

WX4

Twin Inverter Control AC/DC TIG Welding Machines

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High end models that make welding with high quality for variety of materials

Application can be expanded to various aluminum with the twin inverter control and by switching AC output frequency

Concentrated arc is obtained with "high" AC output frequency. Effective for welding of hard aluminum such as No. 6000 and No. 7000 and aluminum bronze.

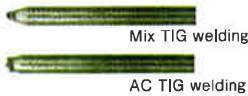
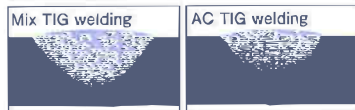
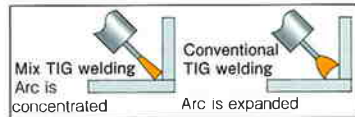


Effective for wide application from thin plate to various aluminum alloys with "low" AC output frequency.

Various work can be treated with various welding modes.

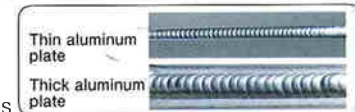
Mix TIG welding

- As concentration of arc is excellent, welding is performed effectively for fillet (overlapping) joint welding for thin aluminum plates.
- Since DC TIG gets in AC TIG, deep penetration is achieved.
- Wear of electrode is significantly reduced.



AC standard TIG welding

- Handles various forms of works from thin plate to thick plate.



AC soft TIG welding

- Low arc noise with soft arc.



AC hard TIG welding

- Concentrated arc can be obtained.
- Effective for welding of thin plate gap joint.



DC TIG welding

DC manual welding

You can choose the optimum mode for your application.

Welding mode	Item	Thin plate butt	Thin plate fillet	Thin plate gap	Thick plate butt	Thick plate fillet
Mix mode		○	○	○	○	○
AC standard TIG mode		○	○	○	○	○
AC hard TIG mode		○	○	○	○	○
AC soft TIG mode		○	△	△	○	○

*There is output limitation.

Versatile function for many applications

- Cleaning width is controlled.
- Enhanced pulse control

Many features for welding sites

- You can weld with an extension cable of 40 m long one way.
 - Depending on welding current, thickness of cable, rolling way of cable, floor material, arc length.
- Equipped with error detection function
 - Input side voltage error
 - Cooling water short
 - Temperature rise
 - Input side over current
 - Output side excessive current

Rated specifications

Model No.		YC-200WX4T00	YC-300WX4T00	YC-500WX4T00
Rated input voltage, rated frequency	—	3-phase, 200/220V (switching), 50/60 Hz (common)		
Rated input	—	9kVA 7kW	12kVA 10.5kW	24kVA 19.5kW
Rated duty cycle (10 minute cycle)	%	40		60
DC no-load voltage	V	"With" electric shock prevention: 14, "without": 63		"With" electric shock prevention: 14, "without": 75
AC no-load voltage	V	63		75
Rated DC output current	TIG welding	A 4~200	A 4~300	A 5~500
	Manual welding	A 4~200	A 4~250	A 50~400
Rated AC output current	Mix TIG	A 10~200	A 10~300	A 20~500
	AC standard TIG	A 10~200	A 10~300	A 20~500
	AC hard TIG	A 20~200	A 20~300	A 20~500
	AC soft TIG	A 10~130	A 10~200	A 20~330
Rated DC output voltage	TIG welding	V 16~18	V 16~20	V 16~24
	Manual welding	V 20~28	V 20~30	V 20~36
Rated AC output voltage	Mix TIG	V 16~19	V 16~21	V 16~25
	AC standard TIG	V 16~20	V 16~22	V 16~26
	AC hard TIG	V 16~20	V 16~22	V 16~26
	AC soft TIG	V 16~17	V 16~20	V 16~22
AC standard, mix, initial crater current	A	10~200	10~300	20~500
AC soft, initial crater current	A	10~130	10~200	20~330
AC hard, initial crater current	A	20~200	20~300	20~500
DC, initial crater current	A	4~200	4~300	5~500
Initial current control	—	Available when crater "Yes" and "Iterative"		
Upslope time	s	0 or 0.1 to 5		
Downslope time	s	0 or 0.2 to 10		
Gas pre-flow time	s	0.3		
Gas after-flow time	s	2~20		
Welding method in which cleaning range can be adjusted	—	AC standard TIG, AC soft TIG, AC hard TIG, Mix TIG		
Pulse frequency	Middle pulse	Hz 10~500		
	Low pulse	Hz 0.5~25		
Pulse width	%	15~85		
Mix TIG frequency	Hz	0.5~10		
Crater control method	—	Crater "Yes", "No", "Iterative"		
External dimensions (W x D x H)	mm	380x530x730		440x585x945
Mass	kg	74		118

*In low current range, select adequate application conditions to stabilize arc.

Power supply system capacity and required cable thickness

Item	Welding P/S	200/220 (switching)		
		YC-200WX4T00	YC-300WX4T00	YC-500WX4T00
Power voltage	V	200/220 (switching)		
Phase number	—	3-phase		
Device capacity	kVA	9 or more	12 or more	24 or more
Fuse capacity (no-fuse breaker)	A	30 (30)	30 (40)	60 (75)
Input side cable (Terminal hole)	mm ²	5.5 or more (for M5)		14 or more (for M6)
Output side cable (Terminal hole)	mm ²	22 or more (for M6)		38 or more (for M8)
Ground cable	mm ²	Equivalent to input side cable or above		1.4

Options (Required devices for each application) *Also see the page for options (pages 10 and 11).

Torch for TIG welding

Various types from 80 to 500A (Standard cable length is 4 m and 8 m)



Argon gas regulator

YX-251A



Extension cable (available on request) and applicable torch

Applicable torch	Cable length	For 5 m			For 10 m			For 15 m									
		YT-15TS2	TWU15125	TWU15126	TWU15127	YT-20TS2	TWU20131	TWU20132	TWU20133	YT-30TSW2	TWU30132	TWU30133	TWU30134	YT-50TSW2	TWU50137	TWU50138	TWU50139
Air cooling																	
Water cooling																	

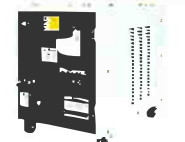
Remote controller

YC-301URTRK1 (common use for 200 to 500A)



Cooling water unit

YX-09KGC1 (with flow rate switch)



(Please prepare the following on your side)

- Holder for hand welding
- Welding rod
- Argon gas (for welding)
- Input and output side cables
- Ground cable

Tungsten electrode (JIS: Z3233) (Diameter 0.5 to 4.8 mm)