

ENERGY AND AUTOMATION

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, BFK TYPE electric (INCLUDING LIMITING RESISTORS), MAXIMUM IEC OPERATIONAL POWER 400V = 15KVAR, COIL 230VAC 60HZ

Contact characteristics N: 3 Rated insulation voltage Ui IEC/EN V 690 Rated insulation voltage Uirp kV 6 Operational frequency min Hz 25 max Hz 400 IEC Conventional free air thermal current lth A 32 Rated operational power AC-6b (T≤40°C) 230V kvar 9 400V kvar 15 440480V kvar 15 440480V kvar 20 Short-time allowable current for 10s (IEC/EN60947-1) A 200 Protection fuse gG (IEC) A 40 Making capacity (RMS value) A 180 Breaking capacity at voltage 440V A 144 Breaking capacity at voltage 440V A 144 Resistance per pole (average value) mΩ 2.5 Power dissipation per pole (average value) mΩ 2.5 Tightening torque for terminals min Nm 1.5 min Ibin 1.1 max Nm 1.8 min Ibin 1.1 max Nm 1.8 min Ibin 1.1 min Nm 0.8 max Nm 1.8 min Nm 1.5 min Ibin 1.1	Product designation Product type designation				Power contactor BFK18
Rated insulation voltage Uile Division of Insulation voltage Uiling Division with stand voltage Uiling Division Insulation Voltage Uiling Division Insulated Spade lug conductor section Pleasing Division Insulated Spade lug conductor section Pleasing Division Insulated Spade lug conductor section Insulations Division Insulated Spade lug conductor section Insulations Division Insulated Spade Insulations Division Division Insulated Spade Insulations Division Insulated Spade Ins					
Rated impulse withstand voltage Uimp kV 6 Operational frequency min max max Hz max 25 max IEC Conventional free air thermal current Ith A 32 32 Rated operational power AC-6b (T≤40°C) 230V kvar 9 400V kvar 15 400V kvar 15 400V kvar 15 400V kvar 17 690V kvar 20 0 Protection fuse gG (IEC) A 400 A 180 A 180 Bereaking capacity (RMS value) A 180 Bereaking capacity (RMS value) A 190 A 120 Bereaking capacity (RMS value) A 190 Bereaking capacity (RMS value) Bereaking capacity (RMS value) Bereaking capacity (RMS value) Bereaking capacity (RMS value) </td <td>Number of poles</td> <td></td> <td></td> <td>Nr.</td> <td>3</td>	Number of poles			Nr.	3
Operational frequency min max	Rated insulation voltage Ui IEC/EN			V	690
min				kV	6
Max	Operational frequency				
EC Conventional free air thermal current Ith Rated operational power AC-6b (Ts40°C) 230V kvar 9 400V kvar 15 440480V kvar 17 689V kvar 20 20 20 20 20 20 20 2			min	Hz	25
Rated operational power AC-6b (T≤40°C)			max	Hz	400
Part	IEC Conventional free air thermal curre	nt Ith		Α	32
A 00	Rated operational power AC-6b (T≤40	°C)			
Add	·	,	230V	kvar	9
Short-time allowable current for 10s (IEC/EN60947-1)			400V	kvar	15
Short-time allowable current for 10s (IEC/EN60947-1)			440480V	kvar	17
Protection fuse gG (IEC)			690V	kvar	20
Making capacity (RMS value)	Short-time allowable current for 10s (IE	EC/EN60947-1)		Α	200
Making capacity (RMS value)	Protection fuse				
Making capacity (RMS value) A 180 Breaking capacity at voltage 440V A 144 500V A 120 690V A 94 Resistance per pole (average value) Ith W 2.5 Power dissipation per pole (average value) min Nm 1.5 Tightening torque for terminals min Nm 1.5 max Nm 1.5 nmx Nm 1.5 Tightening torque for coil terminal min Nm 1.5 nmx Nm 1.5 Tightening torque for coil terminal min Nm 0.8 nmx Nm 1 1.5 Tightening torque for coil terminal min Nm 0.8 nmx Nm 1 1.5 Tightening torque for coil terminal min Nm 0.8 nmx Nm 1 1.5 Tightening torque for coil terminal min Nm 0.8 nmx Nm 1 2 1.5 1.0 1.0 1.0			gG (IEC)	Α	40
Breaking capacity at voltage 440V A 144 500V A 120 690V A 94 Resistance per pole (average value) mΩ 2.5 Power dissipation per pole (average value) lth W 2.6 Tightening torque for terminals min Nm 1.5 max Nm 1.8 min lbin 1.5 Tightening torque for coil terminal min Nm 1.5 Tightening torque for coil terminal min Nm 0.8 max Nm 1 max Nm 1 max Nm 1 max Nm 2 Conductor section Flexible w/o lug conductor section min mm² 1 max mm² 4 Flexible w/o lug conductor section min mm² 4 <	Making capacity (RMS value)			Α	180
A 440					
Resistance per pole (average value) mΩ 2.5			440V	Α	144
Resistance per pole (average value) mΩ 2.5			500V	Α	120
Power dissipation per pole (average value)			690V	Α	94
Power dissipation per pole (average value) Ith	Resistance per pole (average value)			mΩ	2.5
Tightening torque for terminals		ılue)			
Min Nm 1.5	, , , , ,	•	lth	W	2.6
Min Nm 1.5	Tightening torque for terminals				
Min Max 1bin 1.1 1.5			min	Nm	1.5
Tightening torque for coil terminal			max	Nm	1.8
Tightening torque for coil terminal min Nm 0.8 max Nm 1 min Ibin Prodotti finiti max Ibin Prodotti finiti Max number of wires simultaneously connectable Nr. 2			min	Ibin	1.1
min Nm 0.8 max Nm 1 min lbin Prodotti finiti max lbin prodotti finiti m			max	lbin	1.5
min Nm 0.8 max Nm 1 min lbin Prodotti finiti max lbin prodotti finiti m	Tightening torque for coil terminal				
max Nm 1 lbin Prodotti finiti max lbin Prodotti finiti max lbin Prodotti finiti max lbin Prodotti finiti max lbin Prodotti finiti Prodotti finiti max lbin Prodotti finiti Prodotti finiti Prodotti finiti max lbin lbin lbin prodotti finiti max lbin lbin lbin lbin lbin lbin prodotti finiti max lbin lbin lbin lbin lbin lbin lbin lbin			min	Nm	0.8
Max number of wires simultaneously connectable Nr. 2 Conductor section Ibin Prodotti finiti Prodotti finiti Flexible w/o lug conductor section min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position Vertical plan					
Max number of wires simultaneously connectable Nr. 2 Conductor section Imax Nr. 2 Flexible w/o lug conductor section min mm² nm² 1 max mm² 6 Flexible c/w lug conductor section min mm² nm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² nm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position					Prodotti finiti
Max number of wires simultaneously connectable Conductor section Flexible w/o lug conductor section min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Nr. 2 Imax mm² 1 max mm² 4 IP20 when wired Mechanical features Operating position					
Flexible w/o lug conductor section min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position Vertical plan	Max number of wires simultaneously co	onnectable		Nr.	2
min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan	Conductor section				
min mm² 1 max mm² 6 Flexible c/w lug conductor section min mm² 1 max mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Normal Vertical plan		g conductor section			
Flexible c/w lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position Normal Vertical plan		_	min	mm²	1
Flexible c/w lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position Normal Vertical plan					
min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 1 max mm² 1 Power terminal protection according to IEC/EN 60529 Perating position IP20 when wired Mechanical features Operating position Normal Vertical plan	Flexible c/w lu	g conductor section			
Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position normal Vertical plan		-	min	mm²	1
Flexible with insulated spade lug conductor section min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 IP20 when wired Mechanical features Operating position normal Vertical plan					4
min mm² 1 max mm² 4 Power terminal protection according to IEC/EN 60529 Rechanical features Operating position IP20 when wired Vertical plan	Flexible with in	sulated spade lug conductor section			_
Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Max mm² 4 IP20 when wired Normal Vertical plan		· -	min	mm²	1
Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan					4
Mechanical features Operating position normal Vertical plan	Power terminal protection according to	IEC/EN 60529			IP20 when wired
Operating position normal Vertical plan					
normal Vertical plan					
			normal		Vertical plan
					•



ENERGY AND AUTOMATION

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, BFK TYPE electric (INCLUDING LIMITING RESISTORS), MAXIMUM IEC OPERATIONAL POWER 400V = 15KVAR, COIL 230VAC 60HZ

Fixing				Screw / DIN rail
Weight			~	35mm 4080
Auxiliary contact characteristics			g	4080
Type of contact				1 NO
Thermal current Ith			Α	10
IEC/EN 60947-5-1 designation				A600 - P600
Operating current AC15				7,000 1 000
operating surrent 7.5 To		230V	Α	3
		400V	Α	1.9
		500V	Α	1.4
Operating current DC12				
		110V	Α	5.7
Operating current DC13				
		24V	Α	5.7
		48V	Α	2.9
		60V	Α	2.3
		110V	Α	1.25
		125V	Α	1.1
		220V	Α	0.6
		600V	Α	0.1
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	400000
Safety related data				
Performance level B10d accordi	ng to EN/ISO 13489-1			
		rated load	cycles	400000
		mechanical load	cycles	20000000
Mirror contats according to IEC/E	EN 609474-4-1			YES
EMC compatibility			.,,	Yes
Rated AC voltage at 60Hz			V	230
AC coil operating				
AC operating voltage	!!			
OT 6UHZ	coil powered at 60Hz			
	pick-up	min	%Us	80
		min max	%Us	110
	drop-out	IIIdX	/003	110
	arop out	min	%Us	20
		max	%Us	55
AC average coil consumption at	20°C			
	Hz coil powered at 50Hz			
23,000	F	in-rush	VA	75
		holding	VA	9
of 50/60	Hz coil powered at 60Hz	<u> </u>		
	•	in-rush	VA	70
		holding	VA	6.5
of 60Hz	coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤20°C 50H	lz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600



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Operating times				
Average time for U	ls control			
	in AC			
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			4.0
		min	ms	10
	Closing NC	max	ms	20
	Closing NC	min	ms	14
		max	ms	28
UL technical data		max	11.0	20
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
Contact ratios of -	uvilianu pontonto appording to LII	DC current	A	1 4600 B600
Ambient conditions	uxiliary contacts according to UL			A600 - P600
Temperature				
Temperature	Operating temperature			
	operating temperature	min	°C	-50
		max	°C	70
	Storage temperature			
	•	min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				
Wiring diagrams				
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			
<u> </u>	UL 60947-4-1			
Certificates	000			
	CCC			
	cULus FAC			
ETIM classification	EAC			
				EC001079 -
ETIM 8.0				Capacitor contactor