

Ev5N & Ev5R-D Series Contactor & Thermal Relays

Product Overview

Ev5N series AC Contactor with novel appearance and compact structure is suitable for using starting & controlling the AC motor frequently, switching on and off the circuit at a long distance. It is used in combination with thermal relay to compose a magnetic motor starter.

Standard: IEC 60947-1, IEC 60947-4-1.

Specifications

- ◆ Rated operation current(Ie): 9-95A;
- ◆ Rated operation voltage(Ue): 220V~690V;
- ◆ Rated insulation voltage: 690V;
- ◆ Poles: 3P;
- ◆ Installation: Din rail and screw installation

Characteristic

- ◆ More auxiliary contacts, meet various application requirements
- ◆ Suitable for larger voltage fluctuation to ensure the stable operation of the equipment
- ◆ Super environment adaptability, can be reliable operation with extreme environment.

Operating and Installation Conditions

Type	Operating and Installation Conditions
Installation category	III
Pollution level	3
Certification	Ev5N-09~38 IP20; Ev5N-40~95 IP10
Ambient temperature	Limit of temperature: -35℃ ~+70℃ , normal temperature: -5℃ ~+40℃ , The average no more than +35℃ within 24 hours. If not in normal operating temperature range, please refer to "Instructions for abnormal environment"
Altitude	≤2000m
Ambient temperature	The maximum temperature of 70 degrees, the air relative humidity not exceed 50%, under lower temperature can allow for higher relative humidity. If the temperature is 20℃ , the air relative humidity could up to 90%, Special measures should be taken for occasional condensation due to humidity changes.
Installation position	Inclination between installation surface and vertical surface should not exceed ±5°
Shock vibration	Products should be installed and used without significant shake, shock and vibration place.



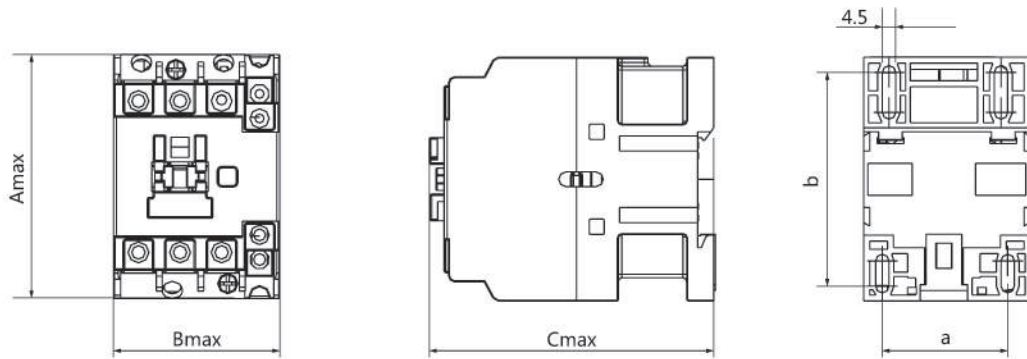
Product Overview

Type			Ev5N-09	Ev5N-12	Ev5N-18	Ev5N-25	Ev5N-32	Ev5N-38	Ev5N-40	Ev5N-50	Ev5N-65	Ev5N-80	Ev5N-95
Main circuit characteristic													
Poles			3P										
Rated insulation voltage(Ui)		V	690										
Rated operating voltage(Ue)		V	380/400, 660/690										
Rated thermal current(Ith),AC-1			20	20	32	40	50	50	60	80	80	125	125
Rated operation current(Ie)	AC-3,380/400V	A	9	12	18	25	32	38	40	50	65	80	95
	AC-3,660/690V	A	6.6	8.9	12	18	22	22	34	39	42	49	49
	AC-4,380/400V	A	3.5	5	7.7	8.5	12	14	18.5	24	28	37	44
	AC-4,660/690V	A	1.5	2	3.8	4.4	7.5	8.9	9	12	24	17.3	21.3
Rated operational power(Pe)	AC-3,380/400V	kW	4	5.5	7.5	11	15	18.5	18.5	22	30	37	45
	AC-3,660/690V	kW	5.5	7.5	10	15	18.5	18.5	30	33	37	45	45
	AC-4,380/400V	kW	1.5	2.2	3.3	4	5.4	5.5	7.5	11	15	18.5	22
	AC-4,660/690V	kW	1.1	1.5	3	3.7	5.5	6	7.5	10	11	15	18.5
Mechanical life			1200				1000		900			650	
Electrical life	AC-3	10000 times	110				90			65			
	AC-4		22		22		17		11				
Frequency of operation	AC-3	times/hour	1200				600						
	AC-4		300				300						
Connecting capability of main circuit terminal													
Flexible wire	1 wire	mm ²	1...4			1.5...6			2.5...25			4...50	
No terminal	2 wire	mm ²	1...4			1.5...6			2.5...16			4...25	
Flexible wire	1 wire	mm ²	1...4			1...6			2.5...25			4...50	
With terminals	2 wire	mm ²	1...2.5			1...4			2.5...10			4...16	
Hard wire	1 wire	mm ²	1...4			1.5...6	1.5...10		2.5...25			4...50	
No terminal	2 wire	mm ²	1...4			1.5...			2.5...10			4...25	
Fastening torque		N.m	1.2			1.8			5			9	
Coil													
Rated control voltage(Us) 50Hz	50Hz	V	24, 36, 48, 110, 127, 220/230, 240, 380/400, 415, 440										
	50/60Hz	V	24, 36, 48, 110, 127, 220/230, 240, 380/400, 415, 440										
Allowed control circuit voltage(Us)	Operation	V	Installation inclination angle ±22.5°: 85%~110%Us; Installation inclination angle±5°: 70%~120%										
	Release	V	Installation inclination angle ±22.5°: 20%~75%Us; Installation inclination angle±5°: 20%~65%										
Power consumption of coil	Actuation	VA	60			70			200			200	
	Keep	VA	6-9.5			6-9.5			15-20			15-20	
	Consumption	W	1-3			1-3			6-10			6-10	
Auxiliary contacts													
Auxiliary contacts specification		A	11										
Rated thermal current (Ith)		A	10										
Rated operating voltage (Ue)	AC	V	380										
	DC	V	220										
Rated control capacit	AC-15	VA	360										
	DC-13	W	33										
Certification			CCC, CE, TUV, CB										

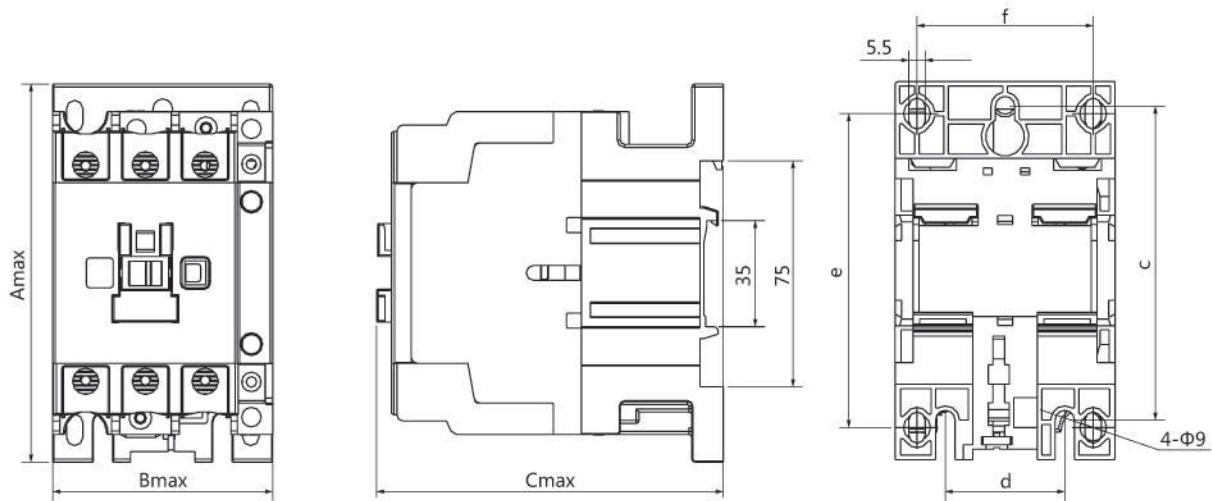
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Overall and Mounting

Ev5N-09~38



Ev5N-40~95



Type	Amax	Bmax	Cmax	a	b	c	d	e	f
Ev5N-09, 12, 18	74.5	45.5	85.5	35	50/60	-	-	-	-
Ev5N-25, 32, 38	83	56.5	97	40	50/70	-	-	-	-
Ev5N-40, 50, 65	127.5	74.5	117	-	-	105	40	100/110	59
Ev5N-80, 95	127.5	85.5	125.5	-	-	105	40	100/110	67