

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Cosel ACE900F* at our website: ***Click HERE***

1 Ordering information C-16

2 Series operation and Parallel operation in Modular power supply C-17

2.1 Series operation C-17
2.2 Parallel operation C-17

3 Function C-17

3.1 Input voltage range C-17
3.2 Inrush current limiting C-17
3.3 Overcurrent protection C-17
3.4 Thermal protection C-18
3.5 Overvoltage protection C-18
3.6 Output voltage adjustment C-18
3.7 Remote sensing C-18
3.8 Remote ON/OFF C-18
3.9 Isolation C-19
3.10 Alarm C-19

4 Assembling and installation method C-19

4.1 Installation method C-19
4.2 Derating C-20

5 Option C-22

5.1 Option outline C-22

6 Imput module C-24

7 Medical electrical equipment C-24

7.1 Type C-24
7.2 Specification C-24
7.3 Others C-24

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

1 Ordering information

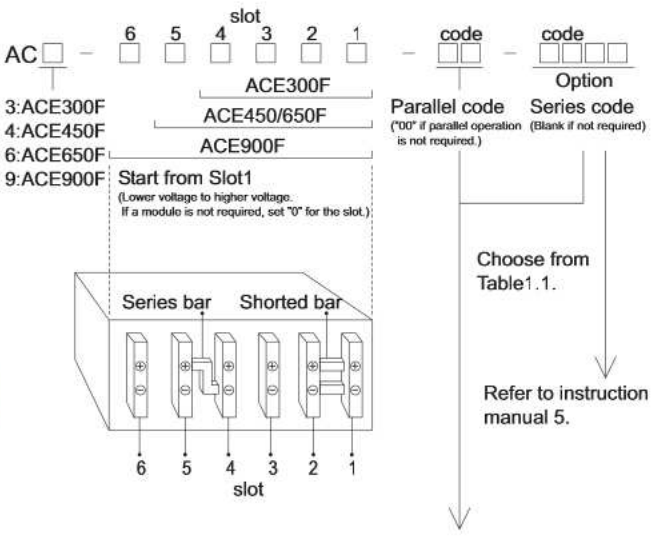
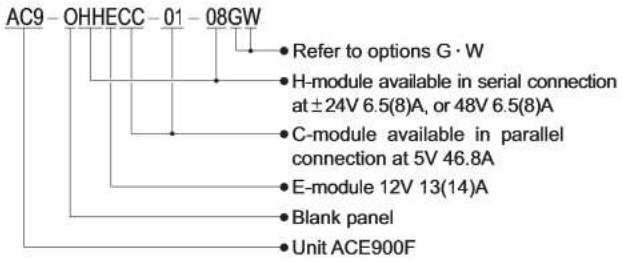


Table 1.1 Parallel / Series code

	code	slot6	slot5	slot4	slot3	slot2	slot1
ACE300F	00						
	01					●	●
	02				●	●	
	03				●	●	●
	04			●	●		
	05			●	●	●	●
	06			●	●	●	
	07			●	●	●	●
ACE450/650F	08		●	●			
	09		●	●		●	●
	0A		●	●	●	●	
	0B		●	●	●	●	●
	0C		●	●	●		
	0D		●	●	●	●	●
	0E		●	●	●	●	
	0F		●	●	●	●	●
ACE900F	10	●	●				
	11	●	●			●	●
	12	●	●		●	●	
	13	●	●		●	●	●
	14	●	●	●	●		
	15	●	●	●	●	●	●
	16	●	●	●	●	●	
	17	●	●	●	●	●	●
	18	●	●	●			
	19	●	●	●		●	●
	1A	●	●	●	●	●	
	1B	●	●	●	●	●	●
	1C	●	●	●	●		
	1D	●	●	●	●	●	●
	1E	●	●	●	●	●	
	1F	●	●	●	●	●	●

● : Output terminal
— : Connection

●EXAMPLE OF NAMING(1)



●EXAMPLE OF NAMING(2)

When the parallel operating module CC(5V46.8A) of example(1) is changed to module 2C(5V60A), the type name becomes the following.

Ex.: AC9-0HHE2C-00-08GW

●EXAMPLE OF NAMING(3)

The parallel and series connecting in 2A-2K follows Table 1.1. For example, when the output power is made 24V25(34)A by connecting two modules 2E[12V25(34)A] in series, the type name becomes the following.

Ex.: AC9-002E2E-00-02

●Configuration rules

(1) After the output voltage and the output current are confirmed, the code of the output module installed in the slots1-6 is selected from ACE Top page. Put the blank panel(code 0) in when modules are not installed in the slots.

(2) When output module is operated in parallel and series, the parallel code can be selected from Table 1.1 depending on whether or not the bus bar between the output modules exists.

※ Refer to 2, Series operation and Parallel operation for set notes.
Series operation might be able to draw maximum power by using some modules.

(3) Install more than two slots.

(4) List of correspondence module of series and parallel setting.

Parallel setting	possible	A-K, 2A-2K
	impossible	L, M, N, P, R, S, T, U, Y, W, Z, 9, Q, V
Series setting	possible	A-K, 2A-2K, L, M, N, P, R
	impossible	S, T, U, Y, W, Z, 9, Q, V

■Series operation is superior to parallel operation in dynamic load response. Therefore we recommend series operation in increasing power.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

2 Series operation and Parallel operation in Modular power supply

2.1 Series operation

■Series operation is possible with the same output modules. The series bar is installed at shipping if there is a series setting in the type name. At module S, T, U, Y, W, Z, 9, Q and V series operation is possible, but series bar cannot be set by series code.

■Output current in series connection is the same as the specification of the connected module.

■Please notice and set the following items.

①Choosing same modules in series setting in principle.

②The rating voltage of the total in series setting can set less than 48V.

③It is impossible to use series setting with pallalel setting.

Please consult us excluding the above-mentined.

2.2 Parallel operation (applying module : A-K, 2A-2K)

■Parallel operation is possible with same output voltage modules in the same power supply. The shorted bar is installed after adjusting internal if there is a parallel setting.

Parallel operation is impossible after shipping.

■The total output current in parallel.

Rated current of module that parallel operation is possible is adjusted to 90%.

Refer to next example.

Ex.: AC4-HHECB-08

- Parallel code 08 means slot4 and slot5 are connected with the bus bar.
- Output module code is "H", consequently total output current in parallel operation is shown as below ;

The total output current in parallel=(6.5+6.5) × 0.9=11.7A

■Notes of parallel operation are shown as follows.

①Please consult us using of remote sensing.

②Peak load is impossible.

③Adjusting output voltage is possible with each potentiometer in all modules that are connected in parallel.

In case of precision adjustment output voltage, remove bus bar, adjust voltage and install the bus bar again. The deferent voltage between each module makes load reguration big. Adjust to reduce difference voltage as possible ,or load regulation might become small.

■In series and parallel operation, output voltage increases like stairs due to a delay of the rise time output voltage at turn on.

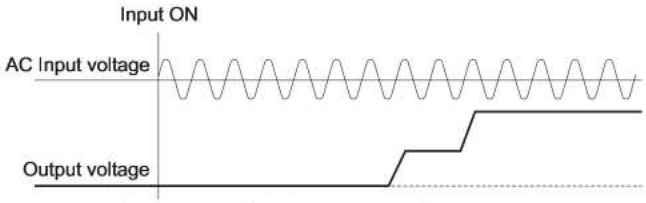


Fig.2.1 Start-up waveform in series and/or parallel operation

3 Function

3.1 Input voltage range

■The range is from AC85V to AC264V or from DC120V to DC350V. Only AC input is available to comply with agency approval.

■If the wrong input is applied, the unit will not operate properly and/or may be damaged. Avoid the followings to cause failure of the unit to apply square wave form input voltage, which is commonly used in UPS and inverters.

3.2 Inrush current limiting

■Inrush current limiting is built-in.

■If a switch on the input side is installed, it has to be the one handling the input inrush current.

■The thyristor technique is used for protection from inrush current. If power is turned ON/OFF repeatedly within a short period of time, that may cause failure. It is necessary to have enough time between power ON and OFF.

3.3 Overcurrent protection

■Overcurrent protection is built-in and activated at 105% of the rated current or 101% of the peak current. Overcurrent protection protects the unit from short circuit and overcurrent condition. The unit automatically recovers when the fault condition is removed.

■If the output voltage drops more than 50% of the rated voltage in an overcurrent protection mode, the average current will also be reduced by the intermittent operation.

■Auxiliary power(AUX)

Auxiliary power(AUX) is only possible for remote ON/OFF.

■Peakcurrent protection(applying module : 2E-2K)

Peakcurrent protection is built-in(refer to Output module specification ※1. for Peak loading).

If this function comes into effect, the output is shut down(the other modules are not shut down).

The minimum interval of AC recycling for recovery is 2 to 3 minutes(*).

* The recovery time varies depending on input voltage and load condition.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

3.4 Thermal protection

■Thermal protection circuit is built-in and shut down under following condition.

①When the current and the temperature which exceed from the derating curve.

②The case FAN stops or air flow is interrupted and the amount of the wind decreases.

After cut off input voltage and cooling down inside of power supply, turns on the input of the power supply again.

3.5 Overvoltage protection

■Overvoltage protection circuit is built-in for each output module and works independently.

The AC input should be shut down if overvoltage protection is activated.

The minimum interval of AC recycling for recovery is more than 1 minutes.

The recovery time varies depending on input voltage.

・Please note that internal components may be damaged if excessive voltage(over rated voltage) is applied to output terminal of power supply. This could happen when customer tests the overvoltage performance of the unit.

3.6 Output voltage adjustment

■Adjustment of output voltage is possible by using potentiometer.

■Refer to specifications of output module in detail.

※At module Y, W, Z, 9, Q and V the potentiometer is turn right and then, +voltage changes into the direction of + and -voltage changes into the direction of - at the same time.

3.7 Remote sensing (applying module : A-K, 2A-2K)

■Remote sensing circuit is built-in at each output module.

■Wiring method without using remote sensing is shown in Fig.3.1.

When you do not use the remote sensing, connect between +S and +M and between -S and -M with CN2 of each output module.

When the power supply is shipped from a factory, a special harness is mounted on CN2.

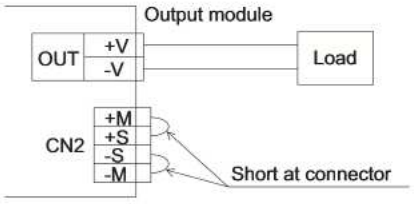


Fig.3.1 When not using remote sensing function

■Wiring method with remote sensing is shown in Fig.3.2.

■When you use the remote sensing, follow instruction as below.

①Note connecting wires enough because the load current flows to sensing line and an internal circuit of power supply is damaged occasionally, when defective contact of the screw such as loosening happens in the load line.

②Confirm line drop should be at 0.3V or less using a thick wire from the power supply to the load.

③When remote sensing function is used, output voltage might become unstable because of a impedance of wiring and load condition. And the power supply should be evaluated enough.

Following are examples to improve it.

・-S sensing wire is removed and terminals between -M and -S are shorted.

・C_0, C_1 and R1 are connected as below figure.

Please ask details to us.

■Do not draw the output current from ±M at CN2.

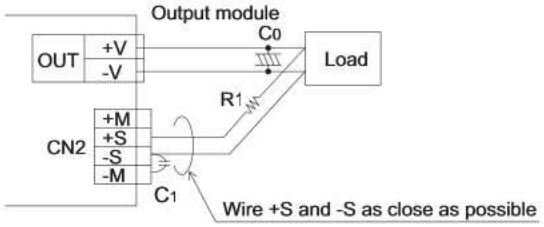


Fig.3.2 When using remote sensing function

3.8 Remote ON/OFF

■Each output module has remote ON/OFF. Remote ON/OFF control becomes available by applying voltage in CN2.

■Auxiliary power(AUX) for remote ON/OFF control.

Auxiliary power(AUX) is built-in for remote ON/OFF control.

Auxiliary power(AUX) is isolated from input,output and FG.

Fig.3.3 shows the way to connect remote control with AUX.

■Remote ON/OFF control logic.

①The output stops when the voltage(4.5 - 12.5V) is applied in RC+.

※Please use the option(-R) when reverse logic in remote ON/OFF operation is necessary. Refer to 5. Option

②Built-in fan does not stop even if the output is turned off with remote ON/OFF circuit.

③The LV alarm outputs when the output voltage is turned off with remote ON/OFF (except module S, T, U).

④This function works in each output module.

■Remote ON/OFF control is indepedent from each output module, therefore any output module is possible to control remote ON/OFF.

Note remote ON/OFF control is not all output module shut down in a lump. Recommend to use series and parallel remote ON/OFF circuit to make output module shut down in a lump.

■Remote ON/OFF circuit(RC+, RC-) is isolated from input,output and FG.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

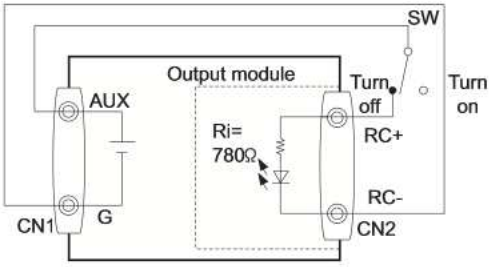


Fig.3.3 Example of connecting remote ON/OFF

Table 3.1 Specification of remote ON/OFF

Connection method		Fig 3.3 Remote SW
SW Logic	Turn on	SW open (0-0.5V between RC+ and RC-)
	Turn off	SW close (12V between RC+ and RC-)
Bases terminal		CN2 RC-

3.9 Isolation

■For a receiving inspection. such as Hi-Pot test, gradually increase (decrease) the voltage for start(shut down). Avoid using Hi-Pot tester with timer because it may generate voltage a few times higher than applied voltage at ON/OFF of a timer.

3.10 Alarm

■Table 3.2 shows the alarm function built-in.

①PR alarm:Detecting line voltage and fan condition.

②LV alarm:Detecting output voltage (except module S, T, U).

Table 3.2 Explanation of alarms

	Alarm	Output of alarm
PR	When line voltage is abnormal (low input voltage out of range) or fan stops, the alarm outputs from CN1.	Open collector method Good : Low (0-0.8V, 1-20mA) Fail :35V max
LV	When the output voltage becomes low or stops, the alarm outputs from CN2. Notice : ① When the output is over current(intermittent current), the alarm is unsettled status. ② LV alarm is not isolated from output. Please notice the connection when using series operating or power supply as negative voltage.(Refer to fig.3.5)	Open collector method Good : Low (0-0.8V, 1-20mA) Fail :35V max

Please consult us details.

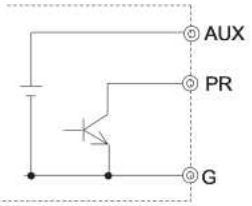
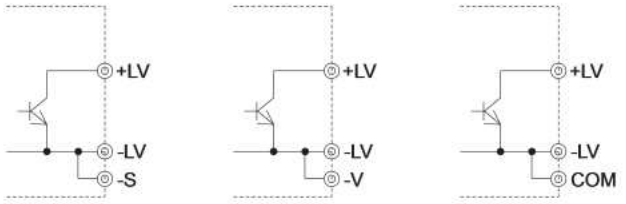


Fig.3.4 Internal circuit of PR

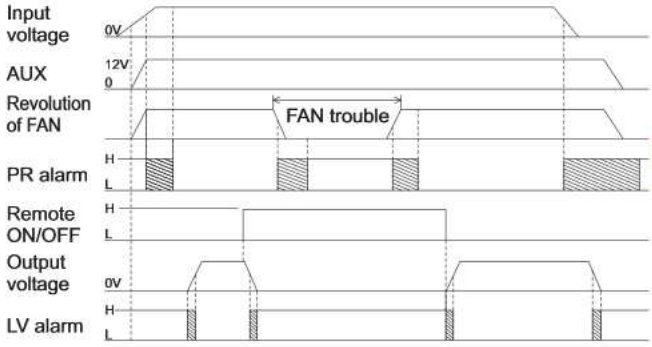


Applying module : A-K, 2A-2K

Applying module : L, M, N, P, R

Applying module : Y, W, Z, 9, Q, V

Fig.3.5 Internal circuit of LV



★ ▨ : unsetteled area

★ H : 2V ≦ H ≦ 35V or Open, L:L ≦ 0.8V

Fig.3.6 Sequence time chart

ACE

4 Assembling and installation method

4.1 Installation method

■Fan for forced cooling is built-in.

Do not block ventilation at inlet side and its opposite side(output terminal side).

※Please use the option (-F) when reverse exhaust is necessary.



Fig.4.1 Air flow

■Install air filter so that the effect of cooling does not decrease when the power supply is used in a dusty place.

Pay attention ventilation design when air filter is installed.

■When fan stops, thermal protection comes into effect and output modules are shut down. Regular maintenance is required for the fan, because the life expectancy of the fan depending on the use condition.

Fan unit for maintenance can be ordered.Refer to optional parts.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

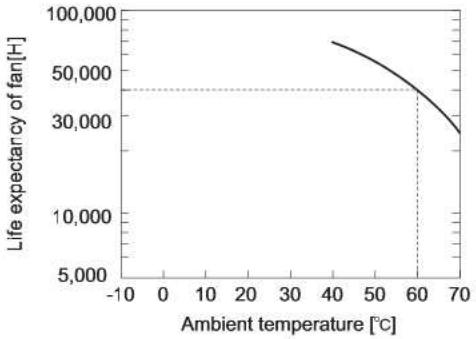


Fig.4.2 Life expectancy of fan(R(t)=90%)

■Fix firmly, considering weight, though it can be used by the installation method shown in Fig.4.3.

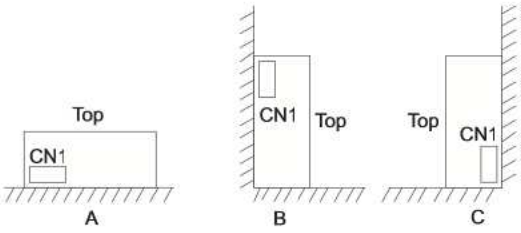


Fig.4.3 Installation method 1

■Avoid installation method 2 Fig.4.4 from mechanical stress.

■The screw should be inserted up to 6mm max from outside of the power supply to keep a distance between inside parts and an isolation(Fig.4.5).

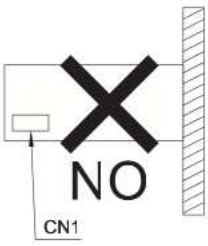


Fig.4.4 Installation method 2

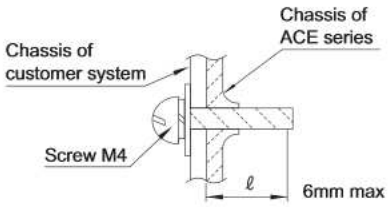


Fig.4.5 Mounting screw

4.2 Derating

■ACE series consists of output module combination. Make sure each output module are used within specifications and total output power is less than rated total output power.

■Derating curve of output module depending on ambient temperature(at suction side) shown in Fig.4.6.

■In the hatching area specification of Ripple,Ripple Noise is different from other area.

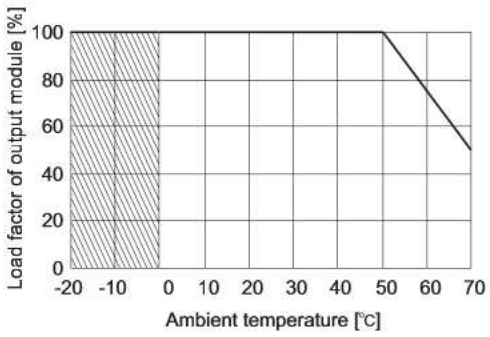


Fig.4.6 Derating curve of output module on ambient temperature

■Derating curve depending on input voltage is shown in Fig.4.7, Fig.4.8, Fig.4.9 and Fig.4.10.

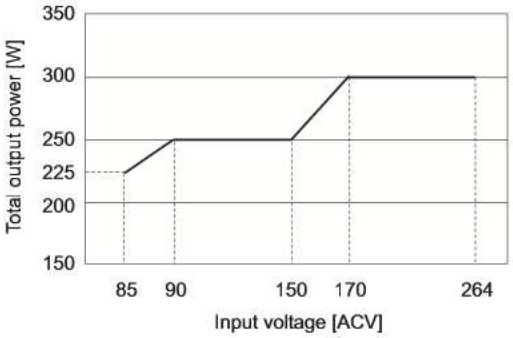


Fig.4.7 Derating curve depending on input voltage(ACE300F)

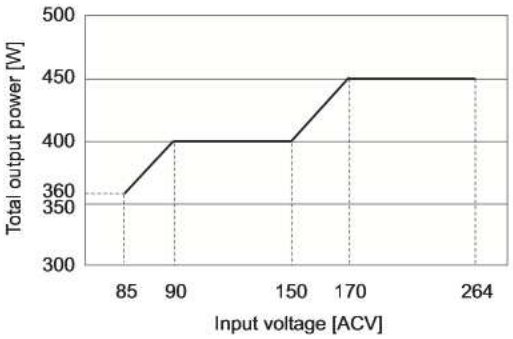


Fig.4.8 Derating curve depending on input voltage(ACE450F)

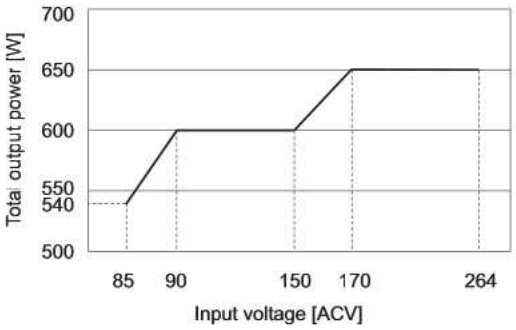


Fig.4.9 Derating curve depending on input voltage(ACE650F)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

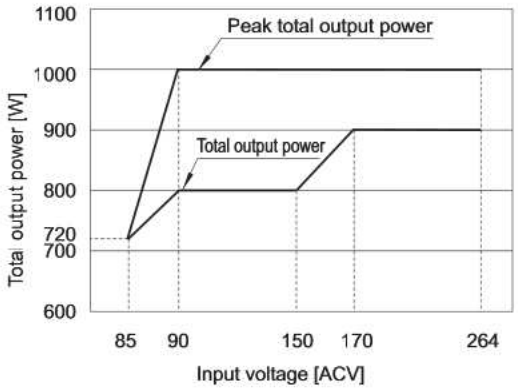
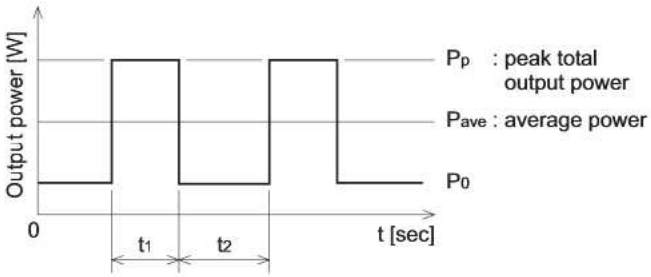


Fig.4.10 Derating curve depending on input voltage(ACE900F)

■ACE900F can output the peak power by the following conditions.



$t_1 \leqq 1$ [sec], $P_{ave} = \frac{P_p t_1 + P_0 t_2}{t_1 + t_2} \leqq$ total output power, $\frac{t_1}{t_1 + t_2} \leqq 0.3$

Fig.4.11 Peak output power(only ACE900F)

■Definition of load factor

$$A_0 = \frac{\text{(Sum of each module power)}}{\text{(Total output power)}} \times 100$$

$$= \frac{\sum_{k=1}^{6} (I_{k1} \times V_{k1} + I_{k2} \times V_{k2})}{\text{(Total output power)}} \times 100$$

Notice : Only the number with a small occupation slot number is calculated in 2A-2K.

$A_{11}, A_{21}, A_{31}, A_{41}, A_{51}, A_{61}$: $A_{k1} = I_{k1} / I_{0k1} \times 100$

$A_{12}, A_{22}, A_{32}, A_{42}, A_{52}, A_{62}$: $A_{k2} = I_{k2} / I_{0k2} \times 100$

Where ; I_{k1}, V_{k1}, I_{0k1} : output current (※1), voltage, rated current (※2) other than V_2 of module S, T, U.

I_{k2}, V_{k2}, I_{0k2} : output current, voltage, rated current in V2 of module S, T, U.

Total output power : Depending input voltage (Refer to Fig.4.7-4.10)

※1 The output current in module Y, W, Z, 9, Q and V is sum of +current and -current.

※2 Module rated current is shown below following ;

· except module Y, W, Z, 9, Q and V : refer to output module specification

· module Y, W, Z, 9, Q and V : 10A(Y), 6.4A(W) , 5A(Z), 3.2A(9) 12.8A(Q), 11A(V)

(Sum of +current and -current)

Load factor [%]=maximum value of A_0 to A_{62}

■About load regulation in module Y, W, Z, 9, Q and V

The sum of +power and -power must be less than output power that module Y is 50W, W is 76.8W, Z is 75W, 9 is 76.8W, Q is 153.6W, V is 165W.

The relation between the current and the load regulation is shown in the following example(Fig.4.12)

<Example of module W>

(1) Rated current 1 : 3.2A --- When drawing current within +3.2A, -3.2A(total 6.4A), the specification of load regulation is "load regulation 1".

(2) Rated current 2 : 4.2A --- When drawing current within +4.2A, -2.2A or +2.2A, -4.2A, the specification of load regulation is "load regulation 2".

(3) Peak current : 5A ------ It is possible to draw +5A, -1.4A or +1.4A, -5A in total 6.4A. Refer to Output Module Specification ※1 when drawing 4.2-5A.

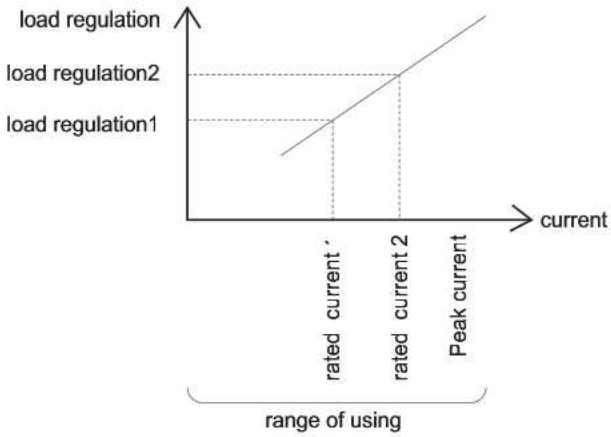


Fig.4.12 The relation between the current and the load regulation

■Minimum output current of module S, T, U.

The allowable load factor of V2 changes depending on the output current of V1 as follows.

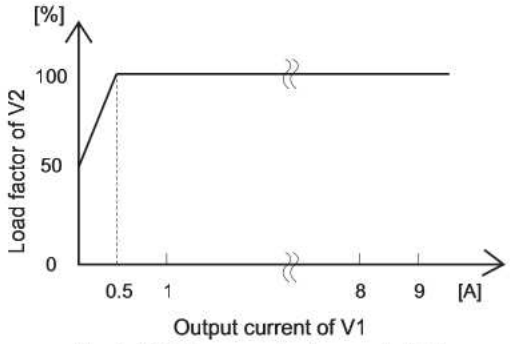


Fig. 4.13 Minimum output current of V1

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

■Example of usage

[Example1] The method to make sure if AC4-LWHEC-00 is possible to operate in as following condition.

Input voltage : AC100V
Ambient temperature : 50℃
Ouput module : slot1 : 5V 15A
slot2 : 12V 7A
slot3 : 24V 6A
slot4 : +12V 4A, -12V 1A
slot5 : 3.3V 10A

Calculating A_{11}-A_{51}

$$A_0 = \frac{\text{(Sum of each module power)}}{\text{(Total output power)}} \times 100 = \frac{\sum_{k=1}^{6}(I_{k1} \times V_{k1} + I_{k2} \times V_{k2})}{\text{(Total output power)}} \times 100$$

=396/400×100=99%
$A_{11}=I_{11}/I_{011}\times100=15/26\times100=58\%$
$A_{21}=I_{21}/I_{021}\times100=7/13\times100=54\%$
$A_{31}=I_{31}/I_{031}\times100=6/6.5\times100=92\%$
$A_{41}=I_{41}/I_{041}\times100=5/6.4\times100=78\%$
$A_{51}=I_{51}/I_{051}\times100=10/10\times100=100\%$

Consequently, the maximum value in A_{11}-A_{51} is 100%, while according to derating curve(Fig.4.6), the output modules are possible to operate at ambient temperature 50℃ in load factor 100%. As a result AC4-LWHEC-00 is OK to use for this condition.

[Example2] The method to make sure if AC9-2HCSWP-00 is possible to operate in as following condition.

Input voltage : AC100V
Ambient temperature : 50℃
Ouput module : slot1 : 15V 3A
slot2 : +12V 3.2A, -12V 2.3A
slot3 : 5V 8A, 5V 4A
slot4 : 5V 25A
slot5 : 24V 13A

Calculating A_{11}-A_{51}

$$A_0 = \frac{\text{(Sum of each module power)}}{\text{(Total output power)}} \times 100 = \frac{\sum_{k=1}^{6}(I_{k1} \times V_{k1} + I_{k2} \times V_{k2})}{\text{(Total output power)}} \times 100$$

=608/800×100=76%
$A_{11}=I_{11}/I_{011}\times100=3/4\times100=75\%$
$A_{21}=I_{21}/I_{021}\times100=5.5/6.4\times100=86\%$
$A_{31}=I_{31}/I_{031}\times100=8/10\times100=80\%$
$A_{32}=I_{32}/I_{032}\times100=4/5\times100=80\%$
$A_{41}=I_{41}/I_{041}\times100=25/26\times100=96\%$
$A_{51}=I_{51}/I_{051}\times100=13/14\times100=93\%$

Consequently, the maximum value in A_{11}-A_{51} is 96%, while according to derating curve(Fig.4.6), the output modules are possible to operate at ambient temperature 50℃ in load factor 100%. As a result AC9-2HCSWP-00 is OK to use for this condition.

5 Option

5.1 Option outline

■Consult us detailed option and delivery before hand.
■Please refer to 1. Ordering information for order method.
■It is possible a combination of the option, and consult us that it is not possible to do according to the option for the combination occasionally.

●-E, -G

・Low leakage current type.
・The difference from standard is shown Table 5.1.

Table 5.1 Low leakage type

	-E	-G
Leakage current (AC230V)	0.5mA max	0.15mA max
Conducted Noise	Class A	Not available
Ripple Noise	1.5 times standard	2.0 times standard

●-F

・Reverse air exhaust type.
・The difference from standard is shown Fig.5.1 and Fig.5.2.



Fig.5.1 Air flow(-F)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

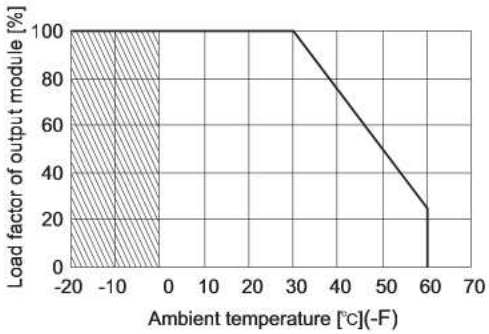


Fig.5.2 Derating curve of output module on ambient temperature(-F)

※Derating curve of output module on input voltage is also defferent for ACE900F.

●-N(External size is changed and consult us about details)

- Cooling by user's fan, without built-in fan.(Refer to Fig.5.3)
- When the safety standard is applied, it is necessary to measure the temperature of the transformer.
- Please consult us cooling method.

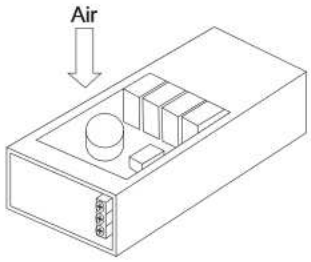


Fig.5.3 Image chart(-N)

●-K

- Low speed fan for reducing sound.
- The difference from standard is shown Fig.5.4.

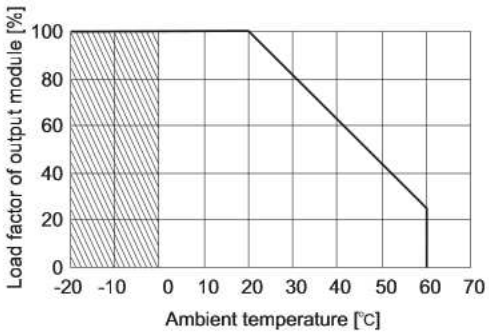


Fig.5.4 Derating curve depending on ambient temperature(-K)

●-R

- Reverse logic in remote ON/OFF operation.
- The module does not work as long as the voltage is not applied to RC terminal even if input voltage is applied.

  Turn on : 12[V] between RC+ and RC-
  Turn off : 0-0.5[V] between RC+ and RC-
- At option -R setting, all installed output modules become object that is a reverse logic.
- The harness for the CN2 connection is needed for this specification.
- Please use option harness H-SN-16 through H-SN-18.
- Please note the remote sensing treatment when you design the harness. Refer to 3.7 Remote sensing.
- Please consult us when you use standard logic and reverse logic by coexistence.

●-T(External size is changed and consult us about details)

- It is a model by which the filter the foreign body mixing measures is added.
- The difference from standard is shown Fig 5.5.
- Option(-T) cannot be used together with option(-F, -K).
- Use in the environment without dust or a regular mentenance is necessary, because the cooling ability cannot be kept when stopped up with dust.

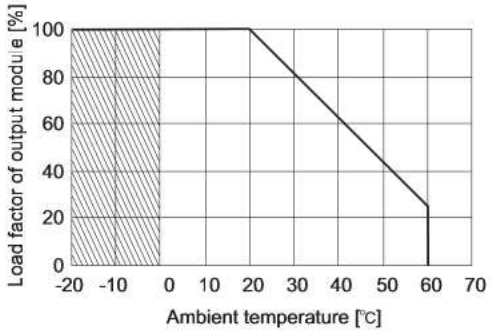


Fig.5.5 Derating curve depending on ambient temperature(-T)

●-U

- Operation stop voltage is set at a lower value than standard version.

Use condition

Input	AC70V(DC100V)	
	Duty 1s/30s	
Output	ACE300F	200W
	ACE450F	360W
	ACE650F	540W
	ACE900F	720W

※Avoid continuously operating about 1[sec] and more so that the power supply is broken.

●-W(External size is changed and consult us about details)

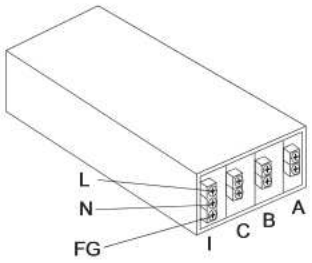
- Covers are installed on the terminal block of the output modules.
- All the terminal covers are installed in all mounted the output modules if option-W is specified.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

6 Input module

In ACE300F, ACE450F and ACE650F, input terminal block and output terminal block are opposite.But Input module (code:I) can be used instead of the most left module.External size is changed and consult us about details.

ex : AC3 – I CBA – 00
Output module
Input module



※Conducted noise is class A when module I is specified.

ACE

7 Medical electrical equipment

・It is a specification which corresponds to medical electrical equipment. The type name and the specification, etc. are as follows. Please consult us for details.

7.1 Type

AC□ – □ □ □ □ □ – □□ – H

When medical electrical equipment and other options are combined, the type name end is as follows.

AC□ – □ □ □ □ □ – □□ – H○△

※ ○, △ :other options

Refer to instruction manual 5. for Option.

i.e:type name when option K by which cooling fan is made low-speed is combined.

AC□ – □ □ □ □ □ – □□ – HK

✱The option not combined is as follows.

C : coating

G,E : low leakage current

※ Option H is a low leakage current specification.

7.2 Specification

・Safety : UL2601-1 (CSA601.1), EN60601-1

・Isolation : AC4,000V input-output, RC, AUX 1min.
cutoff current 10mA

・leakage current : 0.3mA max (AC100V), 0.5mA max (AC230V)
※ It is possible for 0.1mA max.

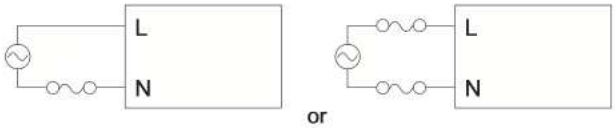
・conducted noise : complies with FCC-A, VCCI-A, CISPR22-A, EN55022-A

・Module which can correspond
They are all modules except module S, T, and U of "Output module specification". Note that it is not possible to correspond in module S, T, and U.

・Ripple noise
Ripple noise increases to 1.5 times that of a equipment model.

7.3 Others

・Safety approved fuse or circuit breaker must be connected to the input terminal when applying to medical electrical equipment.



FUSE ACE300F AC250V8A ACE450F AC250V10A
ACE650F AC250V15A ACE900F AC250V20A

Fig.7.1 Connecting FUSE

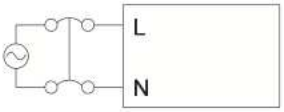


Fig.7.2 Connecting circuit breaker

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP