



کلید مینیاتوری و کیلوآمپر
PA-MB6K MCB 6K

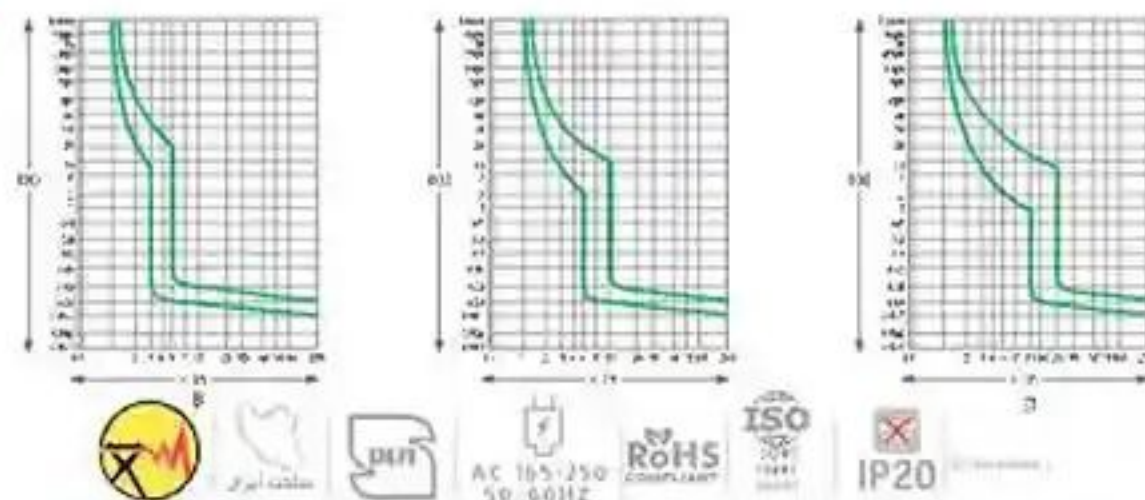
General

1. Overload protection
2. Short circuit protection
3. Controlling
4. Used in residential building, non-residential building, energy source industry and infrastructure
5. According to the type of instantaneous release classified as follows: type B(3-5In), type C(5-10In), type D(10-20In)

Selection

Type	Test current	Tripping time	Expected result	Type	Test current	Tripping time	Expected result
B, C, D	1.13In	$t \leq 1h (In \leq 63A)$	Not tripping	B	3In	$t \leq 0.1s$	Not tripping
	1.13In	$t \leq 2h (In > 63A)$		C	5In	$t \leq 0.1s$	
B, C, D	1.45In	$t < 1h (In \leq 63A)$	Tripping	D	10In	$t \leq 0.1s$	Tripping
	1.45In	$t < 2h (In > 63A)$		B	5In	$t < 0.1s$	
B, C, D	2.55In	$1s < t < 60s (In \leq 32A)$	Tripping	C	10In	$t < 0.1s$	Tripping
	2.55In	$1s < t < 120s (In > 32A)$		D	20In	$t < 0.1s$	

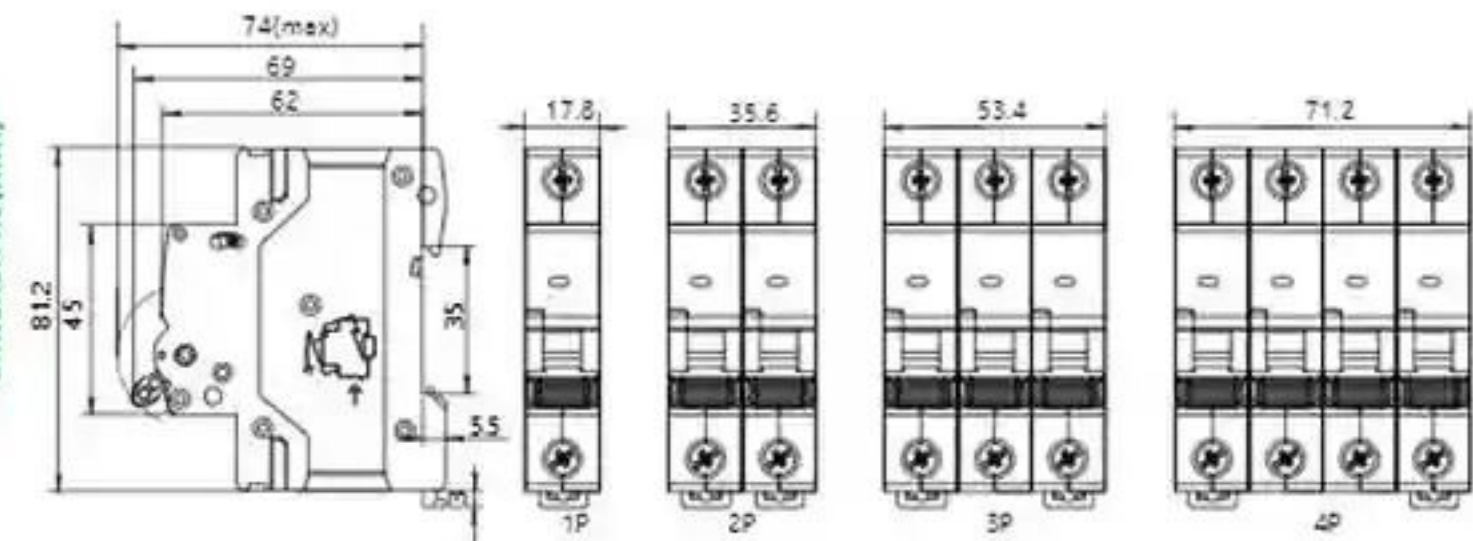
Curve



Technical data

Type	Standard	IEC/EN 60898-1
Electrical features	Rated current In	A 6, 10, 16, 20, 25, 32, 40, 50, 63
	Poles	P 1, 2, 3, 4
	Rated voltage Un	V 230/400
	Insulation voltage Ui	V 500
	Rated frequency	Hz 50/60
	Ultimate Short-Circuit Breaking Capacity Icn	kA 6
	Service Short-Circuit Breaking Capacity Ics	kA 6
	Rated impulse withstand voltage (1.2/50μs) (2000m)	kV 4
	Open Contacts impulse withstand voltage (1.2/50μs) (See Level)	kV 62
	Trip Mechanism	Thermal & Magnetic
	Rated power frequency withstand voltage	kV 2
	Pollution degree	2
Mechanical features	Thermal-magnetic release characteristic	B, C, D
	Electrical life	t 6000
	Mechanical life	t 20000
	Protection degree	IP20
	Reference temperature for setting of thermal element	°C 30
	Ambient temperature (with daily average $\leq 35^\circ\text{C}$)	°C -5 ~ +40
	Storage temperature	°C -25 ~ +70
	Terminal connection type	Cable/Pin-type busbar
	Terminal size top / bottom for cable	mm ² 25
	Terminal size top / bottom for busbar	mm ² 18-3
	Tightening torque	N·m 2
	Mounting	On DIN rail EN 60715/35mm by means of fast clip device
Installation	Connection	From top or bottom

Overall and mounting dimensions (mm)





کلید مینیاتوری • اکیلوآمپر

PA-MB10K

MCB 10K

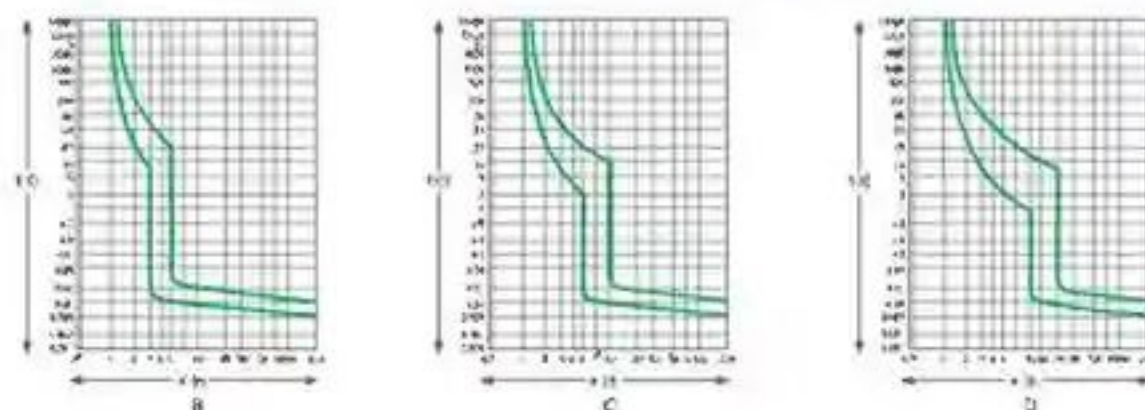
General

1. Overload protection
2. Short circuit protection
3. Controlling
4. Used in residential building, non-residential building, energy source industry and infrastructure
5. According to the type of instantaneous release classified as follows: type B(3-5)In, type C(5-10)In, type D(10-20)In

Selection

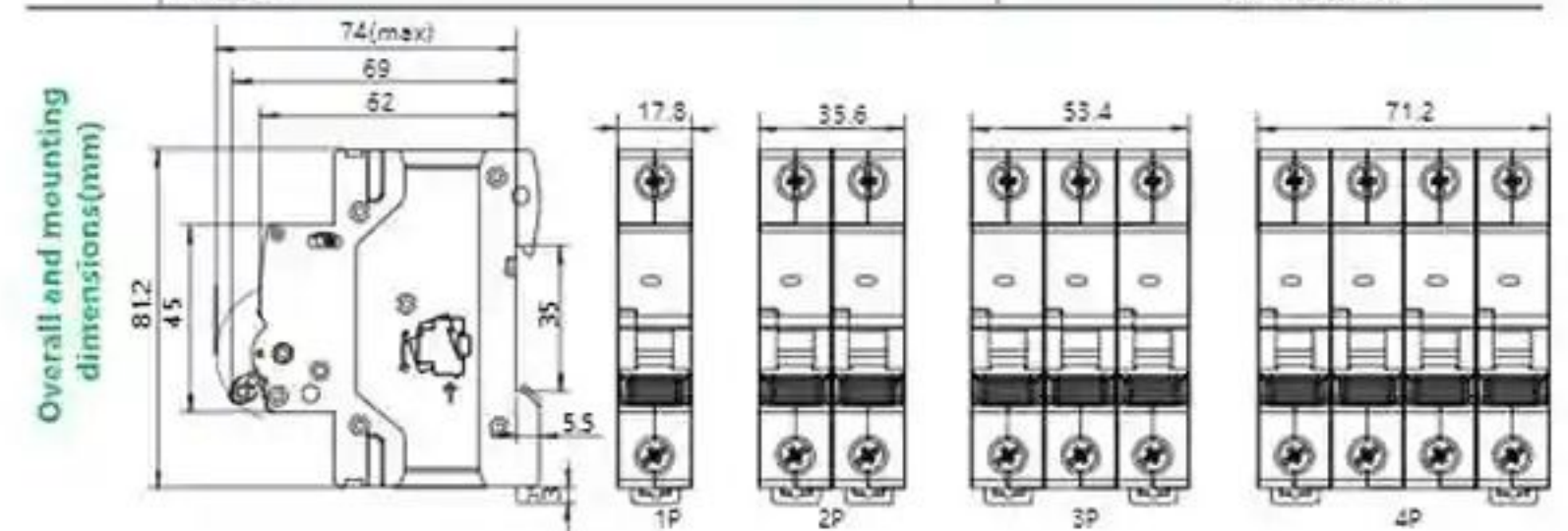
Type	Test current	Tripping time	Expected result	Type	Test current	Tripping time	Expected result
B, C, D	1.13In	$t \leq 1h (In \leq 63A)$	Not tripping	B	3In	$t \leq 0.1s$	Not tripping
	1.13In	$t \leq 2h (In > 63A)$		C	5In	$t \leq 0.1s$	
B, C, D	1.45In	$t < 1h (In \leq 63A)$	Tripping	D	10In	$t \leq 0.1s$	Tripping
	1.45In	$t < 2h (In > 63A)$		B	5In	$t < 0.1s$	
B, C, D	2.55In	$1s < t < 60s (In \leq 32A)$	Tripping	C	10In	$t < 0.1s$	Tripping
	2.55In	$1s < t < 120s (In > 32A)$		D	20In	$t < 0.1s$	

Curve



Technical data

Type	Standard	IEC/EN 60898-1
Electrical features	Rated current In	A 6, 10, 16, 20, 25, 32, 40, 50, 63
	Poles	1, 2, 3, 4
	Rated voltage Ue	V 230/400
	Insulation voltage Ui	V 500
	Rated frequency	Hz 50/60
	Ultimate Short-Circuit Breaking Capacity Icn	kA 10
	Service Short-Circuit Breaking Capacity Ics	kA 7.5
	Rated impulse withstand voltage (1.2/50)Uimp (2000m)	kV 4
	Open Contacts impulse withstand voltage (1.2/50)Uimp (Sea Level)	kV 6.2
	Trip Mechanism	Thermal & Magnetic
Mechanical features	Rated power frequency withstand voltage	kV 2
	Pollution degree	2
	Thermal-magnetic release characteristic	B, C, D
	Electrical life	t 6000
	Mechanical life	t 20000
	Protection degree	IP20
	Reference temperature for setting of thermal element	°C 30
	Ambient temperature (with daily average $\leq 35^{\circ}C$)	°C -5 ~ +40
	Storage temperature	°C -25 ~ +70
	Terminal connection type	Cable/Pin-type busbar
Installation	Terminal size top / bottom for cable	mm ² 25
		AWG 18-3
	Terminal size top / bottom for busbar	mm ² 25
		AWG 18-3
	Tightening torque	N·m 2
		in-lbs 18
Mounting	On DIN rail EN 50715(35mm) by means of fast clip device	
Connection	From top or bottom	





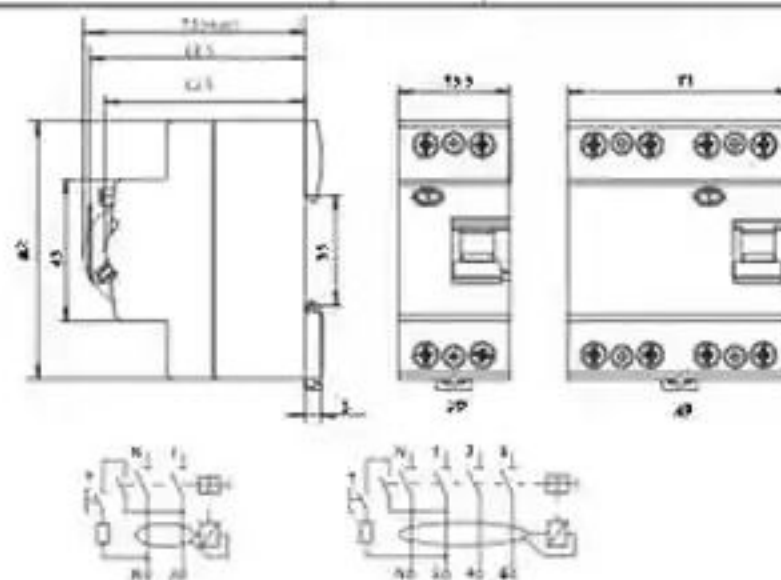
کلید محافظ جان دوپل و چهارپل PA-RCCB2P PA-RCCB4P RCCB

General

1. Protection against the effects of sinusoidal alternating earth fault currents
2. Protection against indirect contacts and additional protection against direct contacts
3. Protection against fire hazard caused by insulation faults
4. Controlling and Switching
5. Used in residential building, non-residential building, energy sources, industry and infrastructure

Selection

Type	Tripping sensitivity data		
AC	For residual sinusoidal alternating currents	30mA	THE Personnel Saving
A	For residual sinusoidal alternating currents and residual pulsating direct currents	100mA	For providing protection against Indirect Contact & Fire
S	For selectivity, with time delay	300mA	For providing fire protection in case of insulation faults



Modular DIN Rail

Technical data

Type	Standard	IEC/EN 61008-1	
Electrical features	Poles	P	1P+N 3P+N
	Residual current action type		AC
	Trip Mechanism		leakage (electronic, Electromagnetic)
	Rated current I _n	A	6, 10, 16, 20, 25, 32, 40, 50, 63
	Rated voltage U _e	V	230/400
	Rated sensitivity I _{Δn}	A	0.03
	Rated making and breaking capacity I _{Δm}	A	500(I _n ≤ 50A) 630(I _n > 50A)
	Rated short-circuit capacity I _{cn}	KA	6
	Break time under I _{Δn}	s	≤ 0.1
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage (1.2/50)U _{imp}	KV	4
		kV	2
	Insulation voltage U _i	V	500
	Pollution degree		2
Mechanical features	Electrical life	t	4000
	Mechanical life	t	8000
	Contact position indicator		Optional
	Protection degree		IP20
	Ambient temperature (with daily average ≤ 35°C)	°C	-5 ~ +40
Installation	Storage temperature	°C	-25 ~ +70
	Terminal connection type		Cable/Pin-type busbar
	Terminal size top/bottom for cable	mm ²	25 / 35
		AWG	18-3 / 18-2
	Terminal size top/bottom for busbar	mm ²	10 / 16
		AWG	18-8 / 18-5
	Tightening torque	N*m	2.5
		in-lbs	22
Connection	Mounting		On DIN rail EN60715(35mm) by means of fast clip device
	Connection		From top and bottom



کلید محافظ جان ترکیبی

PA-RCBO2P PA-RCBO4P RCBO

•Functions and Applications

Overload, short circuit, leakage protection; Suitable for industrial, commercial, high-rise and civil residential and other occasions.

•PRODUCT MODEL AND IMPLICATION

PA-RCBON M-2P-C 16-30mA-AC

Residual current action type:
AC type: Sinusoidal AC Distribution System (default)
A type: Sinusoidal AC or pulsating DC ground fault system
Rated residual action current (mA)
30, 100, 300
rated current (A)
6, 10, 16, 20, 25, 32, 40, 50, 63
Electromagnetic trip curve
B: (3-5) I_n
C: (5-10) I_n
D: (10-20) I_n
Pole: 2P, 4P
Protection type: M (electromagnetic type)
E (electronic type)
N: Integral type
Product model

•Product Feature

Standard: IEC61009-1
Double sink flow bar wiring function
Contact Position Indication Function
With leakage fault indication
Maximum Wiring Capacity 25mm²



Technical data

Residual current action type			AC
Rated Current	I_n	A	6, 10, 16, 20, 25, 32, 40, 50, 63
Poles			1P+N, 3P+N (The N pole is on the right)
Rated Operational Voltage	U_n	V	240/415
Nominal Insulation Voltage	U_i	V	500
Working Frequency		Hz	50/60
Rated residual no-action current	$I_{\Delta ns}$	mA	0.5 I_n
Rated residual action current	$I_{\Delta n}$	mA	30
Trip curve type			B, C, D
Rated impulse withstand voltage(1.2/50)U _{imp}	U_{imp}	KV	4
Rated power frequency withstand voltage		KV	2
Rated short circuit breaking capacity	I_{cn}	KA	6
Rated making and breaking capacity $I_{\Delta m}$	$I_{\Delta m}$	A	500A or 10In(≥63A)

•Temperature Compensation

When the ambient temperature is not the baseline temperature of 30 °C, the reference correction coefficient is as follows:

Ambient Temperature	-20 C	10	0	10	20	30	40	50	60
Current Correction Factor	125	12	115	110	105	100	0.95	0.90	0.85

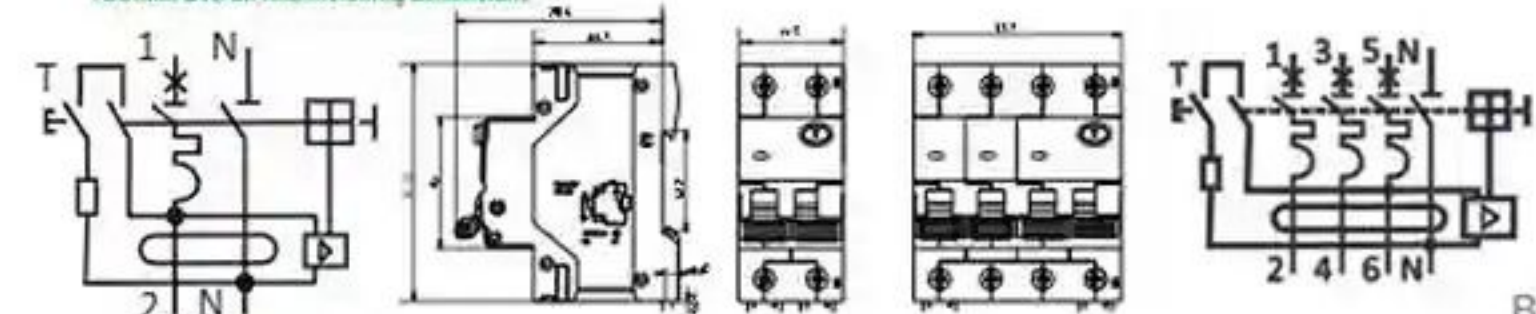
•tripping characteristic

Test	Test current	Initial condition	Limits of tripping or non-tripping time	Result to be obtained	Remarks	Reference temperature
B, C, D	1.13 I_n	Cold	$t \leq 1h (I_n \leq 63)$	No tripping		30°C
	1.45 I_n	Immediately following	$t < 1h (I_n \leq 63)$	Tripping	Current steadily increased within 5 s	
	2.55 I_n	Cold	$1s < t < 60s (I_n \leq 32A)$ $1s < t < 120s (I_n > 32A)$	Tripping		
B	3 I_n	Cold	$t \leq 0.1s$	No tripping		
C	5 I_n					
D	10 I_n					
B	5 I_n	Cold	$t < 0.1s$	Tripping		
C	10 I_n					
D	20 I_n					

•Residual leakage current breaking time

rated current $I_n(A)$	Rated residual action current $I_{\Delta n}(mA)$	Residual current breaking time(s)		
		$I_{\Delta n}$	$2I_{\Delta n}$	$5I_{\Delta n}$
6, 10, 16, 20, 25, 32, 40, 50, 63	30, 100, 300	0.1	0.08	0.04

•Outline Overall And Installing Dimensions





محافظ ولتاژ جریان تک فاز و سه فاز
PA-VIP2P63A VI-Protector

Technical data

Model	PA-VIP2P63A	PA-VIP4P100A
Rated Supply voltage	AC 220V(L-N)	AC 380V(L-L) AC 220V(L-N)
Rated frequency	50/60Hz	50/60Hz
Electric current(>A) setting range	1-63A	1-100A
Overvoltage(>U) setting range	230-300(L-N)	398-519(L-L) 230-300(L-N)
Undervoltage(<U) setting range	210-140(L-N)	240-360(L-L) / 210-140(L-N)
Trip Delay Time	0.1-30S	0.1-30S
Voltage measurement accuracy	2%(Not exceeding 2% of the overall range)	2%(Not exceeding 2% of the overall range)
Output contact	1NO	1NO
Reset Delay Time	1-500 S	1-500 S
Electrical life	10 ⁵	10 ⁵
Mechanical life	10 ⁴	10 ⁴
Protection degree	IP20	IP20
Pollution degree	3	3
Altitude	≤2000m	≤2000m
Operating temperature	-50°C~55°C	-50°C~55°C
Humidity	<50% at 40°C(without condensation)	<50% at 40°C(without condensation)
Storage temperature	-30°C~70°C	-30°C~70°C
Current Specification	63A 80A 100A	63A 80A 100A
Rated Operating current(In,A)	63A 80A 100A	63A 80A 100A
Max Operating Current I _{max} (A,within 10min)	80A 100A 60A	80A 100A 60A
Max power of load (KW)	13.9KW 17.6KW 22KW	13.9KW 17.6KW 22KW

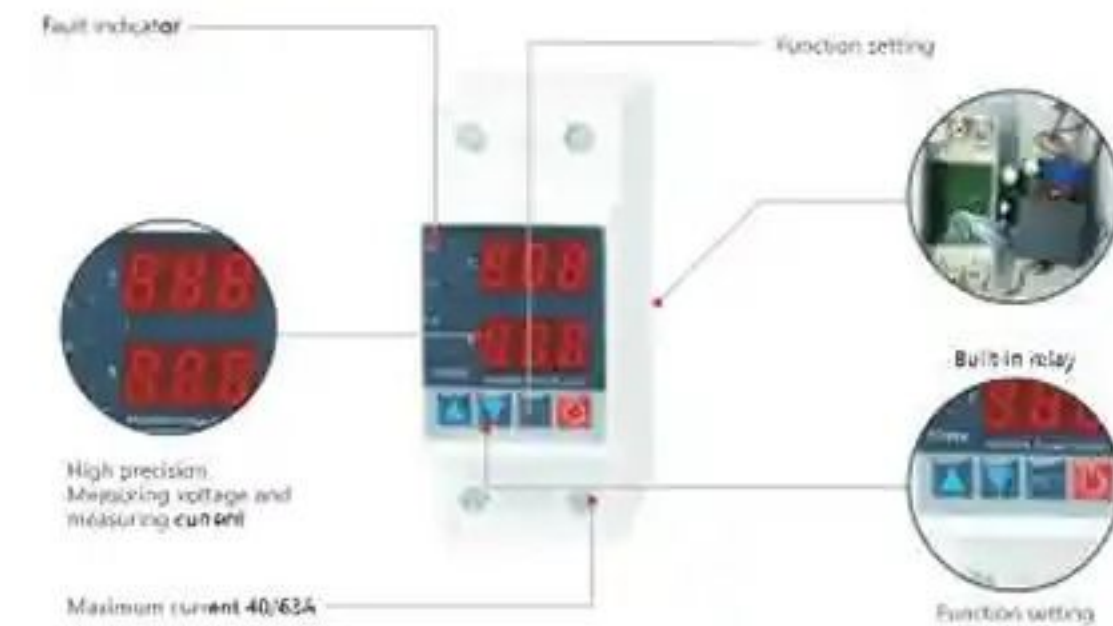
Default Setting

Technical Parameter	Setting range	Step	Factory Setting
Over-voltage protection value	AC230V-300V	1V	AC270V
Under-voltage protection value	AC210V-140V	1V	AC170V
Recovery delay time	0.1S-30S	1S	1S



محافظ ولتاژ جریان تک فاز و سه فاز

Modular DIN Rail Overvoltage and Undervoltage Protector



General

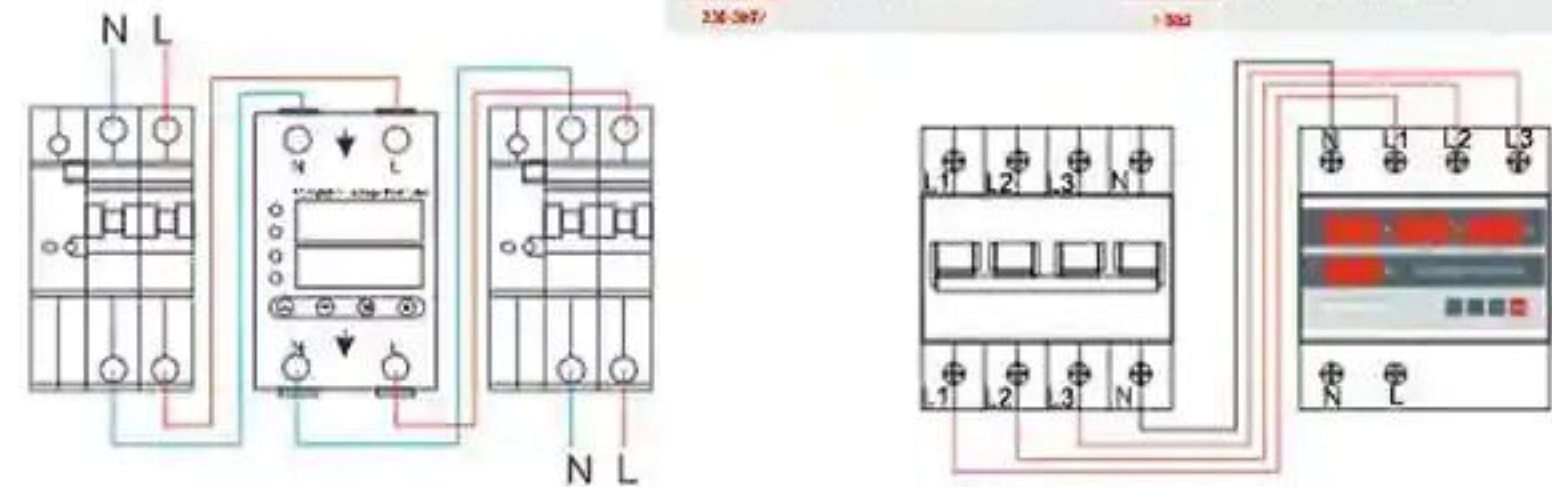
Voltage and current display relay is a microprocessor-based voltage monitoring device for single-phase AC networks to protect electrical equipment from OVEF voltage. The device analyzes the main voltage and displays its current value on a digital indicator. Load is switched by electromagnetic relay. The user can set the current voltage value and delay time through the button. The value is stored in non-volatile memory. Aluminum wires and copper wires can be used for connection.

Application

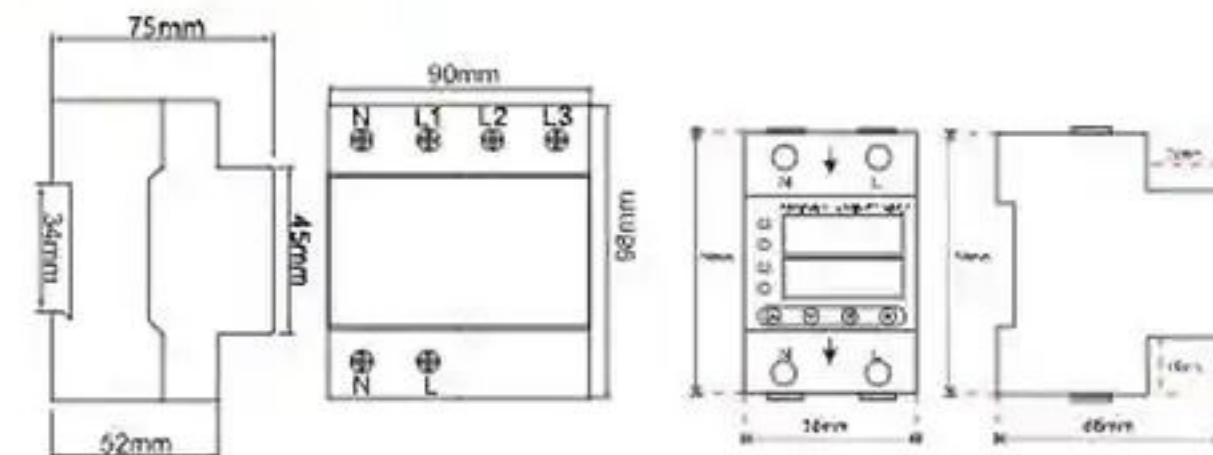
Voltage and current display relay used in administrative, industrial and residential buildings and has the function of protecting single-phase lines:

- Undervoltage protection;
- Overvoltage protection;
- Working under voltmeter mode;
- Overcurrent protection;
- Phase Sequence Protection
- Phase Loss Protection

Wiring diagram



Overall and mounting dimensions(mm)





کنترل فاز ۴ فانکشن قابل تنظیم PA-PHC4F(P-P) Phase Controller 4F

Applications

- Control for connection of moving equipment(site equipment,agricultural equipent,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).

Feature

- Controls its own supply voltage(True RMS measurement).
- Set 8-level rated operating voltage through knob.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

Model and connotation

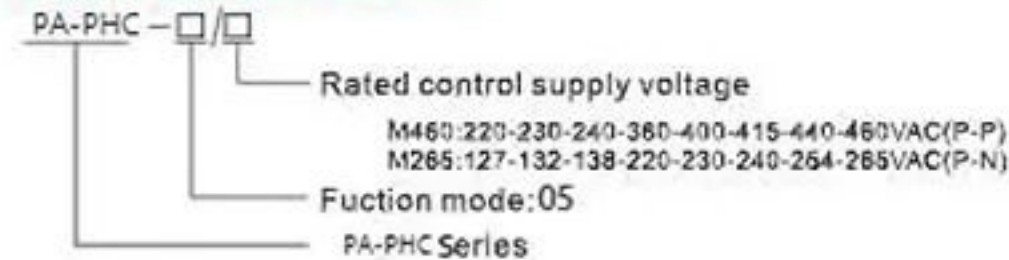
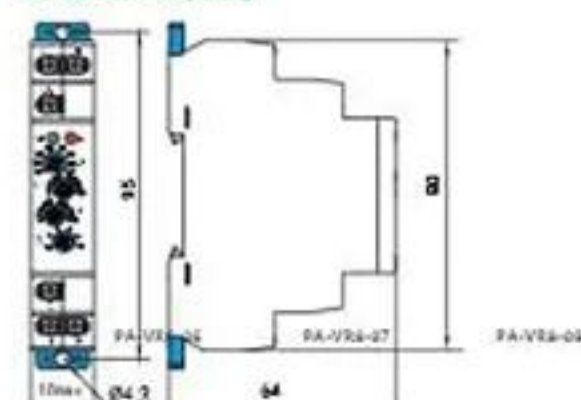


Table1

Function mode	Over-voltage	Under-voltage	Asymmetry	Delay time	Phase sequence	Phase failure
03	—	—	—	—	●	●
04	2%...20%	-20%...2%	—	0.1s...10s	●	●
05	2%...20%	-20%...2%	8%	0.1s...10s	●	●
06	2%...20%	-20%...2%	5%...15%	2s	●	●
07	—	—	5%...15%	0.1s...10s	●	●
08	15%	-16%	8%	2s	●	●

Note:●the function is available

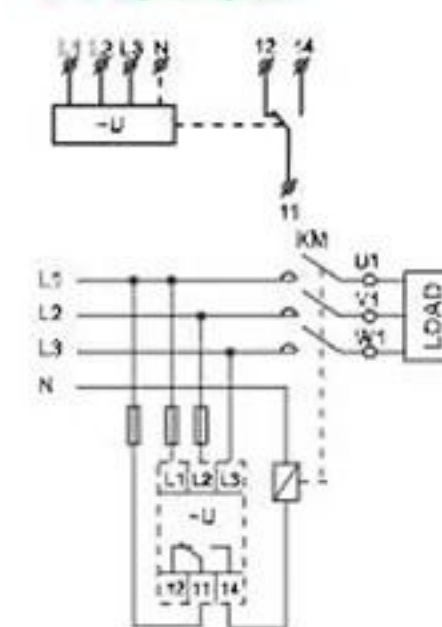
Dimensions(mm)



Technical parameters

	PA-VRF4M460	PA-VRF4M265
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3	L1-L2-L3-N
Supply terminals	L1-L2	L1-N
Voltage range	220-230-240-380-400-415-440-460(P-P)	127-132-138-220-230-240-254-265(P-N)
Rated supply frequency	45Hz-65Hz	
Measuring range	176V-552V	101V-318V
Threshold adjustment voltage	2%-20% of Un selected	
Adjustment of asymmetry threshold	5%-15%	
Hysteresis	2%	
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	≤1%	
Run up delay at power up	0.5s time delay	
Knob setting accuracy	10% of scale value	
Reset time	1000ms	
Temperature coefficient	0.05%/°C,at=20°C(0.05%/°F, at=68°F)	
Output	1×SPDT	
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1×10 ⁷	
Electrical life(AC1)	1×10 ⁵	

Wiring Diagram



Operating temperature	-20°C to +55°C (-4°F to 131°F)
Storage temperature	-35°C to +75°C (-22°F to 158°F)
Mounting/DIN rail	Din rail EN/IEC 60715
Protection degree	IP40 for front panel/IP20 terminals
Operating position	any
Overvoltage category	III
Pollution degree	2
Max.cable size(mm ²)	solid wire max.1X2.5or 2X1.5(with sleeve max.1X2.5)AWG
Dimensions	90×18×84mm
Weight	64g
Standards	EN 60255-1,IEC60947-5-1

Note:

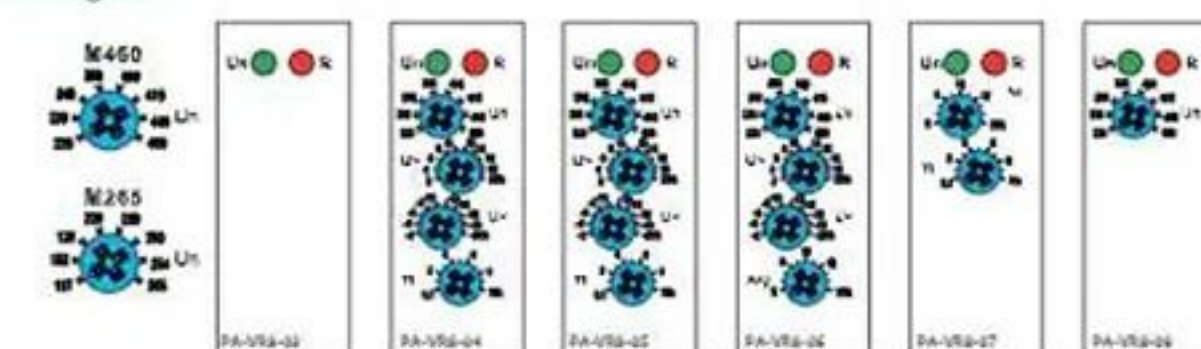
$$U_{avg} = \frac{U_{max} - U_{min}}{U_{avgT}} \times 100\%$$

$$U_{max} = \max(U_1, U_2, U_3)$$

$$U_{min} = \min(U_1, U_2, U_3)$$

$$U_{avgT} = \frac{U_1 + U_2 + U_3}{3}$$

Panel Diagram





کنترل فاز ۶ فانکشن قابل تنظیم
PA-PHC6F(P-P) Phase Controller 6F

Applications

- Control for connection of moving equipment(site equipment,agricultural equipent,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).

Feature

- Controls its own supply voltage(True RMS measurement).
- Set 8-level rated operating voltage through knob.
- Set the reset delay time through the knob.
- 2 C/O output .
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 2-MODULE,DIN rail mounting.

Model and connotation

PA-VR

Rated control supply voltage

M460:220-230-240-380-400-415-440-460VAC(P-P)
M265:127-132-138-220-230-240-254-265VAC(P-N)

Function mode:10

PA-PHC Series

Dimensions(mm)

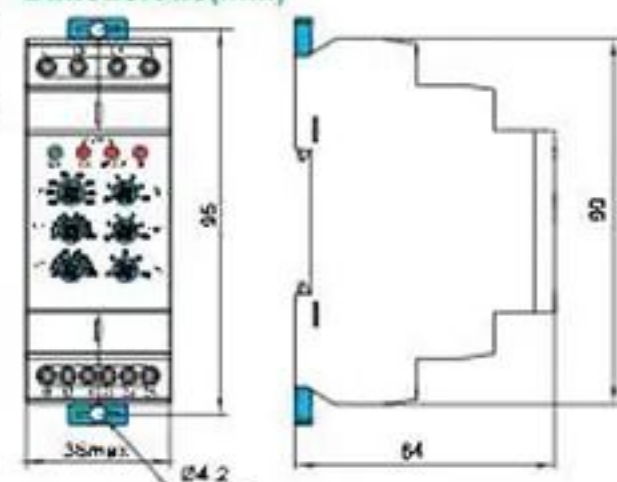


Table1

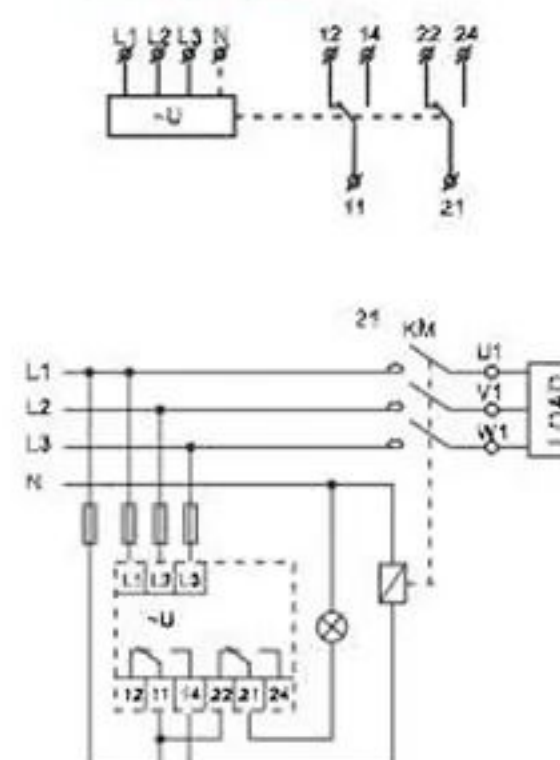
Function mode	Over-voltage	Under-voltage	Asymmetry	Delay time	Phase sequence	Phase failure	Reset time
09			8%		●	●	
10	2%...20%	-20%...2%	5%...15%	0.1s...10s	●	●	0.1s...10s

Note:●the function is available

Technical parameters

	PA-VRF6M460	PA-VRF6M265
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3	L1-L2-L3-N
Supply terminals	L1-L2	L1-N
Voltage range	220-230-240-380-400-415-440-460(P-P)	127-132-138-220-230-240-254-265(P-N)
Rated supply frequency	45Hz 65Hz	
Measuring range	176V-552V	101V-318V
Threshold adjustment voltage	2%-20% of Un selected	
Adjustment of asymmetry threshold	5%-15%	
Hysteresis	2%	
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	≤1%	
Run up delay at power up	Adjustable 0.1s-10s,10%	
Konb setting accuracy	10% of scale value	
Reset time	Adjustable 0.1s-10s,10%	
Temperature coefficient	0.05%/°C,at=20°C(0.05%/°F, at=68°F)	
Output	2×SPDT	
Current rating	8A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1×10 ⁷	
Electrical life(AC1)	1×10 ⁵	

Wiring Diagram



Operating temperature	-20°C to +55°C (-4°F to 131°F)
Storage temperature	-35°C to +75°C (-22°F to 168°F)
Mounting/DIN rail	Din rail EN/IEC 60715
Protection degree	IP40 for front panel/IP20 terminals
Operating position	any
Overvoltage category	III.
Pollution degree	2
Max.cable size(mm²)	solid wire max. 1X2.5 or 2X1.5 with sleeve max. 1X2.5 (AWG 12)
Dimensions	90X36X64mm
Weight	80g
Standards	EN 60255-1, IEC 60947-5-1

Note:

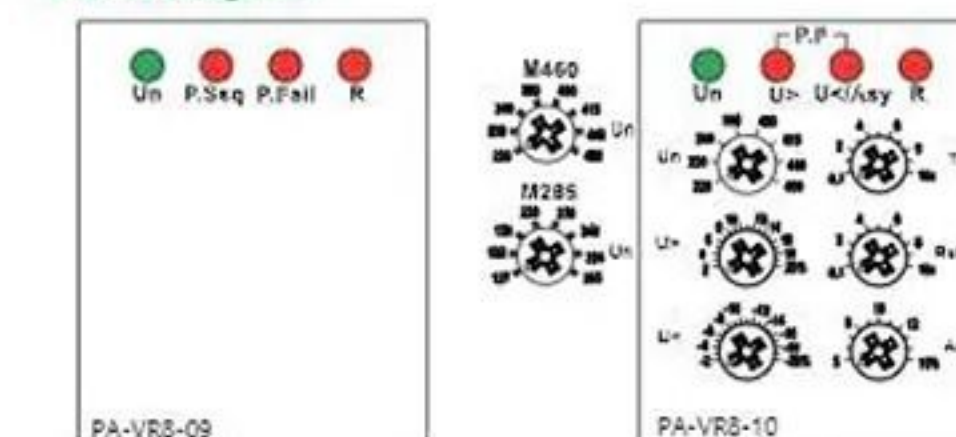
$$A_{sy} = \frac{U_{max} - U_{min}}{U_{avr}} \times 100\%$$

$$U_{avr} = \frac{U_1 + U_2 + U_3}{3}$$

$$U_{max} = \max(U_1, U_2, U_3)$$

$$U_{min} = \min(U_1, U_2, U_3)$$

Panel Diagram





کنتاکتور سری C1

PA-C1D

General

PA-C1D series AC Contactor is suitable for those circuits whose rated voltage is up to 660V AC 50Hz or 60Hz, rated current is up to 95A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & machine-interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter.

Standard: IEC 60947-4-1.

Coil voltage of contactor and code

PA-C1D	Product name	Rated current	Auxiliary contact	Coil voltage	Frequency
PA-C1D	09: 9A	12: 12A	01: 1NC 10: 1NO 11: 1NO+1NC (Applicable for 40A and above) 04: 4NO 08: 2NO+2NC	24V,	50Hz
				36V,	
	18: 18A			42V,	
				48V,	
	25: 25A			110V,	
				220V,	
	32: 32A			230V,	
				240V,	
	40: 40A			380V,	
				400V,	
	50: 50A			415V,	50/60Hz
	65: 65A			440V,	
	80: 80A			600V	
	95: 95A				

Coil voltage of contactor and code

Coil voltage Us(V)	24	36	42	48	110	220	230	240	380	400	415	440	600
50Hz	B5	C5	D5	E5	F5	M5	P5	U5	Q5	V5	N5	R5	X5
60Hz	B6	C6	D6	E6	F6	M6	P6	U6	Q6	V6	N6	R6	X6
50/60Hz	B7	C7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7	X7

PA-C1D09
PA-C1D12
PA-C1D18



PA-C1D25
PA-C1D32



PA-C1D40
PA-C1D50
PA-C1D65



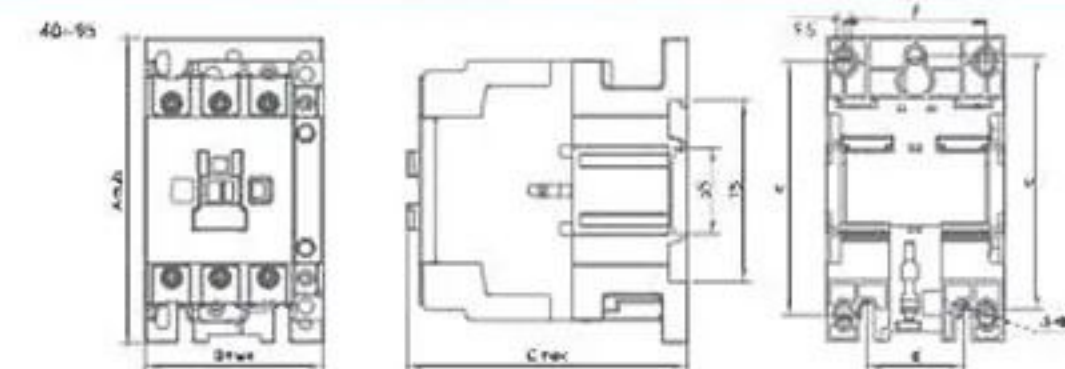
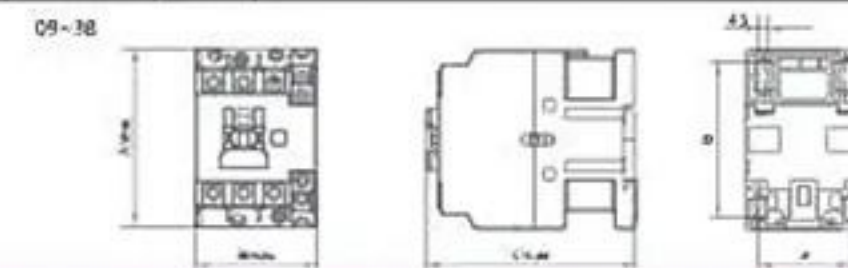
PA-C1D80
PA-C1D95



AC CONTACTOR C1 SERIES

Technical data

Type			PA-C1D09	PA-C1D12	PA-C1D18	PA-C1D25	PA-C1D32	PA-C1D40	PA-C1D50	PA-C1D65	PA-C1D80	PA-C1D95
Rated insulation voltage (Ui)		V	690									
Rated thermal current (Ith)		A	20	20	32	40	50	60	80	80	125	125
Rated operating current (Ie)	AC-3, 380V	A	9	12	18	25	32	40	50	65	80	95
	AC-3, 660V	A	6.6	8.9	12	18	21	34	39	42	49	55
	AC-4, 380V	A	3.5	5	7.7	8.5	12	18.5	24	28	37	41
	AC-4, 660V	A	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
Max. power of 3 phase motor controlled	AC-3, 220V	kW	2.2	3	4	5.5	7.5	11	15	18.5	22	25
	AC-3, 380V	kW	4	5.5	7.5	11	15	18.5	22	30	37	45
	AC-3, 660V	kW	5.5	7.5	10	15	18.5	30	33	37	45	55
Electrical life	AC-3	10000 t	100				80	80			60	
	AC-4	10000 t	20				20	15			10	
Mechanical life		10000 t	1000				800	800			600	
operating frequency	AC-3	t/h	1200				600	600			600	
	AC-4	t/h	300				300	300			300	
Main contact structure			3 N.O., 4 N.O., 2 N.O. and 2 N.C.									
Matching fuse type			RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-100	RT16-125
Matching thermal relay type			28-25	28-25	28-25	28-25	28-36	28-93	28-93	28-93	28-93	28-93
Wiring capacity		mm ²	2.5	2.5	4	4	6	25	25	25	35	35(50)
Coil												
Control power voltage (Us)	AC	V	24, 36, 48, 110, 127, 220/230, 240, 380/400, 415, 440									
Allowed control circuit voltage	Close	V	65%~110%Us									
	Open	V	20%~75%Us(AC)									
	Close	VA	70			110		200				
	Keeping	VA	8			17		20				
	Loss power	W	1.8~2.7			3~4		6~10				
	Auxiliary contact											
Rated thermal current (Ith)		A	10									
Rated operating voltage (Ue)	AC-15	V	380									
	DC-13	V	220									
Rated control capacity	AC-15	VA	360									
	DC-13	W	33									





کنتاکتور سری C2

PA-C2D

General

PA-C2D series AC Contactor is suitable for those circuits whose rated voltage is up to 660V AC 50Hz or 60Hz, rated current is up to 95A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & machine-interlocking device etc. it becomes the delay contactor, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter.

Standard: IEC 60947-4-1.

Coil voltage of contactor and code

PA-CO1	Product name	Rated current	Auxiliary contact	Coil voltage	Frequency
PA-C2D	09: 9A	12: 12A	01 : 1NC 10 : 1NO 11 : 1NO+1NC (Applicable for 40A and above) 04 : 4NO 08 : 2NO+2NC	24V,	50Hz 60Hz 50/60Hz
		18: 18A		36V,	
		25: 25A		42V,	
		32: 32A		48V,	
		40: 40A		110V,	
		50: 50A		220V,	
		65: 65A		230V,	
		80: 80A		240V,	
		95: 95A		380V,	
				400V,	
				415V,	
				440V,	
				600V	

Coil voltage of contactor and code

Coil voltage Us(V)	24	36	42	48	110	220	230	240	380	400	415	440	600
50Hz	B5	C5	D5	E5	F5	M5	P5	U5	Q5	V5	N5	R5	X5
60Hz	B6	C6	D6	E6	F6	M6	P6	U6	Q6	V6	N6	R6	X6
50/60Hz	B7	C7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7	X7

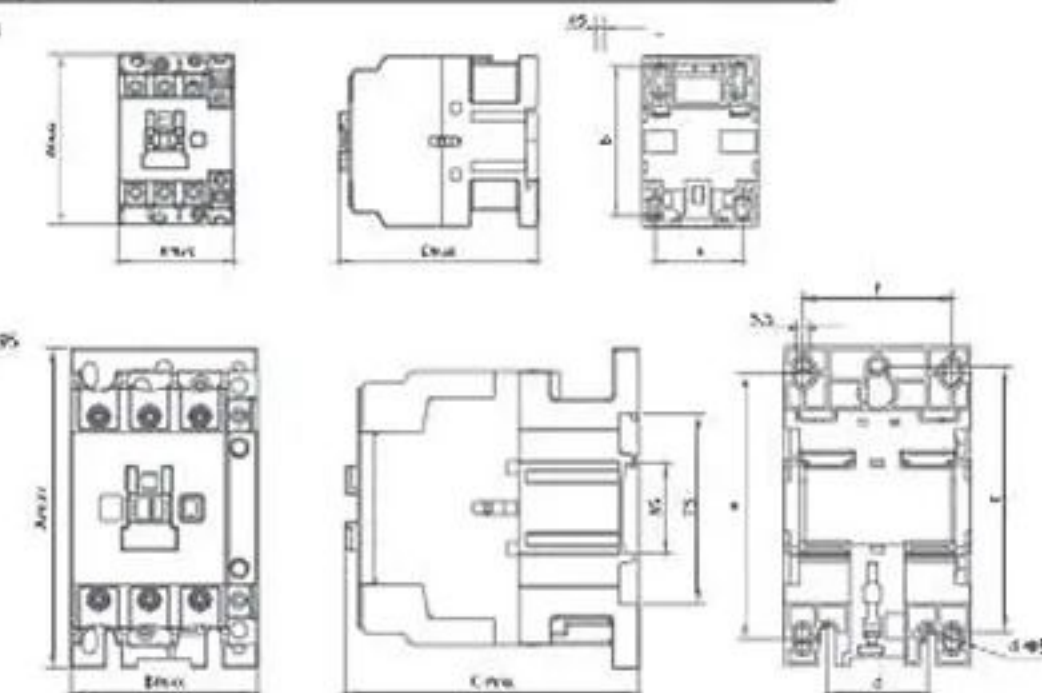


AC CONTACTOR C2 SERIES

Technical data

Type			PA-C2 D9	PA-C2 D12	PA-C2 D18	PA-C2 D25	PA-C2 D32	PA-C2 D40	PA-C2 D50	PA-C2 D60	PA-C2 D80	PA-C2 D125
Rated insulation voltage (Ui)		V	690									
Rated thermal current (Ith)		A	20	20	32	40	50	60	80	80	125	125
Rated operating current (Ie)	AC-3, 380V	A	9	12	18	25	32	40	50	65	80	95
	AC-3, 660V	A	6.6	8.9	12	18	21	34	39	42	49	55
	AC-4, 380V	A	3.5	5	7.7	8.5	12	18.5	24	28	37	41
	AC-4, 660V	A	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
Max. power of 3 phase motor controlled	AC-3, 220V	kW	2.2	3	4	5.5	7.5	11	15	18.5	22	25
	AC-3, 380V	kW	4	5.5	7.5	11	15	18.5	22	30	37	45
	AC-3, 660V	kW	5.5	7.5	10	15	18.5	30	33	37	45	55
Electrical life	AC-3	10000 t	100					80	80			60
	AC-4	10000 t	20					20	15			10
Mechanical life		10000 t	1000					800	800			600
operating frequency	AC-3	t/h	1200					600	600			600
	AC-4	t/h	300					300	300			300
Main contact structure			3 N.O., 4 N.O., 2 N.O. and 2 N.C									
Matching fuse type			RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-100	RT16-125
Matching thermal relay type			28-25	28-25	28-25	28-25	28-36	28-93	28-93	28-93	28-93	28-93
Wiring capacity		mm²	2.5	2.5	4	4	6	25	25	25	35	35-50
Coil												
Control power voltage (Us)	AC	V	24, 36, 48, 110, 127, 220/230, 240, 380/400, 415, 440									
Allowed control circuit voltage	Close	V	85%~110%Us									
	Open	V	20%~75%(AC)									
	Close	VA	70				110		200			
	Keeping	VA	8				11		20			
	Loss power	W	1.5~2.7				3~4		6~10			
	Auxiliary contact											
Rated thermal current (Ith)		A	10									
Rated operating voltage (Ue)	AC-15	V	380									
	DC-13	V	220									
Rated control capacity	AC-15	VA	360									
	DC-13	W	33									

09-38





کنتاکتور سری F

PA-CF(High Current Contactor)

General

PA-CF series AC contactor is applied to circuits with AC 50Hz/60Hz, rated voltage up to 690V, rated current up to 800A. It is used for remote making & breaking circuits and protecting circuit from overload when assembling with thermal overload relay. Standard: IEC 60947-4-1

Type designation

PA-F □ □ □
Number of poles: 4P, Blank: 3P
Rated operating current(A): AC-3 380/400V
AC contactor: 135A~800A

Operating conditions

1. Ambient temperature: -5°C~+40°C
2. Altitude: ≤2000m
3. Pollution grade: 2
4. Mounting category: II
5. Mounting conditions: Inclination between the mounting plane and the vertical plane not exceed 5°
6. The product should be located in the places where there are no obvious impact and shake

Technical data

Model	Rated conventional heating current(A) Ith AC-1	Rated operating current(A)		Power of controlled 3-phase cage motor(KW)		Operating cycles (times/h) AC-3	Electrical life (×10 ⁴ times) AC-3	Mechanical life (×10 ⁴ times)	Matched fuse	
		AC-3 380/400V	AC-4 660/690V	AC-3 380/400V	AC-4 660/690V				Model	Rated current A
PA-F115	200	115	86	55	80	1200	120	1000	NT1	250
PA-F150	200	150	108	75	100				NT1	250
PA-F185	275	185	118	90	110				NT2	315
PA-F225	225	225	137	110	132	600	100	600	NT2	315
PA-F265	315	265	170	132	160				NT3	355
PA-F330	380	330	235	160	200				NT3	500
PA-F400	450	400	303	200	250	600	80	600	NT3	630
PA-F500	630	500	353	250	335				NT4	800
PA-F630	800	630	426	335	450				NT4	1000
PA-F800	800	800(AC-3)	486(AC-3)	450	475	60	300	300	NT4	1000
PA-F800	800	630(AC-4)	462(AC-4)	335	450				NT4	1000

Motor Control & Protection PA-CF AC Contactor

Table 2 Auxiliary contact

Type	Product	Configuration of contacts		Type	Time-delay range	Number of time-delay contacts
		Number of N/O contact	Number of N/C contact			
PA-AUXC2		1	1	PA-F-LA2-D10 PA-F-LA2-D12 PA-F-LA2-D16	0.1s~3s 0.1s~30s 10s~150s	Table 3 Time-delay module NO+NC NO+NC NO+NC
PA-AUXC4		2	2		0.1s~3s 0.1s~30s 10s~150s	NO+NC NO+NC NO+NC

Accessories

Type designation

PA-F4-DN □ □ □
Number of NC auxiliary contacts
Number of NO auxiliary contacts
Auxiliary contact

Type designation

PA-F-LA2-D □ □ □
0: time-delay range, 0.1~3s
2: time-delay range, 0.1~30s
4: time-delay range, 10~150s
T: making time-delay
R: breaking time-delay
Time-delay module

Motor Control & Protection PA-CFAC Contactor

Table 4 Coil

Contactor type	Coil code	Coil voltage(V)	110V AC	127V AC	220V AC	380V AC
	PA-X2-F115,150		FF 110	FF 127	FF 220	FF 380
	PA-X2-F185,225		FG 110	FG 127	FG 220	FG 380
	PA-X2-F265		FH 110	FH 127	FH 220	FH 380
	PA-X2-F330		FI 110	FI 127	FI 220	FI 380
	PA-X2-F400		FI 110	FI 127	FI 220	FI 380
	PA-X2-F500		FK 110	FK 127	FK 220	FK 380
	PA-X2-F630		FL 110	FL 127	FL 220	FL 380
	PA-X2-F800		FM 110	FM 127	FM 220	FM 380

Terminal connection

Model	The connection capability			Screw size	Tightening torque (N·m)
	Number of pins	Cable cross section (mm²)	Cu busbar cross section (mm²)		
PA-CD2-F115	1	70-95	-	M6	3
PA-CD2-F150	1	70-95	-	M8	5
PA-CD2-F185	1	95-150	-	M8	6
PA-CD2-F225	1	95-150	-	M10	10
PA-CD2-F265	1	120-185	-	M10	10
PA-CD2-F330	1	185-240	-	M10	10
PA-CD2-F400	1(2)	240-350	30×5	M10	10
PA-CD2-F500	3	150-185	30×8	M10	10
PA-CD2-F630	2	185-240	40×8	M12	14
PA-CD2-F800	2	185-240	40×8	M12	14

Product features

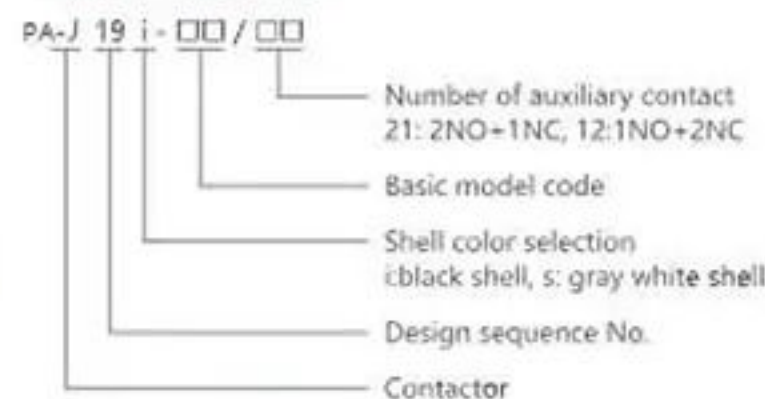
1. The contactor is composed of arc-extinguishing system, contact system, base frame and magnetic system (including iron core, coil).
2. The contact system of the contactor is a direct acting type with double break point distribution.
3. The lower base-frame of the contactor is made of shaped aluminum alloy and the coil is of plastic enclosed structure.
4. The coil is assembled into one body with the mature coil. They can be removed or inserted directly from the contactor.
5. It is convenient for user's service and maintenance.



General

PA-CJ contactor for capacitor switching (hereinafter called contactor) is suitable for the circuit of AC 50Hz/60Hz with rated voltage up to 690V. It is mainly used to add low voltage reactive power compensation equipment or cut off low voltage parallel capacitor. The contactor is equipped with a device to suppress the inrush current, which can effectively reduce the impact of the making inrush current on the capacitor and suppress the over-voltage when the capacitor is cut off.
Standard: IEC/EN 60947-4-1.

Type designation



Operating conditions

- Ambient temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, the average during 24 hours should not exceed $+35^{\circ}\text{C}$;
- Altitude: $\leq 2000\text{m}$;
- Atmosphere conditions: At mounting site, relative humidity not exceed 50% at the max. temperature of $+40^{\circ}\text{C}$, higher relative humidity is allowable under lower temperature. For example, RH could be 90% at $+20^{\circ}\text{C}$, special measures should be taken for occurrence of condensation;
- Pollution degree: 3
- Installation category: III
- Installation conditions: the inclination between installation plane and vertical plane is within $\pm 5^{\circ}$
- Impact and shake: the products should locate in the places where there are no obvious impact and shake.

PA-CJ (CAPACITOR DUTY CONTACTOR)



Motor Control & Protection

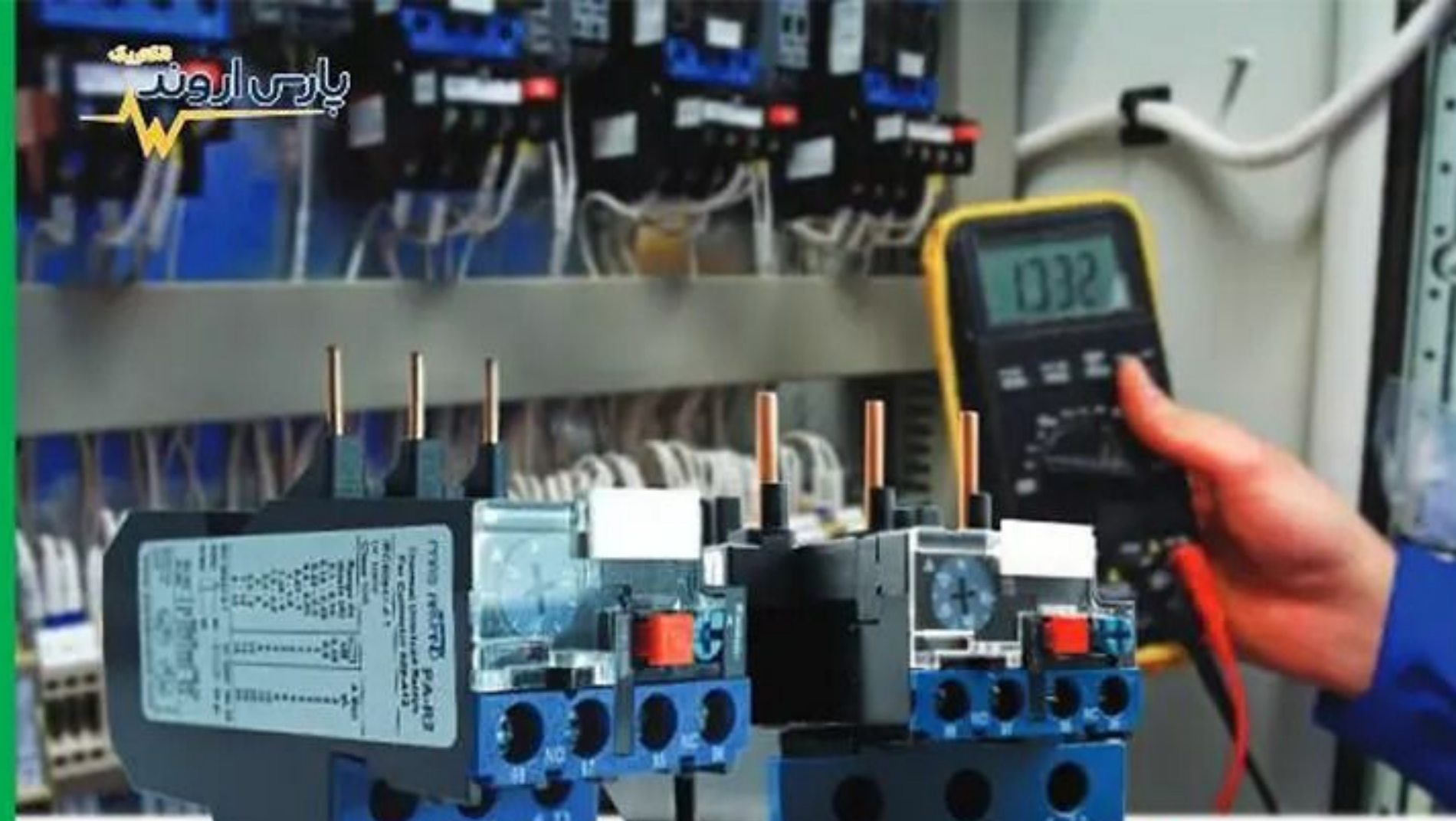
PA-CJ Contactor for Capacitor Switching

Technical data

Model			PA-J19i-25 PA-J19s-25	PA-J19i-32 PA-J19s-32	PA-J19i-43 PA-J19s-43	PA-J19i-63 PA-J19s-63	PA-J19i-95 PA-J19s-95	PA-J19i-115 PA-J19s-115
Main circuit features								
Rated operating voltage(Ue)		V	380/400					
Rated isolation voltage(Ui)		V	690					
Rated current of controllable capacitor(In)	AC-6b 400V	A	17	29	36	43	72	87
Rated capacity of controllable capacitor(Qn)	AC-6b 230V	kVar	6	9	10	15	22.5	35
	AC-6b 400V	kVar	12	18	20	30	45	60
Rated conventional heating current(Ith)		A	25	32	43	63	95	115
Restrained surge capacity		A	≤35In			≤55In		
Mechanical durability		10 ⁴ times	100					
Electrical durability		AC-6b 400V 10 ⁴ times	15					12
Operating frequency cycles/h		AC-6b 400V times/h	300					120
Coil features								
Controlled power voltage (Us)	AC50Hz	V	110, 220, 380					
Operating voltage range	operation voltage	V	85%~110%Us when install inclination angle is +22.5°; 70%~120%Us when install inclination angle is ±5°;					
	release voltage	V	20%~75%Us when install inclination angle is +22.5°; 20%~65%Us when install inclination angle is ±5°;					
Auxiliary contact features								
Number of auxiliary contact			12, 21					
Rated conventional heating current(Ith)		A	10					
The minimum load can be connected to			6V×10mA					

کنتاکتور خازنی PA-CJ(CAPACITOR DUTY CONTACTOR)





بیمنتال
PA-BTOR OVER LOAD RELAY

General

PA-BTOR-R2, R3 & R4 series thermal overload relay are suitable for overload and phase-failure protection of AC motors with frequency of 50/60Hz, voltage up to 690V, current up to 0.1-630A under 8-hours duty or uninterrupted duty. Functions provided by these relays, are phase-failure protection, ON/OFF indication, temperature compensation, and manual/ automatic reset. Standard: IEC 60947-4-1. The relays can be mounted onto contactors or installed as single units.

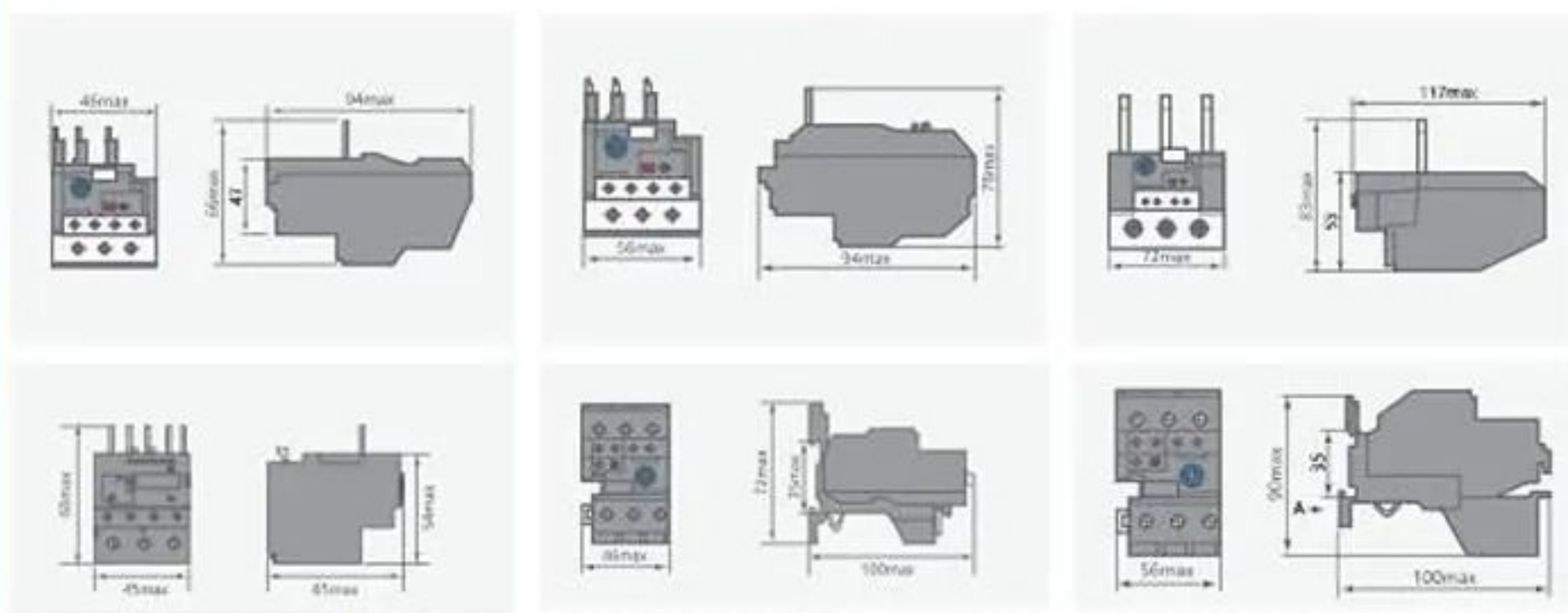


Technical data

Item	NO	Times the setting current	Release time	Test condition
Overload protection	1	1.05	>2h	Start from Cold status
	2	1.2	<2h	Start from Heat status right after item no.1
	3	1.5	<2min	
	4	7.2	2s<Tps10s	Start from Cold status

OVER LOAD RELAY

D



Selection

Products appearance	Rated current (A)	Matched fuse specifications(A)		Matched contactor model
		aM	gG	
	0.1~0.16	0.25	2	PA-D09 PA-D12 PA-D18 PA-D25 PA-D09 PA-D12 PA-D18 PA-D25
	0.16~0.25	0.5	2	
	0.25~0.4	1	2	
	0.4~0.63	1	2	
	0.63~1	2	4	
	1~1.6	2	4	
	1.25~2	4	6	
	1.6~2.5	4	6	
	2.5~4	6	10	
	4~6	8	16	
	5.5~8	12	20	
	7~10	12	20	
	9~13	16	25	
	12~18	20	35	
	17~25	25	50	
	23~32	25	50	
	23~32	40	63	PA-D32 PA-D32 PA-D40 PA-D50 PA-D65 PA-D80 PA-D95
	28~36	40	80	
	23~32	40	63	
	30~40	40	100	
	37~50	63	100	
	48~65	63	100	
	55~70	80	125	
	63~80	80	125	
	80~93	100	160	
	80~104	125	200	
	95~120	125	224	PA-F115 PA-F150 PA-F170
	110~150	160	250	
	30~50	63	100	PA-F115 PA-F150 PA-F185 PA-F225 PA-F265
	40~80	80	125	
	60~100	125	200	
	90~150	160	250	
	132~220	250	400	
	200~330	400	630	PA-F265 PA-F400 PA-F630
	300~500	500	800	
	380~630	630	800	

OVER LOAD RELAY

D

کلید حرارتی

Motor Protection Circuit Breaker

Technical data

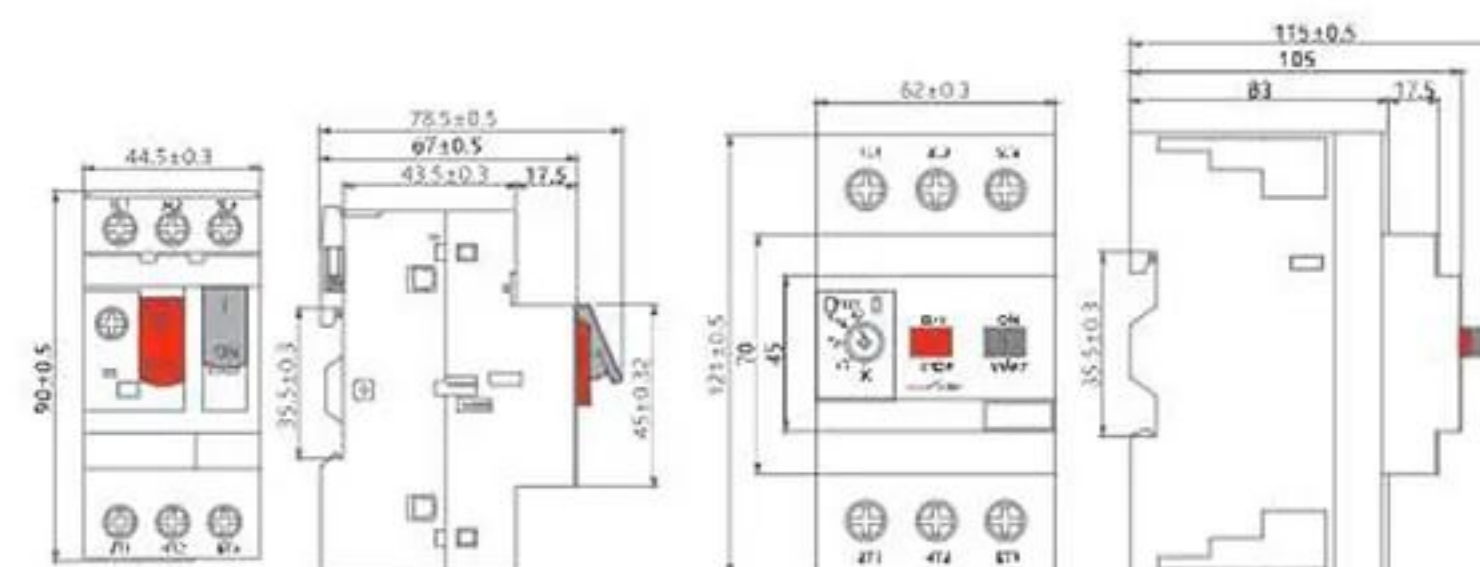
The adjusting range of commutating current	The cutting capacity for rated limit short circuit I_{cu} , the cutting capacity for rated work short circuit I_{cs}							
	230/240V		415V		500V		660V	
	$I_{cu}(kA)$	$I_{cs}, \%I_{cu}(kA)$	$I_{cu}(kA)$	$I_{cs}, \%I_{cu}(kA)$	$I_{cu}(kA)$	$I_{cs}, \%I_{cu}(kA)$	$I_{cu}(kA)$	$I_{cs}, \%I_{cu}(kA)$

PA-1S

0.1-0.16	100	100	100	100	100	100	—	—
0.16-0.25	100	100	100	100	100	100	—	—
0.25-0.4	100	100	100	100	100	100	—	—
0.4-0.63	100	100	100	100	100	100	—	—
0.63-1	100	100	100	100	100	100	—	—
1-1.6	100	100	100	100	100	100	—	—
1.6-2.5	100	100	100	100	100	100	3	75
2.5-4	100	100	100	100	100	100	3	75
4-6.3	100	100	100	100	50	100	3	75
6-10	100	100	100	100	10	100	3	75
9-14	100	100	15	50 (750)	6	75	3	75
13-18	100	100	15	50 (750)	6	75	3	75
17-23	50	50	15	50 (750)	4	75	3	75
20-25	50	50	15	50 (750)	4	75	3	75
24-32	50	50	15	50 (750)	4	75	3	75

PA-2S

16-25	/	/	15	50 (750)	8	100	4	100
25-40	/	/	15	50 (750)	8	75	4	75
40-63	/	/	15	50 (750)	8	75	4	75
56-80	/	/	15	50 (750)	4	100	2	100



کلید حرارتی

PA- MPCB Motor Protection Circuit Breaker

General

PA- MPCB 1S&2S series AC Motor Protection is suitable for circuits whose alternating voltage is up to 690V, current up to 80A. The product works to control the overload, phase loss, short circuit protection and infrequent starts of a three-phase squirrel cage asynchronous motor. The Motor Starter can protect the distributing line for infrequent load transfer, and it can also works as an isolator.

Operating conditions

1. Installation altitude $\leq 2000m$
2. Ambient air temperature $-5^{\circ}C \sim +40^{\circ}C$ average temperature of 24 hours must be below $+35^{\circ}C$
3. Relative humidity below 90% when the temperature is $+25^{\circ}C \pm 5^{\circ}C$
4. Ambient pollution level: 3
5. Installation category of the starter: III

Acting characteristic of each phase in distribution circuit breaker in the load balanced condition

No.	Multiple of setting current	Acting time	Initial state	Ambient air temperature
1	$1.05I_n$	$\leq 2h$ non-tripping	Cold state	$+40^{\circ}C \pm 2^{\circ}C$
2	$1.2I_n$	$\leq 2h$ tripping	Start after 1	$+40^{\circ}C \pm 2^{\circ}C$

Technical data

Rated insulation voltage $U_i(V)$: 690;
 Rated work voltage $U_e(V)$: 230/240, 400/415, 440, 550, 690;
 Rated frequency Hz: 50/60;
 The grade rated current of shell $I_{nm}(A)$: 80;
 The rated voltage of disconnector $I_n(A)$;
 The adjusting range of commutating current(A);
 The cutting capacity for rated limit short circuit $I_{cu}(kA)$;
 The cutting capacity for rated work short circuit $I_{cs}(kA)$;
 The bearable voltage for rated shock $U_{imp}(V)$: 6000;
 Electrical life AC-3: 2000;
 Mechanical life: 10000.



کلید اتوماتیک فیکس
PA-CBFSB MCCB (FIX)

Technical data

Model	PA-CBFSB125	PA-CBFSB160	PA-CBFSB250	PA-CBFSB400	PA-CBFSB630	PA-CBFSB800	PA-CBFSB1250	PA-CBFSB1600																	
Standards	IEC 60947-2																								
Electrical features																									
Rated current In	A	63/80 100/125	63/80/100 125/140/160	100/125 140/160 200/225/250	225/250 315/350/400	315/350 400/500/630	630/700/800	800 1000 1250 1600/1800 2000																	
Rated Operational voltage Ue	V-AC	400																							
Number of pole	P	3																							
Rated insulation voltage	V	800																							
Rated frequency	Hz	50/60																							
Rated Impulse Withstand Voltage	kV	8																							
Utilization Category		A																							
Pollution Degree		3																							
Relay Type		Thermal & Magnetic																							
Protection Type		UL(Long Time-Instantaneous)																							
Reference Temperature	℃ ^①	40																							
Thermal Relay Setting		FIX																							
Magnetic Relay Setting		FIX																							
Breaking capacity grade	KA	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H			
AC400V/50Hz O-CB (Icu) Rated ultimate short-circuit breaking capacity		15	25	35	15	25	35	15	25	35	25	35	50	25	35	50	35	50	65	35	50	65	-	50	100
AC400V/50Hz O-CB (Ics) Rated service short-circuit breaking capacity		7.5	15	25	7.5	15	25	7.5	15	25	15	25	35	15	25	35	25	35	40	25	35	40	-	50	55



کلید اتوماتیک قابل تنظیم
PA-CBASB MCCB (ADJUSTABLE)

Technical data

Model	PA-CBASB160	PA-CBASB250	PA-CBASB400	PA-CBASB630	PA-CBASB1250	
Standard	IEC 60947-2					
Electrical features						
Rated current in	A	63-80 100-160	100-125-160 200-250	250-400	400-630	800-1000-1250
Rated voltage Ue	V-AC	400V				
Number of pole	P	3				
Rated insulation voltage	V	800				
Rated Frequency	Hz	50/60				
Rated Impulse Withstand Voltage	kV	8				
Utilization Category		A				
Pollution Degree		3				
Relay Type		Thermal & Magnetic				
Protection Type		LI(Long Time-Instantaneous)				
Reference Temperature	℃	40				
Thermal Relay Setting		In x(0.8-0.9-1)				
Magnetic Relay Setting		In x(5-6-7-8-9-10)				
Short-circuit breaking AC400V capacity Icu / Ics	kA	50/35		50/50		





کلید اتوماتیک قابل تنظیم PA-CBADB MCCB (ADJUSTABLE)

Technical data

Model	PA-CBADB160	PA-CBADB250	PA-CBADB400	PA-CBADB630	PA-CBADB1250	
Standard	IEC 60947-2					
Electrical features						
Rated current in	A	63-80 100-160	100-125-160 200-250	250-400	400-630	800-1000-1250
Rated voltage Ue	V-AC	400V				
Number of pole	p	3				
Rated insulation voltage	V	800				
Rated Frequency	Hz	50/60				
Rated Impulse Withstand Voltage	kV	8				
Utilization Category		A				
Pollution Degree		3				
Relay Type		Thermal & Magnetic				
Protection Type		LI(Long Time-Instantaneous)				
Reference Temperature	℃	40				
Thermal Relay Setting		In x(0.7-0.8-0.9-1)				
Magnetic Relay Setting		In x(5-6-7-8-9-10)				
Short-circuit breaking AC400V capacity Icu / Ics	kA	50/35		50/50		65/65

کلید اتوماتیک قابل تنظیم الکترونیکی PA-CBEDB MCCB (ELECTRONIC)

Technical data

Model	PA-CBED8160	PA-CBED8250	PA-CBED8400	PA-CBED8630	PA-CBED8800	PA-CBED81250	
Electrical features							
Rated current in		A	63-80 100-160	100-125-160 200-250	250-400	400-630	800-1000-1250
Rated voltage Ue		V	400				
Number of pole		p	3				
Rated insulation voltage		V/AC	800				
Short-circuitbreaking capacity Icu / Ics	AC400V	kA	50/35		50/50		
Operating cycle number	ON		3000		1000		1000
	OFF		7000		4000		4000
Rated Frequency		Hz	50/60				
Rated Impulse Withstand Voltage		kV	8				
Utilization Category			A				
Pollution Degree			3				
Relay Type			Electronic				
Protection Type			LSI(Long& Short Time-Instantaneous)				
Reference Temperature		C°	40				
Relay Setting			Wide Range by Electronic Circuit				



کلید اتوماتیک هوشمند
PA-CBSMT MCCB (SMART)

Technical data

Model	PA-STELC160				PA-STELC200			
Frame Current In:								
Short circuit breaking capacity code:	C	S	M	H	C	S	M	H
Number of poles:	4P				4P			
Rated Working voltage U_e (V), AC:	AC400V				AC400V			
Rated insulation voltage U_i (V):	1000V				1000V			
Rated impulse withstand voltage U_{imp} (KV):	8kV				8kV			
Rated Service short-circuit breaking capacity I_{cs} (kA):	35kA				35kA			
Rated ultimate short-circuit breaking capacity I_{cu} (kA):	50kA				50kA			
Rated short-time withstand current I_{cw} (kA):	5kA/1s				5kA/1s			
Rated residual operating current $I_{\Delta n}$ (mA):	50mA, 100mA, 200mA, 300mA, 400mA, 500mA, 800mA, 1000mA adjustable							
$I_{\Delta m}$	25% I_{cu}				25% I_{cu}			
Rated residual operation type:	AC type				AC type			
Automatic reclosing time:	20s-60s				20s-60s			
Selective category:	CAT B							
Overcurrent release type:	Electronic							
Leaking release type:	Electronic							
Width (mm)	198		198		280		280	
Length (mm)	336		336		257.5		257.5	
Height (mm)	157		157		169		169	



Technical data

Model	PA-STELC400				PA-STELC630				PA-STELC800				PA-STELC1250	
Frame Current In:														
Short circuit breaking capacity code:	C	S	M	H	C	S	M	H	C	S	M	H	C	S
Number of poles:	4P				4P				4P				4P	
Rated Working voltage U_e (V), AC:	AC400V				AC400V				AC400V				AC400V	
Rated insulation voltage U_i (V):	1000V				1000V				1000V				1000V	
Rated impulse withstand voltage U_{imp} (KV):	8kV				8kV				8kV				8kV	
Rated Service short-circuit breaking capacity I_{cs} (kA):	42kA				42kA				35kA				35kA	
Rated ultimate short-circuit breaking capacity I_{cu} (kA):	65kA				65kA				50kA				50kA	
Rated short-time withstand current I_{cw} (kA):	5kA/1s				8kA/1s				10kA/1s				15kA/1s	
Rated residual operating current $I_{\Delta n}$ (mA):	50mA, 100mA, 200mA, 300mA, 400mA, 500mA, 800mA, 1000mA adjustable													
$I_{\Delta m}$	25% I_{cu}				25% I_{cu}				25% I_{cu}				25% I_{cu}	
Rated residual operation type:	AC type				AC type				AC type				AC type	
Automatic reclosing time:	20s-60s				20s-60s				20s-60s				20s-60s	
Selective category:	CAT B													
Overcurrent release type:	Electronic													
Leaking release type:	Electronic													
Width	198				198				280				280	
Length	336				336				257.5				257.5	
Height	157				157				169				169	

PA-CBFO Fix MCCB

PA-CBFM Motorized MCCB

Model		PA-CBFM160	PA-CBFM250	PA-CBFM630	PA-CBFM800	PA-CBFM1250
Electrical features						
Rated FRAMECURRENT Inm (A)		160	250	630	800	1250
RATED CURRENT IN (a)		16A-160A	100A-250A	100A-250A 400A-630A	500A-800A	500A-1250A
RATED WORKING VOLTAGE Ue (V)		AC400V AC230V	AC400V AC230V	AC400V AC230V	AC400V AC230V	AC400V AC230V
Rated insulation voltage Ui (V)		1000	1000	1000	1000	1000
Rated impulse withstand voltage Uimp (kV)		8	8	8	8	8
Number of Poles		3	3	3	3	3
Rated ultimate short-circuit breaking capacity Icu (kA)	AC230V	25	25	25	65	65
	AC400V	20	20	20	40	40
Rated service short circuit breaking capacity Ics (kA)	AC230V	25	25	25	65	65
	AC400V	20	20	20	40	40
Utilization category		A	A	A	A	A
Outline dimension (mm)		155	208	337	418	418
		90	105	168	238	238
		117	115	155	168	168
Electrical Life (times)		1000	1000	1000	1000	1000
Mechanical life		7000	7000	4000	2500	2500
		10000	10000	7000	3500	3500



موتور کلید اتوماتیک

PA-MOP14W&PA-MOP35W MCCB Operating Mechanism

تایمر آنالوگ تابلویی

PA-TMRAI Timer Analog Daily Panel/Rail

Technical data

Material	PC
Flame Retardance	750°C FIRE-RETARDANT
Min setting	15 mins
Max setting	24 hours
Program per day	48 ON/OFF

Electrical Specifica

Power	3680W
Input Voltage	AC230V
Frequency	50Hz
Opera temperature	-14F-113F (-10°C-45°C)
Storage Temperature	-14F-113F (-10°C-45°C)
Max Humidity	80%

Others

Min.Se	15 Minutes
Max.Se	24 hours



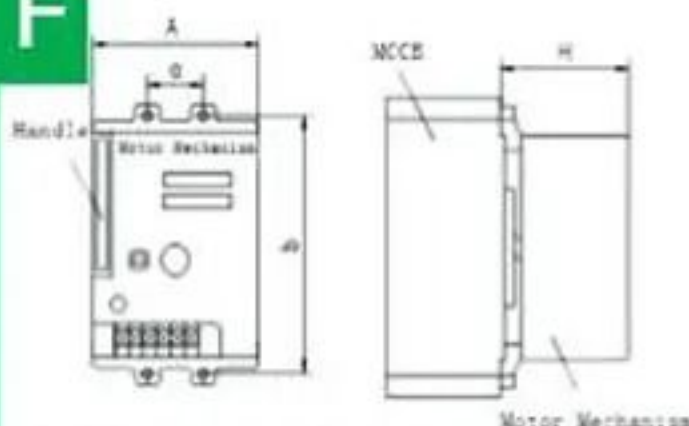
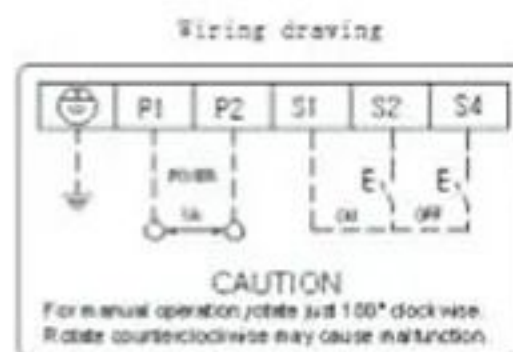
Under Voltage Relay
PA-UVR



Shunt Relay
PA-SHR



Auxiliary Contact
PA-MAUX2



Item	Dimension (mm)				Rated Voltage (V)	Starting Current (A)	Mechanical Life (Times)	Motor Power (W)
	a	b	A	H				
Mop14w(250FA)	35	126	90	102	110-240V AC 100-220V AC 24V DC	≤0.5	10000	14
Mop35w(630FA)	44	194	130	152	230V AC/220V DC 110V AC/110V DC 24V DC	≤2	5000	35

Distribution Apparatus

PA-ACB Series Air circuit breaker

Technical data

Type		PA-CNT200	PA-CNT3200	PA-CNT6300
Pole		3P, 4P	3P, 4P	3P, 4P
Utilization category		B	B	B
Rated current In	A	630, 800, 1000 1250, 1600, 2000	2000, 2500, 3200	4000, 5000, 6300
Rated frequency	Hz	50	50	50
Rated operation voltage Ue	V	400, 690	400, 690	400, 690
Rated insulation voltage Ui	V	800	800	800
Arching distance	mm	-	-	-
Rated impulse withstanding voltage Uimp	V	8000	8000	8000
Rated operation short circuit breaking capacity Ics (O-t-CO)	400V	kA	50	80
	660V	kA	40	50
Rated Ultimate short circuit breaking capacity Icu (O-t-CO)	400V	kA	80	120
	660V	kA	65	85
Rated short time withstanding current Icw (O-t-CO, AC400V 0.4S)	400V	kA	50	65
Operation life	Per hour	Times	20	10
	Electrical	Times	1000	500
	Mechanical	Times	10000	5000
Full breaking time	ms	20~30	20~30	20~30
Full closing time	ms	55~70	55~70	55~70
Power consumption	3P	W	360	1200
	4P	W	450	1750
Resistance of each pole	Fixed type	μΩ	11	9
	Draw out type	μΩ	20	14
Dimensions (LxWxH)	3P fixed type	mm	362x323x402	422x323x402
	3P draw out type	mm	375x461x452	435x471x452
	4P fixed type	mm	457x323x402	537x323x402
	4P draw out type	mm	470x461x452	550x471x452
Approximate weight	3P fixed type	kg	41	55
	3P draw out type	kg	71	95
	4P fixed type	kg	51.5	65
	4P draw out type	kg	86	115

General

PA-ACB series intelligent air circuit breakers (hereinafter called ACB) are applied for the network circuit of AC 50Hz, rated voltage 400V, 690V and rated current between 630A and 6300A. Mainly used for distributing energy and protecting the circuit and power supply device against short-circuit, undervoltage, single-phase ground fault, etc. The ACB has intelligent protection function and the key parts adopt intelligent release. The release can make the accurate selective protection, which can avoid cutting off the power and improve the reliability of power supply. Standard: IEC60947-1, IEC60947-2.

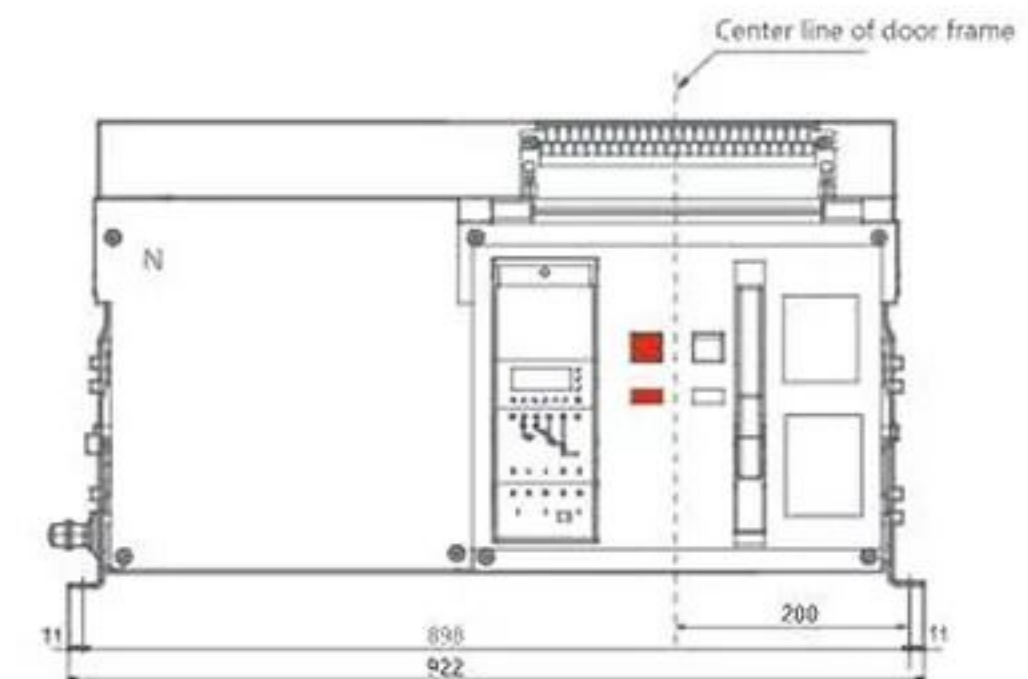
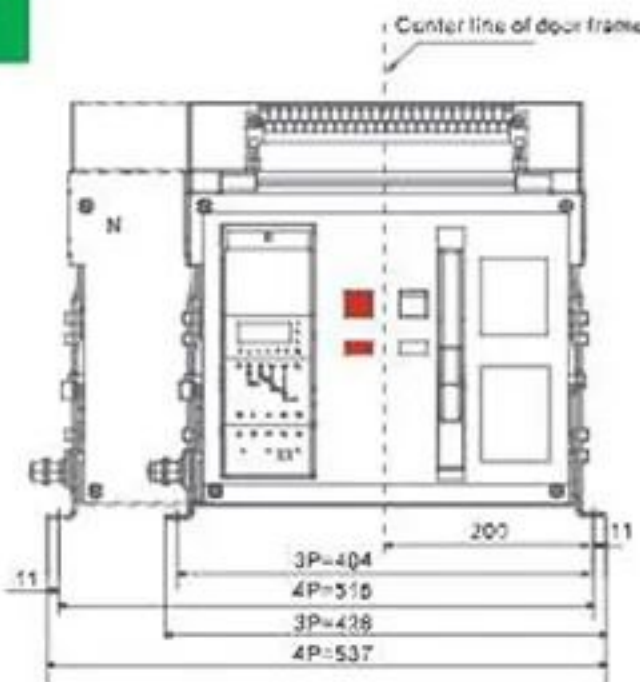
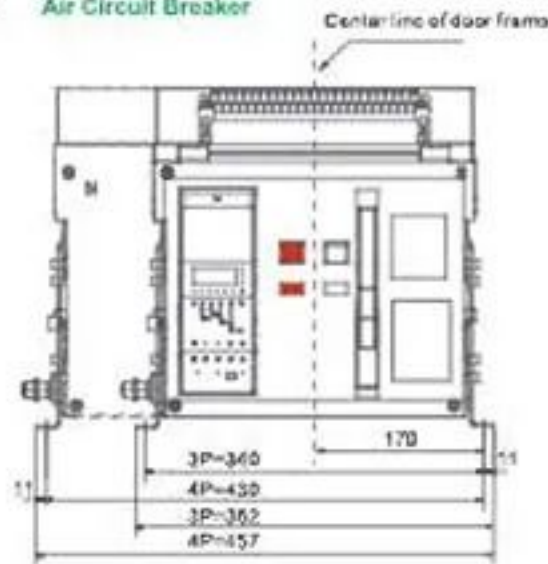
Type designation

PA-ACB-2000/3+Installation+Control unit+Common use accessory+Optional accessory

- Rated current in scope of frame current
2000 Type-in: 630A, 800A, 1000A, 1250A, 1600A, 2000A
3200 Type-in: 2000A, 2500A, 3200A
6300 Type-in: 4000A, 5000A, 6300A
- Pole number
3-default, 4-pole
- Installation
Fixed type-horizontal, vertical
Draw out type-horizontal, vertical
Note: 2000 type have vertical wiring, others are horizontal wiring
- Control unit
1 type-dial switch mode, over-current protection (overload, short delay instantaneous), 2M type-digital display, over-current protection (overload, short delay instantaneous), 4P or 3P+N have earthing protection (3M type is LCD display)
2H type-communication function, digital display, over-current protection (overload, short delay, instantaneous), 4P or 3P+N have earthing protection (3H type is LCD display).
- Common use accessory
Closing electromagnet-AC230V, AC400V, DC220V
Undervoltage release-AC230V, AC400V, undervoltage instantaneous undervoltage time delay
Release(close) magnetic iron-AC230V, AC400V, DC220V
VElectric operation mechanism-AC230V, AC400V, DC110V, DC220V
Auxiliary contact standard type (4a4b), special type (5a5b, 6a6b) Notes-normal open, b-normal close
- Optional accessory
Mechanical inter-lock
one circuit breaker (1lock+1key)
two circuit breaker (steel cable inter-lock, connecting rod inter-lock, 2lock+1key)
three circuit breakers (3locks+2keys, connecting rod inter lock)
Automatic power transfer system
Current transformer connected with neutral lead

کلید اتوماتیک هوایی

PA-ACB Air Circuit Breaker



MODEL	Elucidation	Color	Model	Weight (kg)	Size
-------	-------------	-------	-------	-------------	------



شاسی (استارت و استپ فیل شو) PA-PSHBT(MA)
PA-PSHBP(MA)

White	1	PA-PSHBT(MA)W	0.0684	
Black	1	PA-PSHBT(MA)BL	0.0684	
Green	1	PA-PSHBT(MA)G	0.0684	
Yellow	1	PA-PSHBT(MA)Y	0.0684	
Blue	1	PA-PSHBT(MA)B	0.0684	
Red	1	PA-PSHBT(MA)R	0.0684	
Black	1	PA-PSHBT(MA)BL	0.0774	
Green	1	PA-PSHBT(MA)G	0.0774	
Yellow	1	PA-PSHBT(MA)Y	0.0774	
Blue	1	PA-PSHBT(MA)B	0.0774	



شاسی (استارت لحظه ای) PA-PSHBT(MO)

Black	1	PA-PSHBT(MO)BL	0.070	
Green	1	PA-PSHBT(MO)G	0.070	
Yellow	1	PA-PSHBT(MO)Y	0.070	
Blue	1	PA-PSHBT(MO)B	0.070	
Red	1	PA-PSHBT(MO)R	0.070	
Black	1	PA-PSHBT(MO)BL	0.079	
Green	1	PA-PSHBT(MO)G	0.079	
Yellow	1	PA-PSHBT(MO)Y	0.079	
Blue	1	PA-PSHBT(MO)B	0.079	
Red	1	PA-PSHBT(MO)R	0.079	



شاسی سلکتوری

selector switch	1	PA-SS2PMA	0.0923	
2 position switch	1	PA-SS2PSR	0.0923	
3 position switch	1	PA-SS3PMA	0.0923	
PA-SS3PSR	1	PA-SS3PSR	0.0923	
selector switch with key	1	PA-KSS2PMA	0.1154	
2 position switch with key	1	PA-KSS2PSR	0.1154	
3 position switch with key	1	PA-KSS3PMA	0.1154	
PA-KSS3PSR	1	PA-KSS3PSR	0.1154	
selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	



شاسی سلکتوری کلید دار

selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	
3 position switch with LED	1	PA-LSS3PMA	0.105	
PA-LSS3PSR	1	PA-LSS3PSR	0.105	
selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	
3 position switch with LED	1	PA-LSS3PMA	0.105	
PA-LSS3PSR	1	PA-LSS3PSR	0.105	
selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	



شاسی سلکتوری چراغ دار PA-PSH CSG2

selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	
3 position switch with LED	1	PA-LSS3PMA	0.105	
PA-LSS3PSR	1	PA-LSS3PSR	0.105	
selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	
3 position switch with LED	1	PA-LSS3PMA	0.105	
PA-LSS3PSR	1	PA-LSS3PSR	0.105	
selector switch with light (include LED) 220V	1	PA-LSS2PMA	0.105	
PA-LSS2PSR	1	PA-LSS2PSR	0.105	



شاسی دوقل (استارت / استپ) PA-PSHBD

Double key button switch	1	PA-PSHBD	0.0450	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	



شاسی دوقل چراغ دار PA-PSHBDL

Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	



شاسی خارجی (اضطراری استپ) PA-EMMRP

Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	



شاسی دوقل چراغ دار PA-PSHBDL

Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	



شاسی خارجی (اضطراری استپ) PA-EMMRP

Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	



شاسی خارجی (اضطراری استپ) PA-EMMRP

Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	
Double square head with light button (direct type with LED)	1	PA-PQ-GLS	0.0417	

MODEL	Elucidation	Color	Model	Weight (kg)	Size
-------	-------------	-------	-------	-------------	------



چراغ سیگنال PA-LI

Contain LED New type

Green	PA-LIG	0.0193	
Red	PA-LIR	0.0193	
Yellow	PA-LIY	0.0193	
Blue	PA-LIB	0.0193	
White	PA-LIW	0.0193	



چراغ نشانگر دما (سانسور) PA-TLI

Indicator Thermo-Meter

20°C ~ +199°C

Green	PA-TLIG	0.0203	
Red	PA-TLIR	0.0203	
Yellow	PA-TLIY	0.0203	
Blue	PA-TLIB	0.0203	
White	PA-TLIW	0.0203	



چراغ سیگنال نشانگر ولتاژ و آمپر PA-VLI

Indicator Voltmeter Ammeter

Green	PA-VLIG	0.0193	
Red	PA-VLIR	0.0193	
Yellow	PA-VLIY	0.0193	
Blue	PA-VLIB	0.0193	
White	PA-VLIW	0.0193	



چراغ نشانگر توان (کلو وات) PA-APLI

Indicator Power Meter

AC220V/26KW
AC380V/45KW

Green	PA-APLIG	0.0193	
Red	PA-APLIR	0.0193	
Yellow	PA-APLIY	0.0193	
Blue	PA-APLIB	0.0193	
White	PA-APLIW	0.0193	



چراغ سیگنال نشانگر زمان (ساعت-دقیقه) PA-TMLI

Indicator Hours

0-999H

Green	PA-TMLIG	0.0193	
Red	PA-TMLIR	0.0193	
Yellow	PA-TMLIY	0.0193	
Blue	PA-TMLIB	0.0193	
White	PA-TMLIW	0.0193	



چراغ سیگنال نشانگر اعداد (1-999) PA-CLI

The LED electronics economy energy indicator

Install size Φ16 (The LED has been preinstalled as one and cannot be split)

Green	PA-CLIG	0.0193	
Red	PA-CLIR	0.0193	
Yellow	PA-CLIY	0.0193	
Blue	PA-CLIB	0.0193	
White	PA-CLIW	0.0193	



چراغ سیگنال نشانگر ولتاژ (ولت) PA-VLI

Indicator Voltmeter

C20~500V

Green	PA-VLIG	0.0193	
Red	PA-VLIR	0.0193	
Yellow	PA-VLIY	0.0193	
Blue	PA-VLIB	0.0193	
White	PA-VLIW	0.0193	



چراغ سیگنال نشانگر شدت جریان (آمپر) PA-ILI

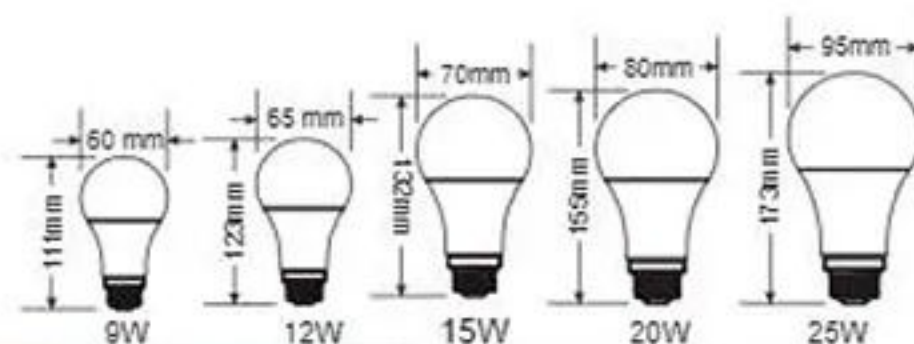
Indicator Ammeter

0~100A
Max AC380

Green	PA-ILIG	0.0193	
Red	PA-ILIR	0.0193	
Yellow	PA-ILIY	0.0193	
Blue	PA-ILIB	0.0193	
White	PA-ILIW	0.0193	



لامپ حبابی

LED A BULB
PA-AB

Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	Beam Angle	Percentage of Failure	Lumen maintenance
PA-AB9W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	220°	L70, F50
PA-AB12W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	220°	L70, F50
PA-AB15W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	220°	L70, F50
PA-AB20W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	220°	L70, F50
PA-AB25W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	220°	L70, F50

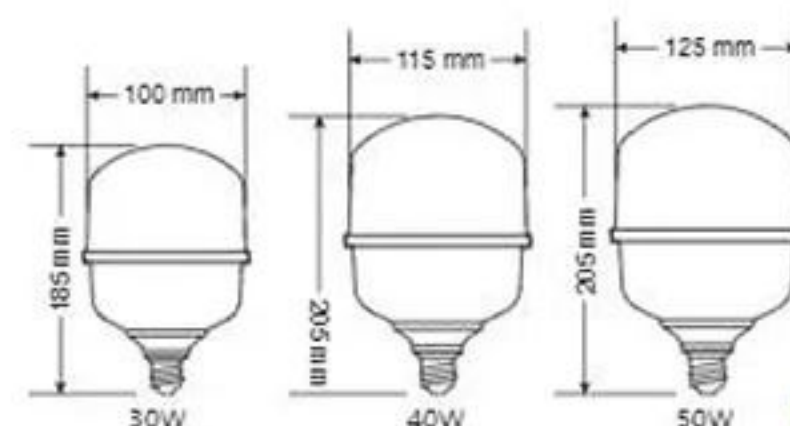


سری لیان

لامپ استوانه ای

LED T-BULB
PA-TB

Liyen Series



Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	Beam Angle	Percentage of Failure	Lumen maintenance
PA-TB30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	200°	L70, F50
PA-TB40W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	200°	L70, F50
PA-TB50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	80CM±5	200°	L70, F50



LED DIECAST T-BULB

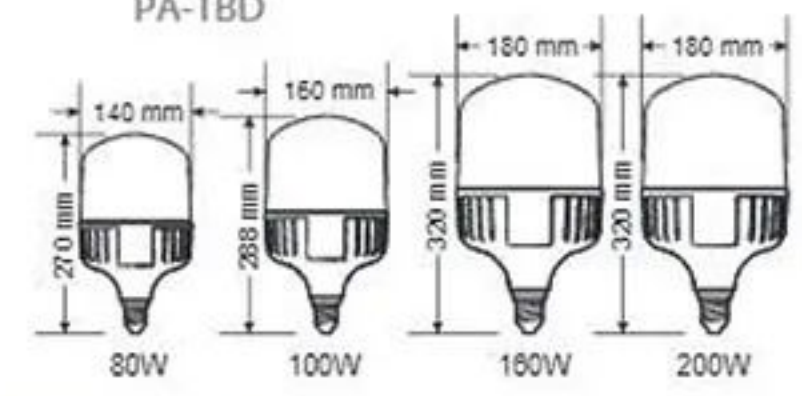
I



سری دایان

لامپ استوانه ای دایکاست

LED DIECAST T-BULB Dayan Series
PA-TBD



Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-TBD-80W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	220°	L70, F50	80%
PA-TBD-100W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	220°	L70, F50	80%
PA-TBD-160W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	220°	L70, F50	80%
PA-TBD-200W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	220°	L70, F50	80%

سری دایان

لامپ استوانه ای دایکاست

LED DIECAST T-BULB Dayan Series
PA-TBD



Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-TBD30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-TBD40W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-TBD60W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%

LED DIECAST T-BULB

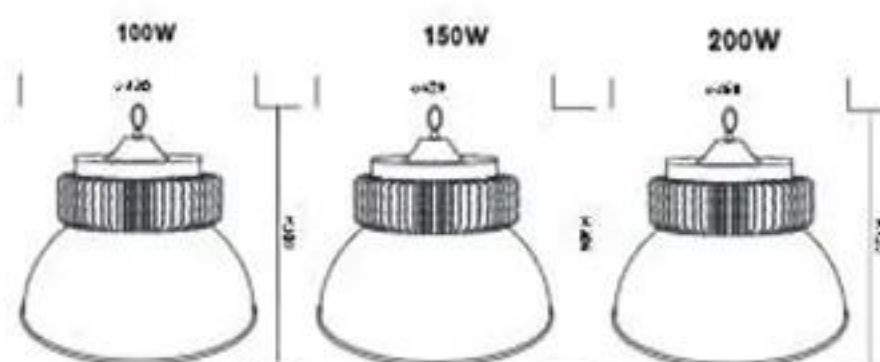
I



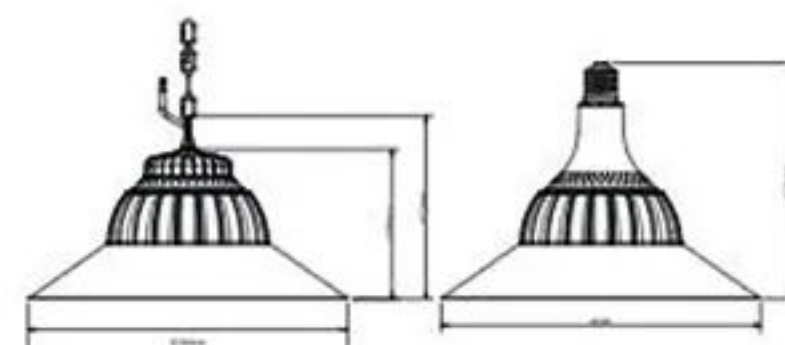


چراغ کارگاهی

LED Highbay
PA-HBW



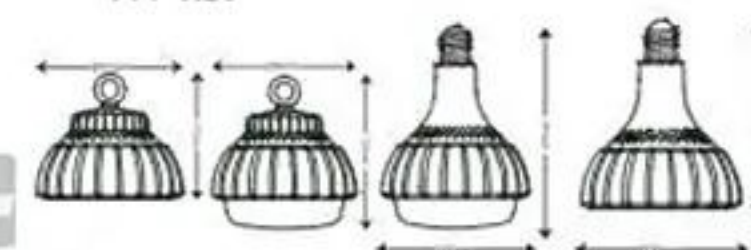
Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-HBW100W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	60°	L70, F50	80%
PA-HBW150W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	60°	L70, F50	80%
PA-HBW200W	3000k-4000k-6500k	110lm/W	PF≥0.9	Ra≥80	SDCM≤5	60°	L70, F50	80%



لامپ سالنی سری ویهان

Vihan Series

LED Highbay
PA-HBV



Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-HBV80W	3000k-4000k-6500k	90 lm/W	PF≥0.5	Ra≥80	SDCM≤5	90°	L70, F50	80%
PA-HBV100W	3000k-4000k-6500k	90 lm/W	PF≥0.5	Ra≥80	SDCM≤5	90°	L70, F50	80%
PA-HBV150W	3000k-4000k-6500k	90 lm/W	PF≥0.5	Ra≥80	SDCM≤5	90°	L70, F50	80%





لامپ سفینه ای

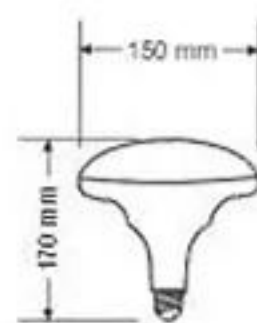
سری لونا

LED UFO BULB LUNA Series

PA-UB



30W



50W



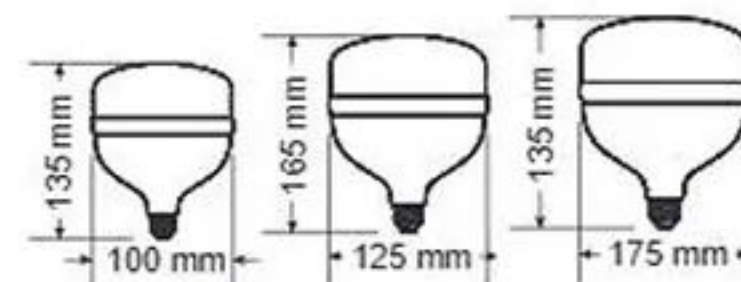
Power & Model	CCT	Luminous Efficacy (lm/W)	Color Rendering Index (CRI)	Beam Angle	Percentage of Failure	Lumen maintenance
PA-UB-30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	8000h	120° L70, F50 80%
PA-UB-50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	8000h	120° L70, F50 80%

لامپ استوانه ای

سری رویان

LED T-BULB Royan Series

PA-TBR

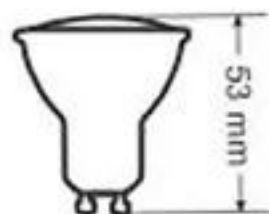


Power & Model	CCT	Luminous Efficacy (lm/W)	Color Rendering Index (CRI)	Beam Angle	Percentage of Failure	Lumen maintenance
PA-TBR-30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	8000h	200° L70, F50 80%
PA-TBR-50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	8000h	200° L70, F50 80%
PA-TBR-40W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	8000h	200° L70, F50 80%



لامپ هالوژن (استارتی)

LED Gu10



Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-GU-7W	3000k-4000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤5	60°	L70, F50	80%



لامپ حبایی رنگی

LED COLOR A BULB



Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-ABCR-9W	1000K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCB-9W	100000K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCY-9W	2150K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCG-9W	8100K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCO-9W	1000K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCV-9W	130000K	60lm/W	PF≥0.5	Ra≥80	SDCM≤5	200°	L70, F50	80%
PA-ABCP-9W	1100K	60lm/W	PF≥0.5	Ra≥80	SDCM	200°	L70, F50	80%

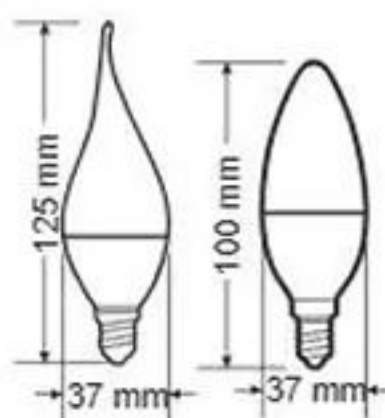




سری سایان

لامپ شمعی-اشکی شفاف لنزدار

TRANSPARENT LED CANDLE-TAIL SAYAN Series

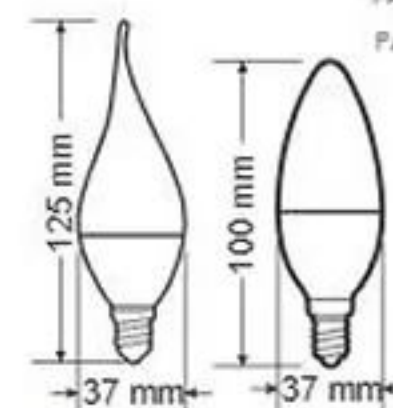
PA-CTBC
PA-CBC

Power & Model	CCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-CTBC-7W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-CBC-7W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%



لامپ شمعی-اشکی مات

LED CANDLE-TAIL

PA-CTB
PA-CB

Power & Model	CCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-CTB-7W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-CB-7W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%





لامپ فیلامنتی شمعی اشکی

LED FILAMENT CANDLE TAIL BULB

PA-FCTA
PA-FCT



Power & Model	CCT	Luminous Efficacy(lm/W)	Color Temp (°K)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FCTA4W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FCTA6W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FCT8W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%



لامپ فیلامنتی شمعی

LED FILAMENT CANDLE BULB

PA-FCA
PA-FC



Power & Model	CCT	Luminous Efficacy(lm/W)	Color Temp (°K)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FCA4W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FCA6W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FC8W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%



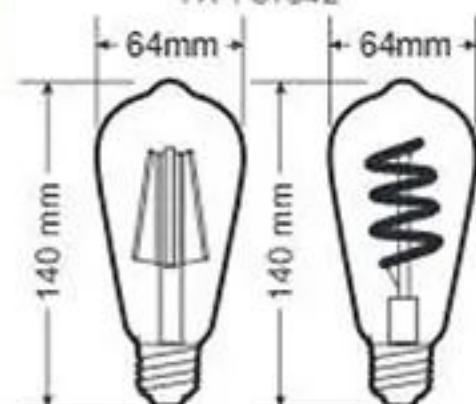


لامپ فیلامنتی خمره ای

LED FILAMENT ST64 BULB

PA-FST64

PA-FST64Z



Power & Model	CCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FST64-4W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FST64-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FST64-8W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FST64-12W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FST64Z-4W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%



لامپ فیلامنتی آناناسی / الماسی / قلبی / کریستالی / ستاره ای

PA-FST

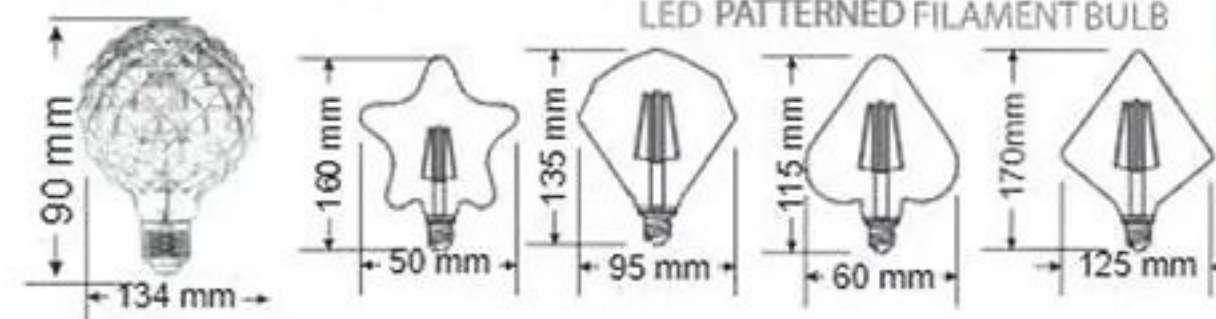
PA-FCR

PA-FHE

PA-FDM

PA-FPA

LED PATTERNED FILAMENT BULB



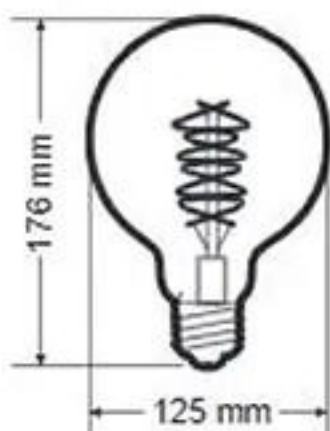
Power & Model	CCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FPA-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FDM-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FHE-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FCR-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FST-6W	2700k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%





لامپ فیلامنتی کرولی

LED FILAMENT GLOBE BULB
PA-FGL

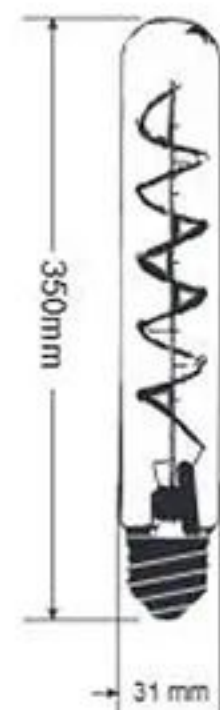


Power & Model	OCT	Luminous Efficacy (lm/W)	Color Temp (K)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FGL-6W	2700k	80lm/W	2700k	Ra≥80	SDCM≤5	270°	L70, F50	80%



لامپ فیلامنتی لوله ای

LED FILAMENT TUBE BULB
PA-FTU



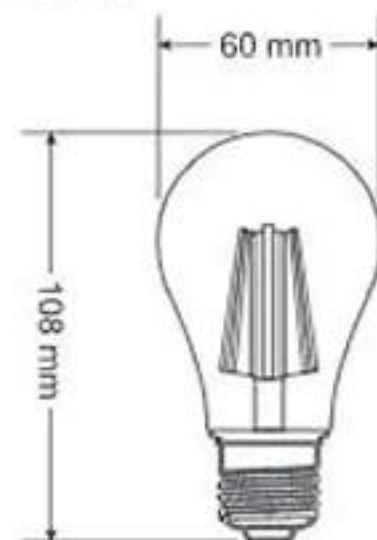
Power & Model	OCT	Luminous Efficacy (lm/W)	Color Temp (K)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FTU-6W	2700k	80	2700k	Ra≥80	SDCM≤5	330°	L70, F50	80%





لامپ فیلامنتی حبابی

LED FILAMENT A BULB
PA-FAB



Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FAB6W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	220°	L70, F50	80%
PA-FAB8W	2700k-6500k	80lm/W	PF≥0.5	Ra≥80	SDCM≤5	220°	L70, F50	80%



لامپ حبابی فانتزی

LED FANTASY BULB

PA-FNG
PA-FNC
PA-FNT
PA-FNA



Power & Model	CCT	Luminous Efficacy (lm/W)	Power Factor (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FNG-7W	2700k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FNC-7W	2700k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FNT-7W	2700k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FNA-7W	2700k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%
PA-FNA-9W	2700k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	270°	L70, F50	80%



سری آیس

K

پنل ۶۰ در ۶۰ مربعی توکار

LED TAIL PANEL RECESSED MOUNTING

PA-TBPR



Power & Model	OCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-TBPR-60W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
2 PA-TBPR-80W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
3 PA-TBPR-100W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
4 PA-TBPR-120W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%

پنل ۳۰ در ۱۲۰ مستطیلی توکار

LED WAFFLE PANEL
RECESSED MOUNTING
PA-WAFP



Power & Model	OCT	Luminous Efficacy(lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-WAFP-60W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
2 PA-WAFP-80W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
3 PA-WAFP-100W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%
4 PA-WAFP-120W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM≤5	120°	L70, F50	80%

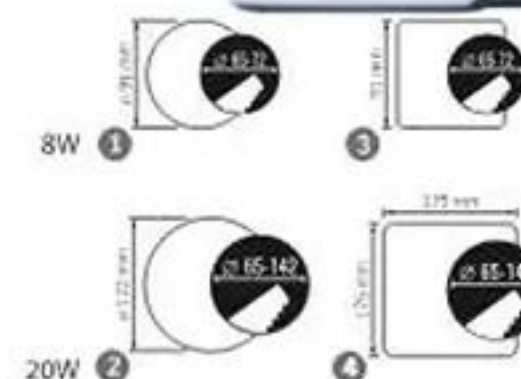
سری آیس

پنل ۶۰ در ۶۰ مربعی روکار

LED TAIL PANEL SURFACE MOUNTING
PA-TBP



Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-TBP-60W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
2 PA-TBP-80W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
3 PA-TBP-100W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
4 PA-TBP-120W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%



سری روشا

پنل قابل تنظیم

LED ADJUSTABLE RECESSED MOUNTING PANEL
BOSHA SERIES

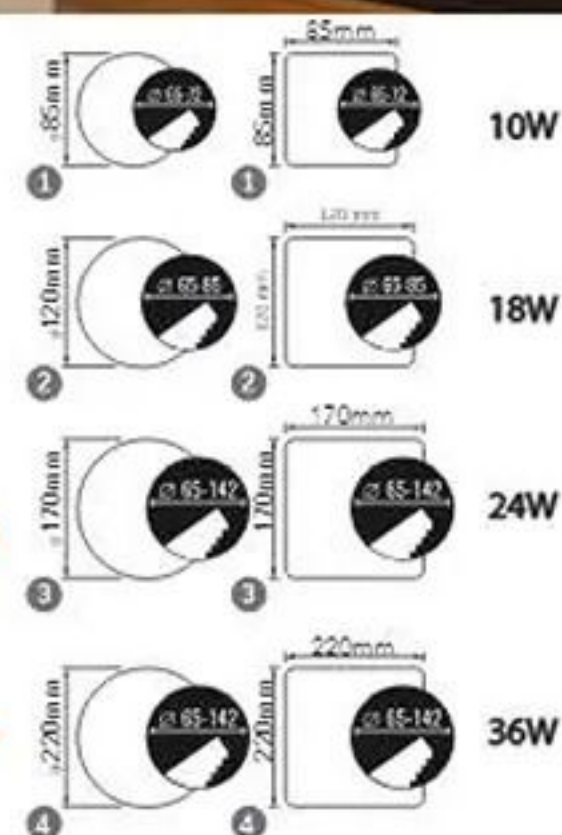


Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-RRA8W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
2 PA-RSA8W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
3 PA-RRA20W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
4 PA-RSA20W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%



پنل قابل تنظیم سری آيسان

LED ADJUSTABLE RECESSED
MOUNTING PANEL
PA-ASRE
PA-ASSRE

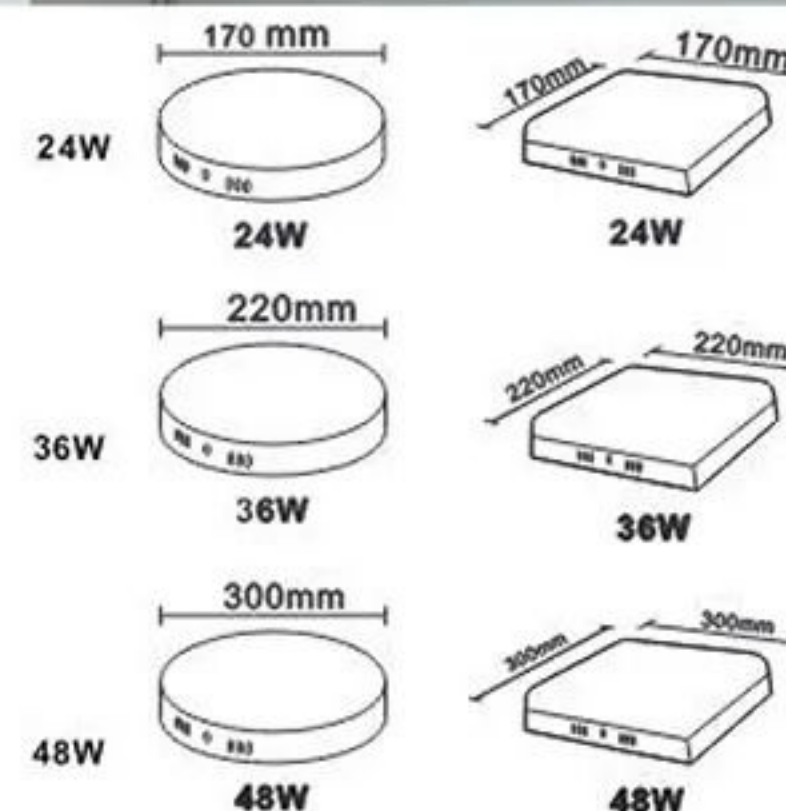


Power & Model	OCT	Luminous Efficacy (lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-ASRE10W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
2 PA-ASSRE18W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
3 PA-ASRE24W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
4 PA-ASSRE36W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%



پنل قابل تنظیم سری آيسان

LED SURFACE MOUNTING PANEL
PA-ASRSU
PA-ASSSU



Power & Model	OCT	Luminous Efficacy (lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-ASRSU24W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
2 PA-ASSSU36W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
3 PA-ASRSU48W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%



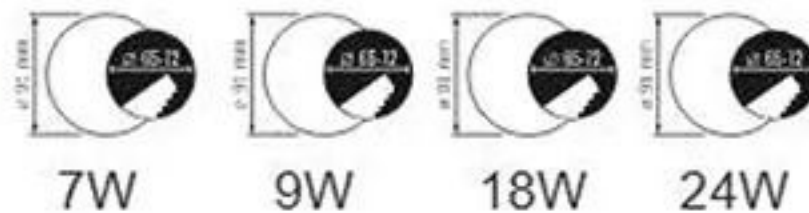
LED BACK LIGHT PANEL

K

پنل بک لایت سری دینو

DinoSeries

LED BACK LIGHT PANEL
PA-DIN



7W

9W

18W

24W



Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-DIN-7W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-DIN-9W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-DIN-18W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-DIN-24W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%



چراغ دان لایت سری هاوین

Haween Series

LED Cob Downlight
PA-CRD



30W

50W

60W

80W



Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-CRD-30W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-CRD-50W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-CRD-60W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%
PA-CRD-80W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM±5	120°	L70, F50	80%

LED Cob Downlight

K



سری شیمین

پنل سی اُ بی

COB DOWNLIGHT PANEL
PA-PSH



Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-PSH-7W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%

سری آویر

پنل توکار

DOWNLIGHT PANEL
PA-PAV



Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-PAV-7W	3000k-4000k-6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%

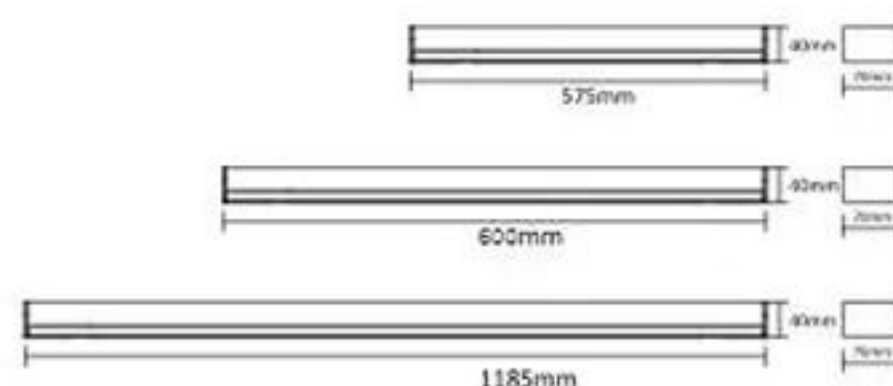


LED LINEAR BRACKET

L

براکت سری مانیا

LED LINEAR BRACKET
MANIA SERIES
PA-LI



Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-LI-50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	180°	L70, F50	80%
2 PA-LI-80W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	180°	L70, F50	80%
3 PA-LI-100W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	180°	L70, F50	80%

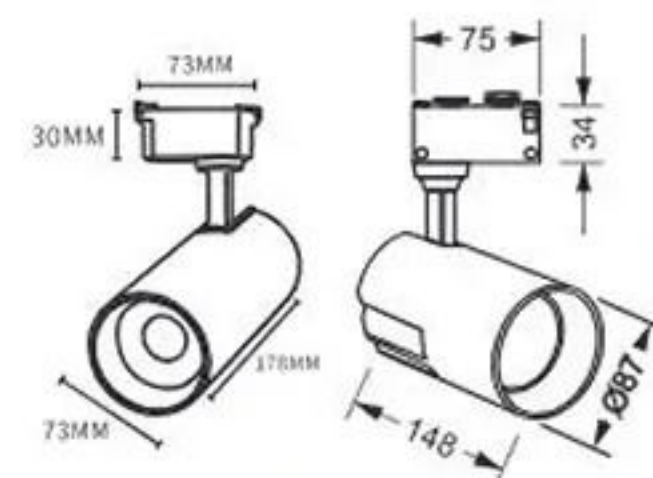


COB TRACKLIGHT

L

چراغ ریلی سری هور

COB TRACKLIGHT
HOOR SERIES
PA-CTLB
PA-CTLW

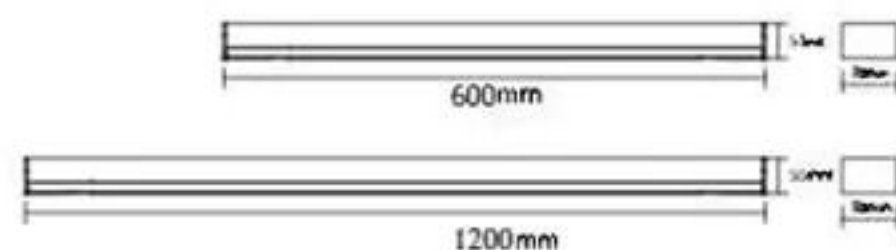


Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-CTLB-30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	36°	L70, F50	80%
2 PA-CTLW-30W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	36°	L70, F50	80%
3 PA-CTLW-50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	36°	L70, F50	80%
4 PA-CTLW-50W	3000k-4000k-6500k	90lm/W	PF≥0.5	Ra≥80	SDCM≤5	36°	L70, F50	80%





WATERPROOF LINEAR BRACKET



براکت ضدآب سری مانیا

MANIA SERIES

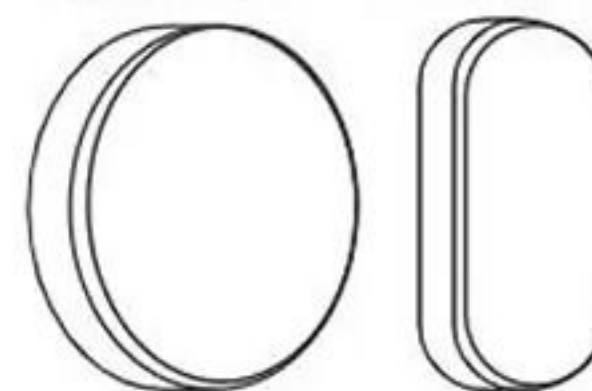
LED WATERPROOF LINEAR BRACKET

PA-LIW



Power & Model	CCT	Luminous Efficacy (lm/W)	شیرین توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-LIW-20W	6500K	90lm/W	PF≥0.5	Ra≥80	SDCM#5	180°	L70, F50	80%
PA-LIW-40W	6500K	90lm/W	PF≥0.5	Ra≥80	SDCM#5	180°	L70, F50	80%

D206 *55mm 270*130*55mm



چراغ ضدآب سری پانیا

PANIA SERIES

LED WATERPROOF BULKHEAD

PA-BHE

PA-BHR

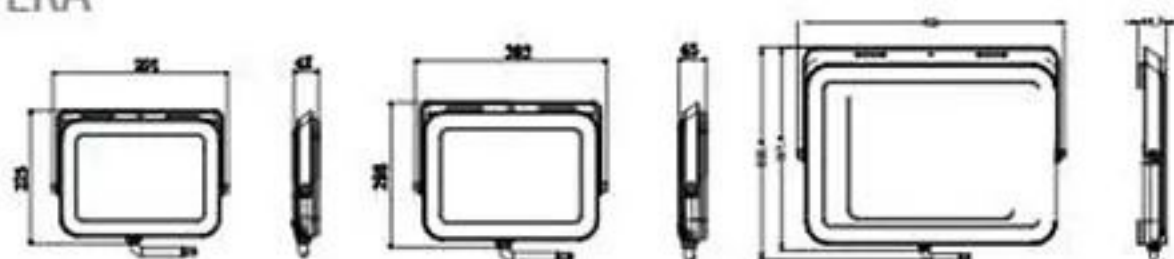


Power & Model	CCT	Luminous Efficacy (lm/W)	شیرین توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-BHE-25W	6500K	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%
PA-BHR-25W	6500K	90lm/W	PF≥0.5	Ra≥80	SDCM#5	120°	L70, F50	80%



پرژکتور سری رایا

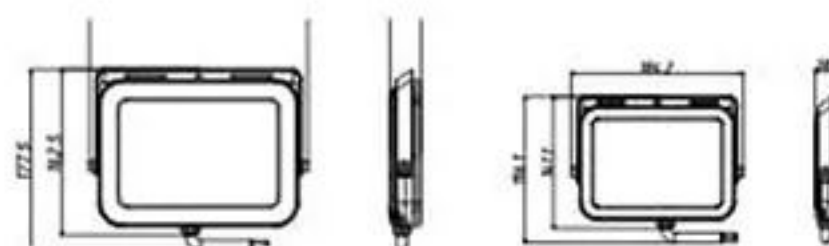
LED FLOOD LIGHT
PA-FLRA



Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLRA-300W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-500W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-600W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%

پرژکتور سری رایا

LED FLOOD LIGHT
PA-FLRA



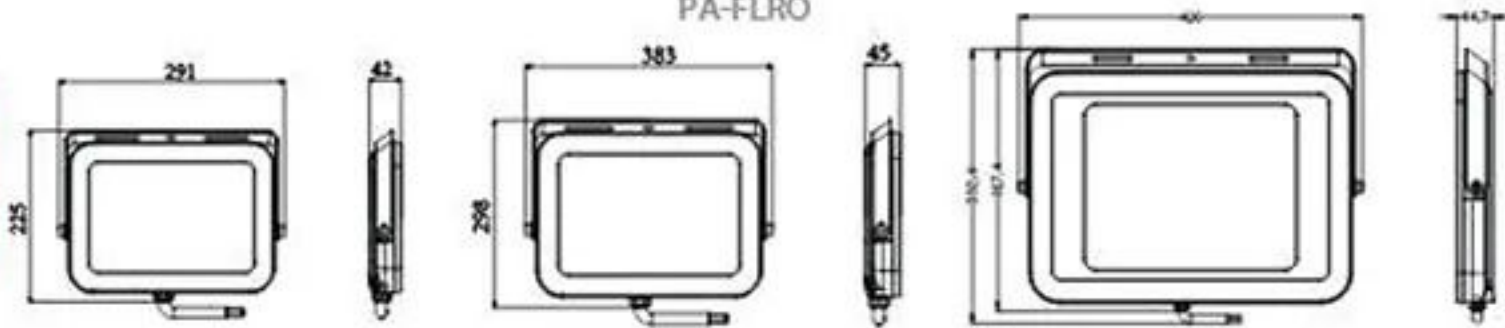
Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLRA-20W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-30W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-50W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-100W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-150W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%
PA-FLRA-200W	6500k	90Lm/W	PF≥0.5	Ra≥80	SDCM#8	120°	L70, F50	80%



پرژکتور سری رویال

LED FLOOD LIGHT ROYAL SERIES

PA-FLRO



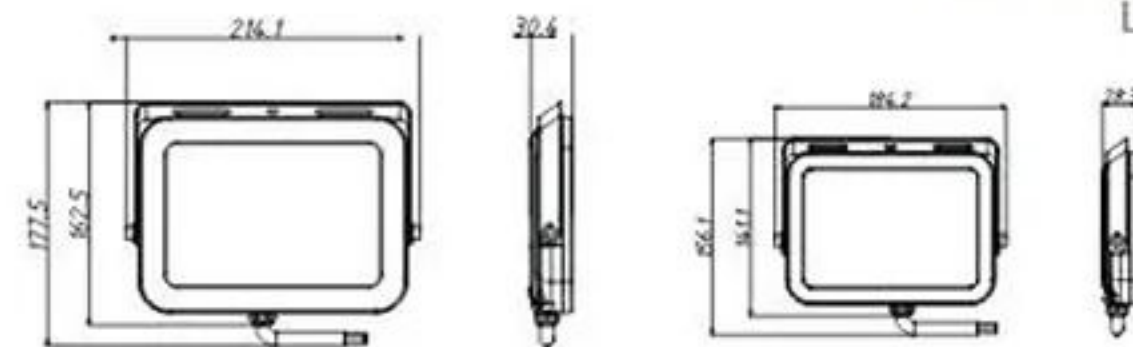
Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLRO-100W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%
PA-FLRO-150W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%
PA-FLRO-200W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%



پرژکتور سری رویال

LED FLOOD LIGHT ROYAL SERIES

PA-FLRO



Power & Model	CCT	Luminous Efficacy (lm/W)	ضریب توان (PF)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLRO-30W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%
PA-FLRO-30W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%
PA-FLRO-50W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%
PA-FLRO-50W	3000k-6500k	90lm/W	PF≥0.9	Ra≥80	SDCM≤8	120°	L70, F50	80%

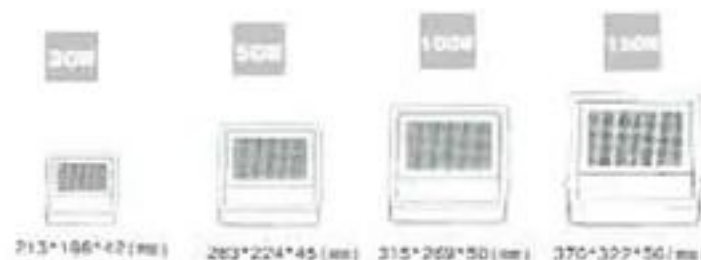


پژکتور سری پرو

LED FLOOD LIGHT PRO SERIES
PA-FLPR

پژکتور سری پرو

LED FLOOD LIGHT PRO SERIES
PA-FLPR



Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLPR-30W	6500k	90lm/W	PF≥0.9	Ra≥80	200°	L70, F50	80%
PA-FLPR-50W	6500k	90lm/W	PF≥0.9	Ra≥80	200°	L70, F50	80%
PA-FLPR-100W	6500k	90lm/W	PF≥0.9	Ra≥80	200°	L70, F50	80%
PA-FLPR-150W	6500k	90lm/W	PF≥0.9	Ra≥80	200°	L70, F50	80%

Power & Model	CCT	Luminous Efficacy(lm/W)	PF	CRI	Beam Angle	Percentage of Failure	Lumen maintenance
PA-FLPR-200W	6500k	90lm/W	PF≥0.9	Ra≥80	120°	L70, F50	80%
PA-FLPR-300W	6500k	90lm/W	PF≥0.9	Ra≥80	120°	L70, F50	80%
PA-FLPR-400W	6500k	90lm/W	PF≥0.9	Ra≥80	120°	L70, F50	80%
PA-FLPR-500W	6500k	90lm/W	PF≥0.9	Ra≥80	120°	L70, F50	80%
PA-FLPR-600W	6500k	90lm/W	PF≥0.9	Ra≥80	120°	L70, F50	80%



Wireless Rope Light

N

ریسه وایرلسی ۲۸۳۵ 2835 LED Wireless Rope Light PA-WRB



10W 12W 15W

Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان واقعی)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-WRB1-10W/m	WHITE-BLUE-RED-GOLDEN	80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%
2 PA-WRB2-12W/m	GREEN-WARM WHITE	80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%
3 PA-WRB3-15W/m		80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%

Wireless Rope Light

N

ریسه وایرلسی ۵۷۳۰ 5730 LED Wireless Rope Light PA-WRP



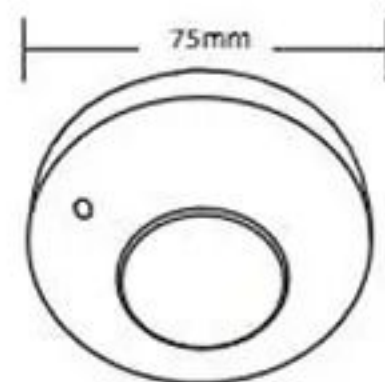
9W 12W 15W

Power & Model	CCT	Luminous Efficacy (lm/W)	PF (توان واقعی)	CRI	SDCM	Beam Angle	Percentage of Failure	Lumen maintenance
1 PA-WRP1-9W/m	MANGO-WHITE-BLUE	80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%
2 PA-WRP2-12W/m	RED-GOLDEN-GREEN	80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%
3 PA-WRP3-15W/m	WARM WHITE	80lm/W	PF≥0.9	Ra≥80	SDCM≤5	120°	L70, F50	80%

سنسور سقفی روکار سایز کوچک

Small PIR Ceiling Surface Mounting Sensor

PA-PCS8



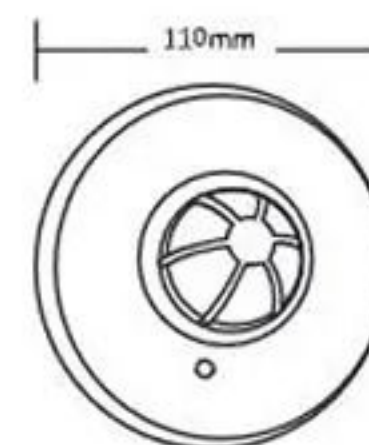
Power & Model	RATED LOAD POWER (LED) - (INCANDESCENT)	MIN/MAX DELAY	AMBIENT LIGHT	OPERATION RANGE	INSTALLATION HEIGHT	MOTION SPEED DETECTION
PA-PCS8	300W - 1200W	10sec/7min	(adjustable) 10 lux-2000 lux	6m(<25°C)	2.5M/3.5M	0.6~ 1.5 m/sec



سنسور سقفی توکار

PIR Ceiling Surface Mounting Sensor

PA-PCS11



Power & Model	RATED LOAD POWER (LED) - (INCANDESCENT)	MIN/MAX DELAY	AMBIENT LIGHT	OPERATION RANGE	INSTALLATION HEIGHT	MOTION SPEED DETECTION
PA-PCS11	300W - 1200W	10sec/7min	(adjustable) 10 lux-2000 lux	6m(<25°C)	2.5M/3.5M	0.6~ 1.5 m/sec

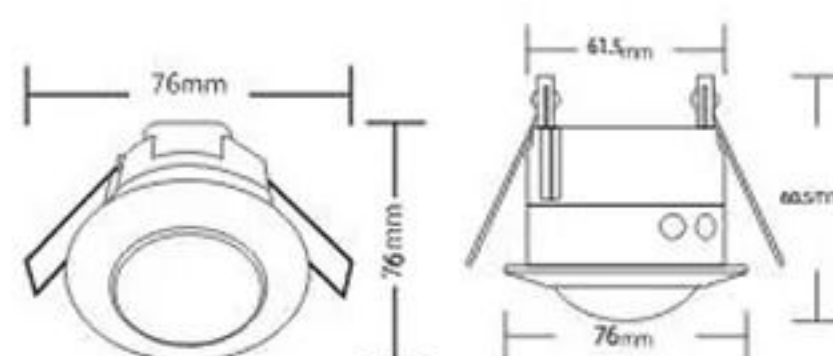


Ceiling Sensor

سنسور سقفی توکار هالوژنی

PIR Ceiling Recessed Mounting Sensor

PA-PCSH6
PA-PCSH8



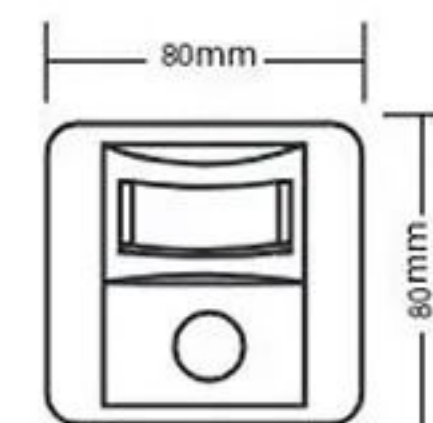
Power & Model	RATED LOAD POWER (LED) - (INCANDESCENT)	MIN/MAX DELAY	AMBIENT LIGHT	OPERATION RANGE (MAX)	INSTALLATION HEIGHT	MOTION SPEED DETECTION
PA-PCSH6	300W - 1200W	10sec/7min	(adjustable) 10 lux-2000 lux	6m(<25°C)	2.5M/3.5M	0.6- 1.5 m/sec
PA-PCSH8	300W - 1200W	10sec/7min	(adjustable) 10 lux-2000 lux	6m(<25°C)	2.5M/3.5M	0.6- 1.5 m/sec

Wall Sensor

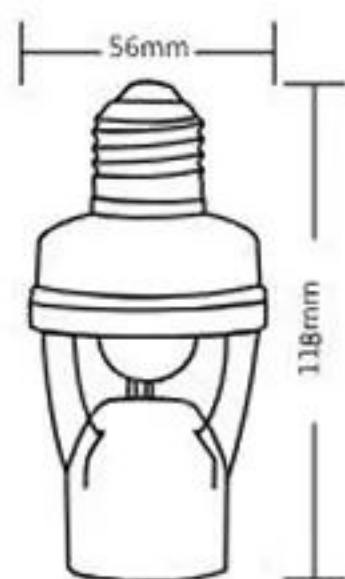
سنسور دیواری توکار

PIR Wall Recessed Mounting Sensor

PA-PWS



Power & Model	RATED LOAD POWER (LED) - (INCANDESCENT)	MIN/MAX DELAY	AMBIENT LIGHT	OPERATION RANGE (MAX)	INSTALLATION HEIGHT	MOTION SPEED DETECTION
PA-PWS	400W - 800W	10sec/7min	(adjustable) 10 lux-2000 lux	9m(<25°C)	1.6M/2.5M	0.6- 1.5 m/sec



سنسور آویزی

Pir Hanging Sensor
PA-PHS



Power & Model	Sensor Type	MIN/MAX DELAY	AMBIENT LIGHT	OPERATION RANGE (MAX)	INSTALLATION HEIGHT	MOTION SPEED DETECTION
PA-PHSSA	PIR	10sec/5min	(adjustable) 10 lux~2000 lux	Φ5-6m(<25°C)	2.5M/3.5M	0.6~1.5 m/sec



فتوسل

Photocell

PA-PHCON10A
PA-PHCUB16A
PA-PHCYL25A



Power & Model	POWER SUPPLY VOLTAGE AC 50Hz	CONNECTION LUX	DISCONNECTION LUX	CONNECTION DELAY	DISCONNECTION DELAY	TEMPERATURE & HUMIDITY	RELAY CURRENT RATING
PA-PHCON10A	180V ~ 250V	12lux	40lux	30sec	30sec	-20 to 65@70%RH	10
PA-PHCUB16A	180V ~ 250V	12lux	40lux	30sec	30sec	-20 to 65@70%RH	16
PA-PHCYL25A	180V ~ 250V	12lux	40lux	30sec	30sec	-20 to 65@70%RH	25



چراغ سنسور دار

LED PIR Ceiling Light
PA-PS20W



Power & Model	CCT	Luminous Efficacy (lm/W)	Color Rendering Index (CRI)	Beam Angle	Percentage of Failure	Lumen maintenance	Operating Distance
PA-PS20W	3000K-4000K-6500K	90lm/W	PF20.5	360°	L70, F50	80%	3-5M



لامپ سنسور دار

LED PIR A-Bulb
PA-ABS12W



Power & Model	CCT	Luminous Efficacy (lm/W)	Color Rendering Index (CRI)	Beam Angle	Percentage of Failure	Lumen maintenance	Operating Distance
PA-ABS12W	3000K-4000K-6500K	90lm/W	PF20.5	360°	L70, F50	80%	2-4M





Digital Timer

تایمر دیجیتال

Digital Timer

PA-TMRD



Power & Model	RATED LOAD POWER	MIN/MAX SETTING	AMBIENT LIGHT
PA-TMRD	3680W	1Sec/7Days	B(16)ON/OFF



DALIY ANALOG TIMER

تایمر آنالوگ روزانه

Daliy Analog Timer

PA-TMRA



Power & Model	RATED LOAD POWER	MIN/MAX SETTING	PROG Number
PA-TMRA	3680W	15min/24hr	(96)48ON/OFF

0



تبدیل تایمردار تبدیل تایمر چراغ دار

3Pin To 2Pin Plug With Timer PA-TMP

3Pin To 2Pin Plug With Timer& Light PA-TMPL

Model	PA-TMP	PA-TMPL
Rating Current	10A	10A
Voltage	170-250 V	170-250 V
Light color	—	Warm white light
Time Selection 3 Modes	45 min, 1:30 hr, 3 hr	45 min, 1:30 hr, 3 hr



فاز متر

(تستر / جیبی / پایه بلند) (PA-PHT / PA-PHP / PA-PHC)

Electrical Screw Drive (Tester / POCKET / Conventional)

Phase Meter Type	Phase Meter / Tester
Material	Steel&Insulated Plastic
Frequency	50 Hz
Lights	Red/ Green and Red
Head Type	flat/Cross head&lat
Indicator	Phase(Red)/Continuity(Green)&Phase(Red)
Voltage	100V - 500V
Power Supply	3x9v battery
Size	150/135/165mm