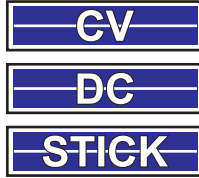


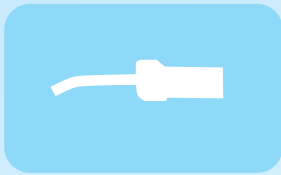


OTC DAIHEN INDIA PVT. LTD.



# CPVS 400/500

## Digital Inverter CO<sub>2</sub>/MAG Welding Machine



DC



STICK



### ✓ Synergic Control

One-Knob synergic control provides appropriate arc voltage for the welding current selected.

### ✓ Easy Operation

Less buttons and digital setting / digital indicator

### ✓ Fine arc Start

Instantaneous arc start close to 100% from low to high current.

### User Friendly Panel Display

- Useful function
- Arc Spot welding
  - Synergic control
  - Arc control
  - interval welding



OTC DAIHEN INDIA PVT. LTD.

## Best Suited for wide range of Manual Welding Application in

- Automotive/Motorcycle
- Repair & Maintenance Shop
- General Fabrication
- Civil/Project construction
- Heavy construction equipment
- Energy Generation Transmission Industries
- Process industry
- Railways
- Shipbuilding & offshore
- Defense Industries



## This DIGITAL INVERTER Controlled Machine with Micro-Processor Integrated offers synergic Control

### Synergic Control Provides Appropriate Are Voltage for the Welding Current Selected

- Inexperienced Operators Can Achieve Proper Welding Conditions Without Creating Rework.
- The Machine Delivers a Built in Preset Voltage Program to Accommodate the Amperage. (Wire Feed Speed)
- Separate Crater Mode (for Amperage & Voltage) is Also Provided as a Standard Feature.



Remote Control

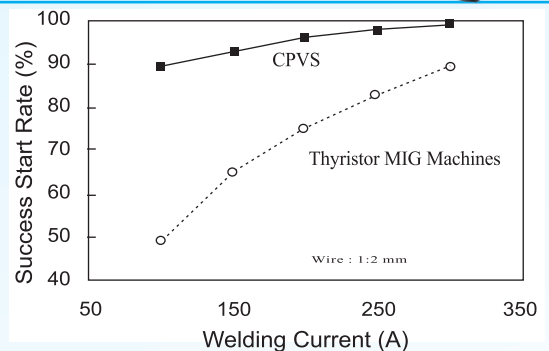


### Easy to Read and Precise Current/Voltage Scales on Remote Control

Indicates adjusted value due to the effect of the gas mixture and wire diameter.

### Instantaneous Arc Start Close to 100% From Low to High Current

- Microprocessor with Invertor control allows instantaneous arc start even at low current virtually every time.
- And it features Hot Start and Wire Slow Down Start control. This combination delivers secured arc starts.

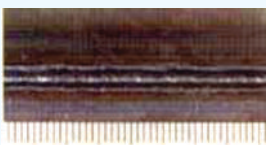


The rate of instantaneous arc start with CPVS

## C02/MAG/ Welding

### ■ Provides High Quality and High Speed Welding of Sheet Metal.

In thin sheet metal welding with C02/MAG, Low Heat Input is Possible resulting in High Quality Welding with Minimal Melt-through.



Current: 125A  
Voltage: 18V  
Welding Speed: 100cm/mm  
Wire Size: 1.2mm  
Base Metal : 1 mmt

### ■ Soft Arc Improves the Efficiency of Semi-Automatic Welding!

Soft arc improves welding stability during high speed welding.

### ■ Arc Control

Arc Characteristic Adjustment on front Panel

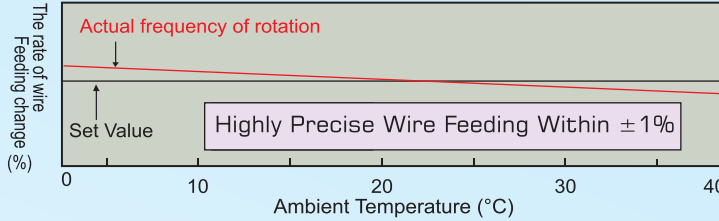
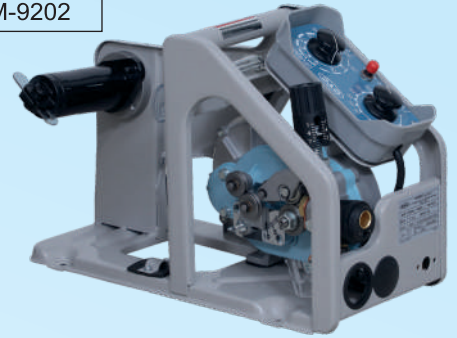
Hard	Soft
<ul style="list-style-type: none"> <li>• Help high traveling speed welding</li> <li>• Stable arc with All position welding</li> <li>• Stable arc even when using a long extension cable</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce spatter generation</li> <li>• Flat bead</li> <li>• High amp welding</li> </ul>

# in Various Welding Applications

## Highly Efficient Wire Feeder for CPVS Series

- **Wire Feeder Selection Best Suited for Material of Wire**  
Highly precise wire Feeding is not influenced by ambient temperature or extension cables, contributes to the stabilization of Welding Quality.
- **Two Roll Drive with wire straightener ensure easy operations & simple maintenance**

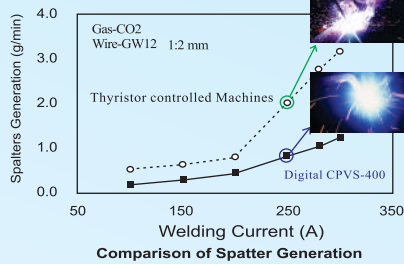
CM-9202



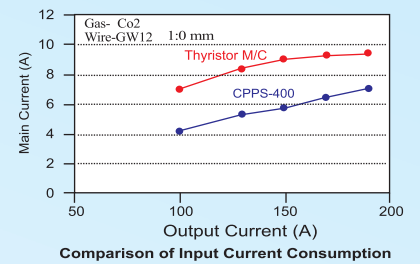
## New User Friendly Design

- Wire feed roll 0.8 - 1.2 mm standard.
- Easy to Set Voltage & Current by operator at his work Less trouble.
- Standard remote control mounted on Wire Feeder.
- It allows adjustment of welding conditions at the work.
- Simple and user-friendly operation panel.
- Crater fill function prevents crater cracking at the end of weld.
- 36V (6A) power outlet equipped for shielding gas regulator heater.
- Preheating function.
- Mice proof case.
- High Power Factor (0.9 & above)
- DC stick welding possible.
- Arc spot timer available.

### Low Spatter Welding



### Low Power Consumption



1	CRATER FILLER	6	SYNERGIC CONTROL
2	MODE SELECTION SWITCH	7	ARC CONTROL knob
3	CRATER FILLER VOLT. CURR. Adjusting knob	8	AMMETER
4	WIRE DIA METER	9	VOLTMETER
5	GAS SELECTION	10	POWER lamp

## Power Saving design

- No load power less than 100 watt.

## Safety design

- Thermostat for preventing overheating.
- Low voltage drive of wire feeder for 24VDC.
- Single Phase Protection.
- Easy-to-see and easy-to-use operation panel.

## Special Features

- Instantaneous Arc Start
- Smooth and regulated welding Output
- Improved energy efficiency
- Manufactured Responding to IEC60974-1
- Excellent welding performance
- Incredible Arc Stability at Very Low Current Ranges
- Incredible Arc Stability at Very High Welding Speeds

### HIGH POWER FACTOR

- Reduced Electricity Cost due to high power factor & low input current

### SYNERGIC CONTROL

- One-knob Synergic Control Provides Appropriate Arc Voltage for the Welding Current selected

### EASY OPERATION


- Less Buttons and Digital Setting / Digital Indicator

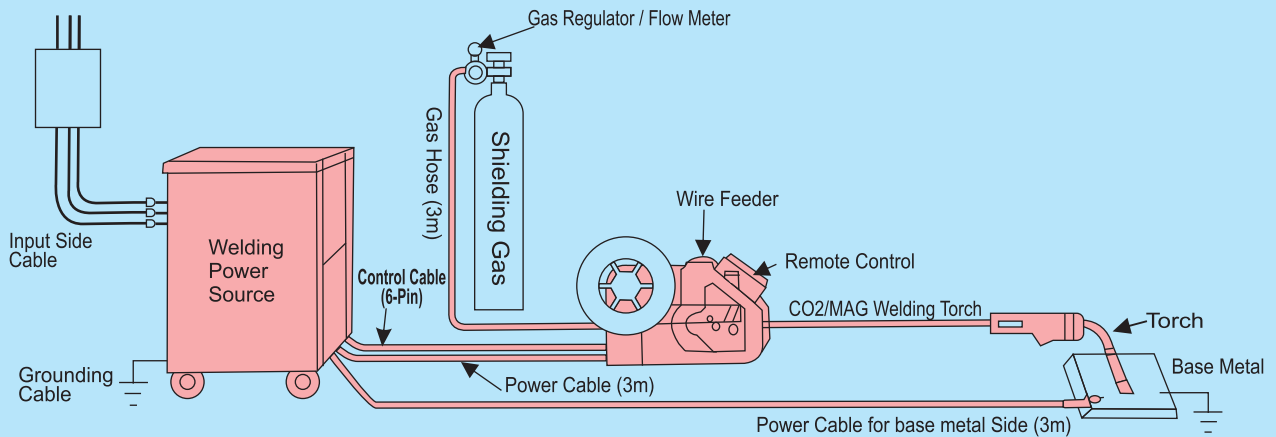
### ASSURED QUALITY

- Low Spatter & Excellent Weld Finish



## ■ Connection Diagram

 This color indicates standard components



## Standard Specifications

● Power Source	Model	CPVS - 400	CPVS - 500
Rated input voltage	V	415 ± 10%(50/60Hz)	415 ± 10%(50/60Hz)
Number of phases	PH	3	3
Rated input	KVA	17.2 (16.4kW)	24(22kW)
Rated duty cycle	%	60	60
Rated output current	A	400	500
Rated load voltage	V	34	45
Output current range	A	30-400	30-500
Output voltage range	V	15.5-36	15-45
Maximum no-load voltage	V	70	72
External dimensions(WxDxH) (Without Terminal cover and Alecosts)	mm	345x550x580	345x550x580
Mass	kg	49kg	51kg
● Wire Feeder	Model	CM-9202	
Wire diameter	mm	0.8, 1.0, 1.2	1.0, 1.2, 1.6
Wire type		Solid wire, Flux cored wire	
Wire feeding speed	m/min	Max,22	
Mass	kg	9	
Welding Cable Wire Feeder Side		BKPT-5003	BKPT-7003
Welding Cable Base Metal Side		BKPT-5003	BKPT-7003
Control cables (6P)	Model	K10012Q02 (3m)	
Gas hose	Model	K-5999 (3m)	
● Welding Torch	Model	WT3510-SBD	WT5000-SBD
Rated current	A	350	500
Wire diameter	mm	(0.9),(1.0),1.2	1.2,(1.4),(1.6)
Duty cycle	%	60(CO2), 30(MAG)	
Cooling system		Air cooling	

## Applicable Welding Process

Welding Process	Shielding Gas	Material	CPVS-400	CPVS-500
DC	CO <sub>2</sub>	Mild steel solid wire	0.8,1.0,1.2	1.0,1.2,1.6
		Mild steel flux cored wire	1.0,1.2	1.0,1.2,1.6
	MAG	Mild steel solid wire	0.8,1.0,1.2	1.0,1.2,1.6

## Standard Accessories

Power Source	CPVS-400	CPVS-500
Glass enclosed fuse (10A,250V)	1	1
Hex wrench (M8)	1	1
Ceramic fuse (4A, 500V)	1	1
Wire Feeder	CM-9202	CM-9202
Hose clamp (MH-4)	1	1
Allen wrench (No.6)	1	1

## Optional Parts

- Control cables (6P)

Cable Length	2m	5 m	10 m	15 m	20 m
Model	K10012Q01	K10012Q03	K10012Q04	K10012Q05	K10012Q06

- Gas hoses

Hose Length	5m	10 m	15 m	20 m	25 m
Model	K-5857	K-5858	K-5859	K-5860	K-5875

## ◆ Input Power Capacity And Cable Specifications

Item	Model	CPVS - 400
Supply Voltage	V	415 ± 10 %
Number of Phase	PH	3
Installed Capacity	KVA	25.2 or more
Fuse/Breaker Capacity	A	40
Input side Power Cable	mm <sup>2</sup>	8 to 14 or more
Base Metal Side Power Cable	mm <sup>2</sup>	50 or more
Grounding Cable	mm <sup>2</sup>	More than you input cable thickness

Item	Model	CPVS - 500
Supply Voltage	V	415 ± 10 %
Number of Phase	PH	3
Installed Capacity	KVA	31.5 or more
Fuse/Breaker Capacity	A	60
Input side Power Cable	mm <sup>2</sup>	8 to 14 or more
Base Metal Side Power Cable	mm <sup>2</sup>	60 or more
Grounding Cable	mm <sup>2</sup>	More than you input cable thickness

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.

**DAIHEN**

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