

CIF-SERIES

AC POWER SOURCE

OPERATION MANUAL



REVISION : 1.0

FILE : CIF-A-E.

PN : 800-01005

2000/7/12

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Technical Specifications:

1. AC Input Voltage : AC _____ V $\pm 10\%$ _____ \emptyset _____ W 50/60Hz
2. AC Output Voltage : _____ V or _____ V, two 10-turns potentiometer
3. Output phase : 1 \emptyset 2W
4. Voltage stability : $\pm 0.5\%$
5. Output frequency : fixed at 50Hz or 60Hz; variable (range 47 ~ 63Hz)
6. Frequency stability : fixed at ± 0.01 Hz; variable at ± 0.1 Hz
7. Output capacity :

<input type="checkbox"/> CIF2000(2KVA)	<input type="checkbox"/> CIF3000(3KVA)
<input type="checkbox"/> CIF5000(5KVA)	<input type="checkbox"/> CIF7500(7.5KVA)
<input type="checkbox"/> CIF1030(10KVA)	<input type="checkbox"/> CIF1530(15KVA)
<input type="checkbox"/> CIF2030(20KVA)	<input type="checkbox"/> CIF3030(30KVA)
8. Waveform distortion: $\leq 2\%$
9. Temperature factor : $\pm 0.01\%$ per $^{\circ}\text{C}$
10. Protection : Over Load 、 Short 、 Over Temp
11. Heat ventilation : Fan cooling
12. Display meters : Digital Voltage Meter, Current Meter, Frequency Meter, Power (wattage) Meter

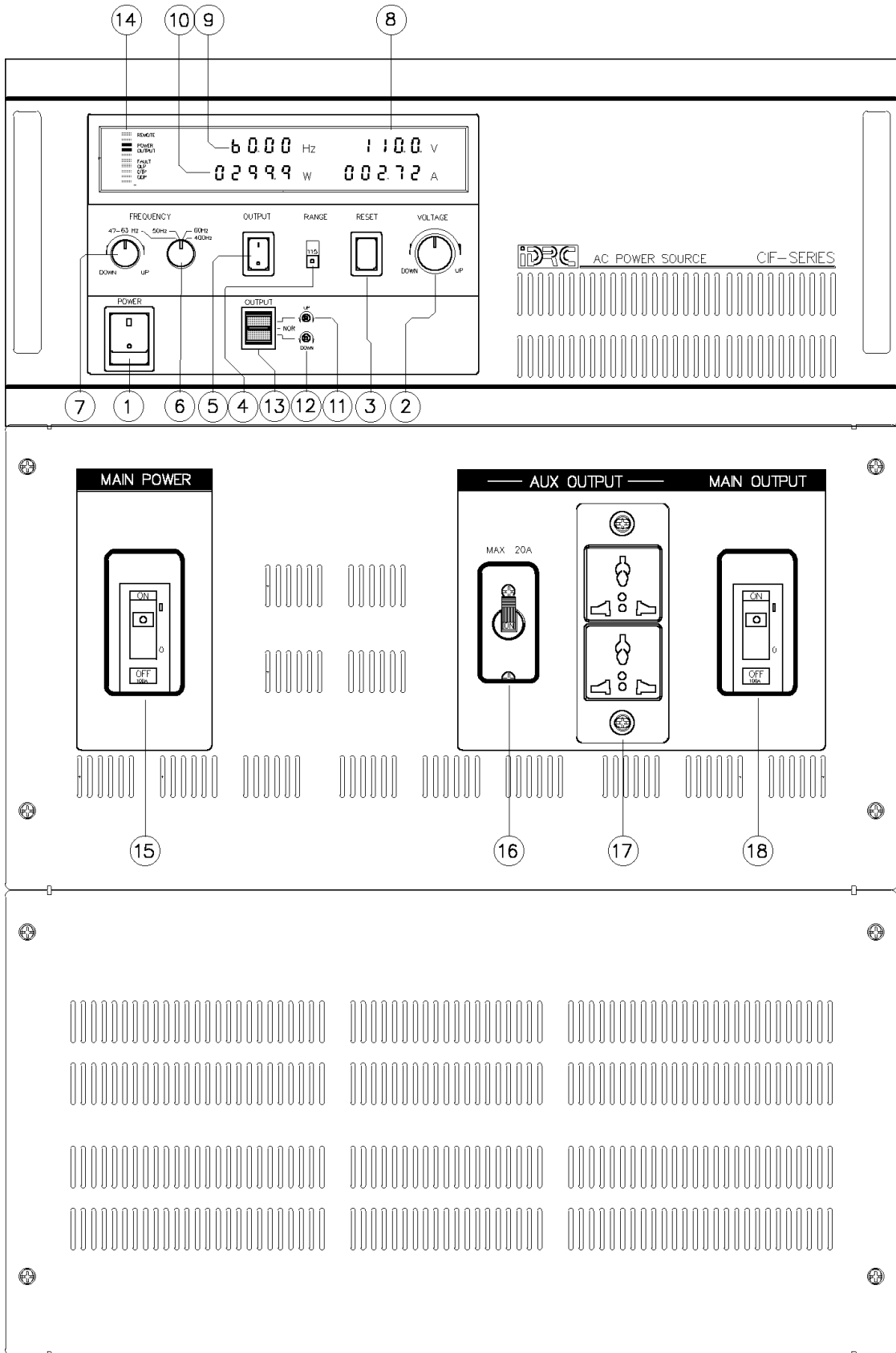
Front Panel:

MODEL: CIF-SERIES AC Source

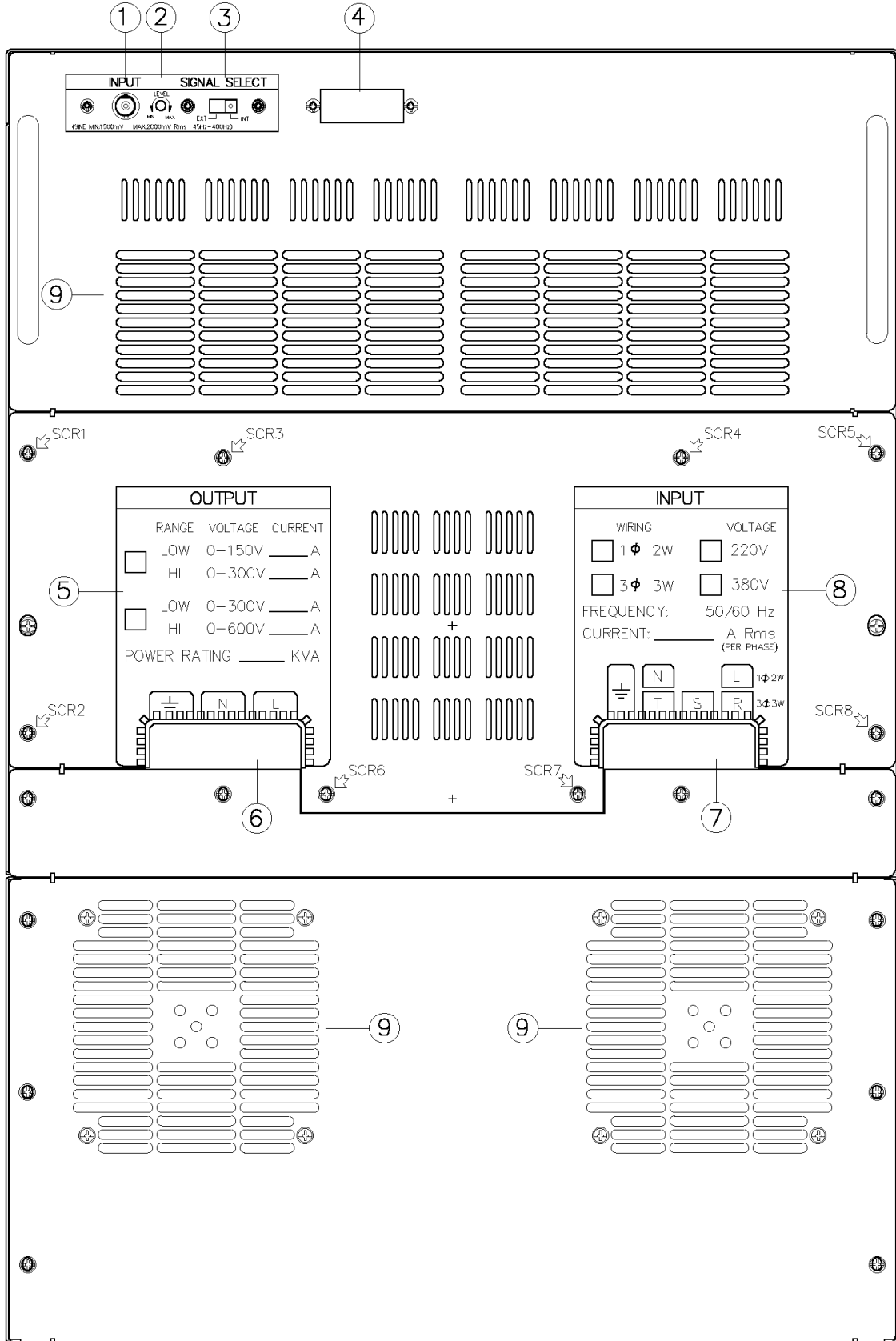
- (1) POWER : Main power
- (2) VOLTAGE : Output voltage adjustment
- (3) RESET : Reset the AC Source when alarm activated
- (4) RANGE : Output voltage range selection (150V or 300V)
- (5) OUTPUT : Output control switch
- (6) FREQUENCY-SELECTOR : Frequency selection (50Hz or 60Hz or 47~63Hz or 400Hz)
- (7) FREQUENCY-ADJ : Frequency adjustment (ONLY 47~63Hz)
- (8) VLOTAGE DISPLAY : Digital voltage meter
CURRENT DISPLAY : Digital current meter
- (9) FREQUENCY DISPLAY : Digital frequency meter
- (10) WATT DISPLAY : Digital power meter
- (11) High limit adjustable VR
- (12) Low limit adjustable VR
- (13) Output limit switch

NOTES:

- (1)The output voltage will arise from 0 to the setting voltage in two seconds until the OUTPUT switch is enabled.



Rear Panel :



Operation Procedure:

General procedure:

1. Keep the distance of the AC source rear side to the wall at least 8 inches or above.
2. Turn OFF all the switches before enabling the power.
3. Adjust the VOLTAGE to the minimum.
4. Verify the INPUT power is correct before connecting to the power source.
5. Turn on the N.F.B.
6. Turn on the POWER switch and wait for 20 seconds.
7. Select the required frequency.
8. Select voltage range, be sure to use high range if testing voltage is over 145V.
9. Turn on the OUTPUT switch.
10. Adjust the required voltage.
11. Only turn on the N.F.B. after connecting the loading.
12. Turn OFF the N.F.B. when operation is either in long-term standby or not in use.

※ CAUTION: Unsuitable input power source will result in serious damage to the AC source.

Output limit setting procedure:

1. Set the Output limit switch to NOR,
then adjust the output voltage (VOLTAGE) to the required voltage, for example 110V.
2. Set the output limit switch to the UP position,
tune the high limit VR to the required voltage, for example +10% at 121V.
3. Set the output limit switch to the DOWN position,
tune the Low limit VR to the required voltage, for example -10% at 99V.

NOTES: The maximum adjustable range is $\pm 20\%$.

※ CAUTION:

1. Check if it's overloading or short circuited when alarm is sounding,
resume (press RESET) the AC source after verification.
2. Remove the loading before turn on the AC source to avoid malfunction.

Standard Accessories:

1. Instruction Manual.

2. N.F.B. () A.

Option:

- CFO-210 Power (Watt) Measurement.
- CFO-600 Output voltage up to 600V.
- CFO-103 3 Phase Synthesized Waveform Generator.

CIF AC Source wire gauge Guide

Model	INPUT				OUTPUT	
	Voltage	Max Current	N.F.B.	Wire gauge	Max RMS current	Wire Gauge
CIF-2000 2KVA	1Ø2W 220V	18A	20A	3.5mm ²	0-140V 16.6A	3.5 mm ²
					0-280V 8.3A	
CIF-3000 3KVA	1Ø2W 220V	27.2A	30A	5.5 mm ²	0-140V 25 A	5.5 mm ²
					0-280V 12.5A	
CIF-5000 5KVA	1Ø2W 220V	45.5A	50A	8 mm ²	0-140V 41.6A	8.5mm ²
	3Ø3W 220V	30.3A	40A	5.5 mm ²	0-280V 20.8A	
CIF-7500 7.5KVA	1Ø2W 220V	68.0A	75A	14 mm ²	0-140V 62.5A	14 mm ²
	3Ø3W 220V	45.3A	50A	8 mm ²	0-280V 31.2A	
CIF-1030 10KVA	1Ø2W 220V	90A	100A	22 mm ²	0-140V 83.3A	22 mm ²
	3Ø3W 220V	60A	75A	14 mm ²	0-280V 41.6A	
CIF-1530 15KVA	3Ø3W 220V	90A	100A	22 mm ²	0-140V 125A	38 mm ²
					0-280V 67.5A	
CIF-2030 20KVA	3Ø3W 220V	121.2A	125A	38 mm ²	0-140V 167A	60 mm ²
					0-280V 83.5A	
CIF-3030 30KVA	3Ø3W 220V	181A	200A	38 mm ² ×2	0-140V 250A	60 mm ²
					0-280V 125A	

Remarks :

1. Use multi-thread, twisted-pair wires.
2. Increase wire gauge if the wire length exceeds 3 meters.
Ex. Use 5.5 mm² instead of 3.5 mm².
3. N.F.B. : Non Fusible Barker.
4. Use quality-assured N.F.B. & wires for testing.
5. Follow the wire gauge used at 0-140 if the 1-140 or 0-280V output is often selected as the testing method.