

ISO 9001 Registered



## *Welbee Inverter*

**NEW**

**Be Smarter and Tougher  
Welding will Advance to the Next Stage**

**WB-P500L**

**WB-P400**

**WB-M350L**

**WB-M500**

**WB-M350**



DAIHEN Corporation

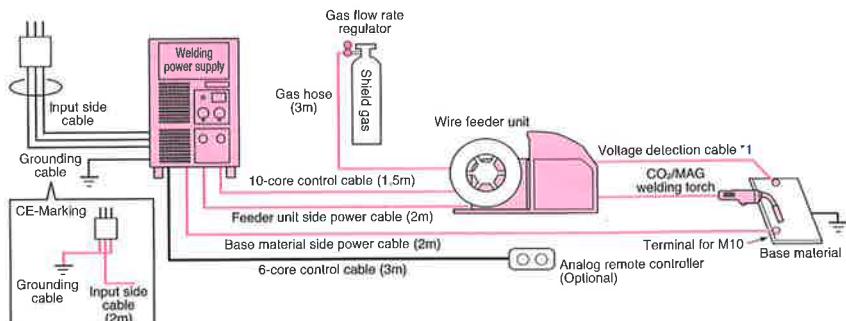
Model	Main features	Welding modes
<b>WB-P500L</b>	 <p>The high-end model achieving optimum welding performance for the welding of steel, stainless, and aluminum        • Significant reduction in spatter generation in the range of low to high electric currents        • Realization of high-quality pulse welding by performing optimized waveform control according to various types of materials</p>	<b>Pulse MAG</b> <b>Pulse MIG</b> <b>Low-spatter CO<sub>2</sub>/MAG</b> <b>Low-spatter SUS-MIG</b> <b>CO<sub>2</sub></b> <b>MAG</b> <b>AL-MIG</b> <b>SUS-MIG</b>
<b>WB-P400</b>	 <p>All-round model available for welding of iron, stainless, and aluminum within a single unit!        • Realization of high-quality pulse welding by performing optimized waveform control according to various types of materials        • The arc stability is perfect even during high-speed welding</p>	<b>Pulse MAG</b> <b>Pulse MIG</b> <b>Low-spatter CO<sub>2</sub>/MAG</b> <b>Low-spatter SUS-MIG</b> <b>CO<sub>2</sub></b> <b>MAG</b> <b>AL-MIG</b> <b>SUS-MIG</b>
<b>WB-M350L</b>	 <p>Low-spatter welding model realizing high productivity by reducing spatter generation        • Significant reduction in spatter generation in the range of low to high electric currents        • Realization of high-quality welding even during high-speed welding by reducing spatter generation</p>	<b>Pulse MAG</b> <b>Pulse MIG</b> <b>Low-spatter CO<sub>2</sub>/MAG</b> <b>Low-spatter SUS-MIG</b> <b>CO<sub>2</sub> (cored)</b> <b>MAG</b> <b>AL-MIG</b> <b>SUS-MIG</b>
<b>WB-M500</b>	 <p>Standard welding model realizing high-quality welding in any situation        • Significant improvement in arc stability in the range of low to high electric currents        • Realization of beautiful weld bead appearance with uniform weld bead end and less voltage fluctuation even during high-speed welding</p>	<b>Pulse MAG</b> <b>Pulse MIG</b> <b>Low-spatter CO<sub>2</sub>/MAG</b> <b>Low-spatter SUS-MIG</b> <b>CO<sub>2</sub></b> <b>MAG</b> <b>AL-MIG</b> <b>SUS-MIG</b>
<b>WB-M350</b>	 <p>Standard welding model realizing high-quality welding in any situation        • Significant improvement in arc stability in the range of low to high electric currents        • Realization of beautiful weld bead appearance with uniform weld bead end and less voltage fluctuation even during high-speed welding</p>	<b>Pulse MAG</b> <b>Pulse MIG</b> <b>Low-spatter CO<sub>2</sub>/MAG</b> <b>Low-spatter SUS-MIG</b> <b>CO<sub>2</sub></b> <b>MAG</b> <b>AL-MIG</b> <b>SUS-MIG</b>

## Connection diagram

The parts in this color are standard components.  
(CO<sub>2</sub>/MAG air cooling specification)

\*1 Use the K5791G00 voltage detection cable (5m) attached to the welding power supply unit.  
(Only for Low spatter model)

The voltage detection cable is not necessary when you do not use the low-spatter-generation type.



## • Welding power supply

General name	Welbee Inverter M350L [M400L]	Welbee Inverter M350[M400]	Welbee Inverter M500			
•Welding Power Supply	WB-M350L[M400L]	WB-M350[M400]	WB-M500			
Rated input voltage	V	400±15%(Common to both 50and60Hz)	400±15%(Common to both 50and60Hz)			
Number of phases	-	Three phases	Three phases			
Rated input voltage	kVA	14.7[18.2](13.6[17.0]kW)	14.7[17.7](13.6[16.6]kW)			
Rated usage rate	%	60[50]	60[50]			
Rated output electric current	A	350[400]	350[400]			
Rated load voltage	V	31.5[34]	31.5[34]			
Output electric current range	A	30~350[30~400]	30~350[30~400]			
Output voltage range	V	12~36[12~34]	12~36[12~34]			
Maximum no-load voltage	V	70	70			
Outside dimension(WxDxH)	mm	395×710×640[592](Excluding eyebolts)	395×710×640[592](Excluding eyebolts)			
Mass	kg	62	61			
•Feeder unit side power cable	Unit form	WB-M350L	WB-M350			
Cable size	mm <sup>2</sup>	BKPDT-6002	BKPDT-3802			
•Base material side power cable	Unit form	BKPDT-6002	BKPT-6002			
Cable size	mm <sup>2</sup>	60	38			
•Wire feeder unit	Unit form	CMV-7402	CM-7402			
Suitable wire diameter	mm	(0.8),0.9,1.0,1.2,(1.4),(1.6)	(0.8),0.9,1.0,1.2,(1.4),(1.6)			
Wire used	-	A solid wire and flux wire	A solid wire and flux wire			
Wire feeding speed	m/min	22(Maximum)	22(Maximum)			
Outside dimension (WxDxH)	mm	207×588×372	207×588×372			
Mass	kg	13	13			
•Welding Torch	Unit form	WT3500V-SD	WT3510V-SD	WT3500-SD	WT3510-SD	WT5000-SD
Rated electric current	A	350(CO <sub>2</sub> )/200(MAG)	350(CO <sub>2</sub> )/300(MAG)	350(CO <sub>2</sub> )/200(MAG)	350(CO <sub>2</sub> )/300(MAG)	500(CO <sub>2</sub> )/450(MAG)
Suitable wire diameter	mm	(0.9),(1.0),1.2	(0.9),(1.0),1.2,(1.4)	(0.9),(1.0),1.2	(0.9),(1.0),1.2,(1.4)	(1.2),1.4,(1.6)
Usage rate	%	30(CO <sub>2</sub> )/30(MAG)	60(CO <sub>2</sub> )/30(MAG)	30(CO <sub>2</sub> )/30(MAG)	60(CO <sub>2</sub> )/30(MAG)	60(CO <sub>2</sub> )/30(MAG)
Cooling system	-	Air cooling	Air cooling	Air cooling	Air cooling	Air cooling
Cable length	m	3,(4.5,6)	3,(4.5,6)	3,(4.5,6)	3,(4.5,6)	3,(4.5,6)

[ ] CE-Marking

\*When using a wire with the diameter indicated in the parentheses, an optional part is necessary.

## • CE-Marking specification

•Wire feeder unit	Unit form	CM-7402-D	CMA-7402-D			
Suitable wire diameter	mm	(0.8),0.9,1.0,1.2,(1.6)	1.0,1.2,(1.6)			
Wire used	-	A solid wire and flux wire	Hard aluminum and soft aluminum			
Wire feeding speed	m/min	22(Maximum)	22(Maximum)			
Outside dimension(WxDxH)	mm	214×805×429	214×805×429			
Mass	kg	17	17			
•CO <sub>2</sub> /MAG Welding Torch	Unit form	WT230-SED	WT280-SED	WT330-SED	WT400-SED	WTW401-SED
Rated electric current	A	230(CO <sub>2</sub> )/200(MAG)	280(CO <sub>2</sub> )/250(MAG)	330(CO <sub>2</sub> )/300(MAG)	400(CO <sub>2</sub> )/350(MAG)	400(CO <sub>2</sub> )/350(MAG)
Suitable wire diameter	mm	(1.0),1.2	(1.0),1.2	1.2,(1.6)	1.2,(1.6)	1.2,(1.6)
Usage rate	%	60	60	60	60	100
Cooling system	-	Air cooling	Air cooling	Air cooling	Air cooling	Water cooling
Cable length	m	3,(4.5)	3,(4.5)	3,(4.5)	3,(4.5)	3,(4.5)
•Aluminum MIG Welding Torch	Unit form	WTAW350-SED				
Rated electric current	A	350				
Suitable wire diameter	mm	1.2,(1.6)				
Usage rate	%	100				
Cooling system	-	Water cooling				
Cable length	m	3				

### • Input Power Capacity and Cable Specifications

Items	Model Name	WB-M350L[M400L]	WB-M350[M400]	WB-M500	WB-P400	WB-P500L
Primary input voltage	V	400±15%	400±15%	400±15%	400±15%	400±15%
phase	-	Three phases	Three phases	Three phases	Three phases	Three phases
Input Power Capacity	kVA	16 [19] or more	16 [18] or more	26 [24] or more	20 or more	26 or more
Fuse / Breaker Capacity	Fuse *1 Breaker	A A	40 40	40 50	40 40	50 50
*2 Input side cable	mm <sup>2</sup>	6 or more to 38 or less	6 or more to 38 or less	10 or more to 38 or less	6 or more to 38 or less	10 or more to 38 or less
Base Metal / Feeder Power Cable	mm <sup>2</sup>	60	38	60	60	60
*2 Earth Ground cable	mm <sup>2</sup>	6 or more	6 or more	10 or more	6 or more	10 or more

[ ] CE-Marking

\*1 When using a no-fuse breaker, use a motor breaker

\*2 Numerical value in a parenthesis indicates the size of the welding machine side pressure terminal.

CE-Marking welding power supplies are equipped with a input cable and a ground cable.

Welbee Inverter P400

WB-P400

400±15%(Common to both 50and60Hz)

Three phases

19.2(18.3kW)

50

400

34

30~400

12~34

80

395×710×640[592](Excluding eyebolts)

62

Welbee Inverter P500L

WB-P500L

400±15%(Common to both 50and60Hz)

Three phases

25.0(24.2kW)

60(Direct current)/80(Pulse)

500(Direct current)/400(Pulse)

39(Direct current)/34(Pulse)

30~500(Direct current)/30~400(Pulse)

12~39(Direct current)/12~34(Pulse)

80

395×710×810[762](Excluding eyebolts)

83

WB-P400

BKPDT-6002

60

BKPDT-6002

60

WB-P500L

BKPDT-6002

60

BKPDT-6002

60

CM-7402	CMA-7402	CMAW-7402	CM-7402	CMV-7402	CMW-742	CMA-7402	CMAW-742
(0.8),0.9,1.0,1.2,(1.4),(1.6)	1.0,1.2,(1.6)	(1.0),1.2,1.6	(0.8),0.9,1.0,1.2,(1.4),(1.6)	(0.8),0.9,1.0,1.2,(1.4),(1.6)	(1.2),1.4,1.6,(2.0)	1.0,1.2,(1.6)	(1.0),1.2,1.6,(2.0),(2.4)
A solid wire and flux wire	Hard aluminum and soft aluminum	Hard aluminum and soft aluminum	A solid wire and flux wire	A solid wire and flux wire	A solid wire and flux wire	A solid wire and flux wire	Hard aluminum and soft aluminum
22(Maximum)	22(Maximum)	22(Maximum)	22(Maximum)	22(Maximum)	22(Maximum)	22(Maximum)	22(Maximum)
207×588×372	248×766×429	248×778×429	207×588×372	207×588×372	207×602×372	248×766×429	248×780×429
13	15	16	13	13	13	15	15

WT3510-SD	WTA300-SD	WTAW400-SD	WT5000-SD	WT3510V-SD	WTCW-5001	WTA300-SD	WTCAW-5002(Standard)
350(CO <sub>2</sub> )/300(MAG)	300	400	500(CO <sub>2</sub> )/450(MAG)	350(CO <sub>2</sub> )/300(MAG)	500	300	500
(0.9),(1.0),1.2,(1.4)	(1.0),1.2,(1.6)	1.2,(1.6)	(1.2),1.4,(1.6)	(0.9),(1.0),1.2,(1.4)	(1.0),1.2,(1.6)	(1.0),1.2,(1.6)	1.2,1.6
60(CO <sub>2</sub> )/30(MAG)	50	100	60(CO <sub>2</sub> )/30(MAG)	60(CO <sub>2</sub> )/30(MAG)	70	50	70
Air cooling	Air cooling	Water cooling	Air cooling	Air cooling	Water cooling	Air cooling	Water cooling
3,(4.5,6)	3	3	3,(4.5,6)	3,(4.5,6)	3	3	3

•Wire Feeder Control Cable(10-pin) Choose cable from the following.	2m	5m	10m	15m	20m
Standard Cable	BKCPP-1002	BKCPP-1007	BKCPP-1007	BKCPP-1012	

•Wire Feeder Power Cable Choose cable from the following.	2m	5m	10m	15m	20m
38mm <sup>2</sup>	BKPDJ-3802	BKPDJ-3807	BKPDJ-3812	BKPDJ-3817	BKPDJ-3822
60mm <sup>2</sup>	BKPDJ-6002	BKPDJ-6007	BKPDJ-6012	BKPDJ-6017	BKPDJ-6022
80mm <sup>2</sup>	BKPDJ-8002	BKPDJ-8007	BKPDJ-8012	BKPDJ-8017	BKPDJ-8022

•Base Metal Power Cable Choose cable from the following.	2m	5m	10m	15m	20m
38mm <sup>2</sup>	BKPDT-3802	BKPDT-3807	BKPDT-3812	BKPDT-3817	BKPDT-3822
60mm <sup>2</sup>	BKPDT-6002	BKPDT-6007	BKPDT-6012	BKPDT-6017	BKPDT-6022
80mm <sup>2</sup>	BKPDT-8002	BKPDT-8007	BKPDT-8012	BKPDT-8017	BKPDT-8022
60mm <sup>2</sup> for WB-M500	BKPT-6002	BKPT-6007	BKPT-6012	BKPT-6017	BKPT-6022
80mm <sup>2</sup> for WB-M500	-	-	-	BKPT-8017	BKPT-8022

## • Optional accessories

### • Extension cables

		5m	10m	15m	20m
Wire Feeder Power cable / Base Metal Power Cable	WB-M350 (38mm <sup>2</sup> ) WB-M350L (60mm <sup>2</sup> ) WB-P400 (80mm <sup>2</sup> ) WB-P500L (60mm <sup>2</sup> ) WB-M500 (80mm <sup>2</sup> )	BKPDT-3807 BKPDT-6007 BKPDT-8007 BKPT-6007	BKPDT-3812 BKPDT-6012 BKPDT-8012 BKPT-6012	BKPDT-3817 BKPDT-6017 BKPDT-8017 BKPT-6017	BKPDT-3822 BKPDT-6022 BKPDT-8022 BKPT-6022
Gas Hose	BKGG-0605	BKGG-0610	BKGG-0615	BKGG-0620	
Wire Feeder Control Cable(10pins)	BKCPJ-1005	BKCPJ-1010	BKCPJ-1015	BKCPJ-1020	
Control cable for the analog remote control box(score)	BKCPJ-0605	BKCPJ-0610	BKCPJ-0615	BKCPJ-0620	
Water Hose	BKWR-0605	BKWR-0610	BKWR-0615	BKWR-0620	

\* In the case of using the extension cable, the standard power cable(2m) is not necessary.

\* In the case that this welding machine is used for an autornatic machine or is used with an electric current value close to current rating, use a cable whose size is larger by one rank.

### • Voltage detection cable

	5m	10m	15m	20m
Voltage detection cable	K5791G00	K5416N00	-	K5791E00

\* K5791G00 is included with WB-M350L and WB-P500L.

### • Setting for water-cooled torch(WB-M500)

#### • Water-cooled kit

Product name	Product number
Water-cooled kit	K5848A00

\* When connect a water-cooled kit, please order your dealer by all means.

#### • Wire feeder unit

Product name	Unit form	CMW-742
Suitable wire diameter	mm	(1.2),1.4,(1.6)
Wire used	-	A solid wire and flux wire
Wire feeding speed	m/min	22(Maximum)
Outside dimension(WxDxH)	mm	207x602x372
Mass	kg	13

#### • Welding torch

Product name	Unit form	WTCW-5001
Rated electric current	A	500
Suitable wire diameter	mm	(1.2),1.4,1.6
Usage rate	%	70
Cooling system	-	Water cooling
Cable length	m	3

#### • Water-cooler

Product name	Product number
Water cooler	PU-301
Hose	BBPU-3002

### • Welding Torch

#### • Stainless MIG Welding Torch

Product name	Unit form	*1 WTS300-SD	*2 WTCSW-5002
Rated electric current	A	300	500
Suitable wire diameter	mm	(0.9),(1.0),1.2	1.2,1.6
Usage rate	%	50	70
Cooling system	-	Air cooling	Water cooling
Cable length	m	3	3

\*1 U5365P00 is necessary for WB-M350L and WB-P500L.

\*2 Compliant wire feeder is CMW-742.

### • Interface and wire feeder for robot manufactured by another company

Product name	Product number
Interface box	IFR-101WB
Wire feeder	CMRE-741
* When connect to robot manufactured by another company, please contact us for details.	
■Wire feeder	Unit form
*Suitable wire diameter	mm
Wire used	-
Wire feeding speed	m/min
Outside dimension(WxDxH)	mm
Mass	kg

\* In the case of using a wire with the diameter indicated in the parenthesis, an optional part is necessary.

### • Remote control Box

#### • Analog Remote Controller

Product name	Product number
Analog remote control box(3m)	K5416Z00



#### • Digital Remote Controller (Following three parts are necessary.)

Product name	Product number
Digital remote control box	E-2454
Control cable	BKCAN-0405(5m)
Converter cable	BKCAN-0410(10m)
	K5810B00

\* Software update is necessary.

Please contact your dealer for details.

In accordance with DAIHEN's policy to make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

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