



# **Specifications**

	нмі	LCD	240 x 128 GLCD
		LED	2 colors (blue & red) 12 points
		Key	Tact switch 9 points
	Input	Zone	4, 6, 8, 12 zone (Classification by model)
		Control Range	0 ~ 400℃
		Scan Rate	100 ms
		Scan Accuracy	±0.3% of FS
		Display Resolution Limit	0.1℃ or 1℃
		Compensable Temperature Variation	± 2.0°℃
Ī			
	Output	Zone	4, 6, 8, 12 zone (Classification by model)
		Output Mode	Phase angle control, Zero cross control
		Output Resolution Limit	Phase angle control: Approximately 1,000 resolutions, Zero cross control: 60Hz-120, 50Hz-100 resolutions
		Output Capacity	15A / zone(Max.), 50A / BOLD3(Max.)
	Environment	Operating Temperature	0 ~ 50℃
		Operating Humidity	20 ~ 90% RH (Non-condensing)
		Storage Temperature	-10 ~ 60℃
		Insulation Resistance	500VDC, over 20M $\Omega$ (Power supply – other terminal)
		Permissive Signal Resistance of T.C	Less than 250Ω
		Withstand Voltage	1,500VAC 50/60Hz 1min. (Power supply – other terminal)
		Vibration Resistance	10 ~ 55Hz, Bandwidth 0.75mm, 3 directions 4 swings, 5min/swing
		Warming-up Time	Over 30min.
		Voltage	3 phase 4 wire 380V (±10%) or 3 phase 3 wire 220V (±10%)
	Power	Rated Frequency	50/60Hz
		(Electric) Power Consumption	48W (12 zone, Max., No-load condition)
		(Electric) Fower consumption	45W (12 20He, Max., No load condition)
	Data Communication	Protocol	EIA-RS485
	Data Communication	Max. Number of Connection	31 set
		Communication Method	Half - duplex 2 wire
		Communication Speed	19,200 bps
		Communication Distance	About within 1.2km
	Other Detail	Electric Detection	0.0 ~ 20.0A
	Other Detail	Electric Detection Degree	±0.1A
		Radiator Temperature Detection	0.0 ~ 100.0℃
		Radiator Temperature Degree	±3°C
		Radiator Break Temperature	85 ± 3℃
		Fuse Rating	250VAC, 20A
		Safety Relay	250VAC, 16A



YUDO INC. (USA) | 33875 Capitol St. Livonia, MI 48150

Tel . 734 744 8120 | Fax. 734 744 8123 | E-mail. yudo@yudousa.com

HEAD OFFICE & FACTORY | I 1112, Seohae-Ro, Paltan-Myeon, Hwaseong-City, Gyeonggi-Do, 445-915 South Korea Tel. + 82 31 350 2500 | Fax. +82 31 354 7446 | E-mail. yudo@yudohot.com



Easy to use

Integrated control with high brightness
Blue LCD (240 x 128) (Max. 12 zone)
Easy and intuitive MMI with 9 keys
Display operating condition by 2 colors (Blue, Red) LED

Innovative bold style design

Compact size comparing to the number of maximum zones Apply Bumper-type cover for external damage protection Bold style design Stylish Black High-Glossy display control panel

Precision control

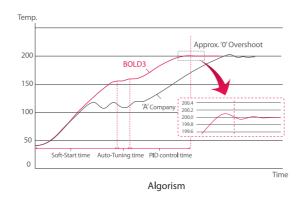
High precision PID Control suitable for various injection conditions Self Tuning (Quick/Full) function detecting features of heater

Safety

High reliability hardware enhanced overvoltage protection Total 18 kinds of self-diagnosis for safety

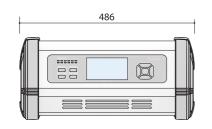
## **Function**

- \_Check operating condition easily by 2 colors(Blue, Red) LED
- \_Use Hot Key for Run/Stop, Standby, and Boost functions
- \_ Divide setting menu by User and Administrator for security reasons
- \_Soft-Start function for protection and lifespan extension of heater
- \_ Prevent damage through overheating monitoring of control components
- \_ Support multiple languages (Korean, English, etc.)

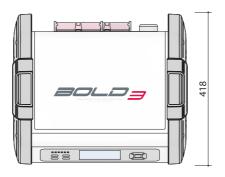


### **Dimensions**

Unit:mm









#### UNIQUE **BOLD** STYLE

Bumper cover on steel case protects controller from external damage and its unique shape makes sturdy and imposing impression. It also provides handle grip for easy moving.



#### **COMPACT SIZE TO EXPANDABILITY**

'BOLD3' achieves minimization of internal components through integrated control of 12 zone for easy use in limited injection space. Moreover, it has expandability that can be double-stacked up to 24 zone thanks to interlocking structure of bumper cover.



#### USER INTERFACE OF **CONVENIENT** AND **LUXURIOUS**

Display control panel of 'BOLD3' has large high brightness Blue LCD on inclined plane towards user, easy key layout, and LED indicating operating condition by zones.

In addition, differentiated Black High-Glossy Panel will improve dignity of your esteemed company.