

# IEC Technical data

## A145 – AF750

Across the line  
contactors

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### Magnet System Characteristics for A... Contactors

Contactor types:	A...	145	185	210	260	300	-	-	-	-
Rated control circuit voltage $U_c$										
- at 50 Hz	V	24 ... 690								
- at 60 Hz	V	24 ... 690								
Coil operating limits according to IEC 60947-4-1		$\sigma \leq 70^\circ\text{C}$ 0.85 ... 1.1 x $U_c$								
Drop-out voltage in % of $U_c$		roughly 25 ... 65 %								
Coil consumption										
Average pull-in value	50 Hz VA	550			1350					
	60 Hz VA	600			1550					
	50/60 Hz ① VA/VA	700/650			1700/1550					
Average holding value	50 Hz VA/W	35/11			60/16					
	60 Hz VA/W	40/12			65/19					
	50/60 Hz ① VA/W	44/13			80/21					
Operating time										
between coil energization and:										
- N.O. contact closing	ms	13 ... 27			17 ... 35					
- N.C. contact opening	ms	8 ... 22			12 ... 30					
between coil de-energization and										
- N.O. contact opening	ms	5 ... 10			7 ... 13					
- N.C. contact closing	ms	9 ... 13			10 ... 16					

### Magnet System Characteristics for AF... Contactors

Contactor types:	AF...	145	185	210	260	300	400	460	580	750
Rated control circuit voltage $U_c$										
- at 50 Hz	V	48 ... 250								
- at 60 Hz	V	48 ... 250								
- d.c.	V	24 ... 250								
Coil operating limits according to IEC 60947-4-1		$\sigma \leq 70^\circ\text{C}$ 0.85 ... 1.1 x $U_c$								
Drop-out voltage in % of $U_c$		55 %								
Coil consumption										
Average pull-in value	50 Hz VA	430			470		890		850	
	60 Hz VA	430			470		890		850	
	d.c. W	500			520		990		950	
Average holding value	50 Hz VA/W	12/3.5			10/2.5		12/4		12/4.5	
	60 Hz VA/W	12/3.5			10/2.5		12/4		12/4.5	
	d.c. W	2			2		4		4.5	
Operating time										
between coil energization and:										
- N.O. contact closing	ms	30 ... 115					50 ... 120			
- N.C. contact opening	ms	30 ... 115					50 ... 120			
between coil de-energization and										
- N.O. contact opening	ms	25 ... 80					40 ... 70			
- N.C. contact closing	ms	25 ... 80					40 ... 70			

① 50/60 Hz coils: voltage codes 8 0 to 8 8. see page 1.28.