

Aultop



YUEQING AULTOP ELECTRICAL CO., LTD.

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YUEQING AULTOP ELECTRICAL CO., LTD.

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[Email: \[A square QR code with a black and white pixelated pattern, used for quick access to the company's website or contact information.\]\(mailto:aultop@aul</p></div><div data-bbox=\)](http://www.aultop.com.cn</p></div><div data-bbox=)



Aultop



Brief Introduction

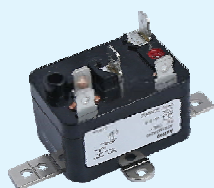
Yueqing Aultop Electrical Co., Ltd is located in, Liushi, Yueqing, Zhejiang, China. We are a high-tech enterprises specialized in , including designing, developing, producing and selling. Our main products are: relay, timer, electric meter, counter, AC contactor, temperature controller, elevator push button switch and etc.

Our products sell very well in domestic market, and we also commit our-self to developing the international market. Our products are exported to the Middle East, Southeast Asia, Europe, America and other more than 30 countries and regions. Moreover, we have gained wide praise and recognition of all clients with excellent quality. We spare no effort to offer first - class pre-sale, in-sale and after-sale service.

We have an outstanding professional technical team, with independent innovation and development capabilities. Serve the customer in every detail is key to our services. We can provide customers with professional design, development of products, and to provide a full range of electrical solutions according to your needs. We have a number of product patents, and strictly follow the ISO9001 quality management. Our productions have been passed CE, UL certification and so on based on high quality.

We always stick to the enterprise culture as: quality first, honesty and trustworthiness, seeking for greater perfection, pioneering and innovation. We would repay our customers with our most sincere services. And we are looking forward to further and deeper cooperation with you to create a win-win brilliance.

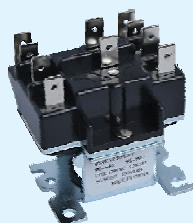




01-04 **High Power/ Fan Relay**



05-10 **Motor Start Potential Relay**



11-12 **Switching Relay**



13-14 **Potential Relay**



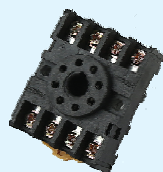
15-16 **Air Conditional Relay**



17-20 **Electromagnetic Relay Series**



21-23 **Time Relay**



24 **Relay Socket**



25-26 **Latching /Memory / Electronic Step Relay**



27-28 **Phase Control Relay**



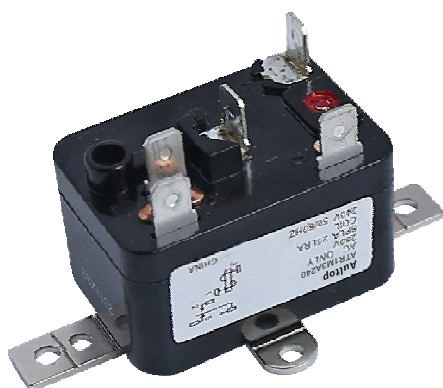
29-31 **Digital Programmable Time Switch**



32-34 **AC Contactor**



35-36 **Hour Meter/Counter**



Features

- 1) 16A switching capability
- 2) 2.5kV dielectric strength(between coil and contacts)
- 3) Panel mount types available
- 4) Environmental friendly product(RoHS COMPLIANT)
- 5) Outline Dimensions: 47.0×32.0×28.5mm

Ordering Information

aultop relay	type	mount	contact arrangement	coil voltage form	coil voltage	cunstomer special code
ATR	1	M	1	D	24	
		Metal Bracket	1: Forma A 2: Forma B 3: Forma C	D: DC A: AC	AC: 6 TO 277VAC DC: 6 TO 120VDC	

Contact Data

Contact arrangement:	1A, 1B, 1C
Contact resistance:	50mΩ max.(at 1A 24VDC)
Contact Material	Silver alloy
Contact rating: (Res. Load)	Form A: 16A 250VAC, resistive load Form B: 8A 250VAC, general load Form C: 16A 250VAC, resistive load
Max. Switching Voltage:	250VAC
Max. Switching Current:	16A
Max. Switching Power:	4000VAC
Mechanical endurance:	1×10 ⁶ OPS
Electrical endurance:	Form A: SPST-NO 1×10 ⁵ OPS(16A 250VAC, Resistive load, at 65℃ 1s on 9s off) Form B: SPST-NC 3×10 ⁴ OPS(8A 250VAC, General use, at 40℃ 1s on 9s off) Form C: SPDT-NO+NC 1×10 ⁵ OPS(16A 250VAC, Resistive load, at 65℃ 1s on 9s off)

Coil Power

Coil Power
DC type: 2.1W; AC type: 3.5VA

Characteristics

Insulation resistance		500MΩ max.(at500VDC)
Dielectric strength	Between coil & contacts	2500VAC 1min
	Between open contact	1000VAC 1min
Operate time(at nomi. Volt.)		DC type: 25ms Max.
Release time(at nomil. Volt.)		DC type: 25ms Max.
Temperature rese(at nomil. Volt.)		90K Max.
Shock resistance(Functional)		147m/s ² 11ms

Vibration resistance	10Hz to 55Hz 2.54mm DA
Ambient temperature	-40℃ to 65℃
Humidity	5% to 85% RH
Termination	QC
Unit weight	Approx. 71g
Construction	Dust protected

Notes: The data shown above are initial values.

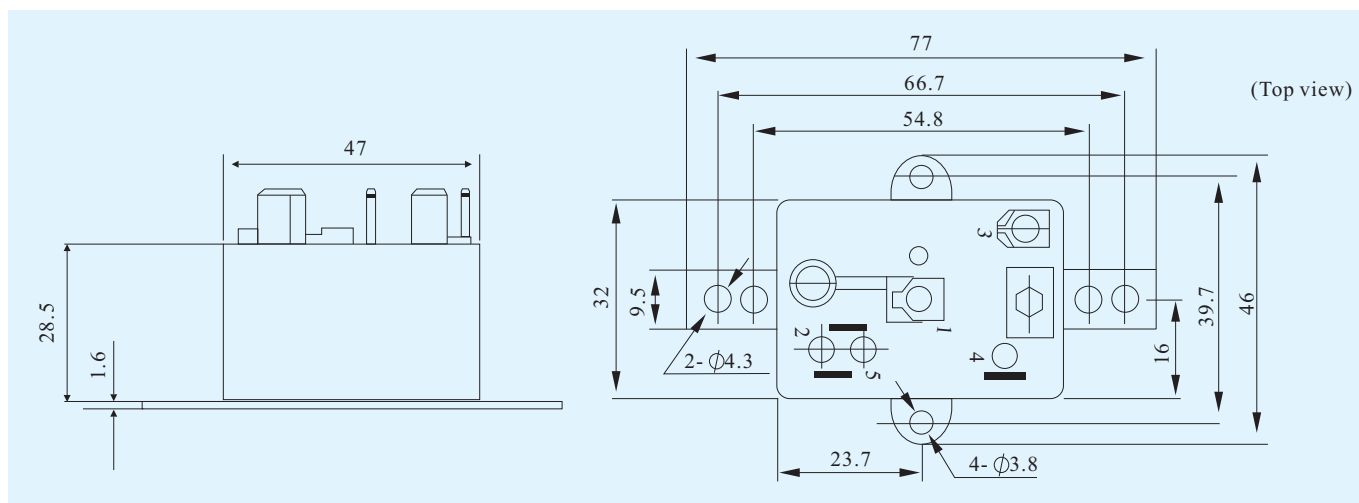
Coil Data At 23℃

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC	Coil Resistance Ω
6	4.50	0.6	6.6	17.5×(1±10%)
9	6.75	0.9	9.9	40×(1±10%)
12	9.00	1.2	13.2	70×(1±10%)
24	18.00	2.4	26.4	280×(1±10%)
48	36.00	4.8	52.8	1120×(1±10%)
120	90.00	12	132	7000×(1±10%)

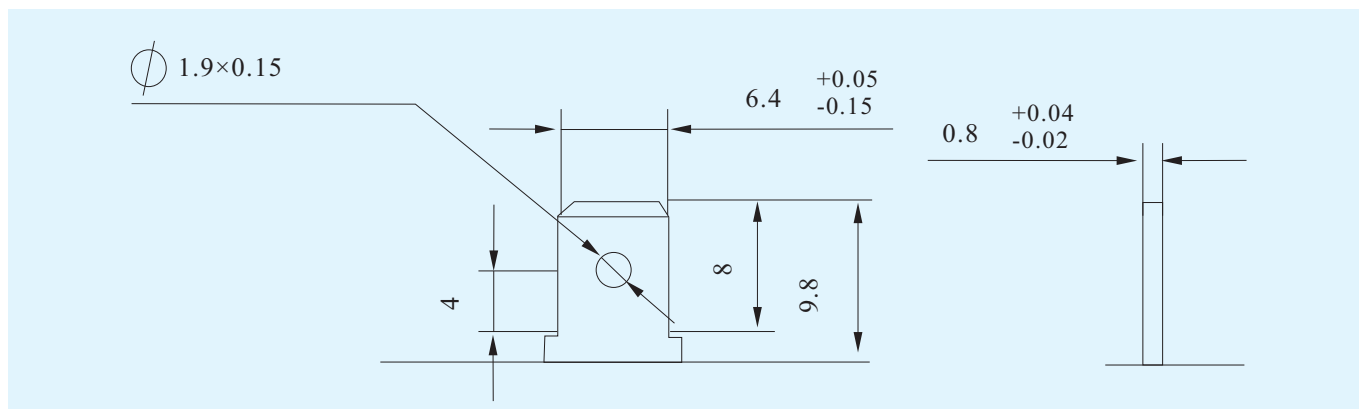
Nominal Voltage VAC	Pick-up Voltage VAC max.	Drop-out Voltage VAC min.	Max. Voltage VAC	Coil Resistance Ω
6	5.1	1.2	6.6	4.8×(1±10%)
12	10.2	2.4	13.2	19×(1±10%)
24	20.4	4.8	26.4	90×(1±10%)
48	40.6	9.6	52.8	300×(1±10%)
120	102.0	24	132	2000×(1±10%)
240	204.0	48	264	7200×(1±10%)
277	235.0	55.4	304.7	11000×(1±10%)

Note: Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time

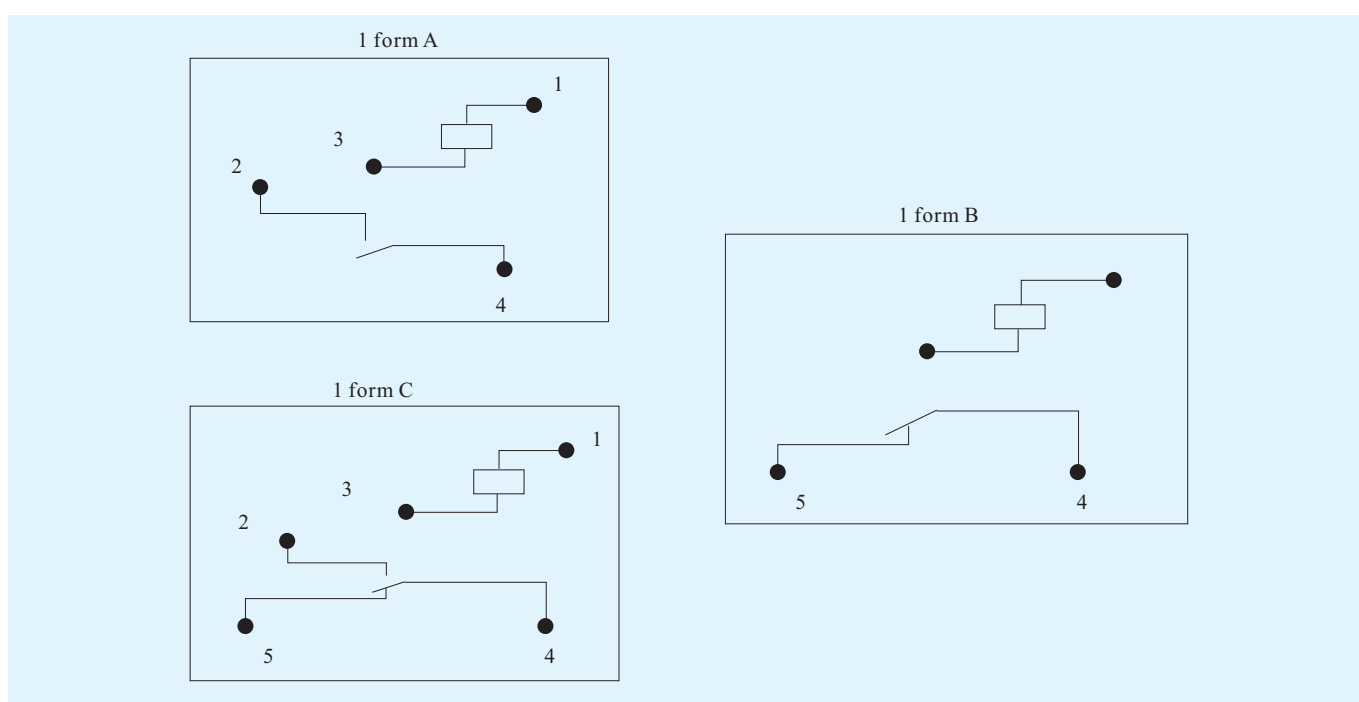
Outline Dimensions



Terminals Type



Wiring Diagram





Features

- 1) 25A switching capability
- 2) 2kV dielectric strength(between coil and contacts)
- 3) Panel mount types available
- 4) Environmental friendly product(RoHS COMPLIANT)
- 5) Outline Dimensions: 47.0 × 32.0 × 28.5mm

Ordering Information

Aultop Relay	Type	Mount	Contact Arrangement	Coil Voltage Form	Coil Voltage	Cunsumer Special Code
ATR	2	M	1	D	24	
		Metal Bracket	1: Forma A 2: Forma B 3: Forma C 4: 1A + 1B	D: DC A: AC	AC: 6 TO 277VAC DC: 6 TO 120VDC	

Contact Data

Contact Arrangement:	1A, 1B, 1C, 1A+1B
Contact Resistance:	200mΩ max.(at 1A 24VDC)
Contact Material	AgCdO
Contact Rating (res. Load)	18A 227VAC
Max. Switching Voltage:	277VAC
Max. Switching Current:	18A
Max. Switching Power:	4986VA
Mechanical Endurance:	1×10 ⁶ OPS
Electrical Endurance:	5×10 ⁴ OPS(25A 277VAC, Resistive load, at 65℃ 1s on 9s off)
	3×10 ⁴ OPS(3A 277VAC, General use, at 65℃ 1s on 9s off)

Coil Power

Coil Power
DC type: 2.4W; AC type: 4.0VA

Characteristics

Insulation Resistance		500MΩ max.(at500VDC)
Dielectric Strength	Between Coil & Contacts	2500VAC 1min
	Between Open Contact	1000VAC 1min
Operate Time(at Nomi. Volt.)		DC type: 25ms Max.
Release Time(at Nomil. Volt.)		DC type: 25ms Max.
Temperature Rese(at Nomil. Volt.)		90K Max.
Shock Resistance(functional)		98m/s ² 11ms

Vibration Resistance	10Hz to 55Hz 0.5mm DA
Ambient Temperature	-40℃to 65℃
Humidity	5% to 85% RH
Termination	QC
Unit Weight	Approx. 74g
Construction	Dust protected

Notes: The data shown above are initial values.

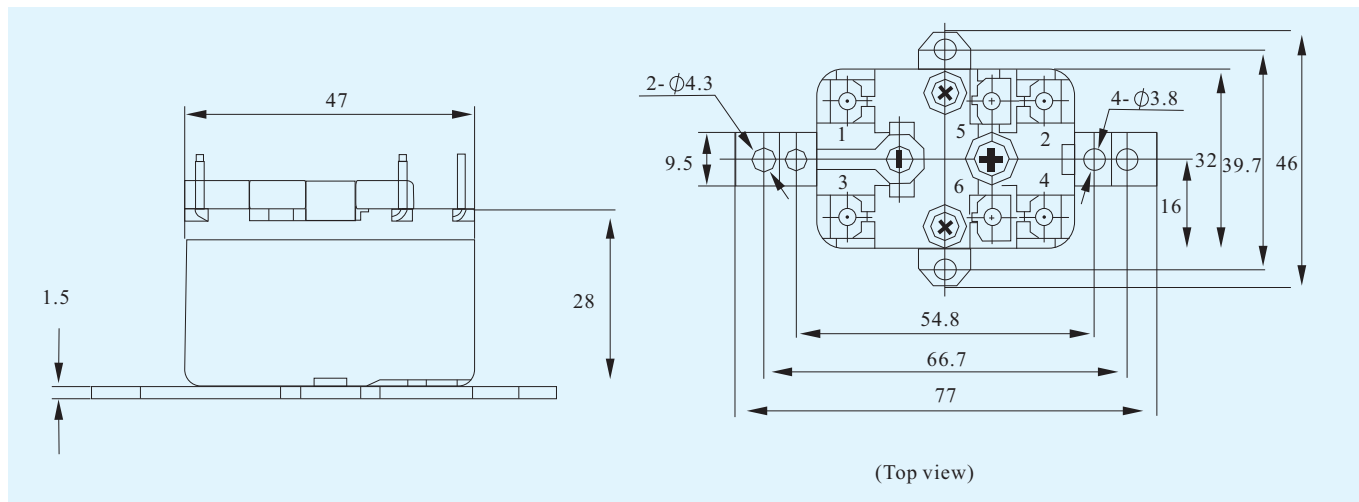
Coil Data At 23℃

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC	Coil Resistance Ω
6	4.50	0.6	6.6	17.5×(1±10%)
9	6.75	0.9	9.9	40×(1±10%)
12	9.00	1.2	13.2	70×(1±10%)
24	18.00	2.4	26.4	280×(1±10%)
48	36.00	4.8	52.8	1120×(1±10%)
120	90.00	12	132	7000×(1±10%)

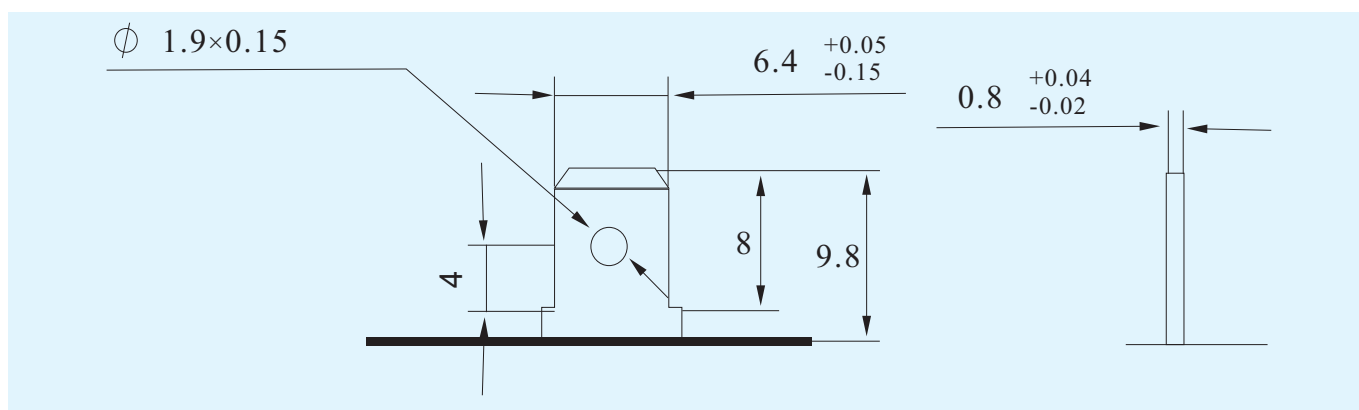
Nominal Voltage VAC	Pick-up Voltage VAC max.	Drop-out Voltage VAC min.	Max. Voltage VAC	Coil Resistance Ω
6	5.1	1.2	6.6	4.8×(1±10%)
12	10.2	2.4	13.2	19×(1±10%)
24	20.4	4.8	26.4	90×(1±10%)
48	40.6	9.6	52.8	300×(1±10%)
120	102.0	24	132	2000×(1±10%)
240	204.0	48	264	7200×(1±10%)
277	235.0	55.4	304.7	11000×(1±10%)

Note: Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time

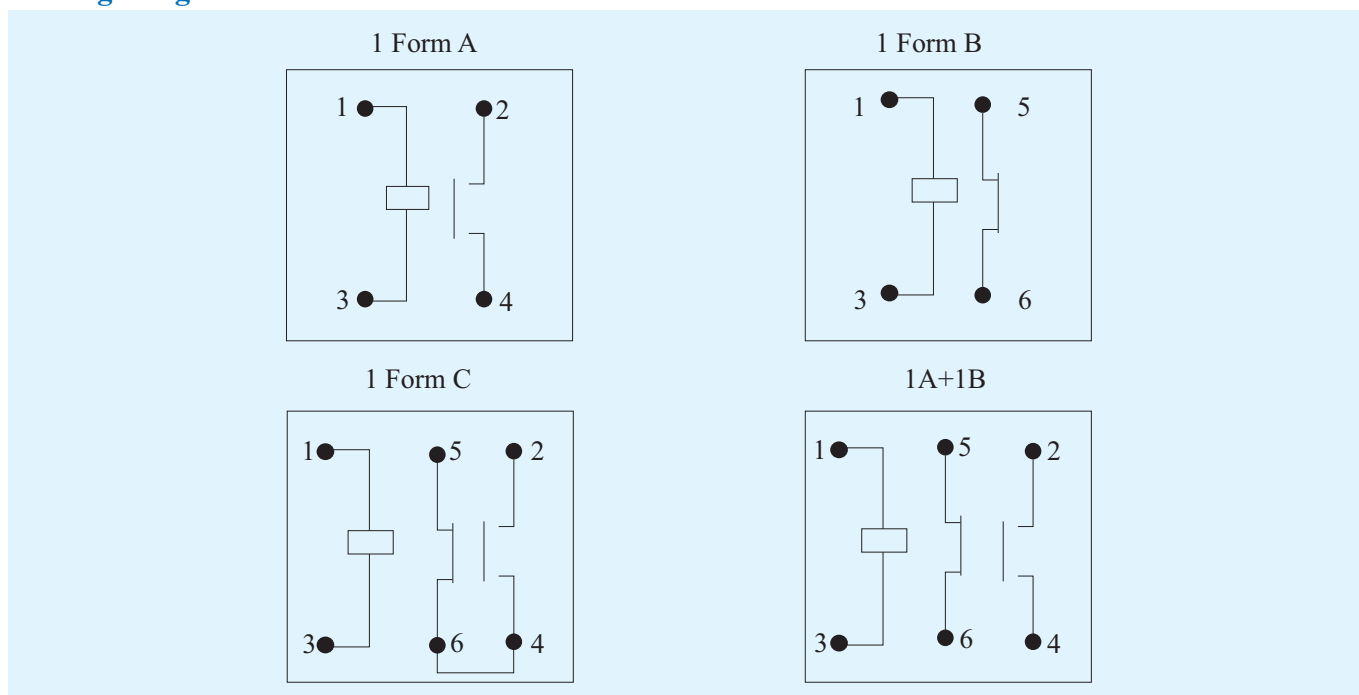
Outline Dimensions

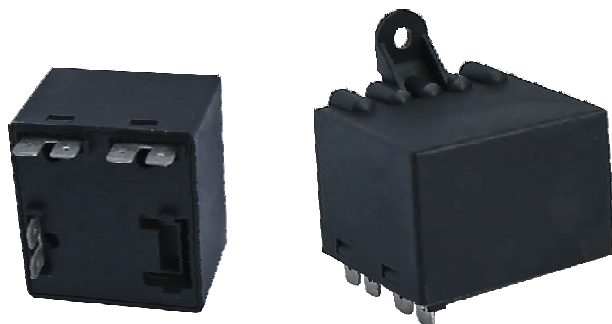


Terminals Type



Wiring Diagram





Features

- 1) 50A switching capability
- 2) 1 NC configuration available
- 3) 250# quick connect termination
- 4) Various of mounting positions
- 5) Environmental friendly product(RoHS COMPLIANT)
- 6) Outline Dimensions: 51.2×6.6×6.5mm

Ordering Information

Aultop Relay	Type	Mount	Coil Number	Operation Characteristics	Operation Position	Customer Special Code
ATR	3	D	2	A	6	
		plastic tab mount on top	see table for operating characteristics	see table for operating characteristics	1,2,3,4,5,6,	

Contact Data

Contact Arrangement:	1NC(SPST, 1 Pole Normally Closed)
Contact Resistance:	100mΩ max.(at 1A 24VDC)
Contact Material	Silver alloy
Contact Rating:(res. Load)	16A(make and break) 400VAC cosφ=0.85)
	35A(break only) 400VAC cosφ=0.85)
	50A(make and break) 400VAC cosφ=0.85)
Mechanical Endurance:	7.5×10 ⁵ OPS
Electrical Endurance:	SPST-NC: 5×10 ⁵ OPS(16A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)
	SPST-NC: 2×10 ⁵ OPS(35A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)
	SPST-NC: 1×10 ⁵ OPS(50A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)

Characteristics

Weight:	Approx.95g
Termination:	QC
Construction:	Dust protected

Coil

Coil Power	Approx. 5VA
Coil Voltage:	See table below
Coil Resistance:	See table below
Insulation System:	ClassB

Notes:The data shown above are initial values.

Operating Characteristics At 50Hz

Coil number		2		3		4		5		6		7		8		9	
Vmax at 40℃(V)		299		338		378		356		452		151		530		228	
Resistance (1±10%)Ω at 25℃		5600		7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
A	120-130											111-124	20-45			111-124	35-77
B	130-140											120-134	20-45			120-134	35-77
C	150-160	140-153	40-90									130-144	20-45			130-144	35-77
D	160-170	150-163	40-90	150-163	40-90							140-153	20-45			140-153	35-77
E	170-180	162-175	40-90	162-175	40-90											149-163	35-77
F	180-190	171-184	40-90	171-184	40-90			180-195	40-105							157-172	35-77
G	190-200	180-193	40-90	180-195	40-105	180-195	40-105	189-205	40-105							168-182	35-77
H	200-220	186-215	40-90	190-215	40-105	195-224	50-110	186-214	60-133							178-192	35-77
I	220-240	205-234	40-105	208-239	50-110	204-233	50-110	204-233	60-133							183-213	35-77
L	240-260	224-252	40-105	224-252	50-110	223-259	50-110	223-252	60-133	223-252	60-130					203-231	35-77
M	260-280	243-271	40-105	239-270	50-110	242-272	50-110	242-272	60-133	239-268	60-135			239-268	75-170		
N	280-300			260-289	50-110	262-290	60-121	262-290	60-133	258-287	60-135			258-287	75-170		
O	300-320					280-310	60-121	280-310	60-133	277-305	60-135			277-305	75-170		
P	320-340					300-328	60-121	300-328	60-154	295-324	60-135			295-324	75-170		
Q	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
R	350-370													323-352	75-180		
S	360-380													332-361	75-180		

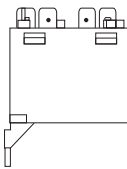
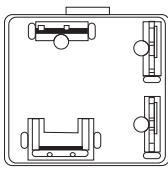
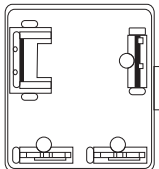
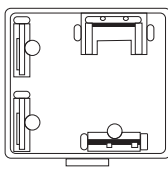
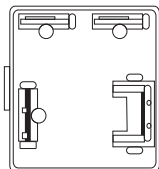
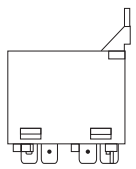
Notes:H.P.U.means Approximate pick-up value at 90℃ P.U.means pick-up value at 25℃D.O.means drop out value at 25℃.

Operating Characteristics At 60Hz

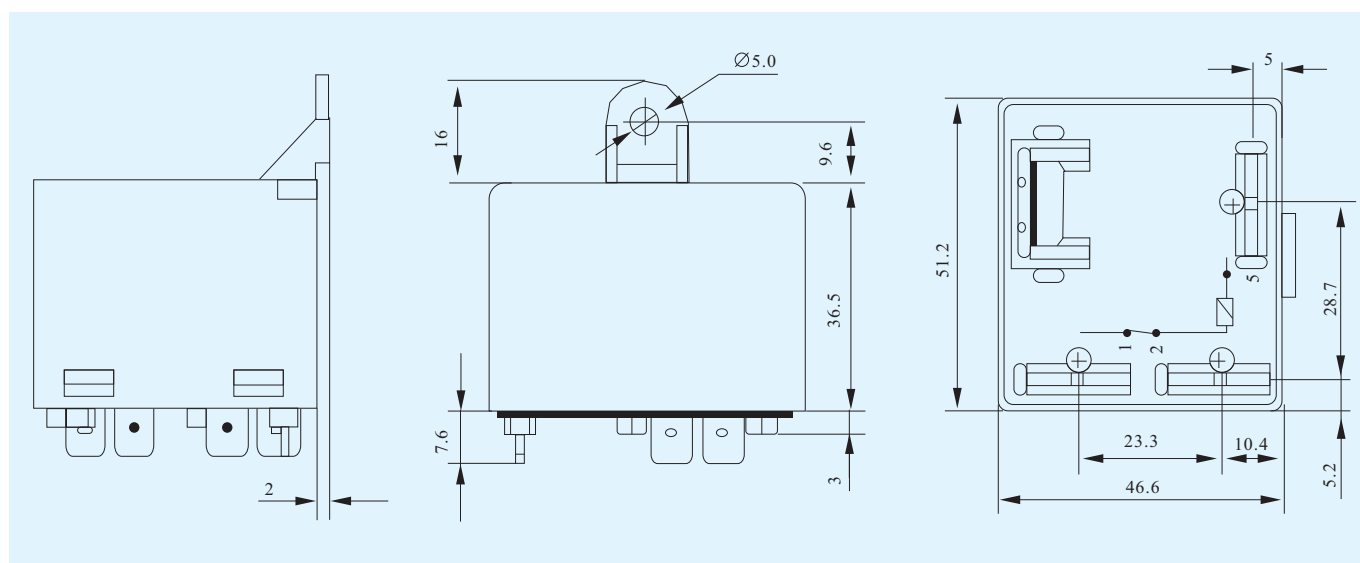
Coil number		2		3		4		5		6		7		8		9	
Vmax at 40℃(V)		332		375		420		395		502		168		588		253	
Resistance (1±10%)Ω at 25℃		5600		7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
AA	120-130											111-124	20-45			111-124	35-77
AB	130-140											120-134	20-45			120-134	35-77
AC	150-160											130-144	20-45			130-144	35-77
AD	160-170	150-163	40-90									140-153	20-45			140-153	35-77
AE	170-180	162-175	40-90									149-163	20-45			149-163	35-77
AF	180-190	171-184	40-90					180-195	40-105							157-172	35-77
AG	190-200	180-193	40-90	180-195	40-105			189-205	40-105							168-182	35-77
AH	200-220	186-215	40-90	190-215	40-105	195-224	60-121	186-214	60-130							178-192	35-77
AI	220-240	205-234	40-90	208-239	50-110	204-233	60-121	204-233	60-130							183-213	35-77
AL	240-260	224-252	40-105	224-252	50-110	223-259	60-121	223-252	60-130							203-231	35-77
AM	260-280	243-271	40-105	239-270	50-110	242-272	60-121	242-272	60-140	239-268	60-135					221-250	35-77
AN	280-300			260-289	50-110	262-290	60-121	262-290	60-140	258-287	60-135			258-287	75-170		
AO	300-320					280-310	60-121	280-310	60-140	277-305	60-135			277-305	75-170		
AP	320-340					300-328	60-121	300-328		295-324	60-135			295-324	75-170		
AQ	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
AR	350-370													323-352	75-180		
AS	360-380													332-361	75-180		

Notes:H.P.U.means Approximate pick-up value at 90℃, P.U.means pick-up value at 25℃,D.O.means drop out value at 25℃.

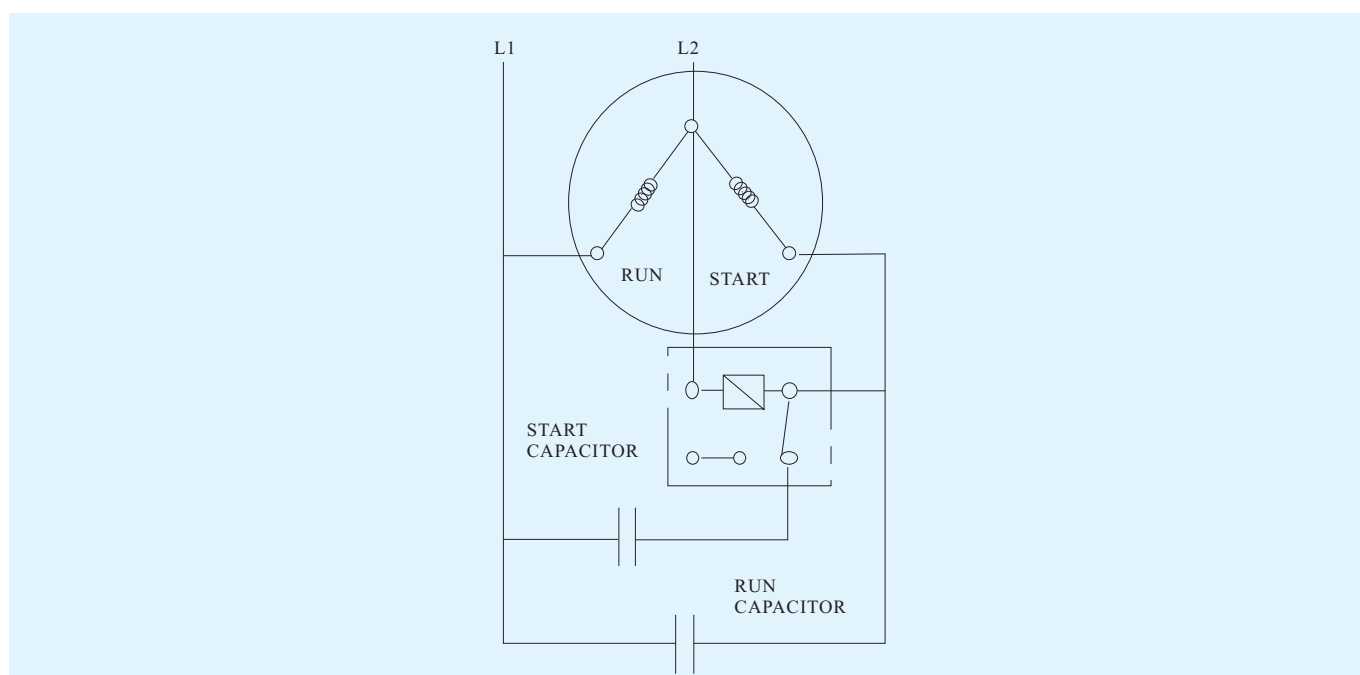
Operating Position

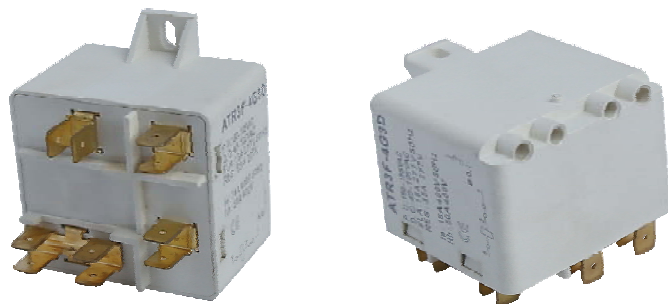
	1	2	3	4	5	6
Plastic Tab Mount On Top						

Outline Dimensions



Wiring Diagram





Features

- 1) 50A switching capability
- 2) 1 NC configuration available
- 3) 250# quick connect termination
- 4) Various of mounting positions
- 5) Environmental friendly product(RoHS COMPLIANT)
- 6) Outline Dimensions: 51.2~6.6~6.5mm

Ordering Information

Aulop Relay	Type	Mount	Coil Number	Operation Characteristics	Operation Position	Customer Special Code
ATR	3	F	2	A	6	
		Panel mount (screws mount)	see table for operating characteristics	see table for operating characteristics	1,2,3,4,5,6,	

Contact Data

Contact Arrangement:	1NC(SPST, 1 Pole Normally Closed)
Contact Resistance:	100mΩ max.(at 1A 24VDC)
Contact Material	Silver alloy
Contact Rating: (res. Load)	16A(make and break) 400VAC cosφ=0.85)
	35A(break only) 400VAC cosφ=0.85)
	50A(make and break) 400VAC cosφ=0.85)
Mechanical Endurance:	7.5×10 ⁵ OPS
Electrical Endurance:	SPST-NC: 5×10 ⁵ OPS(16A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)
	SPST-NC: 2×10 ⁵ OPS(35A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)
	SPST-NC: 1×10 ⁵ OPS(50A on and off 400VAC cosφ=0.7-0.8 at 25℃ 1s on 9s off)

Characteristics

Weight:	Approx.95g
Termination:	QC
Construction:	Dust protected

Coil

Coil Power	Approx. 5VA
Coil Voltage:	See table below
Coil Resistance:	See table below
Insulation System:	ClassB

Notes:The data shown above are initial values.

Operating Characteristics At 50Hz

Coil number		2		3		4		5		6		7		8		9	
Vmax at 40℃(V)		299		338		378		356		452		151		530		228	
Resistance (1±10%)Ωat 25℃		5600		7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
A	120-130											111-124	20-45			111-124	35-77
B	130-140											120-134	20-45			120-134	35-77
C	150-160	140-153	40-90									130-144	20-45			130-144	35-77
D	160-170	150-163	40-90	150-163	40-90							140-153	20-45			140-153	35-77
E	170-180	162-175	40-90	162-175	40-90											149-163	35-77
F	180-190	171-184	40-90	171-184	40-90			180-195	40-105							157-172	35-77
G	190-200	180-193	40-90	180-195	40-105	180-195	40-105	189-205	40-105							168-182	35-77
H	200-220	186-215	40-90	190-215	40-105	195-224	50-110	186-214	60-133							178-192	35-77
I	220-240	205-234	40-105	208-239	50-110	204-233	50-110	204-233	60-133							183-213	35-77
L	240-260	224-252	40-105	224-252	50-110	223-259	50-110	223-252	60-133	223-252	60-130					203-231	35-77
M	260-280	243-271	40-105	239-270	50-110	242-272	50-110	242-272	60-133	239-268	60-135			239-268	75-170		
N	280-300			260-289	50-110	262-290	60-121	262-290	60-133	258-287	60-135			258-287	75-170		
O	300-320					280-310	60-121	280-310	60-133	277-305	60-135			277-305	75-170		
P	320-340					300-328	60-121	300-328	60-154	295-324	60-135			295-324	75-170		
Q	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
R	350-370													323-352	75-180		
S	360-380													332-361	75-180		

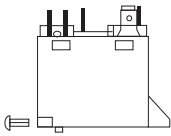
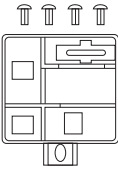
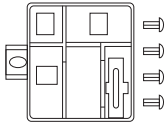
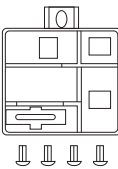
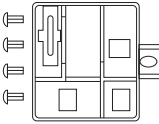
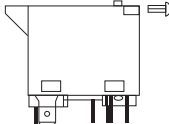
Notes:H.P.U.means Approximate pick-up value at 90℃ P.U.means pick-up value at 25℃D.O.means drop out value at 25℃.

Operating Characteristics At 60Hz

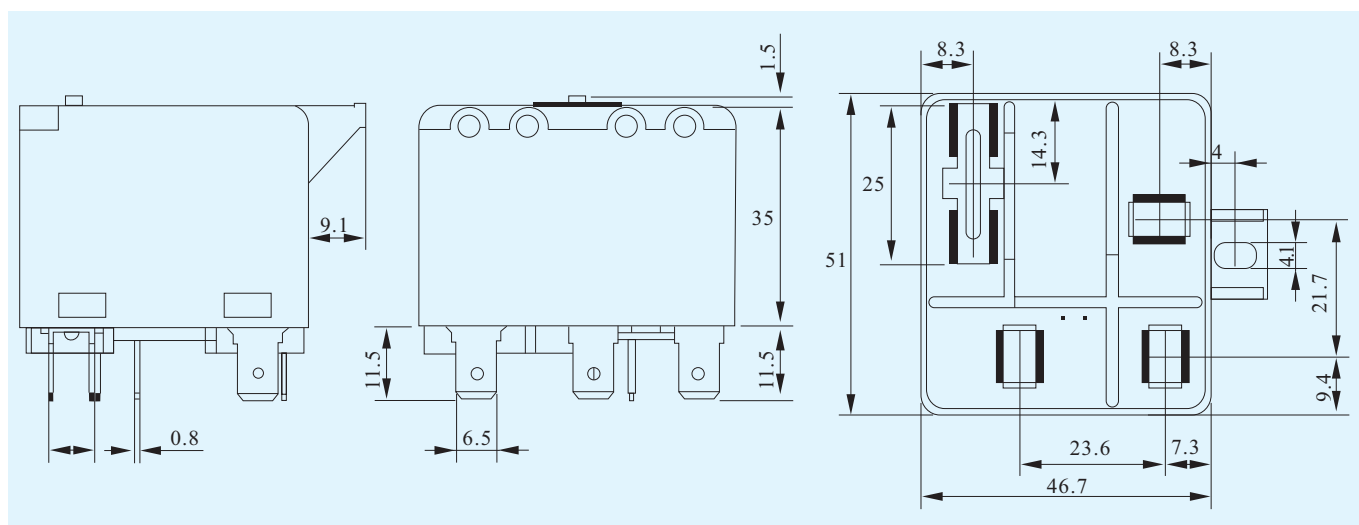
Coil number		2		3		4		5		6		7		8		9	
Vmax at 40℃(V)		332		375		420		395		502		168		588		253	
Resistance (1±10%)Ωat 25℃		5600		7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
AA	120-130											111-124	20-45			111-124	35-77
AB	130-140											120-134	20-45			120-134	35-77
AC	150-160											130-144	20-45			130-144	35-77
AD	160-170	150-163	40-90									140-153	20-45			140-153	35-77
AE	170-180	162-175	40-90									149-163	20-45			149-163	35-77
AF	180-190	171-184	40-90					180-195	40-105							157-172	35-77
AG	190-200	180-193	40-90	180-195	40-105			189-205	40-105							168-182	35-77
AH	200-220	186-215	40-90	190-215	40-105	195-224	60-121	186-214	60-130							178-192	35-77
AI	220-240	205-234	40-90	208-239	50-110	204-233	60-121	204-233	60-130							183-213	35-77
AL	240-260	224-252	40-105	224-252	50-110	223-259	60-121	223-252	60-130							203-231	35-77
AM	260-280	243-271	40-105	239-270	50-110	242-272	60-121	242-272	60-140	239-268	60-135					221-250	35-77
AN	280-300			260-289	50-110	262-290	60-121	262-290	60-140	258-287	60-135			258-287	75-170		
AO	300-320					280-310	60-121	280-310	60-140	277-305	60-135			277-305	75-170		
AP	320-340					300-328	60-121	300-328		295-324	60-135			295-324	75-170		
AQ	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
AR	350-370													323-352	75-180		
AS	360-380													332-361	75-180		

Notes:H.P.U.means Approximate pick-up value at 90℃, P.U.means pick-up value at 25℃, D.O.means drop out value at 25℃.

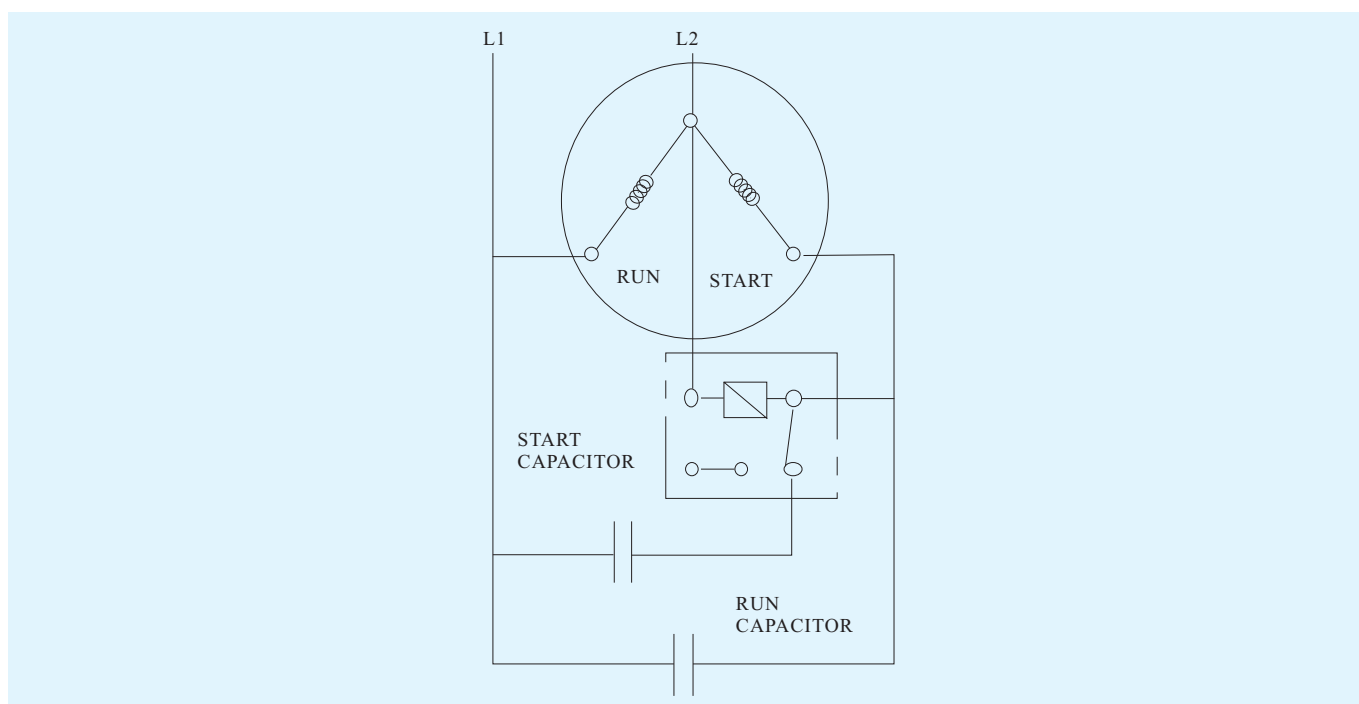
Operating Position

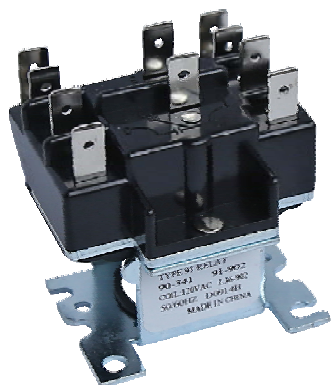
	1	2	3	4	5	6
Panel Mount (screws Mount)						

Outline Dimensions



Wiring Diagram





Features

- 1) 2 POLE switching relay.
- 2) CONTACT: DPDT
- 3) 250# Quick connect termination
- 4) Used on heat pumps, vending machines, fans, and heating and air conditioning

Ordering Information

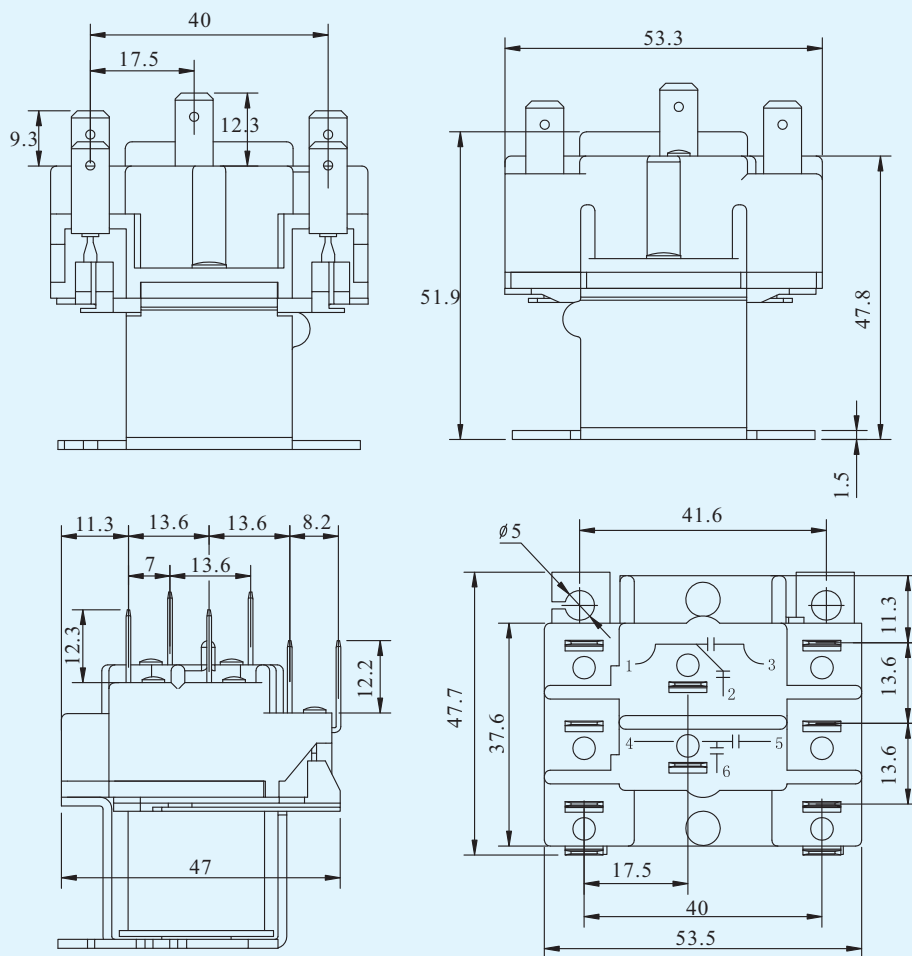
Aultop Relay	Type	Coil Voltage Form	Coil Voltage	Cunstomer Special Code
ATR	4	A	340	
		A: AC D: DC,	340: 24V 341: 110/120V 342: 208/240V	

Characteristics

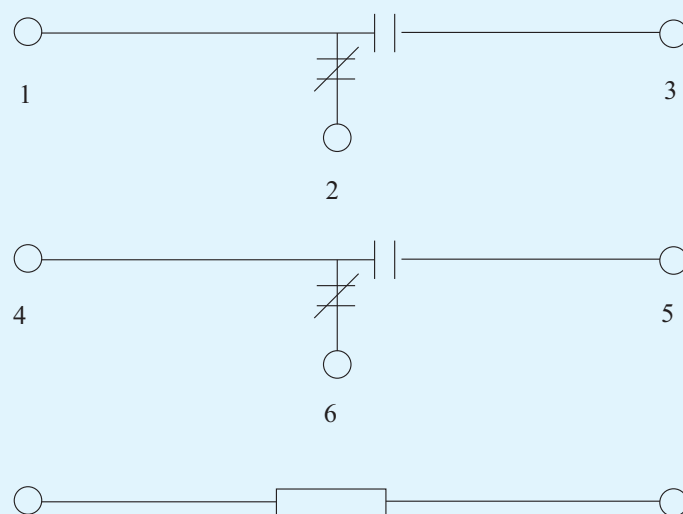
Weight:	Approx.160g
Termination:	QC
Construction:	Dust protected

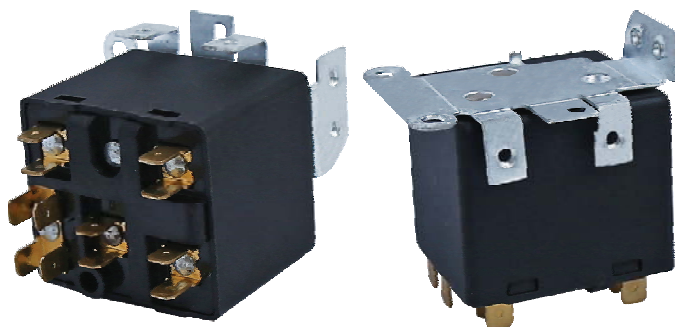
RT NO.	Contact Voltage Vac	Amp			Coil Voltage Vac	Contact Style	Configurations	
		FLA	LRA	Res.			Poles	Poles
							1-2-3	4-5-6
ATR4-340	125	12	60	15	24	DPDT	Power	Power
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				
ATR4-341	125	12	60	15	120	DPDT	Power	Power
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				
ATR4-342	125	12	60	15	208-240	DPDT	Power	Power
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				
ATR4-343	125	12	60	15	24	DPDT	Power	Pilot
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				
ATR4-344	125	12	60	15	120	DPDT	Power	Pilot
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				
ATR4-345	125	12	60	15	208-240	DPDT	Power	Pilot
	250-277	6	35	15				
	480	3	18	12.5				
	600	3	14	-				

Outline Dimensions



Wiring Diagram





Features:

- 1) 35A switching capability
- 2) 1 NC configuration available
- 3) Quick connect termination
- 4) Various of mounting posibtions
- 5) Used on heat pumps, vending machines, fans, and heating and air conditioning

Ordering Information:

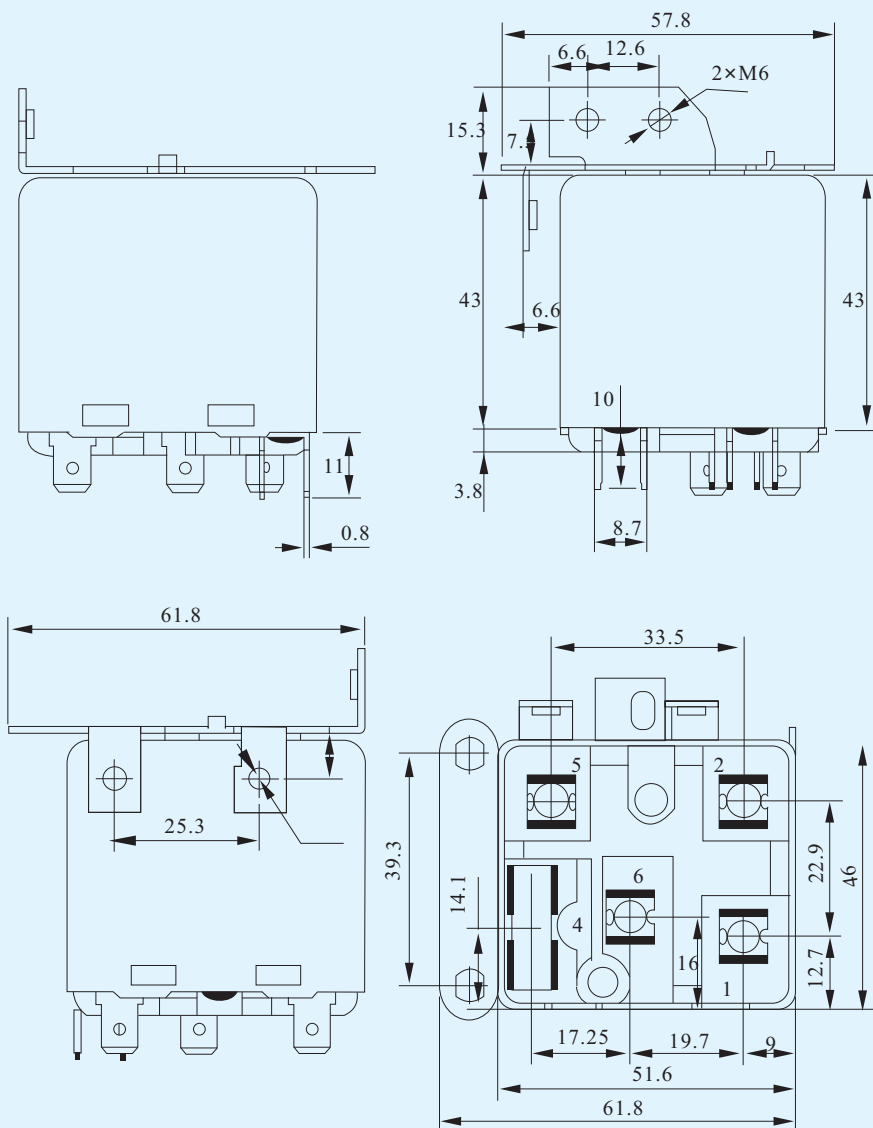
Aultop Relay	Type	Coil Voltage Form	Coil Voltage	Cunstomer Special Code
ATR	5	63 63: 170V 65: 332V 67: 420V 69: 336V 71: 420V 551: 332V 64: 395V 66: 395V 68: 500V 70: 253V 550: 130V	A A: AC D: DC,	

RT NO.	Coil Voltage Vac	Pick Up Min.	Pick Up Max.	Drop-out Max
ATR563A	170	136	156	58
ATR564A	395	257	278	123
ATR565A	332	165	185	93
ATR566A	395	210	230	123
ATR567A	420	292	318	130
ATR568A	500	322	348	138
ATR569A	336	177	198	108
ATR570A	253	152	176	80
ATR571A	420	209	235	124
ATR5550A	130	111	134	42
ATR5551A	332	243	271	91

Characteristics

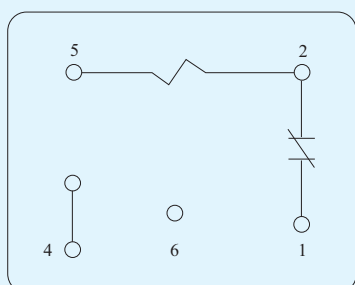
Weight:	Approx.95g
Termination:	QC
Construction:	Dust protected

Outline Dimensions

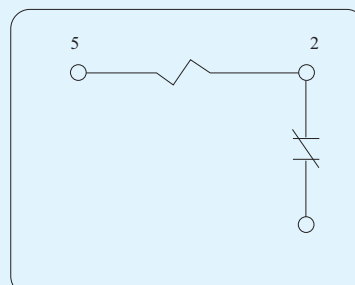


Wiring Diagram

ATR563A
ATR564A
ATR565A
ATR566A
ATR567A
ATR568A
ATR569A
ATR570A
ATR571A



ATR5550A
ATR5551A





Features

- 1) A High-capacity, High-dielectric-strength relay,Compatible with Momentary Vlotage Drops
- 2) Wide-range AC-activated coil that handles 100 to 120 or 200 to 240VAC at either 50 or 60Hz.
- 3) 250# quick connect termination
- 4) Miniatre size for maximum switching power,particularly for inductive loads

Ordering Information

Aultop Relay	Type	Number Of Poles	Contact Form	Terminal Shap	Mounting Construction	Special Functions
ATR	G7L	1	A	T	UB	J
		1: 1POLE 2: 2POLE	SPST-NO DPST-NO	Quick connect terminals(250#)	Upper bracket	with test button

Contact Data

Contact Form	ATR-G7L-1A-TUB ☐		ATR-G7L-2A-TUB ☐	
	Load Resistive load	Inductive load (Cos ϕ =0.4)	Resistive load	Inductive load
Item	Double Break			
Contact Type	Ag Alloy			
Contact Material	30A at 220VAC	25A at 220VAC	25A at 220VAC	
Rated Load	30A		25A	
Rated Carry Current	250VAC			
Max. Switching Current	30A		25A	

Characteristics

Weight:	Approx.90g
Termination:	QC
Construction:	Dust protected
Ambient Operationg Temperature	-25℃ to 60℃ (with no icing or condensation)

Coil Ratings

Item	Raated Current (ma)	Coil Resistance (Ω)	Coil Inductance (h)		Must Operate Voltage	Must Release Voltage	Max. Permissible Voltage	Power Consumption (va-w)
Rated Voltage			Armature ON	Armature OFF	On The Bases Of Rated Voltage			
12VAC	142				75%Max	15% Min.	110%	Approx. 1.7to 2.5
24VAC	71							
50VAC	34							
100-120VAC	17.0 to 20.4				75V Max.	18V Min.	132V	
200-240VAC	8.5 to 10.2				150V Max.	36V Min.	264V	
6VDC	317	18.9	0.09	0.21	75% Max	15% Min.	110%	Approx. 1.9
12VDC	158	75	0.37	0.88				
24VDC	79	303	1.42	3.54				
48VDC	40	1220	6.1	15.3				
100VDC	19	5260	21.3	60.0				

Note:

1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/-20% for AC rated current and 15% for DC coil resistance.
2. The inductances shown above are reference values.
3. Performance characteristic data are measured at a coil temperature of 23°C.
4. The Maximum allowable coil voltage refers to the maximum value in varying range of operating power voltage, measured at ambient temperature at 23°C.
5. The "to" (for example "100" to "120") represents the range of rated voltages.

Operating Characteristics At 50hz

Contact Resistance *1		50 m Ω Max.
Operate Time *2		30 ms Max
Release Time *3		30 ms Max
Max. Operating Frequency	Mechanical	1,800 operations/hr
	Rated Load	1,800 operations/hr
Insulation Resistance *3		1,000 M Ω min
Dielectric Strength	Between Coil And Contacts	4,000 VAC min. 50/60Hz for 1 min
	Between Contacts Of Same Polarity Coil And Contacts	2,000VAC, 50/60Hz for 1 min
	Between Contacts Of Different Polarity (dpst-no Model)	
Impulse Withstand Voltage		1,000V between coil and contact *4
Vibration Resistance	Destruction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude)
Shock Resistance	Destruction	1,000 m/s ²
	Malfunction	100 m/s ²
Endurance	Mechanical	1,000,000 operations min. (at 1,800 operations/hr)
	Electrical *5	1,000,000 operations min. (at 1,800 operations/hr under rated load)
Failure Rate (p Level) (reference Value *6)		100mA at 5VDC

Note:

*1. The values given above are initial values.

*2. Measurement conditions: 5VDC, 1A, voltage drop method.

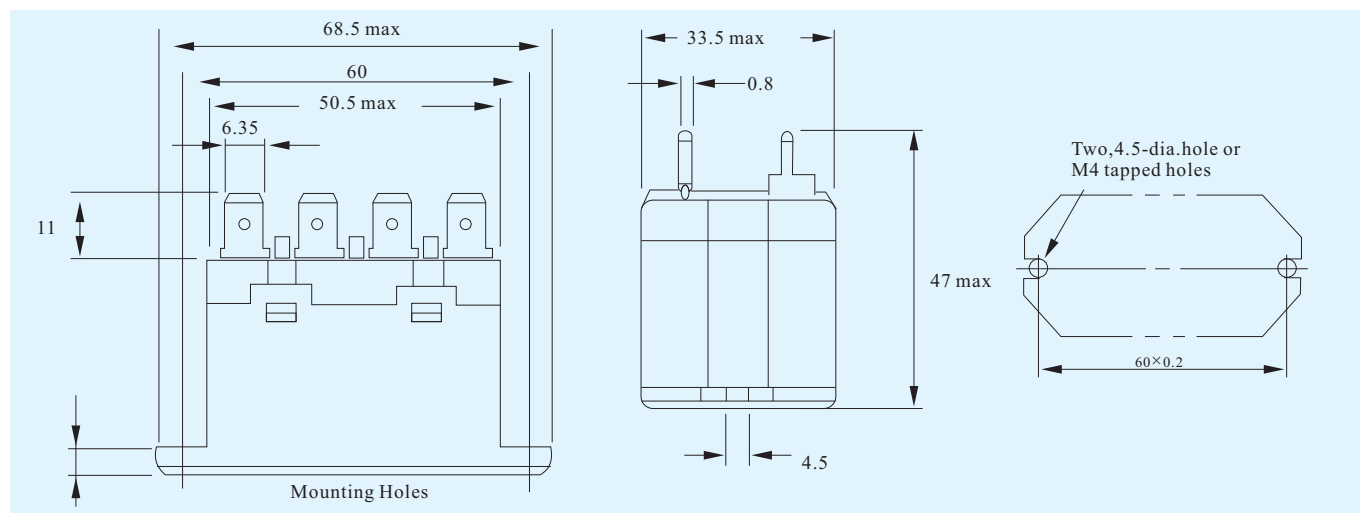
*3. Measurement conditions: The insulation resistance was measured with a 500-VDC megohmmeter at the same locations as the dielectric strength was measured.

*4. JEC-212 (1981) Standard Impulse Wave type(12.2x50 μ s).

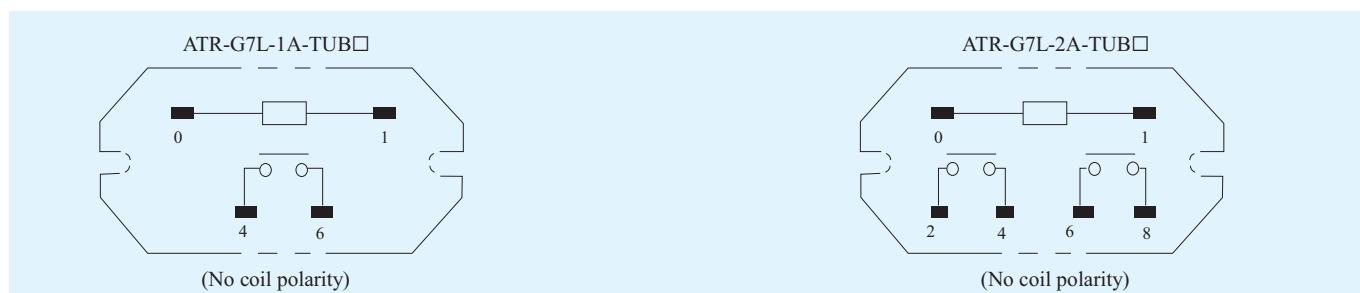
*5. Ambient temperature: 23°C.

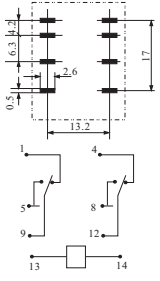
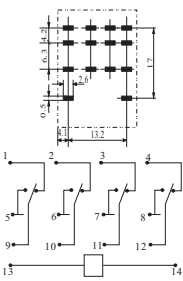
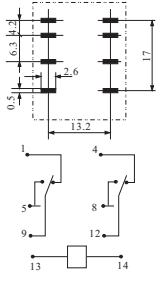
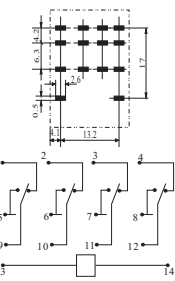
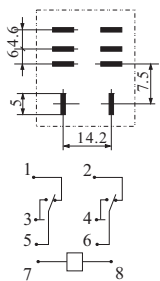
*6. This value was measured at a switching frequency of 60 operations/min.

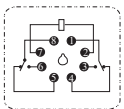
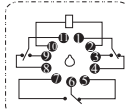
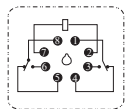
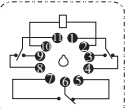
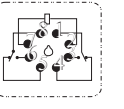
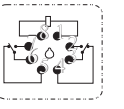
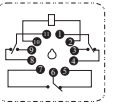
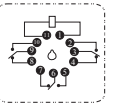
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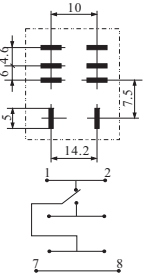
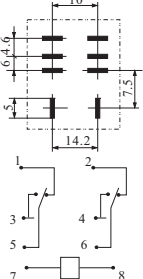
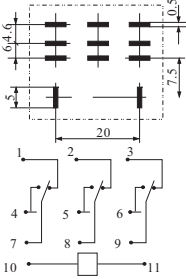
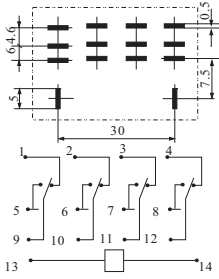


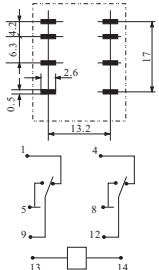
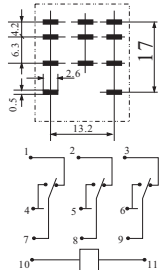
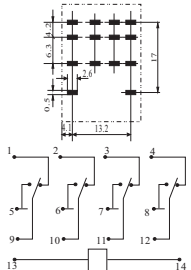
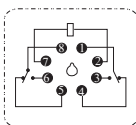
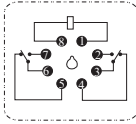
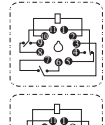
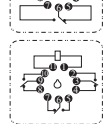
Terminal Arrangement/internal Connerctions



Classification		Electromagnetic Relay Series				
Model		ATRM02	ATRM04	55.32	55.34	56.02
Appearance						
Dimensions(mm)		27.5×21×34	27.5×21×34	27.5×21×34	27.5×21×34	27.5×21×34
Ontact Form		2Z	4Z	2Z	4Z	2Z
Contact Capacity		5A 250VAC DC28V		5A 250VAC DC28V		
Coil Voltage	DC	6V~220V		6V~220V		
	AC	6V~380V		6V~380V		
Coil Power		DC:≤2.5W AC:≤40.0VA		DC:≤2.5W AC:≤4.0VA		
Pick-up		DC:≤75% AC:≤80%		DC:≤75% AC:≤80%		
Drop-out		DC:≥10% AC:≥30%		DC:≥10% AC:≥30%		
Contact Resistance		≤50m Ω		≤50m Ω		
Insulation Resistance		≥100M Ω		≥100M Ω		
Life	Electrical	10 ⁵ times		10 ⁵ times		
	Mechanical	10 ⁷ times		10 ⁷ times		
Dielectric Strength	Between Open Contacts	1000V rms		1000V rms		
	Between Coil & contacts	1500V rms		1500V rms		
Mounting Form		Socket		Socket		
Operating Temperature		-40℃~+55℃		-40℃~+60℃		
Weight		About 35g		About 35g	About 35g	About 35g
Mounting Holes & bottom View						
Similar Products		HH52P MY2	HH54P MY4	HH52P MY2	HH54P MY4	HH62P LY2
Fitted Socket		PYF08A PYF08A-E PY08 PY08-0	PYF14A PYF14A-E PY14 PY14-0	PYF08A PYF08A-E PY08 PY08-0	PYF14A PYF14A-E PY14 PY14-0	PTF08A PTF08A-E PT08

Electromagnetic Relay Series					
ATRM62(60.12)	ATRM63(60.13)	ATRM72(70.2)	ATRM73(70.3)	JQX10F-2P(JTX)	JQX10F-3P(JTX)
					
37×33×53	37×33×53	37×33×53	37×33×53	34.5×34.5×52	34.5×34.5×52
2Z	3Z	2Z	3Z	2Z	3Z
10A		10A		10A 250VAC	
12V, 24V, 48V, 60V, 110V		12V, 24V, 48V, 60V, 110V		6V~220V	
12V, 24V, 48V, 60V, 110V, 220V, 240V		12V, 24V, 48V, 60V, 110V, 220V, 240V		6V~380V	
2.2VA(AC) 1.3W(DC)		2.2VA(AC) 1.3W(DC)		DC: ≤1.5W AC: ≤2.5VA	
DC: ≤75% AC: ≤80%		DC: ≤75% AC: ≤80%		DC: ≤75% AC: ≤80%	
DC: ≥10% AC: ≥30%		DC: ≥10% AC: ≥30%		DC: ≥10% AC: ≥30%	
≤50m Ω		≤50m Ω		≤50m Ω	
≥100m Ω		≥100m Ω		≥100m Ω	
10 ⁵ times		10 ⁵ times		10 ⁵ times	
10 ⁷ times		10 ⁷ times		10 ⁷ times	
1000 V rms		1000V rms		1000V rms	
1500V rms		1500V rms		1500V rms	
Socket		Socket		Socket	
-40℃~+55℃		-40℃~+55℃		-40℃~+55℃	
About 85g		About 85g		About 85g	
				 Model Q  Model T	 Model Q  Model T
MK2P	MK3P	MK2P	MK3P	Omron MK2P,MK3P	
90.22	90.23	90.22	90.23	PF083A PF083A-E PL08	PF113A PF113A-E PL11

Classification		Electromagnetic Relay Series			
Model		LY1,-S,-N,-F,-O	LY2,-S,-N,-F,-O	LY3,-S,-N,-F,-O	LY4,-S,-N,-F,-O
Appearance					
Dimensions(mm)		27.5×21.5×35	27.5×21.5×35	27.5×31×35	27.5×41×35
Contact Form		1Z	2Z	3Z	4Z
Contact Capacity		10A 250VAC DC28V			
Coil Voltage	DC	6~220V			
	AC	6~380V			
Coil Power		DC: ≤ 0.9W AC: ≤ 1.2VA			
Pick-up		DC: ≤ 75% AC: ≤ 80%			
Drop-out		DC: ≥ 10% AC: ≥ 30%			
Contact Resistance		≤ 50mΩ			
Insulation Resistance		≥ 100MΩ			
Life	Electrical	10 ⁵ times			
	Mechanical	10 ⁷ times			
Dielectric Strength	Between Open Contacts	1000V rms			
	Between Coil & Contacts	1500V rms			
Mounting Form		P.C.B & Socket 			
Operating Temperature		-40℃~+55℃			
Weight		About 35g	About 35g	About 53g	About 70g
Mounting Holes & Bottom View					
Similar Products		HH61P	HH62P	HH63P	HH64P
Fitted Socket		PTF08A PTF08A-E PT08	PTF08A PTF08A-E PT08	PT11 PTF11A	PTF14A PTF14A-E PT14
Remarks		With lamp:-N,FLANGE:-F, With button:-S,PCB:-O			

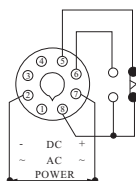
Electromagnetic Relay Series				
MY2,-S,-N-F,-O	MY3,-S,-N-F,-O	MY4,-S,-N-F,-O	MK2P-I,-S,-N	MK3P-I,-S,-N
				
27.5×21.5×35	27.5×21.5×35	27.5×21.5×35	34.5×34.5×52	34.5×34.5×52
2Z	3Z	4Z	2Z	3Z
5A 250V AC DC28V	5A 250V AC DC28V	5A 250V AC DC28V	10A 250V AC, DC28V	
6~220V			6~220V	
6~380V			6~380V	
DC:≤ 0.9W AC: ≤ 1.2VA			DC:≤ 1.5W AC:≤ 2.2VA	
DC:≤ 75% AC: ≤ 80%			DC:≤ 75% AC:≤ 80%	
DC: ≥10% AC: ≥ 30%			DC:≥ 10% AC:≥ 30%	
≤ 50mΩ			≤ 50mΩ	
≥ 100MΩ			≥ 100MΩ	
10 ⁵ times			10 ⁵ times	
10 ⁷ times			10 ⁷ times	
1000v rms			1000v rms	
1500v rms			1500v rms	
P.C.B & Socket			Socket	
-40℃~+55℃			-40℃~+55℃	
About 35g	About 35g	About 35g	About 85g	About 85g
			 Model Q  Model T	 Model Q  Model T
L10KH2 HH52P 4104	L10KH2 HH53P 4104	L10KH2 HH54P 104	H,K FRM5	H,K FRM5
PYF08A PYF08A-E PY08	PYF11A PYF11A-E PY11	PYF14A PYF14A-E PY14	PF083A PF083A-E US-08	PF113A PF113A-E US-11
With lamp:-N,FLANGE:-F, With button:-S,PCB:-O			With lamp:-N With button:-S	

Classification		Timer			Multi Range Timer					Timer	
Model		AH3-□			AH3-N□		AH3-P			ST3P	
Appearance											
Dimensions		50H×40W×57.5D			50H×40W×57.5D		50H×40W×57.5D			55H×40.5W×57.5D	
Mounting & Socket	Surface(-n)	PF083A(E)			PF083A(E)		PF083A(E)			PF-083A(E)	
	Flush(-y)	US-08 P3G-08			US-08 P3G-08		US-08 P3G-08			US-08 P3G-08	
Full Timing Range		SEC:1,3,6,10,12,30,60 MIN:3,6,10,12,30,60 HR:3,6,10,12,30			A:1S,10S,1M,10M B:3S,30S,3M,30M C:6S,60S,6M,60M D:1M,10M,1H,10H E:3M,30M,3H,30H		0.1S-990H			A:0.05-0.5s/5s/30s/3min B:0.1-1s/10s/60s/6min C:0.5-5s/50s/5min/30min D:1-10s/100s/10min/60min E:5-1min/10min/60min/6h F:0.25-2min/20min/2h/12h G:0.5-4min/40min/4h/24h	
Rated Voltage		DC(V):12,24 AC(V):12,24,110,220,240,380, 50/60Hz								24 to 240 VAC/DC AC(V) 110V, 220V DC(V) 12V, 24V	
Indicator Operating		ON-UP Operating			Time Operating flicker		ON-UP Operating			ON,UP Operating	
Output Contact	Model	AH3-1	AH3-2	AH3-3	Mode A/B		AH3-1P	AH3-2P	AH3-3P	ST3PA	ST3PC
	Time Limit 1c	5A		5A		5A	5A		5A		5A
	Time Limit 2c		5A		5A			5A		5A	
	Instantaneous 1c			5A		5A			5A		5A
Life	Mechanical	5×10 ⁶ times								5×10 ⁷ times	
	Electrical	10 ⁵ times								10 ⁵ times	
Accuracy	Repeat Error	±1% max								±1% max	
	Setting Error	±10% max								±10% max	
	Voltage Error	±1% max								±1% max	
	Temp. Error	±2% max								±2% max	
Reset Time		0.1 sec max								0.5 sec max	
Consumed Power		2VA								2VA	
Ambient Temperature		-10℃~+55℃								-10℃~+55℃	
Ambient Humidity		48~85%RH								35~85%RH	
Weight		160g								100g	
Connection Diagrams & Timing Chart		23A	23B	23C	23D	23E	23A	23B	23C	23B	23F

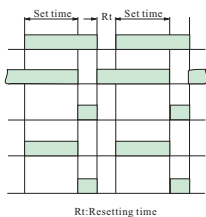
Classification		Timer						Twin Timer		
Model		DH48S-1Z	DH48S-2Z	DH48S-2ZH	AT48S-1Z	AT48S-2Z	AT48S-2ZH	DH48S-S-1Z	DH48S-S-2Z	DH48S-S-2ZH
Appearance										
Dimensions		48H×48W×81.6D								
Mounting & Socket	Surface(-n)	PF083A,PS-08,P2CF-08								
	Flush(-y)	US-08, P3G-08								
Full Timing Range		0.01S~99H99M			0.01S~99990H			0.01S~990H		
Rated Voltage		DC(V):12,24 AC(V):12,24,110,220,240, 380, 50/60Hz								
Display		LED								
Output Contact	Model	DH48S-1Z	DH48S-2Z	DH48S-2ZH	AT48S-1Z	AT48S-2Z	AT48S-2ZH	DH48S-S-1Z	DH48S-S-2Z	DH48S-S-2ZH
	Time Limit 1c	5A PAUSE &REST		5A	5A PAUSE &REST		5A	5A PAUSE &REST		5A
	Time Limit 2c		5A			5A			5A	
	Instantaneous 1c			5A			5A			5A
Life	Mechanical	5×10 ⁶ times								
	Electrical	10 ⁵ times								
Accuracy	Repeat Error	±0.5% max								
	Setting Error	±0.5% max								
	Voltage Error	±0.5% max								
	Temp. Error	±0.5% max								
Reset Time		0.1 sec max								
Consumed Power		2VA								
Ambient Temperature		-10℃~+55℃								
Ambient Humidity		48~85%RH								
Weight		160g								
Connection Diagrams & Timing Chart		23G	23B	23F	23G	23B	23F	23H	23I	23J

AH3-1,AH3P-1P

A

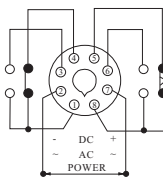


POWER(2-7)
NC(8-5)
NO(8-6)
ON LAMP
UP LAMP

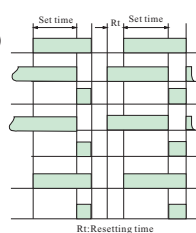


ST3PC-□, DH48S-2ZH, AT48S-2ZH

F

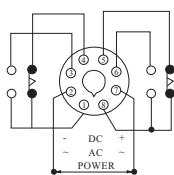


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)
ON LAMP
UP LAMP

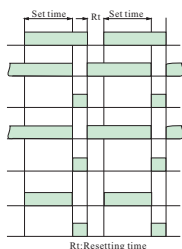


AH3-2,AH3P-2P, ST3PA-□, DH48S-2Z, AT48S-2Z

B

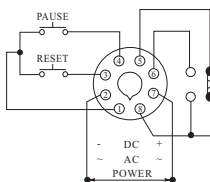


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)
ON LAMP
UP LAMP

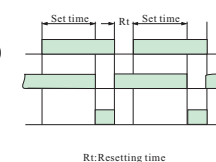


DH48S-1Z, AT48S-1Z

G

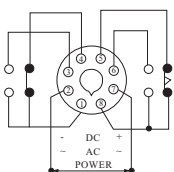


POWER(2-7)
NC(8-5)
NO(8-6)

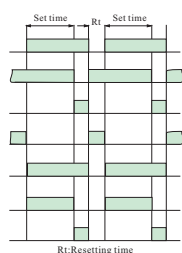


AH3-3, AH3P-3P

C

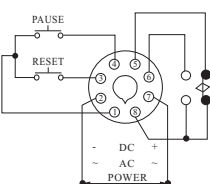


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)
ON LAMP
UP LAMP

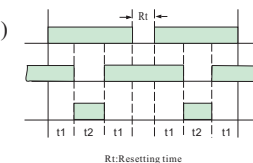


DH48S-S-1Z

H

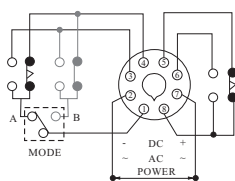


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NO(8-6)

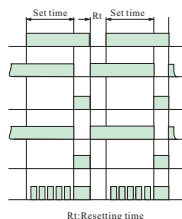


AH3-N□ MODE A, 2C

D

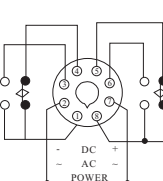


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)
LAMP

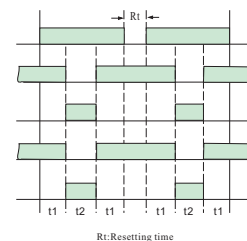


DH48S-S-2Z

I

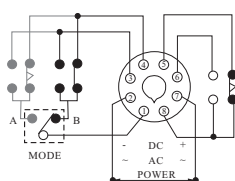


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)

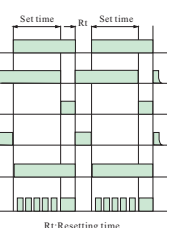


AH3-N□ MODE B, 1A1C

E

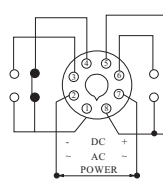


POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)
LAMP

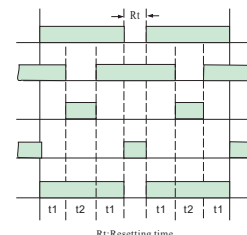


DH48S-S-2ZH

J



POWER(2-7)
NC(8-5)
NO(8-6)
NC(1-4)
NO(1-3)

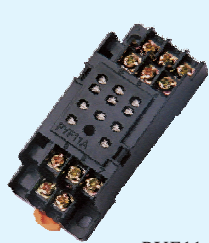




PYF08A



PYF08A-E



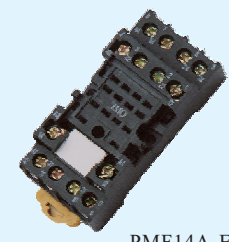
PYF11A



PYF14A



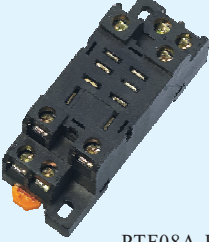
PYF14A-E



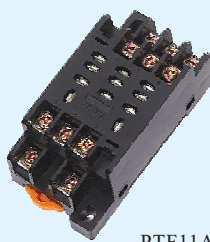
PMF14A-E



PTF08A



PTF08A-E



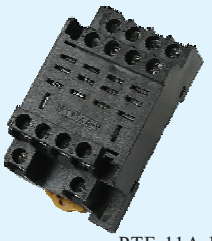
PTF11A



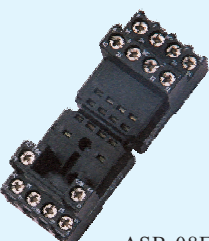
PTF-11AK



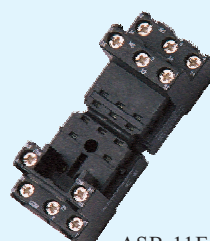
PTF14A



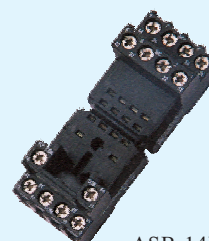
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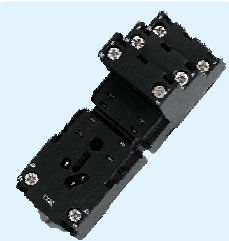
ASB-08E



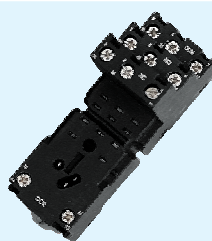
ASB-11E



ASB-14E



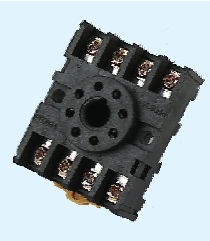
ASC-08E



ASC-11E



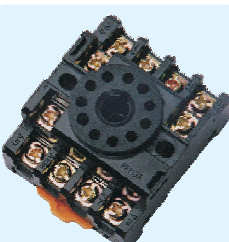
ASC-14E



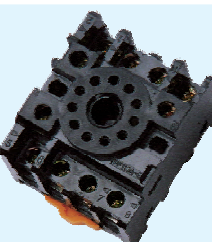
PF083A



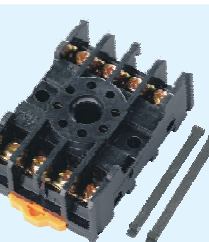
PF083A-E



PF-113A



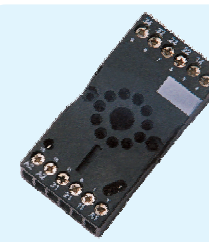
PF-113A-E



PF085A



ASD-11E



ASD-11E



ASE-08E



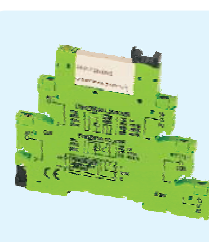
ASE-11E



90.22



90.23



38.51



AULT001

Function

Longer mechanical and electrical life, and much quieter than electromechanical step relays.

controlled by buttons for light switching from more places, are a practical replacement for three-way switches and cross-bar switches.

Technical data

Rated Voltage: 230VAC 50-60Hz

Rated Current: 16A 250VAC(COSφ=1)

Contact configuration: 1NO(SPST-NO)

Mounting: DIN Rail 35 mm(EN 60715)

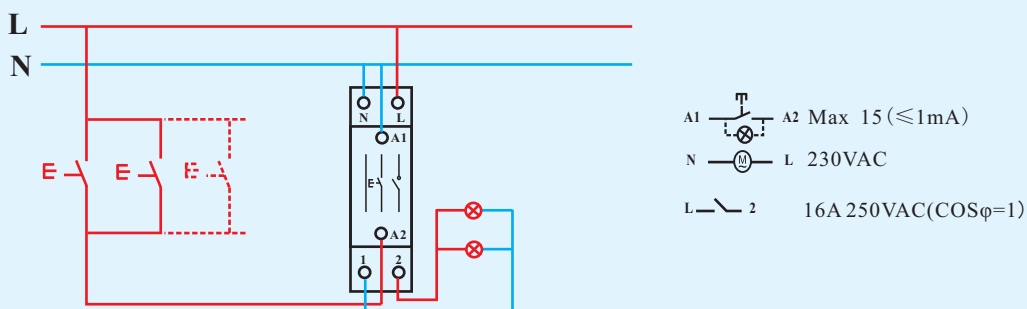
Ambient temperature range: -10...+60

Functions

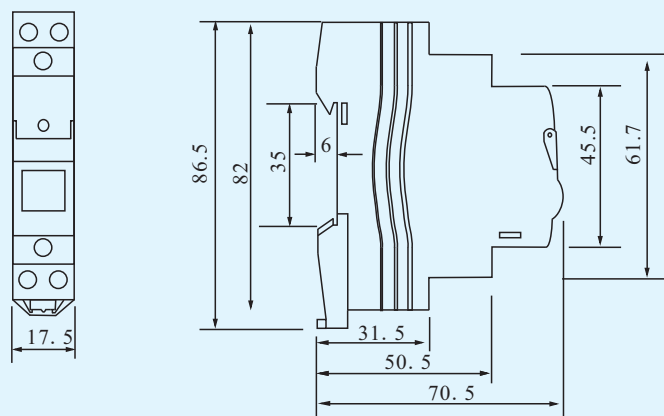


After every impulse, the output contact changes state alternately switching from open to closed and vice versa.

Connection Diagrams



Dimensions





AULT002

Function

Longer mechanical and electrical life, and much quieter than electromechanical step relays.

controlled by buttons for light switching from more places, are a practical replacement for three-way switches and cross-bar switches.

Technical data

Rated Voltage: 24VAC, 230VAC 50-60Hz

Rated Current: 16A 250VAC(COSφ=1)

Contact configuration: SPDT(1NO+1NC)

Mounting: DIN Rail 35 mm(EN 60715)

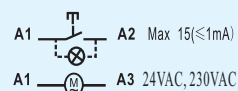
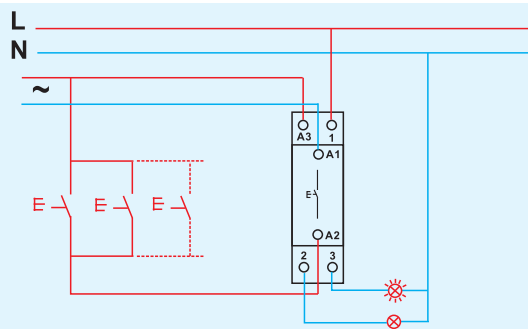
Ambient temperature range: -10...+60

Functions



After every impulse, the output contact changes state alternately switching from open to closed and vice versa.

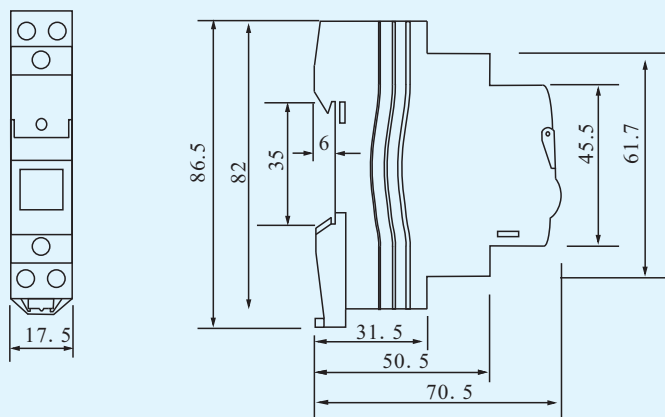
Connection Diagrams



1 2 16A 250VAC(COSφ=1)

1 3 16A 250VAC(COSφ=1)

Dimensions





Main

Product Or Component Type	Modular measurement and control relays
Relay Type	Control relay
Product Specific Appli-cation	For 3-phase supply
Relay Name	ATRP17TG
Relay Monitored Parameters	Phase failure detection Phase sequence
Switching Capacity In Va	1250 VA

Complementary

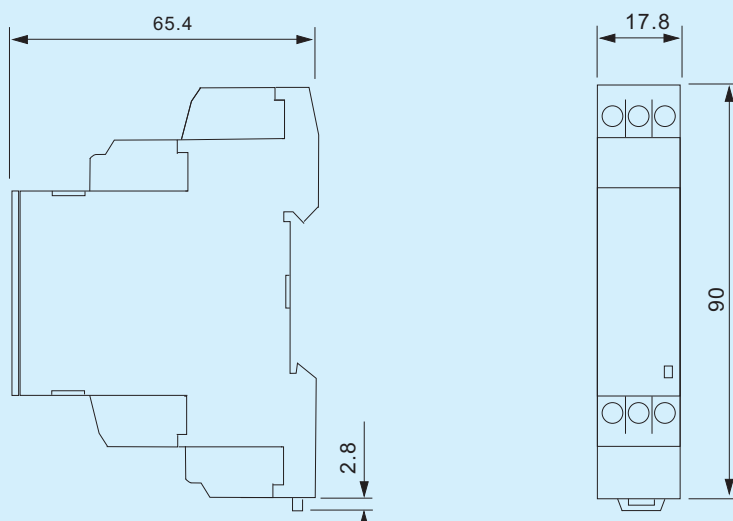
Maximum Switching Voltage	250 V DC/250 V AC
Minimum Switching Current	10 mA at 5 V DC
[us] Rated Supply Voltage	208...480 V AC 3 phases
Supply Voltage Limits	183...528 V AC
Control Circuit Voltage Limits	- 12 %, + 10 % Un
Power Consumption In Va	<= 22 VA 400 V AC 50 Hz
Voltage Detection Threshold	< 100 V for phase failure AC
Control Circuit Frequency	50...60 Hz +/- 10 %
Output Contacts	1 C/O
Nominal Output Current	5 A
Delay At Power Up	<= 650 ms
Voltage Range	183...528 V
Response Time	<= 130 ms in the event of a fault
Marking	CE : 73/23/EEC CE : EMC 89/336/EEC
Overvoltage Category	III conforming to IEC 60664-1
Insulation Resistance	> 500 MOhm at 500 V DC conforming to IEC 60664-1 > 500 MOhm at 500 V DC conforming to IEC 60255-5
[ui] Rated Insulation Voltage	400 V conforming to IEC 60664-1
Supply Frequency	50/60 Hz +/- 10 %
Operating Position	Any position without
Connections - Terminals	Screw terminals 2 x 0.2...2 x 1.5 mm ² - AWG 24...AWG 16, flexible cable with ca-ble end Screw terminals 1 x 0.2...1 x 2.5 mm ² - AWG 24...AWG 12, flexible cable with ca-ble end Screw terminals 2 x 0.5...2 x 2.5 mm ² - AWG 20...AWG 14, solid cable without cable end Screw terminals 1 x 0.5...1 x 4 mm ² - AWG 20...AWG 11, solid cable without ca-ble end
Tightening Torque	0.6...1 N.m conforming to IEC 60947-1
Housing Material	Self-extinguishing plastic
Status Led	1 LED yellow for relay
Mounting Support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Electrical Durability	100000 cycles
Mechanical Durability	≤30000000 cycles
Operating Rate	≤360 operations/hour under full load

Utilisation Category	DC-13 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-12 conforming to IEC 60947-5-1
Width	17.5 mm
Product Weight	0.13 kg

Environment

Electromagnetic Compatibility	Immunity for industrial environments conforming to EN/IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Emission standard for industrial environments conforming to EN/IEC 61000-6-4
Standards	EN/IEC 60255-1
Ambient Air Temperature For Storage	-40...70 °C
Ambient Air Temperature For Operation	-20...50 °C
Relative Humidity	95 % at 55 °C conforming to IEC 60068-2-30
Vibration Resistance	1 gn (f = 57.6...150 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1 0.35 mm (f = 5...57.6 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1
Shock Resistance	15 gn for 11 ms conforming to IEC 60255-21-1
Ip Degree Of Protection	Ip30 (casing) conforming to IEC 60529 IP20 (terminals) conforming to IEC 60529
Pollution Degree	3 conforming to IEC 60664-1
Dielectric Test Voltage	2 kV 1 min AC 50 Hz
Non-dissipating Shock Wave	4 kV

3-Phase Supply Control Relays Dimensions and Mounting





AHTC15A

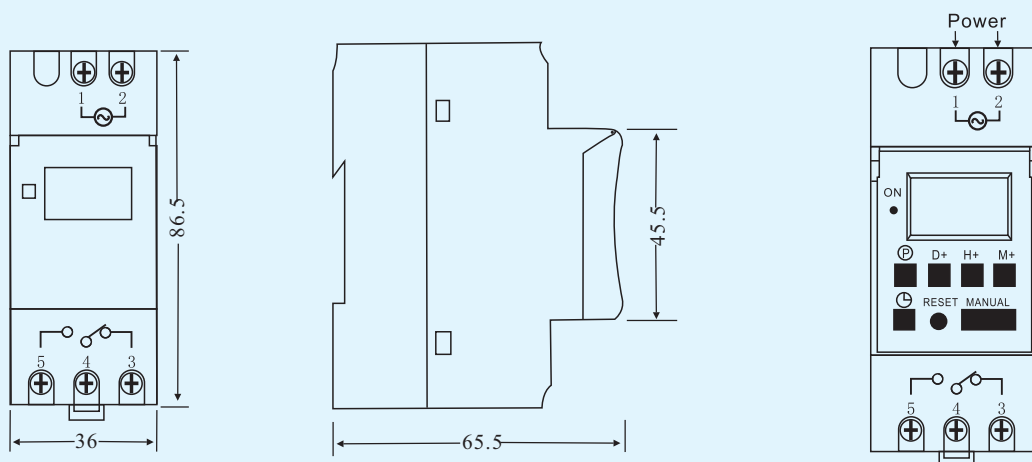
Function

- DIN RAIL installation
- LCD display, Day/week program
- 18 ON/OFF programs
- 18 times pulse programs
- Lithium battery power reserve 3 year, when electric supply cut off
- Auto time error correction ± 30 sec, weekly

Technical data

- Voltage rating: AC220V 50/60Hz
- Voltage limit: AC 180V~250V
- Hysteresis: ≤ 2 sec/day (25°C)
- On/off operation: 18 on & 18 off, 18 times pulse
- Power consumption: 5VA (max)
- Display: LCD
- Service life: mechanically 10^7
Electrically 10^5
- Minimum interval: minute (pulse/cycle 1 s)
- Weight: approx 150g
- Time basis: quartz
- Ambient humidity: 35~85%rh
- Ambient temperature: -10~+40°C
- When the battery reserve, you can see the battery mark on the LCD display.
If use the power, the battery mark will disappear.
- Count down: 1 sec~99 min 59 sec
- Pulse: 1 sec~59min 59 sec
- Switching power: 16A 250VAC ($\cos\phi=1$)
10A 250VAC ($\cos\phi=0.6$)
Incandescent lamp load: 2300W
Halogen lamp load: 2300W
Fluorescent lamps: Non compensated, series compensated
1000VA, Parallel compensated 400VA (42μf)
- Switching contact: 1 changeover switch
- Power reserve: 3 years (lithium battery)

Dimensions





AHTC20A

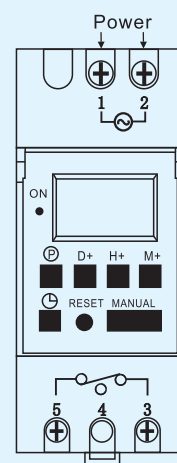
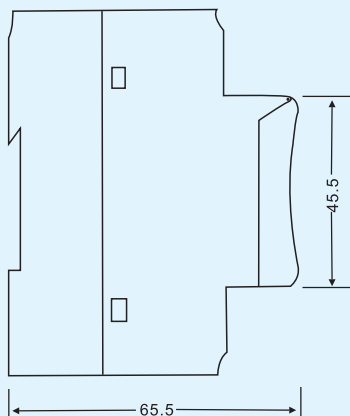
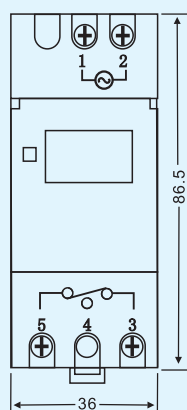
Function

- DIN RAIL installation
- LCD display, Day/week program
- 18 ON/OFF programs
- 18 times pulse programs
- Lithium battery power reserve 3 year, when electric supply cut off
- Auto time error correction ± 30 sec, weekly

Technical data

- Voltage rating: AC220V 50/60Hz
- Voltage limit: AC 180V~250V
- Hysteresis: ≤ 2 sec/day (25°C)
- On/off operation: 18 on & 18 off, 18 times pulse
- Power consumption: 5VA (max)
- Display: LCD
- Service life: mechanically 10^7
Electrically 10^5
- Minimum interval: minute (pulse/cycle 1 s)
- Weight: approx 150g
- Time basis: quartz
- Ambient humidity: 35~85%rh
- Ambient temperature: -10~+40°C
- When the battery reserve, you can see the battery mark on the LCD display.
If use the power, the battery mark will disappear.
- Count down: 1 sec~99 min 59 sec
- Pulse: 1 sec~59min 59 sec
- Switching power: 20A 250VAC ($\cos\phi=1$)
12A 250VAC ($\cos\phi=0.6$)
Incandescent lamp load: 2500W
Halogen lamp load: 2500W
Fluorescent lamps: Non compensated, series compensated
1000VA, Parallel compensated 400VA (42 μ f)
- Switching contact: 1 changeover switch
- Power reserve: 3 years (lithium battery)

Dimensions





AHTC15T

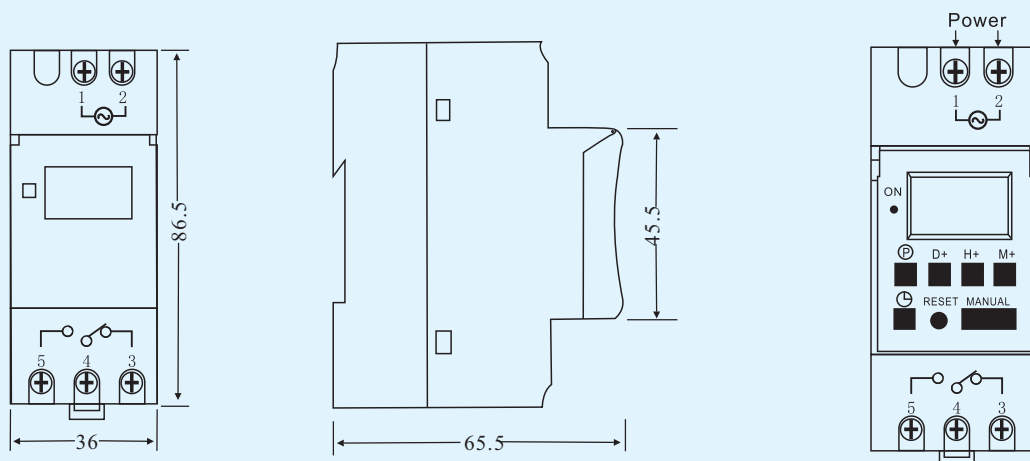
Function

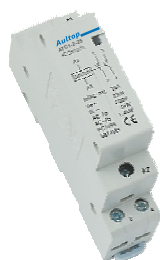
- DIN RAIL installation
- LCD display
- 8 ON/OFF programs
- Lithium battery power reserve 3 year, when electric supply cut off
- Automatically adjust the set time along with seasonal variation to control ON/OFF for lighting on purpose of realizing that light is turned on when sun sets & turned off when sun rises.

Technical data

- Voltage rating: AC220V 50/60Hz
- Voltage limit: AC 180V~250V
- Hysteresis: $\leq 2\text{sec/day}$ (25°C)
- ON/OFF operation: 8 ON & 8 OFF
- Power consumption: 5VA (max)
- Display: LCD
- Service life: mechanically 10^7
Electrically 10^5
- Minimum interval: minute (pulse/cycle 1 s)
- Weight: approx 150g
- Time basis: quartz
- Ambient humidity: 35~85%rh
- Ambient temperature: -10°C ~ 40°C
- Switching power: 16A 250VAC ($\cos\phi=1$)
10A 250VAC ($\cos\phi=0.6$)
- Incandescent lamp load: 2300W
- Halogen lamp load: 2300W
- Fluorescent lamps: Non compensated, series compensated
1000VA, Parallel compensated 400VA (42 μf)
- Switching contact: 1 changeover switch
- Power reserve: 3 years (lithium battery)

Dimensions





ATC1-2-25



ATC1-4-20



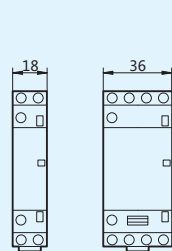
ATC1-2-63



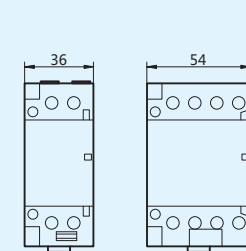
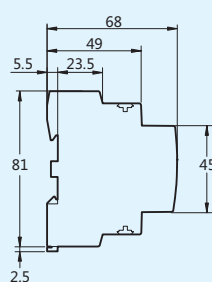
ATC1-4-63

1P	Rating(In) AC7a	Ac7b	Order information	Control voltage (VAC) (50Hz)	Contact	Width in 9mm modules
	25 A	8.5 A	ATC1-1-25	230...240	1NO	2
2P						
	16 A	6 A	ATC1-2-16-230-1	230...240	2NO	2
	25 A	8.5 A	ATC1-2-25-24-1	230...240	1NO+1NC	2
			ATC1-2-25-230-1	230...240	2NO	2
			ATC1-2-25-230-2	230...240	2NC	2
	40 A	15 A	ATC1-2-40-230-1	220...240	2NO	4
	63 A	20 A	ATC1-2-63-230-1	220...240	2NO	4
	100 A		ATC1-2-100-230-1	220...240	2NO	6
4P						
	16 A	6 A	ATC1-4-16-230-3	220...240	2NO+2NC	4
	25 A	8.5 A	ATC1-4-25-24-1	24	4NO	4
			ATC1-4-25-230-1	220...240	4NO	4
			ATC1-4-25-24-2	24	4NC	4
			ATC1-4-25-230-2	220...240	4NC	4
			ATC1-4-25-230-3	220...240	2NO+2NC	4
	40 A	15 A	ATC1-4-40-230-1	220...240	4NO	6
			ATC1-4-40-230-2	220...240	4NC	6
	63 A	20 A	ATC1-4-63-230-1	220...240	4NO	6
			ATC1-4-63-230-2	220...240	4NC	6
			ATC1-4-63-230-3	220...240	2NO+2NC	6
			ATC1-4-63-230-4	220...240	3NO+1NC	6
	100 A	-	ATC1-4-100-230-1	220...240	4NO	12

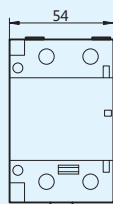
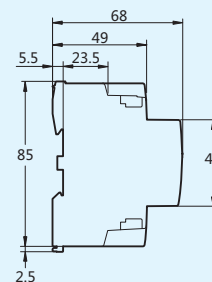
Dimensions



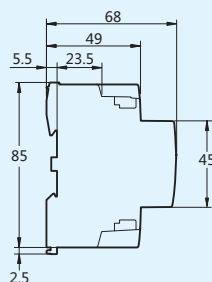
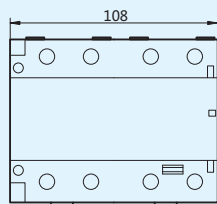
ATC1 16/25 A



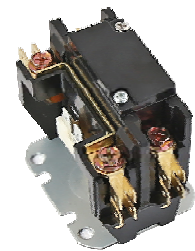
ATC1 40/63 A



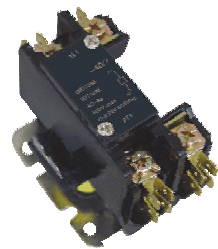
ATC1 100 A



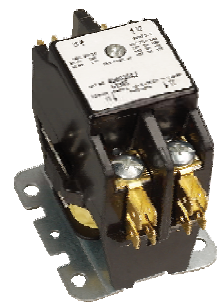
Fla Rating	Number of Poles	Order information			
		24V Ciol	120V Ciol	209/240V Ciol	277V Ciol
20FLA	1	ATC9-1XQ00AA	ATC9-1XT00AA	ATC9-1XU00AA	ATC9-1XV00AA
	2	ATC9-2XQ00AA	ATC9-2XT00AA	ATC9-2XU00AA	ATC9-2XV00AA
25FLA	1	ATC9-1XQ01AA	ATC9-1XT01AA	ATC9-1XU01AA	ATC9-1XV01AA
	2	ATC9-2XQ01AA	ATC9-2XT01AA	ATC9-2XU01AA	ATC9-2XV01AA
30FLA	1	ATC9-1XQ02AA	ATC9-1XT02AA	ATC9-1XU02AA	ATC9-1XV02AA
	2	ATC9-2XQ02AA	ATC9-2XT02AA	ATC9-2XU02AA	ATC9-2XV02AA
40FLA	1	ATC9-1XQ04GG	ATC9-1XT04GG	ATC9-1XU04GG	ATC9-1XV04GG
	2	ATC9-2XQ04GG	ATC9-2XT04GG	ATC9-2XU04GG	ATC9-2XV04GG
20FLA	3	ATC9-3XQ00CY	ATC9-3XT00CY	ATC9-3XU00CY	ATC9-3XV00CY
25FLA	3	ATC9-3XQ01CY	ATC9-3XT01CY	ATC9-3XU01CY	ATC9-3XV01CY
30FLA	3	ATC9-3XQ02CY	ATC9-3XT02CY	ATC9-3XU02CY	ATC9-3XV02CY
	4	ATC9-4XQ02CY	ATC9-4XT02CY	ATC9-4XU02CY	ATC9-4XV02CY
40FLA	3	ATC9-3XQ04CG	ATC9-3XT04CG	ATC9-3XU04CG	ATC9-3XV04CG
	4	ATC9-4XQ04CG	ATC9-4XT04CG	ATC9-4XU04CG	ATC9-4XV04CG
50FLA	3	ATC9-3XQ05CJ	ATC9-3XT05CJ	ATC9-3XU05CJ	ATC9-3XV05CJ
60FLA	3	ATC9-3XQ06CJ	ATC9-3XT06CJ	ATC9-3XU06CJ	ATC9-3XV06CJ
75FLA	3	ATC9-3XQ07CJ	ATC9-3XT07CJ	ATC9-3XU07CJ	ATC9-3XV07CJ
90FLA	3	ATC9-3XQ09CJ	ATC9-3XT09CJ	ATC9-3XU09CJ	ATC9-3XV09CJ



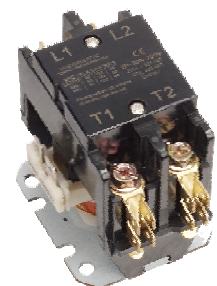
1P30A



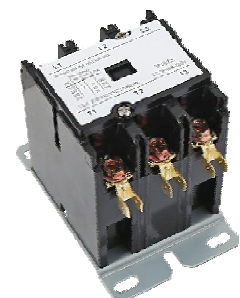
1P40A



2P20A



2P30A



3P30A

Technical Data

Initial Dielectric Strength

Between contacts&coils:2,200VAC

Between poles:2,200VAC(includes shunt)

Between open contacts:2,200VAC(no shunt)

Arc Cover

Opetional on 20-30 FLA;Standard on 40 FLA

INSULATION SYSTEM

130 Class B

Temperature Eange

-40 to +65

-40 F to +150 F

Unit Weight

1Pole 5Lb

2Pole. 6Lb

3Pole. 11b 50-60FLA 21b / 70-90FLA 41b

4Pole. 1.251b

Power Pole Terminations

#10-32 screw or box lug

Wire Size

#10-32 screw 16-8*

Box lug 14-4

*must use ring terminal

Recommended Tightening Torque

#10-32 screw 22 in.lbs

Box lug 40 in.lbs

Quick Connects

Coil terminals dual:250"QC

Power terminals 1 Pole: Quad 250"QC

2 Pole: Dual or Quand."QC

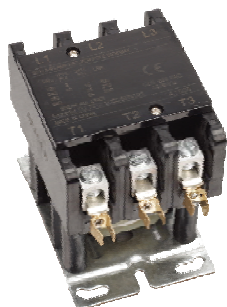
3 Pole: Dual.250"QC

4 Pole: Dual.250"QC

Coil Rating	1 pole contactors				2 pole contactors				4 pole contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	18	420	1800	2500	11	237	1000	1600	6	150	600	750
Maximum Pick Up Voltage	18	88	177	221	18	88	177	221	18	88	177	220
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-165	6-15	20-70	40-140	65-185
Nominal inrush VA@50Hz	31	31	31	31	33	33	33	33	62	62	62	62
Nominal inrush VA@60Hz	28	28	28	28	30	30	30	30	59	59	59	59
Nominal Sealed VA@50Hz	6	6	6	6	8	8	8	8	9	9	9	9
Nominal Sealed VA@60Hz	5	5	5	5	6.5	6.5	6.5	6.5	7	7	6	7
Maximum Coil Voltage	30	132	264	300	30	132	264	300	30	132	264	300

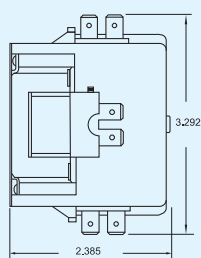
Coil Rating	3 pole contactors				50-60 FLA contactors				75-90 FLA contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	7	180	720	900	2.4	45	180	280	65	16	64	85
Maximum Pick Up Voltage	18	88	177	220	18	93	177	235	18	88	177	220
Minimum Drop Out Voltage	6-15	20-70	40-140	50-185	6-15	20-70	40-140	50-185	6-15	20-70	40-110	65-185
Nominal inrush VA@50Hz	65	65	65	65	138	138	138	138	285	285	285	285
Nominal inrush VA@60Hz	60	60	60	60	130	130	130	130	240	240	240	240
Nominal Sealed VA@50Hz	7.5	7.5	7.5	7.5	18	18	18	18	42	42	42	42
Nominal Sealed VA@60Hz	6	6	6	6	13	13	13	13	27	27	27	27
Maximum Coil Voltage	30	132	264	300	30	132	264	300	30	132	264	300

Dimensions

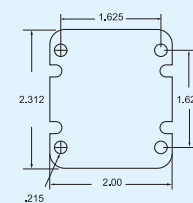
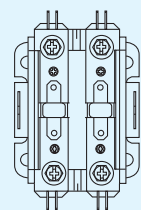
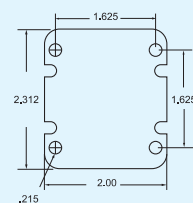
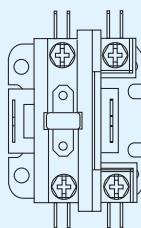
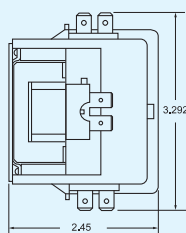


3P50A

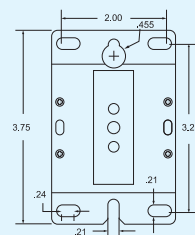
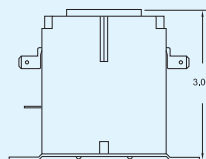
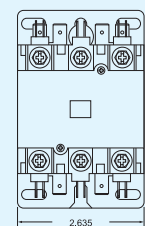
1 pole Dimensions(Inches)



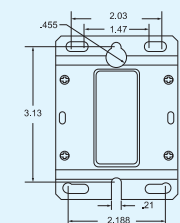
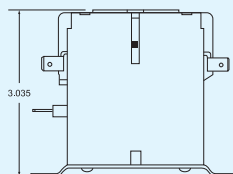
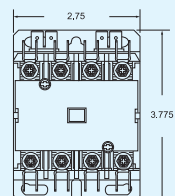
2 pole Dimensions(Inches)



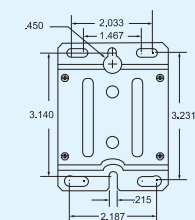
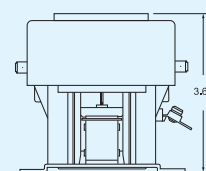
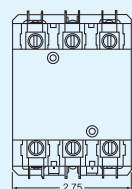
3 pole Dimensions(Inches)



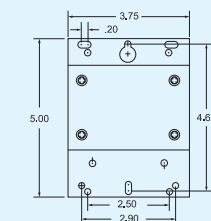
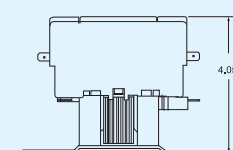
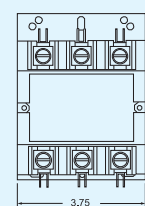
4 pole Dimensions(Inches)



50-60 FLA Dimensions(Inches)



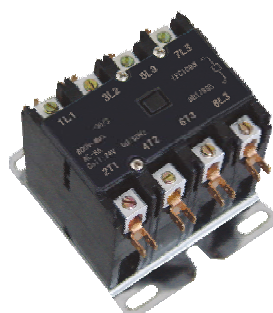
75-90 FLA Dimensions(Inches)



3P75A



4P30A



4P40A

Ordering Information



ATHC3L-8AL

ATHC3L-□□ □A

- VP:DC5-30V Input
- No mark: contact input(no voltage input)
- A:AC/DC110-120VInput
 - 99999.9h
 - 99h59m59s
 - ATHC3L-6
 - 999h59m
 - 999d23h
 - ATHC3L8
 - 999h59m59s
 - 999999h59m

Specifications

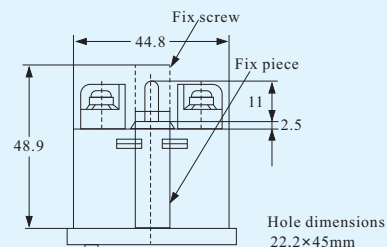
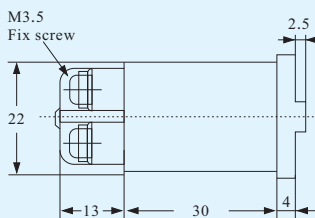
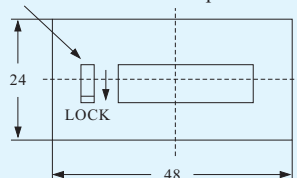


ATHC3L-6AL

Supply Voltage:	Driven by built-in battery	Display:	6.7mmLCD
Input Signal:	Relay or switch contact Transistor input	Weight:	Appro×60g
Reset System:	External reset and manual reset	Operating Temperature:	-10-40℃
Nonvoltage Input Signal:	Short-circuit impedance:10K Ω max Open impedance: 500K Ω min Short-circuit residual voltage 0.5v max	Humidity: Reset Signal	35%-85%RH ≥0.2S
Battery Life:	≥6 Years	Accuracy:	T0.02%

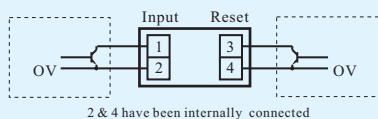
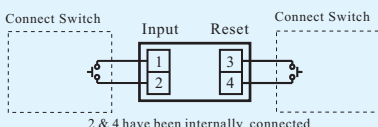
Dimensions(mm)

Reset button A down lock up

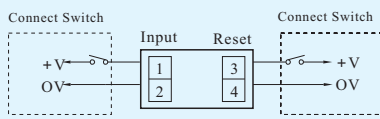
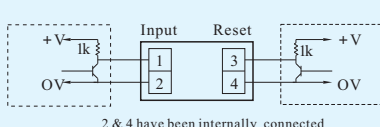


Connection Diagram

No-voltage input

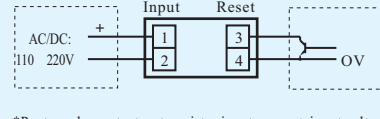
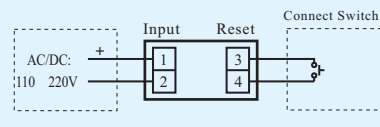


DC voltage input



*Input Voltage:DC5-30V

AC voltage input



*Rest can be contact or transistor input, can not input voltage

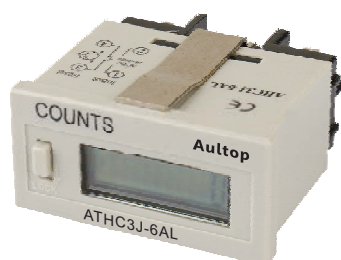


ATHC3J-8AL

Ordering Information

ATHC3J - 6 A L

- L: 10CPC
- H: 200CPC
- V: DC5-30V input
- No mark: No voltage input
- A: AC/DC 100-220V input
- 6: 6 Bit Display
- 8: 8 Bit Display

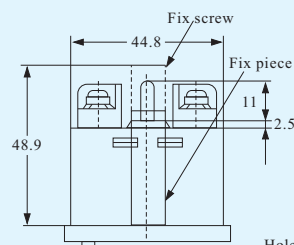
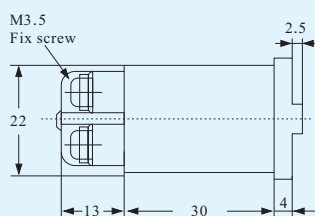
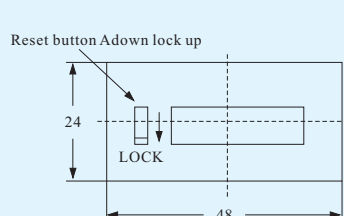


ATHC3J-6AL

Specifications

Supply Voltage:	Driven by built-in battery	Display:	6.7mmLCD
Input Signal:	Relay or switch contact Transistor input	Weight:operating Temperature:	Appro×60g -10~+40℃
Voltage Input Signal	L live: 0-2V H live: V:DC5-30V,A:AC/DC100-240V	Reset System:	External reset and manual reset
Nonvoltage Input Signal:	Short-circuit impedance:10K Ω max Open impedance:500K Ω min short-circuit residual voltage 0.5v max	Reset Signal: Humidity:	≥0.2S 35%-85%RH
Maximun Counting:	10cp (signal width J50mS)	Battery Life:	≥6 Years
Speed:	200cp (signal width J50mS)		

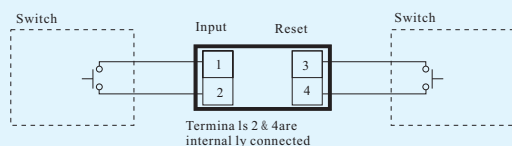
Dimensions(mm)



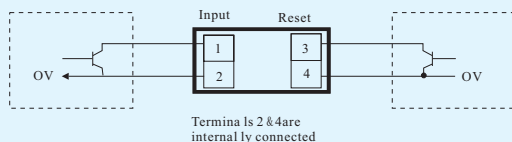
Hole dimensions : 22.2×45mm

Connection Diagram

1)ATHC3J-6 (8) L no Voltage input type



2)ATHC3J-6 (8) H no Voltage input type



3)ATHC3J-6 (8) AL ATHC3J-6(8)VH Voltage input type

