Compact DC Power Supply
PMC-A/PMC Series

Both the PMC and PMC-A Series Deliver High Reliability and Sophisticated Features in a Compact Body
Maximum Output Voltage (18V to 500V) 20 Models

KIKUSUI

www.valuetronics.com

PMC-A/PMC Series

DC Power Supply (CV/CC)

Basic Standard for the Compact Power Supply

The PMC and PMC-A Series are compact, high-performance, constant voltage, constant current series regulated DC power supplies. The adoption of series regulated design realizes a highly stable output with a low level of output noise. LED digital meter which is legible even in dimly lit location, and electronic switches which eliminate relay chattering, are also featured in this series. In addition, some of the PMC-A Series are equipped with various remote control functions, and when connected with power supply controllers, allow compatibility with GPIB systems.

PMC Series **PMC-A Series**

Features (PMC-A Series)

- Simultaneous display of voltage and current values.
- GPIB control by combining with power supply controllers.
- External analog remote control of voltage and current.
- Equipped with output monitoring function (voltage, current, status)
- Front Panel Output ON/OFF switch.
- 10-turn potentiometer for setting of voltage and current.
- Remote sensing function (Only models of which rated output voltage is 18V or 35V)
- Capacity can be expanded by Master-slave parallel operation
- Overvoltage protection (OVP) and overheating protection (OHP) are provided as standard functions.

Features (PMC Series)

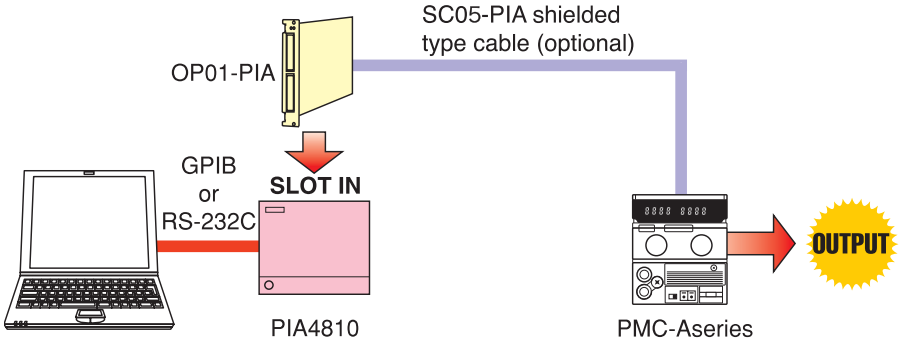
- Front panel output ON/OFF switch.
- 10-turn potentiometer for setting of voltage (single-turn potentiometer for setting of current)
- Capacity can be expanded by one-control parallel operation
- Overvoltage protection (OVP) and overheating protection (OHP) are provided as standard functions.

Computer Control (PMC-A series only)

The Power Supply has a capability of Computer Control by using with PIA4800 Series.

Description of Control

- **Output Voltage setting**
- **Output Current setting**
- **Output Voltage readback**
- **Output Current readback**
- **Power switch ON/OFF monitoring**
- **C.V mode monitoring**
- **C.C mode monitoring**
- **Output ON/OFF monitoring**
- **Alarm monitoring**



www.valuetronics.com

Specifications

Model	Output		Ripple		Line Regulation		Load Regulation		Power Source*	Power Consumption	Dimen-sions	Weight
	CV	CC	CV	CC	CV	CC	CV	CC	AC	Approx.		Approx.
	V	A	mVrms	mArms	mV	mA	mV	mA	V±10%	VA	Type	kg
PMC18-1A	0 to 18	0 to 1	0.5	1	1	10	2	5	100	50	I	3.5
PMC18-2A	0 to 18	0 to 2	0.5	1	1	10	2	5	100	100	I	4.0
PMC18-3A	0 to 18	0 to 3	0.5	1	1	10	4	5	100	160	I	5.0
PMC18-5A	0 to 18	0 to 5	0.5	2	1	5	5	10	100	230	II	6.0
PMC35-0.5A	0 to 35	0 to 0.5	0.5	1	3	10	3	5	100	50	I	3.5
PMC35-1A	0 to 35	0 to 1	0.5	1	3	10	3	5	100	95	I	4.0
PMC35-2A	0 to 35	0 to 2	0.5	1	3	10	3	5	100	190	I	5.0
PMC35-3A	0 to 35	0 to 3	0.5	1	3	5	4	10	100	240	II	6.0
PMC70-1A	0 to 70	0 to 1	1	1	5	2	5	10	100	150	II	5.5
PMC110-0.6A	0 to 110	0 to 0.6	2	1	7	2	7	5	100	150	II	5.5
PMC160-0.4A	0 to 160	0 to 0.4	3	1	10	2	10	5	100	150	II	5.5
PMC250-0.25A	0 to 250	0 to 0.25	3	1	15	1	15	5	100	150	II	5.5
PMC350-0.2A	0 to 350	0 to 0.2	5	1	25	1	25	5	100	150	II	5.5
PMC500-0.1A	0 to 500	0 to 0.1	10	1	30	1	30	3	100	110	II	5.0
PMC18-2	0 to 18	0 to 2	0.5	1	1	10	2	5	100	100	I	4.0
PMC18-3	0 to 18	0 to 3	0.5	1	1	10	4	5	100	160	I	5.0
PMC18-5	0 to 18	0 to 5	0.5	2	1	5	5	10	100	230	II	6.0
PMC35-1	0 to 35	0 to 1	0.5	1	3	10	3	5	100	95	I	4.0
PMC35-2	0 to 35	0 to 2	0.5	1	3	10	3	5	100	190	I	5.0
PMC35-3	0 to 35	0 to 3	0.5	1	3	5	4	10	100	240	II	6.0

*Power Source: (1)105V to 130V (2)180V to 220V (3)195V to 239V (4) 210V to 250V are available upon request.
Unless otherwise specified, the specifications are based on the following conditions: resistance load, output grounded, remote sensing off, warm-up period of 30 minutes.

■Output Voltage
Continuously variable by 10-turn potentiometer
Output voltage temperature coefficient:
100 ppm/°C (typ)
Transient response time: 50μs
100μs:(PMC70-1A,PMC110-0.6A,PMC160-0.4A,
PMC250-0.25A,PMC350-0.2A,PMC500-0.1A)

■Output Current
Continuously variable by 10-turn potentiometer
(PMC-A series)
Continuously variable by single-turn
potentiometer (PMC series)
Output current temperature coefficient:
200 ppm/°C (typ)

■Meter Display (Green LED)

●Output Voltage
Display error ±(0.5% rdg +2 digits) at 23°C ±5°C (typ)
Temperature coefficient: 300 ppm/°C (typ)

●Output Current
Display error ±(1% rdg +5 digits) at 23°C ±5°C (typ)
Temperature coefficient: 400 ppm/°C (typ)

●Voltmeter Display (Fixed Range)

Rated Output Voltage	Max.Digit Displayed
18V	19.99
35V, 70V, 110V, 160V	199.9
250V, 350V, 500V	999

●Ammeter Display (Fixed Range)

Rated Output Ampere	Max.Digit Displayed
Model less than 1A	0.999
Model more than 1A	9.99

■Ground
Positive or negative ground

■Ambient Temperature
0 to +40°C (no condensation)

■Ambient Humidity
10 to 80% rh(no condensation)

■Cooling Method
Conventional air cooling

■Isolation Voltage from Ground
Models of which rated output voltage is 18V and 35V: ±250V
Other Models: ±500V

■Protection
Output overvoltage protection (OVP)
Setting range: 5% to 105% of rating
Input fuse / temperature fuse (130°C)

■Functions (PMC-A series only)
Output voltage remote control
By external voltage: 0 to 10V
By external resistance: 0 to 10kΩ
Output current remote control
By external voltage: 0 to 10V
By external resistance: 0 to 10kΩ
Output ON/OFF control (Output off by external make contact)
Remote sensing (Only models of which rated output voltage is 18V and 35V)
Remote monitoring function
Monitor signal output
V MON (at rated voltage output): 10.0V±0.5V
I MON (at rated current output): 10.0V±0.5V
Status signal output
OUT ON / CV /CC /ALM / PWR ON

■Operation
Series operation*1
Parallel operation is available with same model.*2

■Dimensions (approx.)
PMC-A Series
Type I :107W × 124(134)H × 270(305)Dmm
Type II:107W × 124(134)H × 350(385)Dmm
PMC Series
Type I :107W × 124(134)H × 270(290)Dmm
Type II:107W × 124(134)H × 350(370)Dmm

*1:The number of Power Supplies that can be connected in series is limited by the voltage rating with isolation voltage. For example, for 35V type 250/35=7.14...up to seven units can be connected.
*2:The number of Power Supplies that can be connected in parallel is limited up to four units including the master power supply.

www.valuetronics.com

Rear Panel

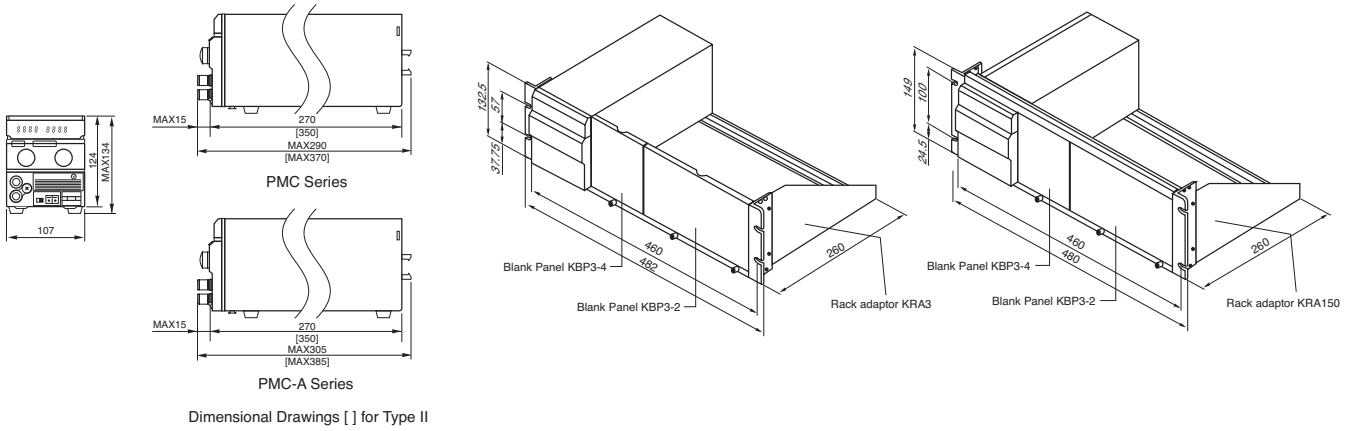
PMC-A Series

PMC Series

1. AC input terminal
2. Ground terminal
3. Master-slave parallel operation input and output terminals
4. Analog remote control terminal (PMC-A Series only)
5. AC input fuse holder

PMC-A/PMC Series External Dimensional Diagrams / Rack Mount Option

Unit:mm

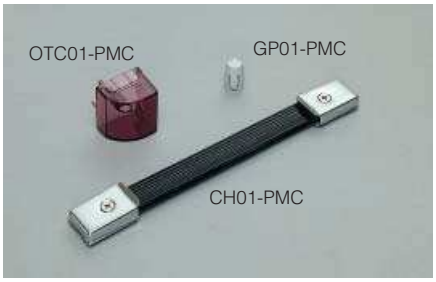


Dimensional Drawings [ ] for Type II

Options

- ■ Output Terminal Cover ... OTC01-PMC
- ■ Guard Cap..... GP01-PMC
- ■ Carrying Handle CH01-PMC

*The CH01-PMC can be installed on the TYPE II models.



KIKUSUI ELECTRONICS CORPORATION
1-1-3, Higashiyamata, Tsuzuki-ku, Yokohama, 224-0023, Japan
Phone: (+81) 45-593-7570, Facsimile: (+81) 45-593-7571, www.kikusui.co.jp

KIKUSUI AMERICA, INC. 1-877-876-2807 www.kikusuiamerica.com
1633 Bayshore Highway, Suite 331, Burlingame, CA 94010
Phone : 650-259-5900 Facsimile : 650-259-5904

KIKUSUI TRADING (SHANGHAI) Co., Ltd. www.kikusui.cn
Room, D-01,11F, Majesty Bld, No.138, Pudong Ave, Shanghai City
Phone : 021-5887-9067 Facsimile : 021-5887-9069

For our local sales distributors and representatives, please refer to "sales network" of our website.

●Distributor:

■ All products contained in this catalogue are equipment and devices that are premised on use under the supervision of qualified personnel, and are not designed or produced for home-use or use by general consumers. ■ Specifications, design and so forth are subject to change without prior notice to improve the quality. ■ Product names and prices are subject to change and production may be discontinued when necessary. ■ Product names, company names and brand names contained in this catalogue represent the respective registered trade name or trade mark. ■ Colors, textures and so forth of photographs shown in this catalogue may differ from actual products due to a limited fidelity in printing. ■ Although every effort has been made to provide the information as accurate as possible for this catalogue, certain details have unavoidably been omitted due to limitations in space. ■ If you find any misprints or errors in this catalogue, it would be appreciated if you would inform us. ■Please contact our distributors to confirm specifications, price, accessories or anything that may be unclear when placing an order or concluding a purchasing agreement.

Printed in Japan Issue:Oct.2009 200910PDFa

www.valuetronics.com