



SHALL®

潇潇公司

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POWER TOOLS

HAND TOOLS

PNEUMATIC TOOLS

TOOL SETS

AGRICULTURE TOOLS

WATER PUMPS

GENERATORS

WELDING MACHINES

POWER TOOL ACCESSORIES

FASTENERS & HARDWARE

TAPS & DIES

LADDERS

AUTOMOTIVE ACCESSORIES

2023-2024





ABOUT SHALL

SHALL is founded on 1998. SHALL manufacturing complex locates on Economy & Technology Development Area, total 25,000 square meter.

SHALL products cover full range of tools, such as **Power Tools, Hand Tools, Garden Tools, Pneumatic Tools, Tool Sets, Agriculture Tools, Water Pumps, Generators, Power Tools Accessories, Fasteners, Hardware, Taps & Dies, Ladders & Automotive Accessories. We have more than 10,000 items.**

As a Reliable Chinese company, The SHALL Group offer customers quality products, competitive prices and on-time deliveries. We sell our products world wide.

SHALL have good reputation in the market.SHALL's Excellent Financial Situation strongly support our Input of Marketing, QA,New Products Developing...

SHALL is good. SHALL can be better. SHALL is Improving & Growing.

Index

MMA WELDING MACHINE

CONTENTS

MINI-115s/135s/165s	P03
MINI-115c/135c/165c	P04
MINI-120Evo/140Evo/160Evo	P05
MINI-120Heo/140Heo/160Heo	P06
HANDY-160i	P07
MMA-145i/165i/185i/205i/255i	P08
MMA-145c/165c/185c/205c/255c	P09
MMA-140Evo/160Evo/180Evo/200Evo/250Evo	P10
MMA-140Heo/160Heo/180Heo/200Heo/250Heo	P11
MMA-140Neo/160Neo/180Neo/200Neo/250Neo	P12
MMA-141Evo/161Evo/201Evo	P13
MMA-180Pvo/200Pvo/250Pvo	P14
MMA-160Lcd/180Lcd/200Lcd/250Lcd	P15
MMA-160E/180E/200E/250E	P16
MMA-160L/180L/200L/250L	P17
ARC-160Heo/180Heo/200Heo	P18
TOP-250MV/300MV	P19
MMA-400Heo/500Heo	P20

MIG/MAG WELDING MACHINE

EMIG-140	P23
EMIG-140P	P24
EMIG-205i/205Tec	P25
MIG-160Tec/200Tec	P26
MIG-201Tec	P27
MIG-200s/250s	P28
MIG-200Heo/250Heo	P29
MIG-200Pvo/250Pvo	P30
MIG-200Syn/250Syn	P31
MCT-416	P32
MIG-225v	P33
MIG-200b/250b	P34
MIG-250I/270I	P35
MIG-250PI/270PI	P36
SUPER MIG-350P/500P	P37
ALU MIG-350P/500P	P38

TIG WELDING MACHINE

ETIG-160/200	P41
ETIG-160Pvo/200Pvo	P42
TIG-160Heo/180Heo/200Heo	P43
TIG-161Pvo/201Pvo	P44
ALU TIG-200P	P45

PLASMA CUTTING MACHINE

CUT-40Pvo	P48
CUT-40Heo	P49
CUT-41Pvo	P50
CUT-40y	P51
CUT-60Heo	P52
CUT-80Heo/100Heo	P53



IGBT INVERTER MMA WELDING MACHINE

With MIG(Metal Inert Gas) or MAG(Metal Active Gas) welding also called Gas-Shielded Metal Arc Welding(GMAW) an arc is maintained between a continuous solid wire electrode and the work piece.The arc and weld pool are shielded by a stream of inert or active gas.The process is suitable for most materials and filler wires are available for a wide range of metals.

MIG/MAG welding is inherently more productive than MMA,where productivity losses occur each time a welder stops to replace a consumed electrode.Material losses also result from MMA welding when the stub of each electrode is thrown away.For every kilogram of coated stick electrode purchased,about 65 percent becomes part of the weld(the rest being discarded).The use of solid wire and flux cored wire has increased this efficiency to 80-95 percent.MIG/MAG welding is a versatile process,which can deposit metal at a very high rate and in all psditions.The process is widely used on light to medium gauge steel fabrications and on aluminium alloy structures particularly where high-rate manual operator production is required.The introduction of flux cored wires is finding increased application in heavy steel structures.

Flux Cored Arc Welding

Flux Cored Arc Welding(FCAW) is quite similar to MIG/MAG welding as far as operation and equipment are concerned.However,the electrode is not solid but consists of a metal sheath surrounding a flux core.The electrode begins life as a flat metal strip,which is formed first into a "U" shape.Flux and alloying materials are deposited into the "U",which is then closed into a tube by a series of forming rolls.

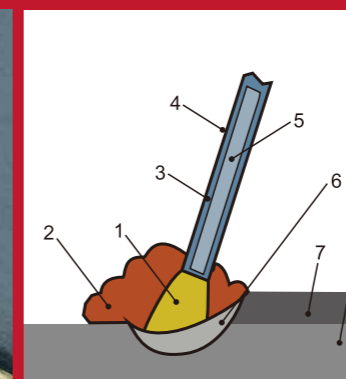
As in MIG/MAG welding,the flux cored process depends on a gas shield to protect the weld zone from atmospheric contamination.The gas is either applied separately,in which case the electrode is referred to as a gas shielded flux cored electrode,or it is generated from the decomposition of gas forming ingredients contained in the flux core(self shielding).in addition to the gas shield,the flux cored electrode produces a slag covering for further protection of the weld metal as it cools.This is subsequently removed.

ELECTRODES & CURRENTS

Φ E(mm)	1.6	2.5	2.5	3.2
RT	30-55	40-70	50-100	80-130
BS	50-75	60-100	70-120	110-150
CE	20-45	30-60	40-80	70-120

Φ E(mm)	4.0	5.0	6.0
RT	120-170	150-250	220-370
BS	140-200	190-260	250-320
CE	100-150	140-230	200-300

- RT Rutile
- BS Basic
- CI Cast iron
- SS Stainless steel
- AL Aluminium
- CE Cellulosic
- Φ E Electrodes diameter



- 1.Welding arc
- 2.Gaseous protection
- 3.Coating
- 4.Electrode
- 5.Core
- 6.Melting pool
- 7.Slag
- 8.Base material



MINI-115s/135s/165s

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



MMA WELDING

SAFETY ENERGY CONSERVATION HIGH EFFICIENCY STABILITY

ITEM	CODE	2540101	2540102	2540103
	UNIT	MINI-115s	MINI-135s	MINI-165s
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	3.8	4.2	5.0
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-110	20-130	20-160
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-2.5	1.6-2.5	1.6-3.2
No-load Voltage	(V)	62	62	62
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	33.0x20.0x23.0	33.0x20.0x23.0	33.0x20.0x23.0
Weight	(KG)	2.5	2.8	3.0

MINI-115c/135c/165c

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
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Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540111	2540112	2540113
	UNIT	MINI-115c	MINI-135c	MINI-165c
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	3.8	4.2	5.0
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-110	20-130	20-160
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-2.5	1.6-2.5	1.6-3.2
No-load Voltage	(V)	62	62	62
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	33.0x20.0x23.0	33.0x20.0x23.0	33.0x20.0x23.0
Weight	(KG)	2.5	2.8	3.0

MINI-120Evo/140Evo/160Evo

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.



Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540121	2540122	2540123
	UNIT	MINI-120Evo	MINI-140Evo	MINI-160Evo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	3.8	4.2	5.0
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-120	20-140	20-160
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-2.5	1.6-2.5	1.6-3.2
No-load Voltage	(V)	62	62	62
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	33.5x19.5x23.0	33.5x19.5x23.0	33.5x19.5x23.0
Weight	(KG)	2.5	2.8	3.0

MINI-120Heo/140Heo/160Heo

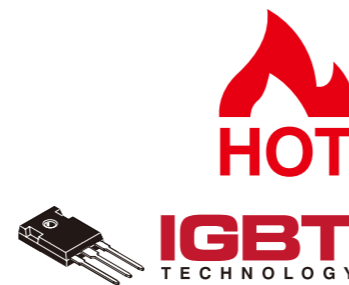


Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
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- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540131	2540132	2540133
	UNIT	MINI-120Heo	MINI-140Heo	MINI-160Heo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	3.8	4.2	5.0
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-120	20-140	20-160
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-2.5	1.6-2.5	1.6-3.2
No-load Voltage	(V)	62	62	62
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	34.0x19.0x20.5	34.0x19.0x20.5	34.0x19.0x20.5
Weight	(KG)	2.5	2.8	3.0

HANDY-160i



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540141
	UNIT	HANDY-160i
Input Voltage	(V)	1PH/220V±15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	5.0
Duty Cycle	(25°C)	60%
Current Range	(A)	20-160
Efficiency	(%)	85
Usable Electrode	(mm)	1.6-3.2
No-load Voltage	(V)	62
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	34.0x19.0x20.5
Weight	(KG)	2.5

MMA-145i/165i/185i/205i/255i



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540151	2540152	2540153	2540154	2540155
	UNIT	MMA-145i	MMA-165i	MMA-185i	MMA-205i	MMA-255i
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	4.5	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%	80%
Current Range	(A)	20-140	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62	62
Insulation Class		F	F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	37.0x21.5x26.5	37.0x21.5x26.5	37.0x21.5x26.5	37.0x21.5x26.5	37.0x21.5x26.5
Weight	(KG)	3.6	3.8	4.0	4.3	4.7

MMA-145c/165c/185c/205c/255c



Technical characteristics

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Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540161	2540162	2540163	2540164	2540165
	UNIT	MMA-145c	MMA-165c	MMA-185c	MMA-205c	MMA-255c
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	4.5	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%	80%
Current Range	(A)	20-140	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62	62
Insulation Class		F	F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	37.0x22.0x26.5	37.0x22.0x26.5	37.0x22.0x26.5	37.0x22.0x26.5	37.0x22.0x26.5
Weight	(KG)	3.6	3.8	4.0	4.3	4.7

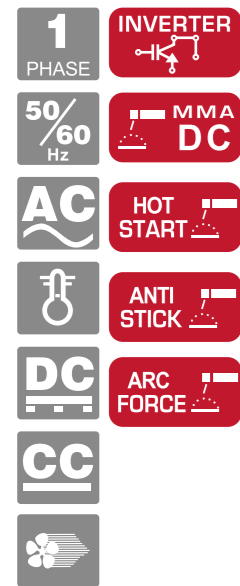
MMA-140Evo/160Evo/180Evo 200Evo/250Evo



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- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540171	2540172	2540173	2540174	2540175
	UNIT	MMA-140Evo	MMA-160Evo	MMA-180Evo	MMA-200Evo	MMA-250Evo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	4.5	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%	80%
Current Range	(A)	20-140	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62	62
Insulation Class		F	F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	39.0x21.5x26.5	39.0x21.5x26.5	39.0x21.5x26.5	39.0x21.5x26.5	39.0x21.5x26.5
Weight	(KG)	3.6	3.8	4.0	4.3	4.7

MMA-140Heo/160Heo/180Heo 200Heo/250Heo



Technical characteristics

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- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540181	2540182	2540183	2540184	2540185
	UNIT	MMA-140Heo	MMA-160Heo	MMA-180Heo	MMA-200Heo	MMA-250Heo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	4.5	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%	80%
Current Range	(A)	20-140	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62	62
Insulation Class		F	F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0
Weight	(KG)	3.7	3.9	4.1	4.4	4.8

MMA-140Neo/160Neo/180Neo 200Neo/250Neo



Technical characteristics

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- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540191	2540192	2540193	2540194	2540195
	UNIT	MMA-140Neo	MMA-160Neo	MMA-180Neo	MMA-200Neo	MMA-250Neo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	4.5	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%	80%
Current Range	(A)	20-140	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62	62
Insulation Class		F	F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5
Weight	(KG)	3.7	3.9	4.1	4.4	4.8

MMA-141Evo/161Evo/201Evo



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540201	2540202	2540203
	UNIT	MMA-141Evo	MMA-161Evo	MMA-201Evo
Input Voltage	(V)	110/220V±15%	110/220V±15%	Dual voltage 110/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	6.0	6.8	7.5
Duty Cycle	(25°C)	80%	80%	80%
Current Range	(A)	20-140	20-160	20-200
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-2.5	1.6-3.2	1.6-4.0
No-load Voltage	(V)	62	62	62
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	39.0x21.5x26.5	39.0x21.5x26.5	39.0x21.5x26.5
Weight	(KG)	3.8	4.0	4.3

MMA-180Pvo/200Pvo/250Pvo



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540211	2540212	2540213
	UNIT	MMA-180Pvo	MMA-200Pvo	MMA-250Pvo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	6.8	7.5	8.8
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-180	20-200	20-250
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	65	65	65
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5
Weight	(KG)	4.5	4.8	5.1

MMA-160Lcd/180Lcd/200Lcd/250Lcd



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Minimum Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540221	2540222	2540223	2540224
	UNIT	MINI-160Lcd	MINI-180Lcd	MINI-200Lcd	MINI-250Lcd
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%
Current Range	(A)	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85
Usable Electrode	(mm)	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62
Insulation Class		F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0
Weight	(KG)	3.9	4.1	4.4	4.8

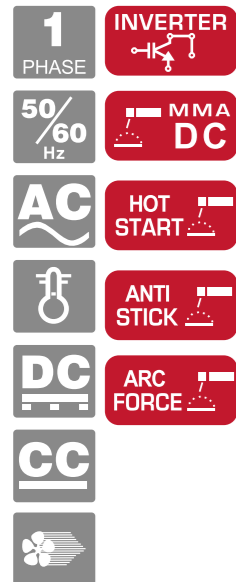
MMA-160E/180E/200E/250E



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540231	2540232	2540233	2540234
	UNIT	MMA-160E	MMA-180E	MMA-200E	MMA-250E
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%
Current Range	(A)	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85
Usable Electrode	(mm)	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62
Insulation Class		F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0
Weight	(KG)	3.9	4.1	4.4	4.8

MMA-160L/180L/200L/250L



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description



ITEM	CODE	2540241	2540242	2540243	2540244
	UNIT	MMA-160L	MMA-180L	MMA-200L	MMA-250L
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60	50/60
Input Capacity	(KVA)	5.0	6.2	7.3	8.5
Duty Cycle	(25°C)	80%	80%	80%	80%
Current Range	(A)	20-160	20-180	20-200	20-250
Efficiency	(%)	85	85	85	85
Usable Electrode	(mm)	1.6-4.0	1.6-4.0	1.6-5.0	1.6-5.0
No-load Voltage	(V)	62	62	62	62
Insulation Class		F	F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S	IP21S
Package Size	(cm)	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5	39.5x22.0x26.5
Weight	(KG)	3.9	4.1	4.4	4.8

ARC-160Heo/180Heo/200Heo



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540251	2540252	2540253
	UNIT	ARC-160Heo	ARC-180Heo	ARC-200Heo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	5.5	6.8	7.5
Duty Cycle	(25°C)	80%	80%	80%
Current Range	(A)	20-160	20-180	20-200
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-4.0	1.6-4.0	1.6-5.0
No-load Voltage	(V)	65	65	65
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	35.0x20.5x29.0	35.0x20.5x29.0	35.0x20.5x29.0
Weight	(KG)	5.0	5.2	5.5

TOP-250MV/300MV



Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter control technology, with high duty cycle and efficiency.
- ▶ Small Size, light weight, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ With Anti-stick, Hot-start, Arc-force, and strong compensation capability.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable, brush/hammer, protective mask.

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540261	2540262
	UNIT	TOP-250MV	TOP-300MV
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	8.3	9.2
Duty Cycle	(35°C)	45%	45%
Current Range	(A)	20-250	20-300
Efficiency	(%)	85	85
Usable Electrode	(mm)	1.6-5.0	1.6-5.0
No-load Voltage	(V)	65	65
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	42.0x24.0x34.0	42.0x24.0x34.0
Weight	(KG)	8.5	9.0

MMA-400Heo/500Heo

Technical characteristics

- ▶ Adopt advanced (Double Modules) Inverter control technology, with high duty cycle and efficiency.
- ▶ Applicable to Industrial building welding operations, high quality construction and energy-saving.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Easy arc-starting, with Auto protection functions of over-current and over-heat.
- ▶ Excellent arc characteristics, stable arc, good welding performance, less splash & noise.
- ▶ Suitable for welding all kinds of materials, such as carbon steel, alloy steel, cast iron and stainless steel etc.
- ▶ With Complete accessories: Electrode holder, earth clamp, welding cable.

Description

- 3** PHASE **INVERTER**
- 50/60** Hz **MMA DC**
- AC** **HOT START**
- ANTI STICK**
- DC** **ARC FORCE**
- CC**



ITEM	CODE	2540271	2540272
	UNIT	MMA-400Heo	MMA-500Heo
Input Voltage	(V)	3PH/380V±15%	3PH/380V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	18.2	23.5
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	30-400	30-500
Efficiency	(%)	85	85
Usable Electrode	(mm)	1.6-6.0	1.6-6.0
No-load Voltage	(V)	75	75
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	55.0x30.5x47.5	63.0x30.5x47.5
Weight	(KG)	17.0	21.0



IGBT INVERTER MIG/MAG WELDING

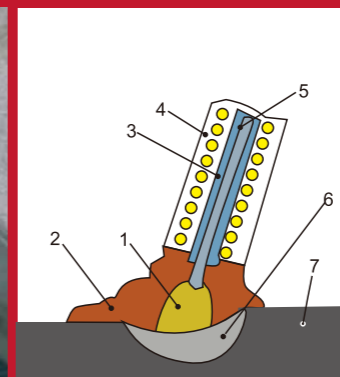
With MIG(Metal Inert Gas) or MAG(Metal Active Gas) welding also called Gas-Shielded Metal Arc Welding(GMAW) an arc is maintained between a continuous solid wire electrode and the work piece.The arc and weld pool are shielded by a stream of inert or active gas.The process is suitable for most materials and filler wires are available for a wide range of metals.

MIG/MAG welding is inherently more productive than MMA,where productivity losses occur each time a welder stops to replace a consumed electrode.Material losses also result from MMA welding when the stub of each electrode is thrown away.For every kilogram of coated stick electrode purchased,about 65 percent becomes part of the weld(the rest being discarded).The use of solid wire and flux cored wire has increased this efficiency to 80-95 percent.MIG/MAG welding is a versatile process.which can deposit metal at a very high rate and in all psditions.The process is widely used on light to medium gauge steel fabrications and on aluminium alloy structures particularly where high-rate manual operator production is required.The introduction of flux cored wires is finding increased application in heavy steel structures.

Flux Cored Arc Welding

Flux Cored Arc Welding(FCAW) is quite similar to MIG/MAG welding as far as operation and equipment are concerned.However,the electrode is not solid but consists of a metal sheath surrounding a flux core.The electrode begins life as a flat metal strip,which is formed first into a "U" shape.Flux and alloying materials are deposited into the "U",which is then closed into a tube by a series of forming rolls.

As in MIG/MAG welding,the flux cored process depends on a gas shield to protect the weld zone from atmospheric contamination.The gas is either applied separately,in which case the electrode is referred to as a gas shielded flux cored electrode,or it is generated from the decomposition of gas forming ingredients contained in the flux core(self shielding).in addition to the gas shield,the flux cored electrode produces a slag covering for further protection of the weld metal as it cools.This is subsequently removed.



- 1.Welding arc
- 2.Gaseous protection
- 3.Contact tip
- 4.Nozzle
- 5.Wire electrode
- 6.Melting pool
- 7.Solidified deposit



MIG WELDING

SAFETY ENERGY CONSERVATION HIGH EFFICIENCY STABILITY

EMIG-140

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, MIG/MMA/LIFT TIG function, suit for 1kg Flux-cored Wire.
- ▶ Fan cooled & Thermal protection, only for Flux -cored (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, electrode holder, earth clamp, welding cable, brush/hammer.



Description



ITEM	CODE	2541101	
	UNIT	EMIG-140	
		MIG	MMA
Input Voltage	(V)	1PH/220V ± 15%	
Frequency	(Hz)	50/60	
Input Capacity	(KVA)	4.2	4.5
Duty Cycle (25°C)		60%	60%
Current Range	(A)	30-140	20-140
Efficiency	(%)	85	
Flux-cored Wire	(mm)	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-2.5
No-load Voltage	(V)	52	
Insulation Class		F	
Protection Degree	(IP)	IP21S	
Package Size	(cm)	40.0x25.5x26.5	
Weight	(KG)	6.0	

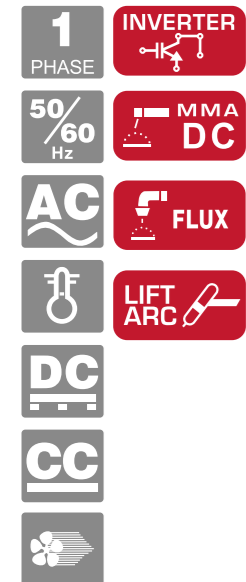
EMIG-140P

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, MIG/MMA/LIFT TIG function, suit for 1kg Flux-cored Wire.
- ▶ Fan cooled & Thermal protection, only for Flux -cored (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, electrode holder, earth clamp, welding cable, brush/hammer,



Description



ITEM	CODE	2541111	
		EMIG-140P	
	UNIT	MIG	MMA
Input Voltage	(V)	1PH/220V ± 15%	
Frequency	(Hz)	50/60	
Input Capacity	(KVA)	4.2	4.5
Duty Cycle (25°C)		60%	60%
Current Range	(A)	30-140	20-140
Efficiency	(%)	85	
Flux-cored Wire	(mm)	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-2.5
No-load Voltage	(V)	52	
Insulation Class		F	
Protection Degree	(IP)	IP21S	
Package Size	(cm)	41.5x24.0x31.5	
Weight	(KG)	6.0	

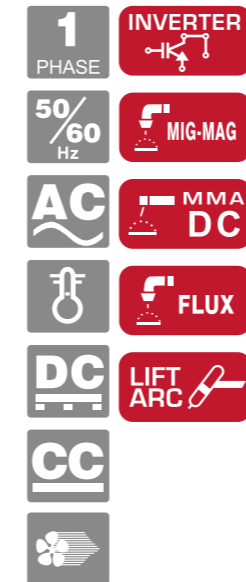
EMIG-205i/205Tec

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA/LIFT TIG multi-functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541121		2541122	
		EMIG-205i		EMIG-205Tec	
	UNIT	MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V ± 15%			
Frequency	(Hz)	50/60			
Input Capacity	(KVA)	6.1	7.2	6.1	7.2
Duty Cycle (25°C)		60%	60%	60%	60%
Current Range	(A)	30-200	20-200	30-200	20-200
Efficiency	(%)	85			
Welding Wire	(mm)	0.8-1.0	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0	/	1.6-4.0
No-load Voltage	(V)	52			
Insulation Class		F			
Protection Degree	(IP)	IP21S			
Package Size	(cm)	55.0x26.0x38.0			
Weight	(KG)	8.0			

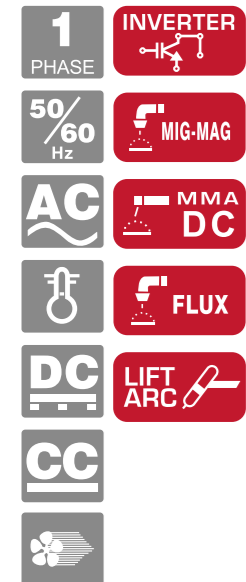
MIG-160Tec/200Tec

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA/LIFT TIG multi-functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541131		2541132	
		MIG-160Tec		MIG-200Tec	
	UNIT	MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V±15%		1PH/220V±15%	
Frequency	(Hz)	50/60		50/60	
Input Capacity	(KVA)	4.5	5.5	6.1	7.2
Duty Cycle	(25°C)	80%	60%	80%	60%
Current Range	(A)	30-160	20-160	30-200	20-200
Efficiency	(%)	85		85	
Welding Wire	(mm)	0.6-0.8	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-3.2	/	1.6-4.0
No-load Voltage	(V)	52		52	
Insulation Class		F		F	
Protection Degree	(IP)	IP21S		IP21S	
Package Size	(cm)	55.0x26.0x38.0		55.0x26.0x38.0	
Weight	(KG)	8.0		8.5	

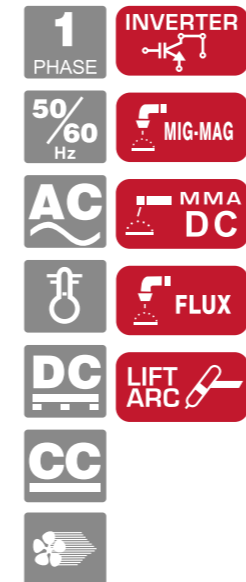
MIG-201Tec

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA/LIFT TIG multi-functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541141	
		MIG-201Tec	
	UNIT	MIG	MMA
Input Voltage	(V)	110/220V±15%	
Frequency	(Hz)	50/60	
Input Capacity	(KVA)	6.1	7.2
Duty Cycle	(25°C)	80%	60%
Current Range	(A)	30-200	20-180
Efficiency	(%)	85	
Welding Wire	(mm)	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0
No-load Voltage	(V)	52	
Insulation Class		F	
Protection Degree	(IP)	IP21S	
Package Size	(cm)	55.0x26.0x38.0	
Weight	(KG)	9.2	

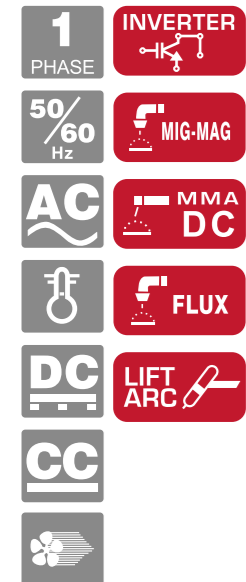
MIG-200s/250s

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541151		2541152	
		MIG-200s		MIG-250s	
	UNIT	MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V±15%		1PH/220V±15%	
Frequency	(Hz)	50/60		50/60	
Input Capacity	(KVA)	6.1	7.2	7.1	8.0
Duty Cycle (25°C)		80%	60%	80%	60%
Current Range	(A)	40-200	20-180	40-250	20-200
Efficiency	(%)	85		85	
Welding Wire	(mm)	0.8-1.0	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0	/	1.6-5.0
No-load Voltage	(V)	50		50	
Insulation Class		F		F	
Protection Degree	(IP)	IP21S		IP21S	
Package Size	(cm)	52.5x32.0x38.0		52.5x32.0x38.0	
Weight	(KG)	11.0		11.5	

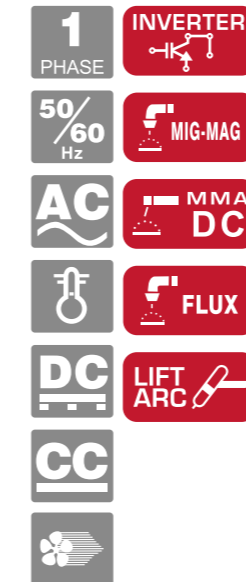
MIG-200Heo/250Heo

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541161		2541162	
		MIG-200Heo		MIG-250Heo	
	UNIT	MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V±15%		1PH/220V±15%	
Frequency	(Hz)	50/60		50/60	
Input Capacity	(KVA)	6.1	7.2	7.1	8.0
Duty Cycle (25°C)		80%	60%	80%	60%
Current Range	(A)	40-200	20-180	40-250	20-200
Efficiency	(%)	85		85	
Welding Wire	(mm)	0.8-1.0	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0	/	1.6-5.0
No-load Voltage	(V)	50		50	
Insulation Class		F		F	
Protection Degree	(IP)	IP21S		IP21S	
Package Size	(cm)	50.0x28.0x41.5		50.0x28.0x41.5	
Weight	(KG)	11.0		11.5	

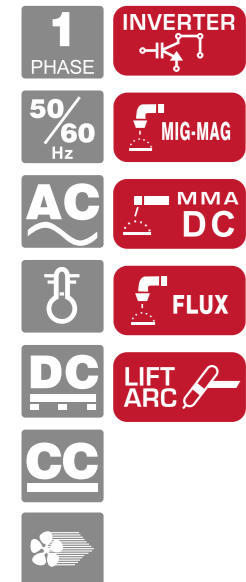
MIG-200Pvo/250Pvo

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541171		2541172	
		MIG-200Pvo		MIG-250Pvo	
		MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V±15%		1PH/220V±15%	
Frequency	(Hz)	50/60		50/60	
Input Capacity	(KVA)	6.1	7.2	7.1	8.0
Duty Cycle	(25°C)	80%	60%	80%	60%
Current Range	(A)	40-200	20-180	40-250	20-200
Efficiency	(%)	85		85	
Welding Wire	(mm)	0.8-1.0	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0	/	1.6-5.0
No-load Voltage	(V)	50		50	
Insulation Class		F		F	
Protection Degree	(IP)	IP21S		IP21S	
Package Size	(cm)	52.5x32.0x38.0		52.5x32.0x38.0	
Weight	(KG)	11.0		11.5	

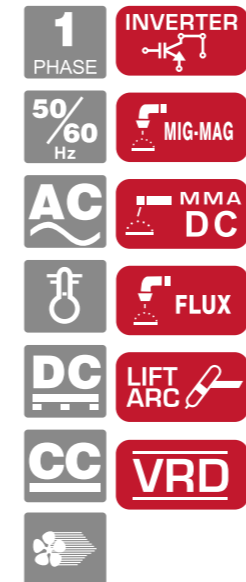
MIG-200Syn/250Syn

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



ITEM	CODE	2541181		2541182	
		MIG-200Syn		MIG-250Syn	
		MIG	MMA	MIG	MMA
Input Voltage	(V)	1PH/220V±15%		1PH/220V±15%	
Frequency	(Hz)	50/60		50/60	
Input Capacity	(KVA)	6.1	7.2	7.1	8.0
Duty Cycle	(25°C)	80%	60%	80%	60%
Current Range	(A)	40-200	20-180	40-250	20-200
Efficiency	(%)	85		85	
Welding Wire	(mm)	0.8-1.0	/	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0	/	1.6-5.0
No-load Voltage	(V)	50		50	
Insulation Class		F		F	
Protection Degree	(IP)	IP21S		IP21S	
Package Size	(cm)	50.0x28.0x41.5		50.0x28.0x41.5	
Weight	(KG)	11.2		11.8	

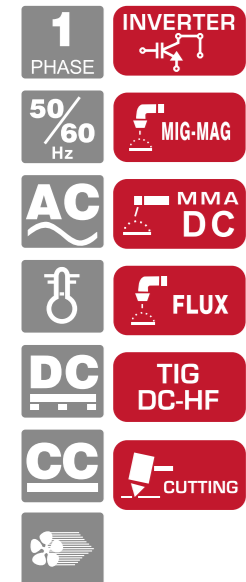
MCT-416

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA/TIG/CUT multi-functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, TIG Torch, Plasma Torch, electrode holder, earth clamp, welding cable.



Description



SYNERGIC CONTROL

IGBT TECHNOLOGY

ITEM	CODE	2541191			
	UNIT	MCT-416			
		MIG	MMA	TIG	CUT
Input Voltage	(V)	1PH/220V ± 15%			
Frequency	(Hz)	50/60			
Input Capacity	(KVA)	4.5	5.5	5.0	4.8
Duty Cycle (25°C)		60%	60%	60%	60%
Current Range	(A)	30-160	20-160	20-160	10-40
Efficiency	(%)	85			
Welding Wire	(mm)	0.6-0.8	/	/	/
Usable Electrode	(mm)	/	1.6-4.0	/	/
Cutting Thickness	(V)	/	/	/	≤12
No-load Voltage		50	55	55	230
Arc Starting	(IP)	/	/	HF	HF
Package Size	(cm)	50.0x28.0x41.5			
Weight	(KG)	13.5			

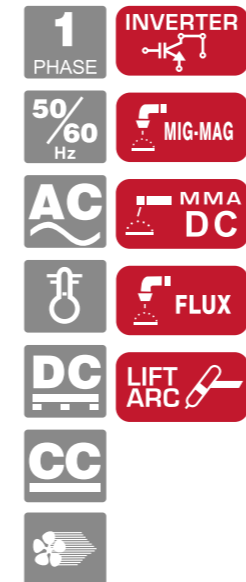
MIG-225v

Technical characteristics

- ▶ Advanced (IGBT) Inverter Technology, with MIG/MMA functions.
- ▶ Fan cooled & Thermal protection, both for MIG/MAG (gas) & Flux (no gas) welding.
- ▶ Automatic over-voltage, over-current and over-heat protection, safety and durable.
- ▶ Power-saving design, easy to be operated, smooth and stable welding performance, less spatter & noise.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With high duty cycle, performance & efficiency, stepless adjustment for current, voltage, wire feeder speed.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."



Description



IGBT TECHNOLOGY

ITEM	CODE	2541201	
	UNIT	MIG-225v	
		MIG	MMA
Input Voltage	(V)	1PH/220V ± 15%	
Frequency	(Hz)	50/60	
Input Capacity	(KVA)	6.8	8.0
Duty Cycle (25°C)		80%	60%
Current Range	(A)	30-200	20-180
Efficiency	(%)	85	
Welding Wire	(mm)	0.8-1.0	/
Usable Electrode	(mm)	/	1.6-4.0
No-load Voltage	(V)	52	
Insulation Class		F	
Protection Degree	(IP)	IP21S	
Package Size	(cm)	58.0x34.5x42.0	
Weight	(KG)	13	

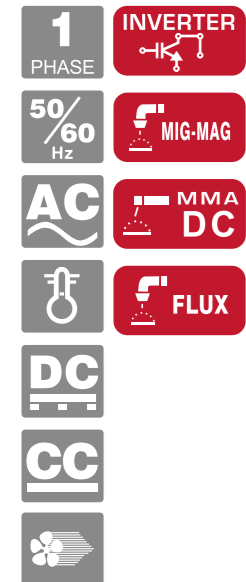
5 Kg Wire
15 Kg Wire

MIG-200B/250B

Technical characteristics

- ▶ IGBT Inverter technology, current-mode control, reliable quality, stable performance.
- ▶ Closed circuit feedback, constant Voltage output fits for wide voltage range(±15%).
- ▶ Fan cooled & Thermal protection, high duty cycle allows welding over longer durations.
- ▶ Stable welding performance, minimal splash, deep welding penetration, good welding shape.
- ▶ Industrial electric welding machine, high conversion rate, and energy-saving.
- ▶ Slow wire feeding during arc starting, remove the tip ball after welding,easy arc-starting.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable.

Description



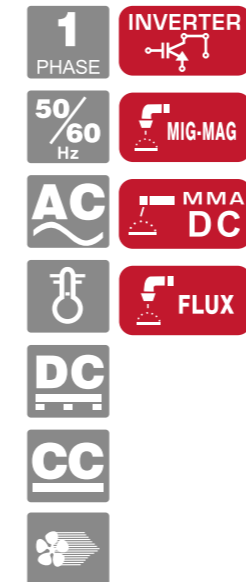
ITEM	CODE	2541211	2541212
	UNIT	MIG-200B	MIG-250B
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	6.5	7.8
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	40-200	40-250
Efficiency	(%)	85	85
Welding Wire	(mm)	0.8-1.0	0.8-1.0
Usable Electrode	(mm)	1.6-4.0	1.6-5.0
No-load Voltage	(V)	52	52
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	58.5x31.5x61.5	58.5x31.5x61.5
Weight	(KG)	20	23

MIG-250I/270I

Technical characteristics

- ▶ IGBT Inverter technology, current-mode control, reliable quality, stable performance.
- ▶ Closed circuit feedback, constant Voltage output fits for wide voltage range(±15%).
- ▶ Fan cooled & Thermal protection, high duty cycle allows welding over longer durations.
- ▶ Stable welding performance, minimal splash, deep welding penetration, good welding shape.
- ▶ Industrial electric welding machine, high conversion rate, and energy-saving.
- ▶ Slow wire feeding during arc starting, remove the tip ball after welding,easy arc-starting.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."

Description



ITEM	CODE	2541221	2541222
	UNIT	MIG-250I	MIG-270I
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	7.8	9.2
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	40-250	40-270
Efficiency	(%)	85	85
Welding Wire	(mm)	0.8-1.0	0.8-1.0
Usable Electrode	(mm)	1.6-5.0	1.6-5.0
No-load Voltage	(V)	52	52
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	60.5x33.0x63.0	60.5x33.0x63.0
Weight	(KG)	26	28

MIG-250PI/270PI

Technical characteristics

- ▶ IGBT Inverter technology, current-mode control, reliable quality, stable performance.
- ▶ Closed circuit feedback, constant Voltage output fits for wide voltage range(±15%).
- ▶ Fan cooled & Thermal protection, high duty cycle allows welding over longer durations.
- ▶ Stable welding performance, minimal splash, deep welding penetration, good welding shape.
- ▶ Industrial electric welding machine, high conversion rate, and energy-saving.
- ▶ Slow wire feeding during arc starting, remove the tip ball after welding,easy arc-starting.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."

Description

- 1** PHASE **INVERTER**
- 50/60** Hz **MIG-MAG**
- AC** **MMA DC**
- FLUX**
- DC**
- CC**



- INVERTER MIG**
- INVERTER MMA**

ITEM	CODE	2541231	2541232
	UNIT	MIG-250PI	MIG-270PI
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	7.8	9.2
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	40-250	40-270
Efficiency	(%)	85	85
Welding Wire	(mm)	0.8-1.0	0.8-1.0
Usable Electrode	(mm)	1.6-5.0	1.6-5.0
No-load Voltage	(V)	52	52
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	60.5x30.5x62.0	60.5x30.5x62.0
Weight	(KG)	28	30

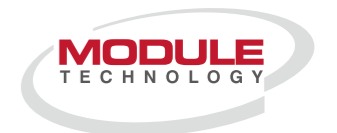
SUPER MIG-350p/500p

Technical characteristics

- ▶ IGBT Inverter technology, (IGBT module) current-mode control, reliable quality, stable performance.
- ▶ Closed circuit feedback, constant Voltage output fits for wide voltage range(±15%).
- ▶ Fan cooled & Thermal protection, high duty cycle allows welding over longer durations.
- ▶ Stable welding performance, minimal splash, deep welding penetration, good welding shape.
- ▶ Industrial electric welding machine, high conversion rate, and energy-saving.
- ▶ Slow wire feeding during arc starting, remove the tip ball after welding,easy arc-starting.
- ▶ Suitable for welding low carbon steel, low alloy steel, stainless steel, aluminium and aluminium-alloy etc.
- ▶ With Complete accessories: Mig torch, CO2regulator, electrode holder, earth clamp, welding cable."

Description

- 3** PHASE **INVERTER**
- 50/60** Hz **MIG-MAG**
- AC** **MMA DC**
- FLUX**
- DC**
- CV**



- INVERTER MIG**
- INVERTER MMA**

ITEM	CODE	2541241	2541242
	UNIT	SUPER MIG-350p	SUPER MIG-500p
Input Voltage	(V)	3PH/380V±15%	3PH/380V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	15	26
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	40-350	40-500
Efficiency	(%)	85	85
Welding Wire	(mm)	0.8-1.2	0.8-1.6
Usable Electrode	(mm)	2.5-6.0	2.5-6.0
No-load Voltage	(V)	55	55
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	63.0x30.5x68.0	63.0x30.5x68.0
Weight	(KG)	41	50

ALU MIG-350P/500P

Technical characteristics

- ▶ Multiple Process with Pulse / Duplex Pulse MIG (GMAW), Stick (SMAW).
- ▶ New Generation advanced IGBT Inverter Technology, Multi-Process Synergic Inverter MIG Welder.
- ▶ Industrial type, modular and compact design with heavy duty, both for Manual and Synergic controls.
- ▶ Power, Overload and Under/Over-Voltage LED indicators, Equipped with voltage protection and thermal protection.
- ▶ Adjustable ending current / voltage and inductance, Stepless welding wire feeding speed (A) and voltage (V) adjustment knobs.
- ▶ Digital welding parameters display, Built-in soft wire feeding, post-gas, burn-back and ball cutting.
- ▶ Welding mode, Welding Materials, Shielding Gas, Wire Diameters selections/settings.
- ▶ Excellent welding with steel, stainless Steel, Aluminium and Flux cored wires.
- ▶ Ideal for welding of carbon steels, low-alloy steels, stainless steels and aluminum.

Description

- 3** PHASE **INVERTER**
- 50/60** Hz **MIG-MAG**
- AC** **MMA** **DC**
- FLUX**
- DC**
- CV**



ITEM	CODE	2541251	2541252
	UNIT	ALU MIG-350P	ALU MIG-500P
Input Voltage	(V)	3PH/380V±15%	3PH/380V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	15	26
Duty Cycle	(35°C)	60%	60%
Current Range	(A)	40-350	40-500
Efficiency	(%)	85	85
Welding Wire	(mm)	0.8-1.2	0.8-1.6
Usable Electrode	(mm)	2.5-6.0	2.5-6.0
No-load Voltage	(V)	55	55
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	1080.0x43.0x1360.0	1080.0x43.0x1360.0
Weight	(KG)	85	92



IGBT INVERTER TIG WELDING

TIG(Tungsten Inert Gas)welding or Gas-Shielded Tungsten Arc Welding(GTAW) is a process,which uses a non-consumable solid tungsten electrode.The electrode,the arc and the area surrounding the molten weld puddle are protected from the atmosphere by an inert gas shield.If a filler metal is necessary,it is added to the leading edge of the molten puddle.

TIG welding produces exceptionally clean,high quality welds.As no slag is produced,the chance of slag inclusions in the weld metal is eliminated and the finished weld requires virtually no cleaning.TIG welding may be used for welding almost all metals and the process lends itself to both manual and automatic operation.TIG welding is most extensively used for welding aluminium and stainless steel alloys where weld integrity is of the utmost importance.It is widely used for high quality joints in the nuclear,chemical,aircraft and food industries.

THE WELDING METHODS

AC/DC

TIG welding methods are classified according to the welding current to DC TIG and AC TIG for direct current and alternating current, respectively. TIG welding power sources are suitable for both current types (AC/DC) or for only DC welding.

DC/TIG

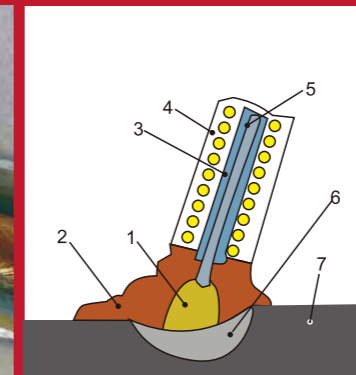
welding is typically used in welding a variety of metals. Alternating current must, however, be used in aluminum welding.

MIX TIG

welding if current mixed of both direct and alternating current is used in TIG welding. It is a particularly useful method when welding aluminum materials of different thicknesses together.

PULSED

TIG in Pulse TIG welding, the power source pulses the welding current, which reduces the heat effect affecting the material being welded. This is useful particularly when welding thin materials in which the TIG heat input is great. Pulse welding also improves the manageability of the molten weld pool and the penetration.



1. Welding arc
2. Gaseous protection
3. Electrode holder clamp
4. Nozzle
5. Infusible electrode
6. Melting pool
7. Solidified deposit



**TIG
INVERTER**

TIG WELDING

SAFETY ENERGY CONSERVATION HIGH EFFICIENCY STABILITY

ETIG-160/200

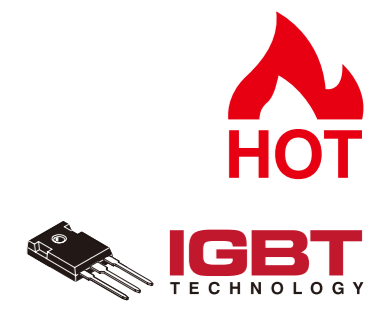
Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter technique, and excellent imported capacity equipment, high working efficiency.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ With both DC TIG and MMA arc welding functions, can weld all kinds of metals, high duty cycle & efficiency.
- ▶ High frequency pressurization arc starting, wide range for current adjustment and superior welding performance.
- ▶ With Auto protection functions of over-current, over-heat, and prevent lack of voltage etc, to ensure safety operations.
- ▶ Simple structure, excellent technics, durability, reliability, and easy maintenance.
- ▶ With stable arc, good welding performance, less splash & noise, and strong compensation capability.
- ▶ With Complete accessories: TIG Torch, electrode holder, earth clamp, welding cable, brush/hammer, protective mask.



Description

- 1** PHASE **INVERTER**
- 50/60** Hz **TIG/MMA**
- AC** **TIG DC-HF**
- ANTI STICK**
- DC** **emc**
- CC**



ITEM	CODE	2542101	2542102
		ETIG-160	ETIG-200
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	5.0	6.5
Duty Cycle	(25°C)	60%	60%
Current Range	(A)	20-160	20-200
Efficiency	(%)	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0
No-load Voltage	(V)	56	56
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	39.0x22.0x26.5	39.0x22.0x26.5
Weight	(KG)	6.3	7.2

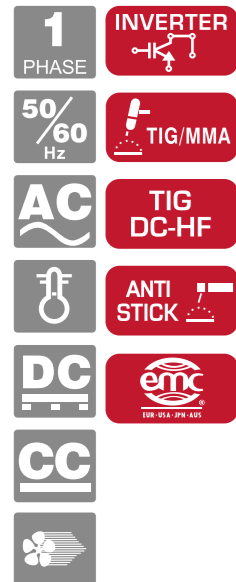
ETIG-160Pvo/200Pvo

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter technique, and excellent imported capacity equipment, high working efficiency.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ With both DC TIG and MMA arc welding functions, can weld all kinds of metals, high duty cycle & efficiency.
- ▶ High frequency pressurization arc starting, wide range for current adjustment and superior welding performance.
- ▶ With Auto protection functions of over-current, over-heat, and prevent lack of voltage etc, to ensure safety operations.
- ▶ Simple structure, excellent technics, durability, reliability, and easy maintenance.
- ▶ With stable arc, good welding performance, less splash & noise, and strong compensation capability.
- ▶ With Complete accessories: TIG Torch, electrode holder, earth clamp, welding cable, brush/hammer, protective mask.



Description



ITEM	CODE	2542111	2542112
	UNIT	ETIG-160Pvo	ETIG-200Pvo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	5.0	6.5
Duty Cycle	(25°C)	60%	60%
Current Range	(A)	20-160	20-200
Efficiency	(%)	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0
No-load Voltage	(V)	56	56
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	39.5x22.0x26.5	39.5x22.0x26.5
Weight	(KG)	6.3	7.2

TIG-160Heo/180Heo/200Heo

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter technique, and excellent imported capacity equipment, high working efficiency.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ With both DC TIG and MMA arc welding functions, can weld all kinds of metals, high duty cycle & efficiency.
- ▶ High frequency pressurization arc starting, wide range for current adjustment and superior welding performance.
- ▶ With Auto protection functions of over-current, over-heat, and prevent lack of voltage etc, to ensure safety operations.
- ▶ Simple structure, excellent technics, durability, reliability, and easy maintenance.
- ▶ With stable arc, good welding performance, less splash & noise, and strong compensation capability.
- ▶ With Complete accessories: TIG Torch, electrode holder, earth clamp, welding cable, brush/hammer, protective mask.



Description



ITEM	CODE	2542121	2542122	2542123
	UNIT	TIG-160Heo	TIG-180Heo	TIG-200Heo
Input Voltage	(V)	1PH/220V±15%	1PH/220V±15%	1PH/220V±15%
Frequency	(Hz)	50/60	50/60	50/60
Input Capacity	(KVA)	5.0	5.8	6.5
Duty Cycle	(25°C)	60%	60%	60%
Current Range	(A)	20-160	20-180	20-200
Efficiency	(%)	85	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0	1.6-4.0
No-load Voltage	(V)	56	56	56
Insulation Class		F	F	F
Protection Degree	(IP)	IP21S	IP21S	IP21S
Package Size	(cm)	47.0x25.0x35.5	47.0x25.0x35.5	47.0x25.0x35.5
Weight	(KG)	6.8	7.5	8.2

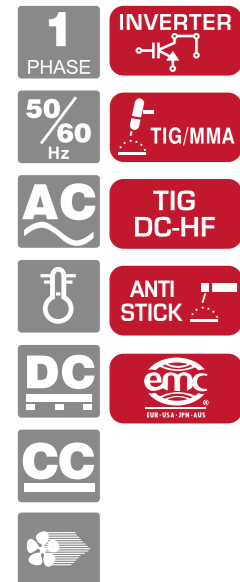
TIG-161Pvo/201Pvo

Technical characteristics

- ▶ Adopt advanced (IGBT) Inverter technique, and excellent imported capacity equipment, high working efficiency.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ With both DC TIG and MMA arc welding functions, can weld all kinds of metals, high duty cycle & efficiency.
- ▶ High frequency pressurization arc starting, wide range for current adjustment and superior welding performance.
- ▶ With Auto protection functions of over-current, over-heat, and prevent lack of voltage etc, to ensure safety operations.
- ▶ Simple structure, excellent technics, durability, reliability, and easy maintenance.
- ▶ With stable arc, good welding performance, less splash & noise, and strong compensation capability.
- ▶ With Complete accessories: TIG Torch, electrode holder, earth clamp, welding cable, brush/hammer, protective mask.



Description



ITEM	CODE	2542131	2542132
	UNIT	TIG-161Pvo	TIG-201Pvo
Input Voltage	(V)	110/220V±15%	110/220V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	5.0	6.5
Duty Cycle	(25°C)	60%	60%
Current Range	(A)	20-160	20-200
Efficiency	(%)	85	85
Usable Electrode	(mm)	1.6-3.2	1.6-4.0
No-load Voltage	(V)	56	56
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	39.5x22.0x26.5	39.5x22.0x26.5
Weight	(KG)	6.5	7.8

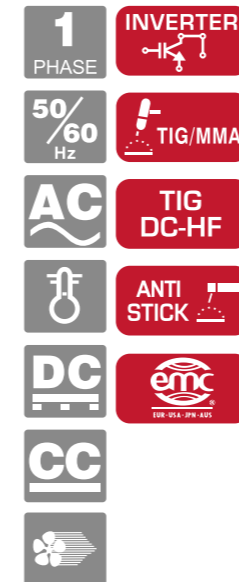
ALU TIG-200P

Technical characteristics

- ▶ Use powerful IGBT switched and advanced inverter and MCU control.
- ▶ Use PWM control technology and Constant current output control, welding current can be exactly controlled.
- ▶ Digital control technology, High-tech products.
- ▶ With AC TIG, DC PULSE TIG, DC TIG and MMA functions.
- ▶ High weld quality, Lower heat input, small deformation after welding.
- ▶ Low power consumption, energy saving up to 30%, with auto-protection functions of over-current and over-heat.
- ▶ With stable arc, good welding performance, less splash & noise, and strong compensation capability.
- ▶ Be able to weld all kinds of metal, such as carbon steel, alloy, Steel, cast iron, stainless steel, aluminum, aluminum alloy etc.



Description



ITEM	CODE	2542141
	UNIT	ALU TIG-200P
Input Voltage	(V)	1PH/220V±15%
Frequency	(Hz)	50/60
Current Range	(A)	20-200
Input Capacity	(KVA)	6.5
Rated Input Current	(A)	14
No-load Voltage	(V)	56
Duty Cycle	(25°C)	60%
Arcing Way		HF
Preflow Time	(S)	0-1S
Slow Up	(S)	0-5S
Gas Delay Time	(S)	0-10S
Pulse Frequency	(Hz)	10-100Hz
Efficiency	(%)	85
Power Factor		0.73
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	52.5x32.0x38.5
Weight	(KG)	12

IGBT INVERTER PLASMA CUTTING

This process uses a concentrated electrical arc to burn the material through a high-temperature plasma beam. All conductive materials can be cut. Plasma cutting units with cutting currents from 20 to 160 amperes can cut plates with 0,5 to 50 mm thicknesses. Plasma gas is mainly compressed air. The air plasma arc cutting unit can cut mild, alloy steels, aluminium, copper and other metals and alloys.

Modern technology for all electrically-conductive materials, used particularly for structural steel, stainless and non-ferrous metals.

Low heat distortion of the material due to densely concentrated plasma arc.

High cutting speeds (5 to 7 times higher than with oxy/fuel cutting) and low dead times (no preheating required).

Material thickness 0.5 to 50 mm cuttable with plasma current up to 160 amperes.

Efficient cuts in structural steel up to 30 mm vertically or bevelling.

Highest cutting quality obtainable with fine-beam plasma or water-injection plasma method.

Contact Striking

A particular kind of cutting torch with mobile electrode is used. When the striking is activated, the electrode, pushed by the air, detaches itself from the nozzle and the sparkie generates the pilot arc. More wear of cutting torch internal parts, lesser electromagnetic disturbances.

HF Striking

The pilot arc is struck thanks to sparkie which is delivered by a particular circuit. The sends a high frequency and high intensive impulse. Less wear of the internal parts of cutting torch.

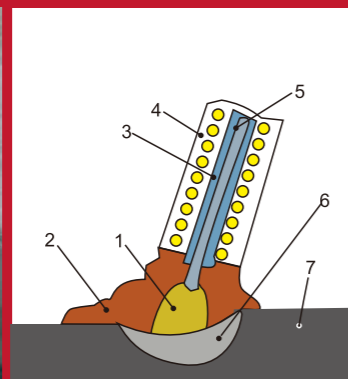
Cutting Characteristics

ADVANTAGE

- ▶ Quick cutting
- ▶ Simple operation
- ▶ Cutting in thin thicknesses
- ▶ High quality and cutting speed

DISADVANTAGE

- ▶ Nozzle of cutting torch easy to bad
- ▶ Electrode of cutting torch easy to bad
- ▶ Need for compressed machine



1. Welding arc
2. Gaseous protection
3. Contact tip
4. Nozzle
5. Wire electrode
6. Melting pool
7. Solidified deposit



PLASMA CUTTING

SAFETY ENERGY CONSERVATION HIGH EFFICIENCY STABILITY

CUT-40Pvo

Technical characteristics

- ▶ IGBT power switch and advanced Inverter technology design, 60% high duty cycle.
- ▶ Simple operation, Smooth cutting edge and high cutting precision.
- ▶ Stable output, small cutting tension and deformation.
- ▶ Thick metal plate can be cut easily and quickly.
- ▶ Suit for cutting stainless steel, copper, iron and aluminium, etc; HF touched Arc-starting cutting.
- ▶ Scope of Application: Petroleum industry, chemical industry, power supply, metallurgy, shipbuilding etc.
- ▶ With Complete accessories: Plasma cutting torch, air regulator, earth clamp, welding cable.



Description

- 1** PHASE **INVERTER**
- 50/60** Hz **CUTTING**
- AC**
- DC**
- CC**



ITEM	CODE	2543101
	UNIT	CUT-40Pvo
Input Voltage	(V)	1PH/220V±15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	4.8
Duty Cycle	(25°C)	60%
Current Range	(A)	10-40
Efficiency	(%)	85
Cutting Thickness	(mm)	≤12
No-load Voltage	(V)	230
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	39.5x22.0x26.5
Weight	(KG)	7.5

CUT-40Heo

Technical characteristics

- ▶ IGBT power switch and advanced Inverter technology design, 60% high duty cycle.
- ▶ Simple operation, Smooth cutting edge and high cutting precision.
- ▶ Stable output, small cutting tension and deformation.
- ▶ Thick metal plate can be cut easily and quickly.
- ▶ Suit for cutting stainless steel, copper, iron and aluminium, etc; HF touched Arc-starting cutting.
- ▶ Scope of Application: Petroleum industry, chemical industry, power supply, metallurgy, shipbuilding etc.
- ▶ With Complete accessories: Plasma cutting torch, air regulator, earth clamp, welding cable.



Description

- 1** PHASE **INVERTER**
- 50/60** Hz **CUTTING**
- AC**
- DC**
- CC**



ITEM	CODE	2543111
	UNIT	CUT-40Heo
Input Voltage	(V)	1PH/220V±15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	4.8
Duty Cycle	(25°C)	60%
Current Range	(A)	10-40
Efficiency	(%)	85
Cutting Thickness	(mm)	≤12
No-load Voltage	(V)	230
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	46.5x27.0x34.0
Weight	(KG)	9

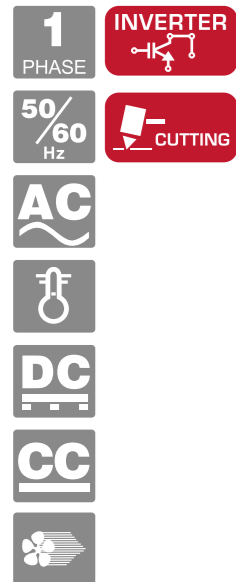
CUT-41Pvo

Technical characteristics

- ▶ IGBT power switch and advanced Inverter technology design, 60% high duty cycle.
- ▶ Simple operation, Smooth cutting edge and high cutting precision.
- ▶ Stable output, small cutting tension and deformation.
- ▶ Thick metal plate can be cut easily and quickly.
- ▶ Suit for cutting stainless steel, copper, iron and aluminium, etc; HF touched Arc-starting cutting.
- ▶ Scope of Application: Petroleum industry, chemical industry, power supply, metallurgy, shipbuilding etc.
- ▶ With Complete accessories: Plasma cutting torch, air regulator, earth clamp, welding cable.



Description



ITEM	CODE	2543121
	UNIT	CUT-41Pvo
Input Voltage	(V)	110/220V ± 15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	4.8
Duty Cycle	(25°C)	60%
Current Range	(A)	10-40
Efficiency	(%)	85
Cutting Thickness	(mm)	≤12
No-load Voltage	(V)	230
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	46.5x27.0x34.0
Weight	(KG)	8

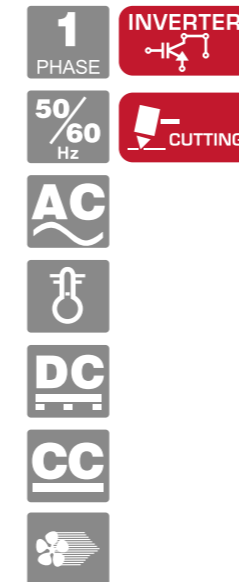
CUT-40y

Technical characteristics

- ▶ IGBT power switch and advanced Inverter technology design, 60% high duty cycle.
- ▶ Built-in Air compressor, simple operation, smooth cutting edge and high cutting precision.
- ▶ Stable output, small cutting tension and deformation.
- ▶ Thick metal plate can be cut easily and quickly.
- ▶ Suit for cutting stainless steel, copper, iron and aluminium, etc; HF touched Arc-starting cutting.
- ▶ Scope of Application: Petroleum industry, chemical industry, power supply, metallurgy, shipbuilding etc.
- ▶ With Complete accessories: Plasma cutting torch, air regulator, earth clamp, welding cable.



Description



ITEM	CODE	2543131
	UNIT	CUT-40y
Input Voltage	(V)	1PH/220V ± 15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	4.8
Duty Cycle	(25°C)	60%
Current Range	(A)	10-40
Aire Pressure	(Bar)	2.2
Efficiency	(%)	85
Cutting Thickness	(mm)	≤12
No-load Voltage	(V)	230
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	50.0x28.0x41.5
Weight	(KG)	14

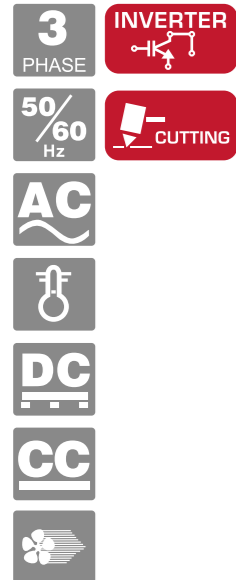
CUT-60Heo

Technical characteristics

- ▶ IGBT power switch and advanced Inverter technology design, 60% high duty cycle.
- ▶ Simple operation, Smooth cutting edge and high cutting precision.
- ▶ Stable output, small cutting tension and deformation.
- ▶ Thick metal plate can be cut easily and quickly.
- ▶ Suit for cutting stainless steel, copper, iron and aluminium, etc; HF touched Arc-starting cutting.
- ▶ Scope of Application: Petroleum industry, chemical industry, power supply, metallurgy, shipbuilding etc.
- ▶ With Complete accessories: Plasma cutting torch, air regulator, earth clamp, welding cable.



Description



ITEM	CODE	2543141
	UNIT	CUT-60Heo
Input Voltage	(V)	3PH/380V±15%
Frequency	(Hz)	50/60
Input Capacity	(KVA)	7.9
Duty Cycle	(25°C)	60%
Current Range	(A)	10-60
Efficiency	(%)	85
Cutting Thickness	(mm)	≤18
No-load Voltage	(V)	230
Insulation Class		F
Protection Degree	(IP)	IP21S
Package Size	(cm)	50.0x28.0x41.5
Weight	(KG)	15

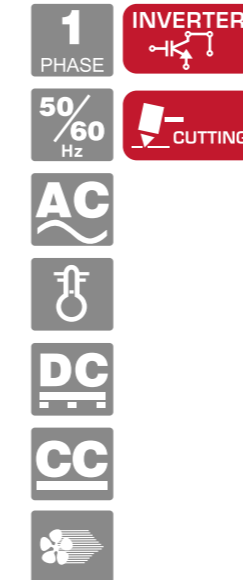
CUT-80Heo/100Heo

Technical characteristics

- ▶ Industrial type, heavy duty, easy to move and storage.
- ▶ Digital cutting current display, Easy-to-use and user-friendly control panel.
- ▶ Equipped with voltage protection and thermal protection, Power and overload indicators.
- ▶ New Generation IGBT Inverter Technology, Suitable for manual cutting and automation cutting.
- ▶ Gas check/ cutting/ net cutting and 2T/4T mode selections switches.
- ▶ Patented compact design, Steeples cutting current knob.
- ▶ Fan cooling system, Steeples cutting current knob.
- ▶ High performance on cutting of carbon steels, low alloyed steels, stainless steels and aluminium alloys.



Description

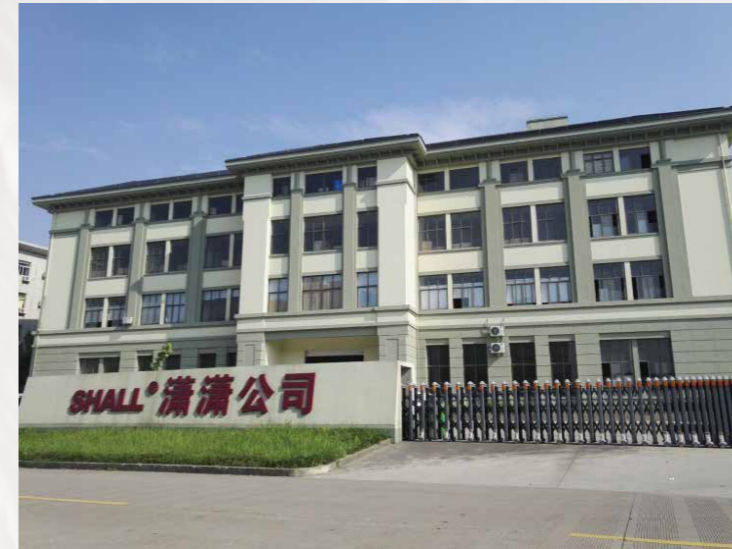


ITEM	CODE	2543151	2543152
	UNIT	CUT-80Heo	CUT-100Heo
Input Voltage	(V)	3PH/380V±15%	3PH/380V±15%
Frequency	(Hz)	50/60	50/60
Input Capacity	(KVA)	9.0	12.0
Duty Cycle	(25°C)	60%	60%
Current Range	(A)	10-80	10-100
Efficiency	(%)	85	85
Cutting Thickness	(mm)	≤22	≤26
No-load Voltage	(V)	230	230
Insulation Class		F	F
Protection Degree	(IP)	IP21S	IP21S
Package Size	(cm)	63.0x30.5x47.5	63.0x30.5x47.5
Weight	(KG)	21	25

SHALL PRODUCTS



MANUFACTURING COMPLEX



厂房
FACTORY BUILDINGS

厂房
FACTORY BUILDINGS



办公楼
OFFICE BUILDING



生产流水线
PRODUCTION LINE