



Product designation			Power contactor
Product type designation Contact characteristics			BGP09
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	500
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		i v	<u> </u>
operational requestoy	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	Α	20
Operational current le			
	AC-1 (≤40°C)	Α	20
	AC-1 (≤55°C)	Α	18
	AC-1 (≤70°C)	Α	15
	AC-3 (≤440V ≤55°C)	Α	9
	AC-4 (400V)	Α	4
Rated operational power AC-1 (T≤40°C)	, , ,		
	230V	kW	8
	400V	kW	14
	500V	kW	16
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	10
Making capacity (RMS value)		Α	92
Breaking capacity at voltage			
	440V	Α	72
	500V	Α	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC-3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Max number of wires simultaneously connectable Conductor section		Nr.	2

Conductor section

AWG/Kcmil





FOUR-POLE CONTACTOR, AC COIL 60HZ, 230VAC, REAR PCB SOLDER PIN

Flexible wire lug conductor section		mov		12
Flexible ctw lug conductor section				12
Plexible c/w lug conductor section		-	mm²	0.8
Flexible c/w lug conductor section				
Per				2.0
Prizable with insulated spade lug conductor section min mm² 1.5 max mm² 2.5 min min mm² 2.5 min min mm² 2.5 min min mm² 2.5 min		-	mm²	1 5
Flexible with insulated spade lug conductor section				
Main Mini				2.0
Power terminal protection according to IEC/EN 60529			mm²	1.5
Power terminal protection according to IEC/EN 60529 Power terminal protection allowable Power terminal protection allowable Power terminal protection Power terminal				
Mechanical features Operating position normal allowable Vertical plan \$20°C Fixing g 200 Weight g 200 Auxiliary contact characteristics Thermal current tith A 10 IEC/EN 60947-5-1 designation ycles 20000000 Operations cycles 5000000 Mechanical life cycles 500000 Electrical life cycles 500000 Safety related data cycles 500000 Performance level B10d according to EN/ISO 13489-1 rated load cycles 500000 EMC compatibility yes 500000 AC operating yes 500000 EAC coll operating yes 500000 Rated AC voltage at 60Hz yes 30 AC operating voltage min %Us 75 drop-out min %Us 20 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 4 f 60Hz coil powered at 6	Power terminal protect			
Operating position normal allowable Vertical plan ±30° Fixing Screw / DIN rail 35mm Weight g 20 Auxiliary contact characteristics Thermal current lth A 10 IEC/EN 60947-5-1 designation Cycles 20000000 Designation Cycles 500000 Mechanical life Cycles 500000 Electrical life cycles 500000 Safety related data Ferformance level B10d according to EN/ISO 13489-1 rated load cycles 500000 EMC compatibility yes 20000000 EMC compatibility yes 200 AC operating yes 200 AC operating voltage min %Us 75 AC operating voltage min %Us 75 AC average coll consumption at 20°C fof 60Hz coil powered at 50Hz in-rush holding %Us 30 AC average coll				00
Pixing				
Fixing Secret Part	31	normal		Vertical plan
Note		allowable		-
Meight Saffilm Saff	E' '			Screw / DIN rail
Auxiliary contact characteristics	rixing			
Auxiliary contact characteristics	Weight		g	200
EC/EN 60947-5-1 designation	Auxiliary contact chara	cteristics		
Operations Mechanical life cycles 20000000 Electrical life cycles 500000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 500000 cycles 20000000 EMC compatibility y 230 AC coil operating Rated AC voltage at 60Hz y 230 AC operating voltage of 60Hz coil powered at 60Hz min %Us 75 max %Us 75 drop-out min %Us 20 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 30 holding holding VA 30 holding VA 3 of 50/60Hz coil powered at 60Hz in-rush holding VA 3 in-rush holding VA 30 holding VA 4 in-rush holding ≤20°C 50Hz W </td <td>Thermal current Ith</td> <td></td> <td>Α</td> <td>10</td>	Thermal current Ith		Α	10
Mechanical life cycles 20000000 Electrical life cycles 500000 Safety related data Performance level B10d according to EN/ISO 13489-1 EMC compatibility rated load mechanical load cycles 500000 cycles 20000000 EMC compatibility V 230 AC operating voltage of 60Hz coil powered at 60Hz min %Us 75 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 30 AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz in-rush holding VA 30 AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz in-rush holding VA 30 AC average coil consumption at 20°C foll powered at 60Hz in-rush holding VA 30 AC average coil consumption at 20°C foll powered at 60Hz in-rush holding VA 3 AC average coil consumption at 50/60Hz coil powered at 60Hz in-rush holdin	IEC/EN 60947-5-1 des	signation		A600
Electrical life cycles 500000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 500000 cycles 500000 cycles 200000000 EMC compatibility yes AC coll operating yes AC coll operating yes AC coll operating voltage yes AC coll operation voltage yes AC	Operations			
Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load mechanical load overless 500000 cycles 5000000000 5000000000000000000000000000000000000	Mechanical life		cycles	20000000
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load occles 500000 counce EMC compatibility yes AC coil operating Rated AC voltage at 60Hz V 230 AC operating voltage min %Us 75 max %Us 115 drop-out min %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush voltage VA 30 holding AC average coil consumption at 20°C in-rush holding VA 4 0 <	Electrical life		cycles	500000
EMC compatibility vyes AC coll operating V 20000000 Rated AC voltage at 60Hz V 230 AC operating voltage of 60Hz coil powered at 60Hz min %Us 75 pick-up min %Us 115 drop-out min %Us 20 AC average coil consumption at 20°C min %Us 55 AC average coil consumption at 20°C in-rush holding VA 30 for 50/60Hz coil powered at 50Hz in-rush holding VA 4 of 50/60Hz coil powered at 60Hz in-rush holding VA 25 holding VA 30 No holding VA 30 No pissipation at holding ≤0°C 50Hz in-rush holding VA 30 Max cycles (frequency VA 0.95 Max cycles (frequency)	Safety related data			
mechanical load cycles 20000000 EMC compatibility yes AC coil operating V 230 Rated AC voltage at 60Hz V 230 AC operating voltage min %Us 75 Pick-up min %Us 75 Max %Us 115 drop-out min %Us 20 max %Us 55 AC average coil consumption at 20°C in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency W 0.95	Performance level B10	0d according to EN/ISO 13489-1		
EMC compatibility yes AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 75 max %Us 115 drop-out min %Us 20 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 50/60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Mechanical operation cycles/h 3600		rated load	cycles	500000
AC coil operating Rated AC voltage at 60Hz V 230 AC operating voltage of 60Hz coil powered at 60Hz pick-up min max %Us 75 max max %Us 115 drop-out min max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Kycles/h 3600		mechanical load	cycles	20000000
Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 75 max %Us 115 115 drop-out min %Us 20 max %Us 55 55 AC average coil consumption at 20°C in-rush VA 30 of 50/60Hz coil powered at 50Hz in-rush Nolding VA 4 in-rush Nolding VA 3 4 of 60Hz coil powered at 60Hz in-rush NA 25 in-rush Nolding VA 3 30 of 60Hz coil powered at 60Hz in-rush NA 30 in-rush Nolding VA 4 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Cycles/h 3600				yes
AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 75 max %Us 115 drop-out min %Us 20 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Mechanical operation cycles/h 3600				
of 60Hz coil powered at 60Hz pick-up min)Hz	V	230
Pick-up min %Us 75 max %Us 115	AC operating voltage			
min %Us 75 max %Us 115 drop-out min max %Us 20 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 4 VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush holding VA 3 in-rush holding VA 3 VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush holding VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Max cycles/h 3600		·		
Max WUs 115		·	0/11	
Min Wus 20 max Wus 55				
Min max %Us b5 20 max AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush vA 30 holding vA 4 of 50/60Hz coil powered at 60Hz in-rush vA 25 holding vA 3 of 60Hz coil powered at 60Hz in-rush vA 30 holding vA 3 of 60Hz coil powered at 60Hz in-rush vA 30 holding vA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency cycles/h 3600			%Us	115
max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 in-rush holding VA 4 of 50/60Hz coil powered at 60Hz in-rush holding VA 3 in-rush holding VA 3 of 60Hz coil powered at 60Hz in-rush holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency W 0.95 Mechanical operation cycles/h 3600		•	0/11-	20
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Mechanical operation cycles/h 3600				
of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4 of 50/60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Mechanical operation cycles/h 3600	AC average coil core:		/0US	33
in-rush	AC average con consu	·		
holding			\/Δ	30
of 50/60Hz coil powered at 60Hz in-rush VA 25 holding VA 3 of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 3600				
$\frac{\text{in-rush holding}}{\text{of 60Hz coil powered at 60Hz}} \frac{\text{VA}}{\text{of 60Hz coil powered at 60Hz}} \frac{\text{in-rush holding}}{\text{in-rush VA}} \frac{\text{VA}}{\text{30}} \frac{3}{\text{VA}} = \frac{30}{\text{VA}} \frac{30}{\text{VA}} = \frac{30}{\text{VA}} \frac{30}{\text{VA}} = \frac{30}{\text{VA}} \frac{30}{\text{VA}} = \frac{30}{\text{VA}$			v / \	<u>'</u>
$\frac{\text{holding}}{\text{of 60Hz coil powered at 60Hz}} \frac{\text{holding}}{\text{of 60Hz coil powered at 60Hz}} \frac{\text{VA}}{\text{in-rush}} \frac{\text{VA}}{\text{holding}} \frac{30}{\text{VA}} \frac{30}{\text{holding}}$ $\frac{\text{Dissipation at holding}}{\text{Dissipation at holding}} \le 20^{\circ}\text{C 50Hz}$ $\frac{\text{W}}{\text{Max cycles frequency}} \frac{\text{VA}}{\text{S00}} \frac{30}{\text{VA}} \frac{30}{\text$		•	\/A	25
of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 3600				
in-rush VA 30 holding VA 4 Dissipation at holding ≤20°C 50Hz W 0.95 Max cycles frequency Mechanical operation cycles/h 3600			***	
holdingVA4Dissipation at holding ≤20°C 50HzW0.95Max cycles frequencyCycles/h3600		•	VA	30
Dissipation at holding ≤20°C 50HzW 0.95Max cycles frequencyCycles/h 3600				
Max cycles frequency Mechanical operation cycles/h 3600	Dissipation at holding			
Mechanical operation cycles/h 3600				
			cycles/h	3600





FOUR-POLE CONTACTOR, AC COIL 60HZ, 230VAC, REAR PCB SOLDER PIN

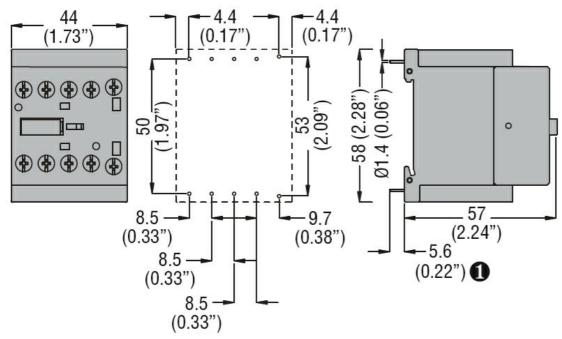
Average time for Us control

	ontroi i A C				
	in AC	Obstant NO			
		Closing NO			40
			min	ms	12
		0 1 110	max	ms	21
		Opening NO			
			min	ms	9
			max	ms	18
		Closing NC			
			min	ms	17
			max	ms	26
		Opening NC			
			min	ms	7
			max	ms	17
	in DC				_
		Closing NO			
		-	min	ms	18
			max	ms	25
		Opening NO			
		3 -	min	ms	2
			max	ms	3
		Closing NC			
		3.33g 113	min	ms	3
			max	ms	5
		Opening NC	max	1110	O
		Opening No	min	ms	11
			max	ms	17
UL technical data			IIIdX	1113	17
Full-load current (FLA)	for three phase AC				
		motor			
Tull-load culterit (LA)	nor three-phase AC	motor	at 490\/	۸	7.6
Tull-load current (LA)	nor three-phase AC	motor	at 480V	A	7.6 6.1
		motor	at 480V at 600V	A A	7.6 6.1
Yielded mechanical pe	erformance				
			at 600V	Α	6.1
	erformance		at 600V 110/120V	A HP	0.5
	erformance for single-phase A	AC motor	at 600V	Α	6.1
	erformance	AC motor	at 600V 110/120V 230V	A HP HP	0.5 1.5
	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V	HP HP	0.5 1.5
	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V	HP HP HP	0.5 1.5 2 3
	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	0.5 1.5 2 3 5
Yielded mechanical pe	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V	HP HP HP	0.5 1.5 2 3
	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	0.5 1.5 2 3 5
Yielded mechanical pe	erformance for single-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	0.5 1.5 2 3 5
Yielded mechanical pe	erformance for single-phase A for three-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	0.5 1.5 2 3 5
Yielded mechanical pe	erformance for single-phase A for three-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP HP	0.5 1.5 2 3 5 5
Yielded mechanical pe	erformance for single-phase A for three-phase A	AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP HP	0.5 1.5 2 3 5 5
Yielded mechanical pe	erformance for single-phase A for three-phase A Contactor	C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP HP	0.5 1.5 2 3 5 5
Yielded mechanical pe	erformance for single-phase A for three-phase A	C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5
Yielded mechanical pe	erformance for single-phase A for three-phase A Contactor	C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5 -50
Yielded mechanical pe	for single-phase Affor three-phase Affor three-phase Affor three-phase Afformation	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5
Yielded mechanical pe	erformance for single-phase A for three-phase A Contactor	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5 -50 +70
Yielded mechanical pe	for single-phase Affor three-phase Affor three-phase Affor three-phase Afformation	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max min	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5 20 -50 +70 -60
Yielded mechanical per General USE Ambient conditions Temperature	for single-phase Affor three-phase Affor three-phase Affor three-phase Afformation	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max	A HP HP HP HP HP C C C C C C C C C C C C	6.1 0.5 1.5 2 3 5 5 4 -50 +70 -60 +80
Yielded mechanical per General USE Ambient conditions Temperature Max altitude	for single-phase Affor three-phase Affor three-phase Affor three-phase Affor three-phase Afformation Contactor Operating temperations Storage temperations	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max min	HP HP HP HP HP	6.1 0.5 1.5 2 3 5 5 20 -50 +70 -60
General USE Ambient conditions Temperature Max altitude Resistance & Protection	for single-phase Affor three-phase Affor three-phase Affor three-phase Affor three-phase Afformation Contactor Operating temperations Storage temperations	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max min	A HP HP HP HP HP C C C C C C C C C C C C	6.1 0.5 1.5 2 3 5 5 20 -50 +70 -60 +80 3000
Yielded mechanical per General USE Ambient conditions Temperature Max altitude	for single-phase Affor three-phase Affor three-phase Affor three-phase Affor three-phase Afformation Contactor Operating temperations Storage temperations	C motor C motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current min max min	A HP HP HP HP HP C C C C C C C C C C C C	6.1 0.5 1.5 2 3 5 5 4 -50 +70 -60 +80



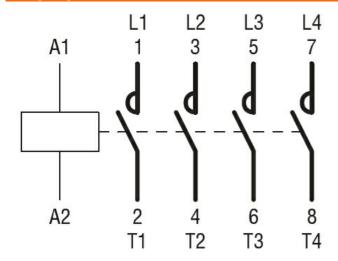
ENERGY AND AUTOMATION

Dimensions



• Recommended PCB drillings 1.7-2mm.

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

UL 60947-4-1

Certificates

cURus

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching