


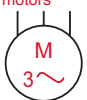
IEC Technical data

AF1350 – AF1650

Across the line
contactors

1

Main Pole - Utilization Characteristics

Contactor types:	AF..	1350	1650
Rated operational voltage U_e max.	V	1000	1000
Rated frequency limits	Hz	25-400	25-400
Conventional free-air thermal current I_{th} acc. to IEC 60947-4-1, open contactors $\varnothing \leq 40^\circ\text{C}$	A	1350	1650
with conductor cross-sectional area ^①	mm ²	2/100x5	3/100x5
Rated operational current I_e / AC-1 for air temperature close to contactor			
U_e max. 690 V	$\left\{ \begin{array}{l} \varnothing \leq 40^\circ\text{C} \\ \varnothing \leq 55^\circ\text{C} \\ \varnothing \leq 70^\circ\text{C} \end{array} \right.$	$\left\{ \begin{array}{l} \text{A} \\ \text{A} \\ \text{A} \end{array} \right.$	$\left\{ \begin{array}{l} 1350 \\ 1150 \\ 1000 \end{array} \right.$
with conductor cross-sectional area	mm ²	2 x 80 x 5 ^①	2 x 80 x 5 ^①
Utilization categorie AC-3			
for air temperature close to contactor $\leq 55^\circ\text{C}$			
Rated operational current I_e AC-3			
	220-230-240 V	A	860
3-phase motors	380-400 V	A	860
	415 V	A	860
	440 V	A	860
	500 V	A	—
	690 V	A	—
	1000 V	A	—
			
Rated operational power AC-3			
	220-230-240 V	kW	257
	380-400 V	kW	475
	415 V	kW	500
	440 V	kW	560
	500 V	kW	—
	690 V	kW	—
	1000 V	kW	—
			
Rated making capacity AC-3 according to IEC 60947-4-1		10 x I_e , AC-3	
Rated breaking capacity AC-3 according to IEC 60947-4-1		8 x I_e , AC-3	
Short-circuit protection for contactors without thermal O/L relay - Motor protection excluded $U_e \leq 500$ V a.c. - gG type fuse		Product coordination with ABB circuit breaker Consult factory	
Rated short-time withstand current I_{cw} at 40°C ambient temp., in free air, from a cold state			
	1 s	A	10,000
	10 s	A	8000
	30 s	A	6000
	1 min	A	4500
	15 min	A	1600
Maximum breaking capacity $\cos \varnothing = 0.45$ ($\cos \varnothing = 0.35$ for $I_e > 100$ A)			
	at 440 V	A	10,000
	at 690 V	A	—
Max. electrical switching frequency			
– for AC-1	cycles/h	60	60
– for AC-3	cycles/h		
– for AC-2, AC-4	cycles/h		
Electrical durability		50,000	50,000
Mechanical durability			
– millions of operating cycles		500,000	500,000
– max. mechanical switching frequency	cycles/h	60	60

① Dimensions of the bars (in mm).