



ESNxxxB Contactors

Electrical and Mechanical Characteristics

Electrical characteristic

Type	ESNxxxB			
	Modular contactors			Auxiliary contact
Description				
Number of module	2	3	3	1/2
Thermal current I _{th} (40°C)	25A	40 A	63 A	
Rated frequency	50 - 60 Hz			
Rated insulation voltage (U _i)	440V	440V	440V	500V
Rated impulse withstand voltage (U _{imp})	4kV	4kV	4kV	4kV

Rated operating currents and power ratings in AC

AC-1 / AC-7a	Rated operating currents I _e	25A	40A	63A	
	Rated operating power	230V 3-phase	9 kW	16kW	24 kW
		400V 3-phase	16 kW	26 kW	40 kW
AC-3 / AC-7a	Rated operating currents I _e	9A	22A	30A	
	Rated operating power	230V 3-phase	2.2 kW	5.5 kW	8.5 kW
		400V 3-phase	4 kW	11 kW	15 kW
AC-15	Rated operating currents I _e @ 230V			6A	
	Rated operating currents I _e @ 400V			4A	

Rated operating currents in DC

DC-1	1 pole per polarity	U _e = 24V	25A	40A	63A
		U _e = 110V	2A	4A	4A
		U _e = 220V	0.5A	0.8A	0.8A
	2 poles in series per polarity	U _e = 24V	-	40A	63A
		U _e = 110V	4A	10A	10A
		U _e = 220V	1.5A	6A	6A

Overload

Back up fuse gL max rating	35A	63A	80A	6A
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Mechanical & electrical endurances

Mechanical endurance	<i>Number of operation</i>				
Electrical endurance @ AC-1 / AC-7a	<i>Number of operation</i>	200 000	100 000	100 000	
Electrical endurance @ AC-3 / AC-7b	<i>Number of operation</i>	500 000	150 000	150 000	
Maximum operation frequency	<i>No of operation / hour</i>	600	120	120	600

Power dissipation

Power dissipation per current path	2.2W	4W	8W	
Electrical endurance @ AC-1 / AC-7a	<i>Number of operation</i>	200 000	100 000	100 000

Magnetic system

Standard control voltage	U _c = 220 / 230V	AC or DC	AC or DC	AC or DC	-
Coil consumption		3W	5W	5W	-
Closing delay		15-30 ms	15-20 ms	15-20 ms	-
Opening delay		50-80 ms	35-45ms	35-45ms	-

Solenoid system power consumption

Pick-up	4VA, 4W	5VA, 5W	6.5VA, 6.5W	
Holding	4VA, 4W	5VA, 5W	4.2VA, 4.2W	
On delay			< 40ms	
Off delay			< 40ms	