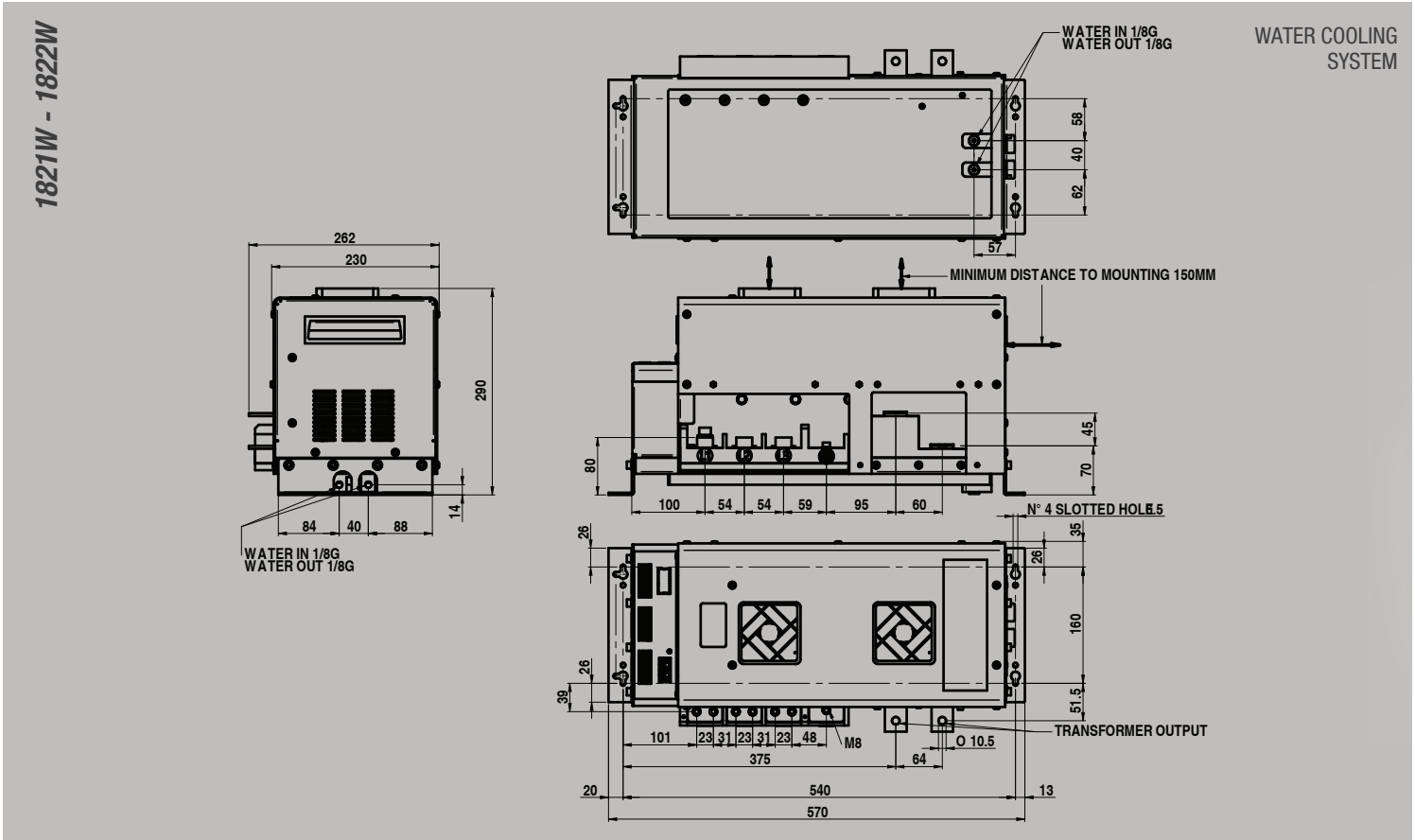
Order the options separately or contact TECNA for special item numbers to be ordered



maximum output current

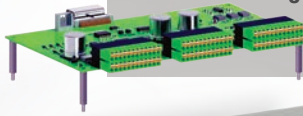
	1821W	1822W
	WATER COOLING heavy duty	
TRANSFORMER	160 kVA	200 kVA
I _{max}	42000 A	64000 A

dimensions



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



INCLUDED

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

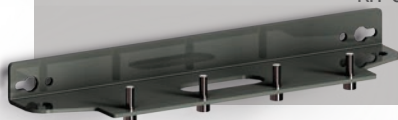
OPTIONAL



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



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



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



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



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 fieldbus 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**



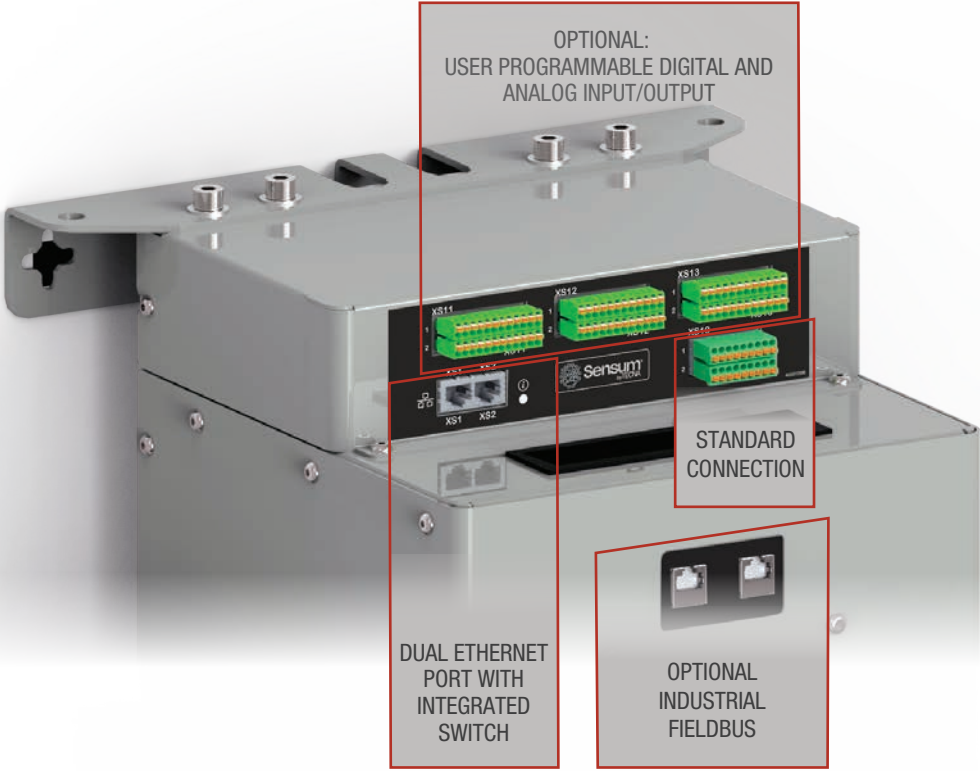
ITEM NUMBER: **18M10**,
SYMBOL "R2"
ELECTRONIC BOARD BUS RJ45 FOR
INVERTER 1000 - 1500 A **PROFINET**



ITEM NUMBER: **18M12**,
SYMBOL "R3"
ELECTRONIC BOARD BUS RJ45 FOR
INVERTER 1000 - 1500 A **ETHERNET/IP**

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

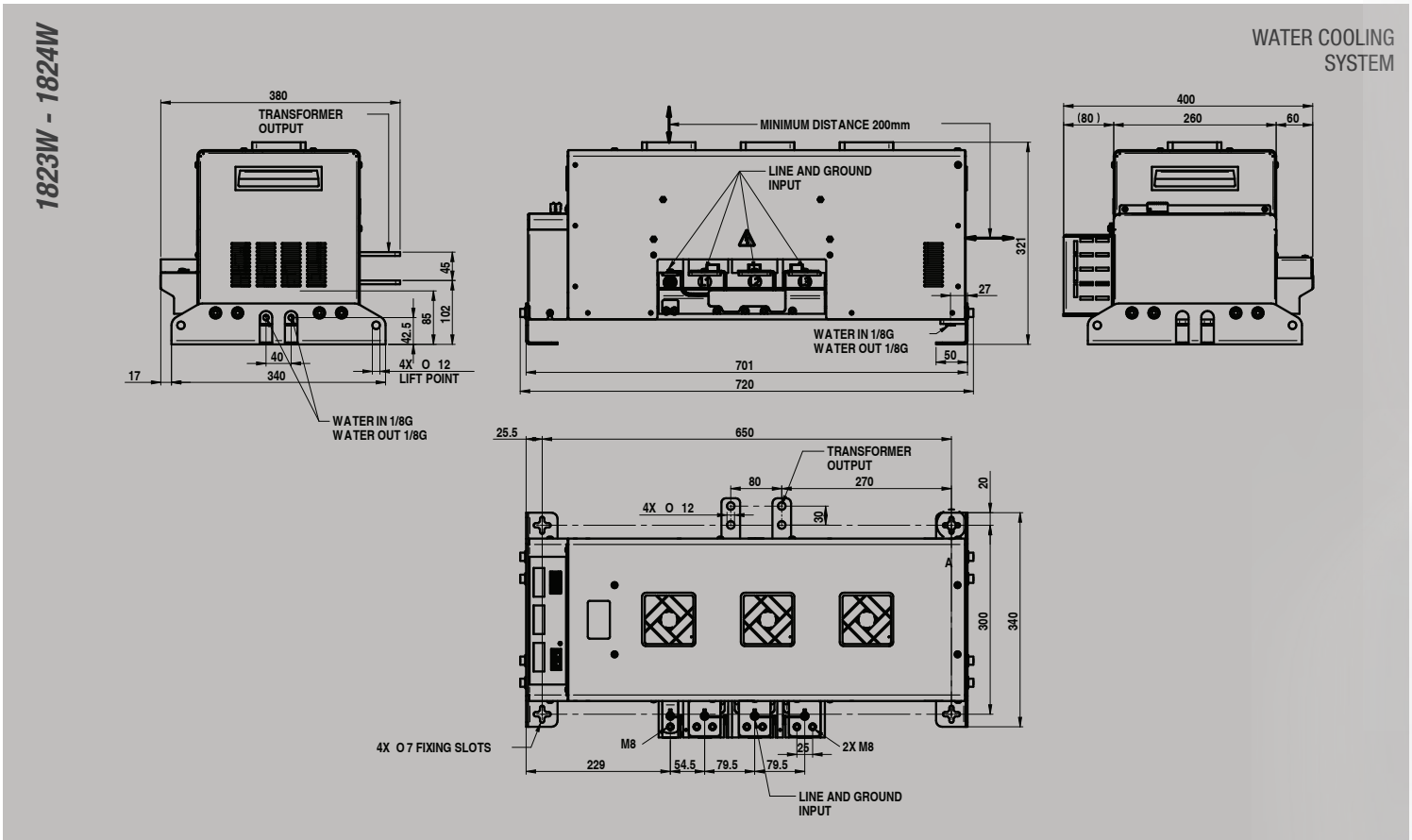
1823 - 1824



maximum output current

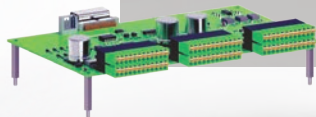
	1823W	1824W
	WATER COOLING heavy duty	
TRANSFORMER	240 kVA	315 kVA
I _{max}	88000 A	100000 A

dimensions



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 fieldbus 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 2000 - 2800 A **ETHERCAT**



ITEM NUMBER: **18M10**,
SYMBOL "R2"
ELECTRONIC BOARD BUS RJ45 FOR
INVERTER 2000 - 2800 A **PROFINET**



ITEM NUMBER: **18M12**,
SYMBOL "R3"
ELECTRONIC BOARD BUS RJ45 FOR
INVERTER 2000 - 2800 A **ETHERNET/IP**

INCLUDED



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

OPTIONAL



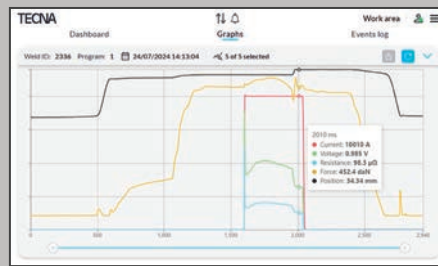
ITEM NUMBER: **18L32**
90° INPUT PROTECTION KIT
FOR INVERTER 2000 A - 2800 A



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



Weld ID	Welding program	Weld time	Weld current RMS	QC
1	1	220 ms	10013 mA	✓
2	1	180 ms	9301 mA	✓
3	1	180 ms	9009 mA	✓
4	1	220 ms	10013 mA	✓
5	1	180 ms	8805 mA	✓
6	1	180 ms	8389 mA	✓
7	2	220 ms	12.6 mA	✓

Logical IO	Physical IO	Fieldbus
STARTING - Start 1 NO	STARTING - Start 1 NO	STARTING - Start 1 NO
STARTING - Start 2 NO	STARTING - Start 2 NO	STARTING - Start 2 NO
STOP - Stop 1 NO	STOP - Stop 1 NO	STOP - Stop 1 NO
STOP - Stop 2 NO	STOP - Stop 2 NO	STOP - Stop 2 NO
STOP - Stop 3 NO	STOP - Stop 3 NO	STOP - Stop 3 NO
STOP - Stop 4 NO	STOP - Stop 4 NO	STOP - Stop 4 NO
STOP - Stop 5 NO	STOP - Stop 5 NO	STOP - Stop 5 NO
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STOP - Stop 8 NO	STOP - Stop 8 NO	STOP - Stop 8 NO
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STOP - Stop 98 NO	STOP - Stop 98 NO	STOP - Stop 98 NO
STOP - Stop 99 NO	STOP - Stop 99 NO	STOP - Stop 99 NO
STOP - Stop 100 NO	STOP - Stop 100 NO	STOP - Stop 100 NO

Fieldbus	Module status	Module FW version	Module revision	Module type
EtherCAT	Operational	1.3.28	3C	EtherCAT

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							
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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