11BF8040230

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 125A, AC COIL 50/60HZ, 230VAC

Product designation			Power contactor
Product type designation			11BF80
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	125
Operational current Ie			
	AC-1 (≤40°C)	A	125
	AC-3 (≤440V ≤55°C)	A	80
	AC-4 (400V)	A	38
Rated operational power AC-1 (T≤40°C)			
	230V	kW	47
	400V	kW	82
	500V	kW	108
	690V	kW	128
Short-time allowable current for 10s (IEC/EN60947-1)		A	480
Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	80
Making capacity (RMS value)		A	1200
Breaking capacity at voltage			
	440V	A	1200
	500V	A	1050
	690V	A	800
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	Ith	W	9.4
	AC3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	3.7
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	1
Conductor section			
	AWG/Kcmil		

		max		2/0
	Flexible w/o lug conductor section			
		min	mm²	6
		max	mm²	50
	Flexible c/w lug conductor section			
		min	mm²	6
		max	mm²	50
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	1575
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1300000
		mechanical load	cycles	15000000
Mirror contats according to IEC/EN 609474-4-1				yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz			V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		pick-up		
			min	%Us 80
			max	%Us 110
		drop-out		
			min	%Us 20
			max	%Us 55
	of 50/60Hz coil powered at 60Hz			
		pick-up		
			min	%Us 80
			max	%Us 110
		drop-out		
			min	%Us 40
			max	%Us 55
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
			in-rush	VA 200
			holding	VA 18
	of 50/60Hz coil powered at 60Hz			
			in-rush	VA 200
			holding	VA 15
	of 60Hz coil powered at 60Hz			
			in-rush	VA 220
			holding	VA 18

Dissipation at holding ≤20°C 50Hz			W	6
DC coil operating				
Average coil consumption ≤20°C				
		in-rush	W	45
		holding	W	75
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us control				
	in AC			
		Closing NO		
			min ms	13
			max ms	28
		Opening NO		
			min ms	6
			max ms	19
	in DC			
		Closing NO		
			min ms	40
			max ms	85
		Opening NO		
			min ms	20
			max ms	55
UL technical data				
Full-load current (FLA) for three-phase AC motor				
			at 480V A	77
			at 600V A	77
Yielded mechanical performance				
	for three-phase AC motor			
			200/208V HP	25
			220/230V HP	30
			460/480V HP	60
			575/600V HP	75
General USE				
	Contactor			
			AC current A	125
Ambient conditions				
Temperature				
	Operating temperature			
			min °C	-50
			max °C	70
	Storage temperature			
			min °C	-60
			max °C	80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
Certifications and compliance				
Compliance				
	CSA C22.2 n° 60947-1			
	CSA C22.2 n° 60947-4-1			
	IEC/EN 60947-1			
	IEC/EN 60947-4-1			

	UL 60947-1
	UL 60947-4-1
Certificates	
	CCC
	CSA
	cULus
	EAC

ETIM classification

ETIM 8.0	EC000066 - Power contactor, AC switching