

Combined Indicator

AD16-30JC

www.si-apt.com

AD16-30JC Combined Indicator

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APT

Combined Indicator

AD16-30JC





Company Profile

APT has been established in 1993. Today it is now a Chinese leading manufacturer of low-voltage components and has been specialized in the manufacturing of low voltage products such as pushbuttons, indicators, cam switches and general-purpose relays. In August 2008, Siemens Electrical Apparatus Ltd. Suzhou (hereinafter referred to as "Siemens") made the wholly-owned acquisition of APT, putting the APT brand and related products under the operation of Siemens. With unified quality control and R&D resources of Siemens, APT focuses on manufacturing pushbuttons, indicators and other important low-voltage products such as tower lights, control cabinets, combined lights, current transformers and limit switches etc.

Through over 20 years of promotion and application, the APT products have been widely serving dozens of industrial fields in China including power, energy, rail transit, elevator, logistics, machine tool, etc. They have been successively selected and applied in Qinshan Nuclear Power Plant, the Three Gorges Project, Shenzhou V Spacecraft, Qinghai-Tibet Railway locomotives, "Harmony" Electric Multiple Unit, "Fuxing" Electric Multiple Unit, international airports and urban metros and have become the preferred brand for national key projects. At the same time, Siemens gives full play to its international operation experience to continuously enhance the management and business development of APT and better serve the Chinese market through advanced technology and improved product line.



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Ordering Method

Order Code Description

Page 16

APT

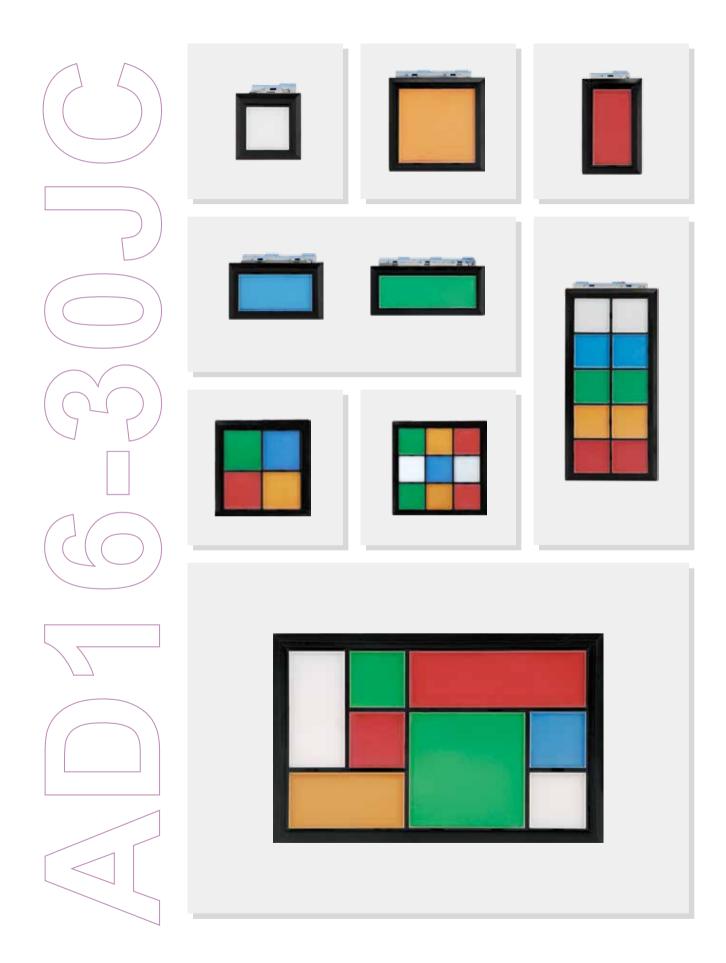


AD16-30JC

Combined Indicator

Applicable scope

 The AD16-30JC combined indicators (hereinafter referred to as "combined lights") are applicable to the equipment of AC 50Hz (or 60Hz), with rated working voltage of 24V, 48V, 110V, 220V & 380V and DC rated working voltage of 24V, 48V, 110V & 220V as the indicators for various light indication signals and light execution signals.



Order code description

Compliance

The combined lights comply with the national standard GB/T14048.5.

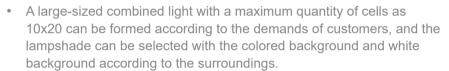
Structure and features

 The combined lights can provide single light with 5 types of panes: F, H, L, V and G. The customers can combine them according to their own requirements.

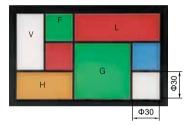
Type F: 30x30mm; Type H: 30x60mm; Type L: 30X90mm;

Type V: 60x30mm; Type G: 60x60mm.

 The overall appearance of the combined light is steady and grand with the transparent and uniform light color. The black frames between the single lights are well distinguished.



- The enclosures of the combined lights have a large hole area for the heat radiation window, and they can be thoroughly penetrated both horizontally and vertically after the combination in order to ensure the reliable heat radiation of the combined light.
- The combined light can be installed conveniently and easily. The LED can
 be removed or replaced in the direction of the lampshade surface on the
 installation panel only by disconnecting the power supply.
- The electrical contact is the plug-in type and the terminals are protected by the terminal covers. The mechanical structure is reinforced by the metalenclosed mounting plate to ensure its safety and reliability.
- The light source of the combined light is high-brightness LED luminescent diode with a variety of colors such as red, yellow, green, blue, white and two-color, and is displayed in the colored or white background.
- The lampshade of the combined light is square and the lampshade is connected with the enclosure in a clip-on way (demountable).
- The single-light illumination type of the combined light includes normally on, flashing, two colors of red and green as well as acousto-optical combination.
- The rated voltage class includes: AC/DC24V, AC/DC48V, AC/DC110V, AC220V, DC220V and AC380V.









Technical feature

- Power frequency withstand voltage: 1,890V (AC effective value), 1min
- The voltage variation is $\pm 20\%$ of the rated voltage
- Insulation resistance≥100MΩ
- Continuous working endurance≥30,000h
- Brightness≥120cd/m2
- Comparative Tracking Index (CTI) ≥175V
- · Application frequency of AC combined light: 50Hz or 60Hz
- Protection class: IP40

Comparison table of voltage and current (Type F single light)

Illumination type	Voltage	Current	Illumination type	Voltage	Current
	AC/DC24V	16mA±1		AC/DC24V	22mA±1
	AC/DC48V	15mA±1		AC/DC48V	24mA±1
Normally on	AC/DC110V	11mA±1	Floobing	AC/DC110V	15mA±1
	DC220V	14mA±1	Flashing	DC220V	15mA±1
	AC220V	21mA±1		AC220V	15mA±1
	AC380V	18mA±1		AC380V	18mA±1

Normal working conditions

- Ambient temperature -25°C ~+55°C
- Relative air humidity ≤95%
- Altitude of the installation location ≤2,000m





Meaning of order code

AD16-30JC -

Series name

APT 30 series combined light

02	13							
Line No.	Row No.							
For Types H, L, V and G single lights, please								

For Types H, L, V and G single lights, please convert to the quantity equivalent to that of Type F pane

convert to the quantity equivalent to that of Type F pane											
Equivalent to the quantity of Type F pane											
01	01	11									
02	02	12									
03	03	13									
04	04	14									
05	05	15									
06	06	16									
07	07	17									
08	08	18									
09	09	19									
10	10	20									

/D

Remarks

If all pane gears of the combined lights are of DC220V, "/D" will occur. Otherwise, it will be omitted.

Note: to determine the complete order code, please refer to "ordering method" on page 16









O Dimension and panel dimension & specification

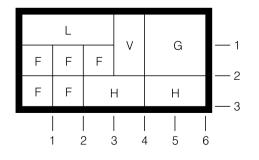
Dimension of Type F and assembled pane quantity of combined lights (please convert to Type F in regard to Types H, L, V & G)

	(hc	Row prizontal)	b	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Line	Dii	mension	В	43	73	103	133	163	193	223	253	283	313	343	373	403	433	463	493	523	553	583	613
(Longitudinal)		Hole dimension	(D)	(36)	(66)	(96)	(126)	(156)	(186)	(216)	(246)	(276)	(306)	(336)	(366)	(396)	(426)	(456)	(486)	(516)	(546)	(576)	(606)
а	Α	(C)		()	()	()	()	(+)	(100)	(= : =)	()	()	()	()	()	()	(1-0)	(/	(100)	(/	()	()	()
01	43	(36)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
02	73	(66)		2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
03	103	(96)		3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	51	57	60
04	133	(126)		4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
05	163	(156)		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
06	193	(186)		6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
07	223	(216)		7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140
08	253	(246)		8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	130	144	152	160
09	283	(276)		9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180
10	313	(306)		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200

Application method of the table

- The total assembled pane quantity of the combined lights is line (longitudinal) x row (horizontal). For example: the dimension of 6 (lines) x 8 (rows) is 193mm (H) x 253mm (W) with the hole dimension of 186mm (H) x 246mm (W), and the total pane quantity is 48.
- The dimension is the number of line (Row A) and row (Row B).
- The hole dimension is the number in the brackets of line (C) and row (D), and the tolerance of the hole dimension is $0 \sim +1.0$ mm.
- Please refer to the following description for the total pane quantity, dimension, hole dimension and pane conversion of the combined lights.

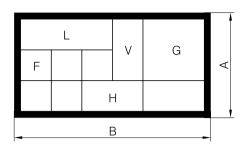
Total pane quantity (as shown in the figure)

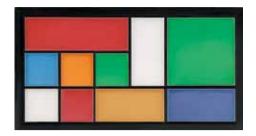


Convert the longitudinal number and horizontal number of Types H, L, V & G into the equivalent quantity of Type F panes.

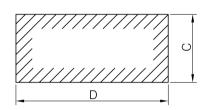


Dimension (as shown in the figure)





Hole dimension (as shown in the figure)





Pane conversion

Type H



Equivalent to 2 Type F panes horizontal (1), longitudinal (2)

Type L



Equivalent to 3 Type F panes horizontal (1), longitudinal (3)

Type V



Equivalent to 2 Type F panes horizontal (2), longitudinal (1)

Type G



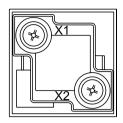
Equivalent to 4 Type F panes horizontal (2), longitudinal (2)

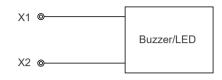




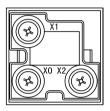
Terminal wiring

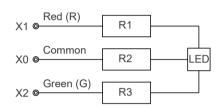
Normally on type, flashing type and buzzer terminal wiring





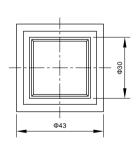
Terminal wiring of bi-color light

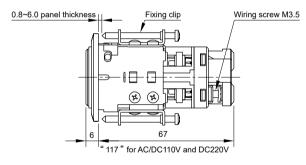


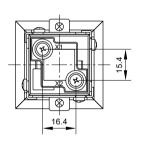


Dimension drawing special for Type F single window (unit: mm)

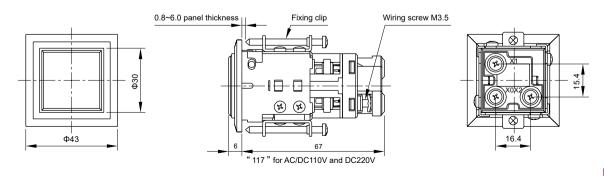
Normally on type, flashing type and buzzer



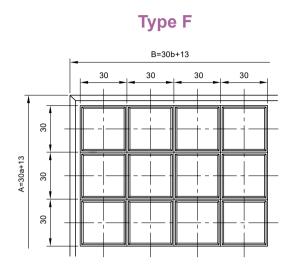


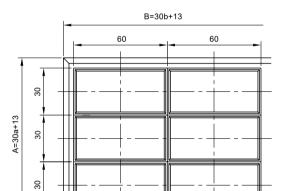


Bi-color type

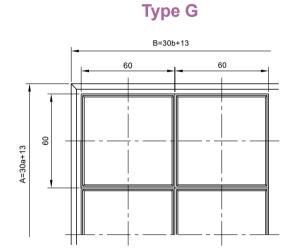


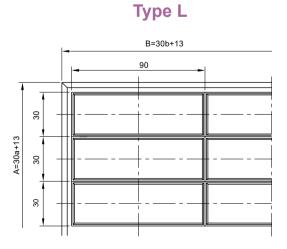
Front dimension of single light (unit: mm)





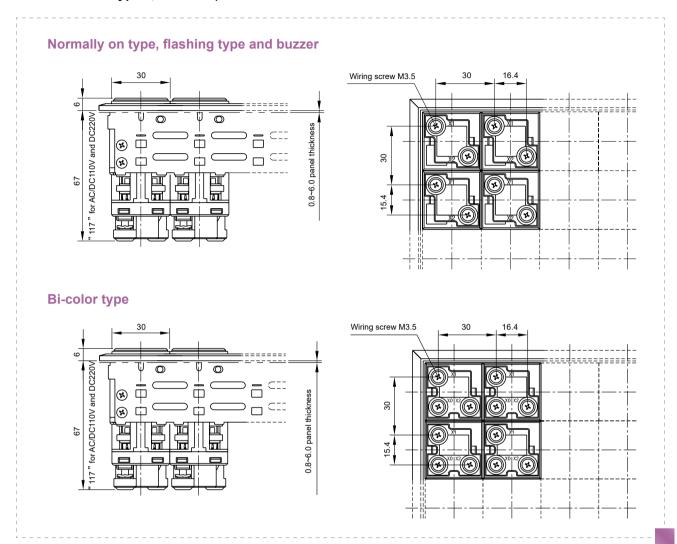
Type H

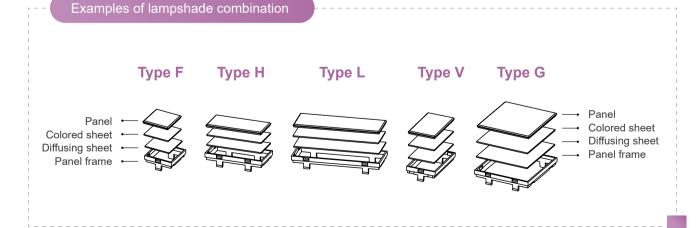






Side and back dimensions of Type F single light (sides and backs of Types H, L, V and G are same as those of Type F, unit: mm)





Dimension & specifications

Lightin	Type F	Type H	Type L	Type V	Type G	
	Pane (L × W)	30×30	30×60	30×90	60×30	60×60
	Lighting surface (L \times W)	28×28	28×58	28×88	58×28	58×58
Dimension of lighting unit (mm)	Colored sheet (L \times W \times T)	27×27×1.0	27×57×1.0	27×87×1.0	57×27×1.0	57×57×1.0
	Diffusing sheet (L \times W \times T)	27×27×1.0	27×57×1.0	27×87×1.0	57×27×1.0	57×57×1.0
	Lettering area	26×26	26x56	26×86	56×26	56×56

Accessories

Name	Profile	Order code	Remarks
Removing clip		JC-1	It is used to remove LED light bead
Connection strap		JC-2	It is used for short connection between the wiring terminals
Fixing clip		JC-3	Fix the combined light from the panel back

Operation precautions

- Panel thickness
 - During the panel installation, please choose the panel thickness with consideration for the bodyweight of AD16-30JC type combined indicator and wire weight of the wiring.
- Tightening torque of terminal screw
 Please use the wires with proper input voltage and current during the wiring and tighten the wiring screws with 1.0 ~1.3N · m tightening torque.
- Before the installation, removal, wiring, maintenance and inspection, please be sure to cut off the power supply. Particularly when removing LED light beads, please be sure to cut off the power supply to the combined light first in order to avoid electric shock, burn
- and damage to LED light beads. Moreover, please do not use it when the lampshade is removed in order to avoid short circuit and damage to the lighting surface of LED light beads due to the entrance of sundries so that the brightness drops or the light turns off.
- Avoid the contact of chemical solvents with the combined light.
- Do not use the combined light in the place with direct sunlight so as to avoid overheating that causes fire alarms or damage to the function of combined light.
- When the combination quantity is quite large, please use the fan or other tools for heat dissipation in order to avoid the overheating of the combined light.



Installation method

Dismantling and installation methods of combined light pane

Insert a small slotted screwdriver into the slot under the panel frame and pry it downwards gently when dismantling the combined light pane.

First point the protruding ribs on the outside of the panel frame towards the groove of the combined light enclosure and then press it in when installing the combined light pane.

Dismantling and installation methods of combined light lampshade

When dismantling the combined light lampshade, insert a small slotted screwdriver into the slot on the holding-on groove side of the lampshade and dismantle it by gentle prying. As the holding-on groove of the lampshade is in different positions for the panel frames of different order codes, please verify the position of the holding-on groove before dismantling.

When installing the combined light lampshade, install the colored sheet, symbol mark (if any) and diffusing sheet on the inner side of the panel frame. First insert one end of the holding-on groove on the panel into the holding-on groove on the inner side of the panel frame and then press down the other end faces gently to fix the lampshade.

Dismantling and installation methods of combined light bead

When dismantling the combined light bead, please be sure to cut off the power supply first. Insert deep into the groove and clamp both sides of the light beads with the removing clip (Model No. JC-1) to draw out the light bead.

Notes: Draw out the light bead straightly from the product body without the force exerted on the connection terminal parts between the light bead and product body.

When installing the combined light bead, align the connecting part of the light bead with the connection terminal part in the product body and press it into the product body gently.

Installation method of combined light

When installing on the panel, after the product body is inserted from the panel front, insert the auxiliary fixing clip (Model No. JC-3) into the square hole on the mounting plate of the combined light from the panel back and tighten the screws.



Ordering method

There are two ways to purchase the combined lights online for allocation through the network as follows:

1. Visit APT homepage: www.si-apt.com/ → Selection → Combined indicator

Note: The username and password shall be entered for the above method (currently the username and password are only available for authorized APT distributors; if any customer needs to place an order, please consult APT Sales or local authorized distributor).

Order allocation form:

Order allocation form of AD16-30JC combined indicator

Ordered by: test001

Contact Person: test001

Material No. of Finished Product: 101035950

Dimension: 103*163

Contact Tel: test001

Hole Dimension: 96*156

F-mail: test001

Order Code of Finished Product: AD16-30JC-0305

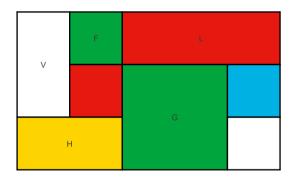
Reference No.: test001-1

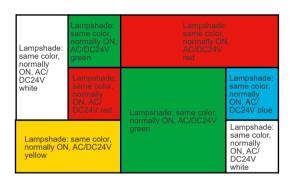
Distributor Name: Global User (for test)

Print Date: June 30, 2011 10:51:25

System Information Allocation No.:

06302011001





Customer Signature for Confirmation:

Remarks for Customer

Requirement for order code selection:

- 1. Please strictly follow the pane type, illumination type and voltage specification provided by us for order code selection.
- 2. The cell of the bi-color light only has red-green bi-color normally ON type. No ordering on other bi-color customization is accepted.
- 3. AC/DC110V has different cell length from those with different voltage specifications. If there are cells with over two voltage specifications to be installed together, the wiring terminal parts may be different in length.
- 4. The lettering font on the cells are the boldface by default and the font size shall be decided by the cell shape and the quantity of letters.
- 5. We do not accept the order in regard to the mixed installation of DC220 and other voltages. Please call our customer service (021-56553757-8056) for any special requirement.
- 6. The fonts of foreign languages and numbers are Arial by default.

Declaration:

- 1. This parameter allocation table will be our only drawing standard and we will not accept the drawings for orders in any other format.
- 2. Once we receive your order requirement signed by you for confirmation and record it in SAP system, we will not accept any change.
- 3. The cell colors of actual products may be slightly different from those displayed on the computer screen and electronic format. Please refer to the actual products for the colors.
- 4. If the order is repeated with the same material number of a customer, please ensure that the allocations are completely identical. Otherwise, please reallocate.
- 5. This allocation table includes the appearance allocation table and technical parameter allocation table, which will be displayed on two pages due to the influence of the order types. Please make sure that the allocation information is delivered completely.
- 6. The above appearance parameter effect drawings including the font size and Song typeface which are only for reference. Please refer to the actual products.
- 7. All rights of this parameter allocation system are reserved by Siemens Electrical Apparatus Ltd., Suzhou.