



Product designation Product type designation Contact characteristics Number of poles Rated insulation voltage Ui IEC/EN V Rated impulse withstand voltage Uimp Operational frequency min Hz max Hz IEC Conventional free air thermal current Ith A AC-1 (≤40°C) A AC-1 (≤70°C) A AC-1 (≤70°C) A AC-3 (≤440∨ ≤55°C) A AC-4 (400∨) A Rated operational power AC-1 (T≤40°C) Rated operational power AC-1 (T≤40°C) Rated operational power AC-1 (T≤40°C) Rated operational power AC-1 (T≤40°C) IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series Sequence	Power contacto
Product type designation Contact characteristics Number of poles Nr.	rower contacto
Contact characteristics Number of poles Nr. Rated insulation voltage Ui IEC/EN V Rated impulse withstand voltage Uimp kV Operational frequency min hz max Hz IEC Conventional free air thermal current Ith A Operational current Ie AC-1 (≤40°C) A AC-1 (≤55°C) A AC-1 (≤70°C) A AC-3 (≤440V ≤55°C) A AC-4 (400V) A AC-4 (400V) A Rated operational power AC-1 (T≤40°C) 230V kW 400V kW 500V kW 690V kW 690V kW IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 48V A 75V A 110V A 220V A IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 48V A 75V A 110V A 220V	BF230
Number of poles Nr. Rated insulation voltage Ui IEC/EN V Rated impulse withstand voltage Uimp kV Operational frequency min Hz IEC Conventional free air thermal current Ith A Operational current Ie AC-1 (≤40°C) A AC-1 (≤70°C) A AC-1 (≤70°C) A AC-3 (≤440V ≤55°C) A AC-4 (400V) A Rated operational power AC-1 (T≤40°C) 230V kW 400V kW 500V kW 690V kW 100V kW 100V kW 110V A 110V A 110V A 110V A 220V A	
Rated insulation voltage Ui IEC/EN V	4
Rated impulse withstand voltage Uimp Rated Operational Current Ieh A A A C S C A A A C S C A A A C S C A A A C C C A A A	1000
Min Hz max Hz	8
Min Hz max Hz IEC Conventional free air thermal current lth	
Max	25
EC Conventional free air thermal current Ith A	
AC-1 (≤40°C)	400
AC-1 (≤40°C) A AC-1 (≤55°C) A AC-1 (≤55°C) A AC-1 (≤70°C) A AC-3 (≤440V ≤55°C) A AC-4 (400V) AC-4 (40	350
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{c c} AC-1 \left(\le 70^{\circ}\text{C} \right) & A \\ AC-3 \left(\le 440\text{V} \le 55^{\circ}\text{C} \right) & A \\ AC-4 \left(400\text{V} \right) & A \\ \hline $	350
AC-3 (≤440V ≤55°C) A AC-4 (400V) A Rated operational power AC-1 (T≤40°C) 230V kW 400V kW 500V kW 690V kW 690V kW 1EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 48V A 48V A 75V A 110V A 220V A 1EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 48V A 48V A 48V A 75V A 110V A 220V A	290
AC-4 (400V) A	250
Rated operational power AC-1 (T≤40°C) 230V kW 400V kW 500V kW 690V kW IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 48V A 75V A 110V A 220V A IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 48V A 75V A 110V A 220V A IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 48V A 75V A 110V A 220V A IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A	230
	110
EC max current le in DC1 with L/R \leq 1ms with 1 poles in series \leq 24V A 48V A 48V A 410V A 420V A 48V A A A A	132
IEC max current le in DC1 with L/R \leq 1ms with 1 poles in series \leq 24V A 48V A 75V A 110V A 220V A A 48V A A A A A A A A A	230
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	253
	397
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	350
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	350
In the second series In the series In t	350
IEC max current le in DC1 with L/R \leq 1ms with 2 poles in series \leq 24V A 48V A 48V A A 410V A 220V A A 420V A	145
IEC max current le in DC1 with L/R \leq 1ms with 2 poles in series	_
	350
	350
	350
	270
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A	225
≤24V A	223
	250
48V A	350
	350
75V A	350
110V A	270
220V A	270
330V A	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	
≤24V A	350
48V A	350
75V A	350
110V A	350



	220V	Α	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	135
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	225
	220V	A	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		100
120 max current le in 200-200 with 2/10 13 with 3 poles in series	≤24V	Α	350
	48V	A	350
	75V	A	250
	110V	A	250
	220V	A	225
	330V	Α	180
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	350
	48V	Α	350
	75V	Α	250
	110V	Α	250
	220V	Α	225
	330V	Α	210
	460V	Α	180
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1840
Protection fuse			
	gG (IEC)	Α	400
	aM (IEC)	Α	250
Making capacity (RMS value)		Α	2300
Breaking capacity at voltage			
	440V	Α	1840
	500V	Α	1472
	690V	Α	1296
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)		11132	0.10
Tower dissipation per pole (average value)	Ith	W	21
	AC3	W	9.3
Tightoning targue for terminals	A03	V V	9.5
Tightening torque for terminals		Nlma	10
	min	Nm	18
	max	Nm	18
	min	lbin	159
This control of the state of th	max	lbin	159
Tightening torque for coil terminal	_		
	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal		Vertical plan



BF230T4E024

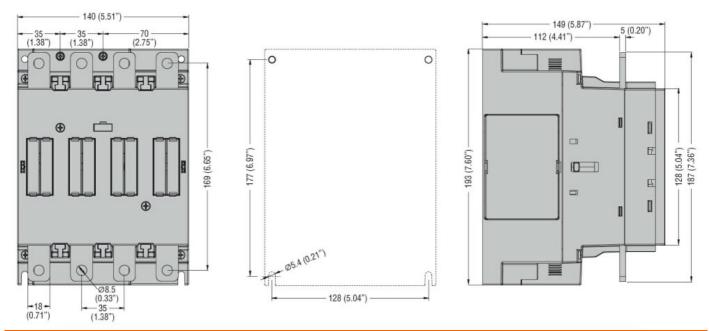
		allowable		±30°
Fixing				Screw
Weight			g	4000
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data			·	
Performance level B10	0d according to EN/ISO 13489-1			
	•	rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				,
Rated AC voltage at 5	0/60Hz, 60Hz			
3	,	min	V	24
		max	V	60
AC operating voltage			<u>-</u>	
operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ριοίτ αρ	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	IIIdX	/008	i io os iliax
	ulop-out	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz	IIIdX	/008	⊒10 U3 IIIII
	•			
	pick-up	min	%Us	80 Us min
			%Us	110 Us max
	drap out	max	7008	110 05 max
	drop-out	may	0/110	≤70 Us min
A O		max	%Us	≤/U US Min
AC average coil consu				
	of 50/60Hz coil powered at 50Hz	2		400 000
		in-rush	VA	160230
	(TO (OOL)	holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz			400 000
		in-rush	VA	160230
		holding	VA	1.53.0
	of 60Hz coil powered at 60Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
Dissipation at holding	≤20°C 50Hz		W	1.53.0
OC coil operating				
DC rated control voltag	ge			
		min	V	20
		max	V	60
OC operating voltage				
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out			
	·	max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			
J		in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency		- Indianing		
Mechanical operation			cycles/h	1000
nconanical operation			Cycles/II	1000



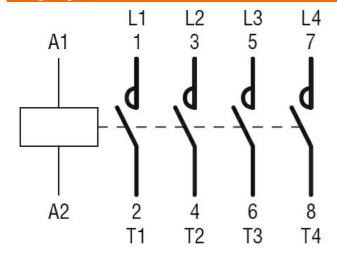
Operating times				
Average time for Us co	ontrol			
_	in AC			
	Closing NO			
	3	min	ms	50
		max	ms	100
	Opening NO			
	, ,	min	ms	30
		max	ms	75
UL technical data				
Yielded mechanical pe	erformance			
	for three-phase AC motor			
	and the prince of the same of	200/208V	HP	75
		220/230V	HP	75
		460/480V	HP	150
		575/600V	HP	200
General USE		3.0,000.		
00110101 002	Contactor			
	Contactor	AC current	Α	350
Short-circuit protection	fuse 600V	710 00110111	- , ,	
Criore official protoction	High fault			
	riigiriaan	Short circuit current	kA	100
		Fuse rating	A	400
		Fuse class	, ,	J
	Standard fault	1 430 01433		
	Standard radit	Short circuit current	kA	10
		Fuse rating	A	400
		Fuse class		RK5
Ambient conditions		1 400 01433		1110
Temperature				
Tomporatoro	Operating temperature			
	Operating temperature	min	°C	-40
		max	°C	70
	Storage temperature	παλ		
	Otorage temperature	min	°C	-50
		max	°C	80
Max altitude		IIIdA	 	3000
Resistance & Protection			111	3000
Pollution degree				3
Dimensions				
Б ініспоюно				

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 350A, AC/DC COIL, 24...60VAC - 20...60VDC



Wiring diagrams



Certifications and compliance

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching