## BF09T4A230



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 230VAC



Product designation		Power contactor
Product type designation		BF09
Contact characteristics		
Number of poles	nr.	3
Rated insulation voltage Ui	V	690
Rated impulse withstand voltage Uimp	kV	6
Operating frequency		
Operational frequency min	Hz	25
Operational frequency max	Hz	400
Conventional free air thermal current Ith	А	25
Operating current		
Operational current AC3 (≤440V ≤55°C)	А	9
Operational current AC4 (400V)	А	4.9
Short-time allowable current for 10s (IEC/EN60947-1)	А	150
Protection fuse		
gG (IEC)	А	25
aM (IEC)	A	10
Making capacity (RMS value)	A	90
Breaking capacity at voltage	7.	
Breaking capacity 440V	А	72
Breaking capacity 500V	A	72
Breaking capacity 690V	A	71
Resistance per pole (average value)	mΩ	2.5
Power dissipation per pole (average value)		2.0
Power dissipation pole (average value)	W	1.6
AC3	Ŵ	0.2
Tightening torque for terminals	••	0.2
min	Nm	1.5
max	Nm	1.8
min	lbft	1.1
max	Ibft	1.5
Tightening torque for coil terminal	IDIT	1.5
min	Nm	0.8
	Nm	1
max min	lbft	0.59
	lbft	0.59
max number of wires simultaneously connectable		
max number of wires simultaneously connectable	nr.	2
Conductor section		
AWG		16
min		16
max		10
Flexible w/o lug conductor section		4
min	mm²	1
Max Elevible c/w lug conductor section	mm²	6

Flexible c/w lug conductor section

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

ENERGY AND AUTOMATION

BF09T4A230 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 230VAC

min         mm²         1           max         mm²         4           Flexible with insulated spade lug conductor section         min         mm²         1           max         mm²         4         1           Power terminal protection according to IEC/EN 60529         in ma²         1           Availary contact         1         1         NA           Thermal current th         A         25         1           IEC/EN 60347-5-1 designation         A 600         Ambent conditions         4600           Temperature         min         *C         -50         max         *C         -50           Max altitude         max         *C         -60         max         *C         -60           Operating position         max         *C         -60         max         *C         80           Mounting         Screw / DIN rail         35mm         Screw / DIN rail         -600	max         mm²         4           Power terminal protection according to IEC/EN 60529         mm²         1           Auxilary contact characteristics         mm²         1           Type of contact         1         NA           Thermal current lth         A         25           IEC/EN 60947-5-1 designation         A600           Ambient conditions         600           Temperature         min         °C           Operating temperature         min         °C           min         °C         60           Max altitude         max         °C           Operating position         min         °C           Operating position         min         °C           Mounting         Screw / DIN rall           Weight         g         0.367           Operating position         Vertical plan           Mechanical tife         Cycles         2000000           Safety related data         Yes           Performance level B10d according to EN/ISO/03449-1-         Yes           Performance level B10d according to EN/ISO/03449-204000000000000000000000000000000000						
Flexible with insulated spade lug conductor section           min         min         mm²         1           Power terminal protection according to IEC/EN 60529         IP20           Availary contact characteristics         IP20           Type of contact         1 NA           Demeral current lth         A           Demerature in the intervent lth         A           Coperating temperature         min         *C           Max attitude         min         *C           Operating position         min         *C           Operating position         min         *C           Mounting         Screw / DIN rail         35m           Mounting         Screw / DIN rail         35m           Mechanical life         Cycles         2000000           Safety related data         Cycles         2000000           Safety related data         Yes         AC cologerating to EV/ISO 01489-1           Performance level B10d according to EV/ISO 01489-1         Yes           AC coperating voltage at 50/60Hz, 60Hz         Yes           AC cologerating voltage at 50/60Hz, 60Hz         min         V         12           Max         file/	Flexible with insulated spade lug conductor section           max         mm*         1           nax         mm*         4           Power terminal protection according to IEC/EN 60529         IP20           Auxiliary contact characteristics         1NA           Type of contact         1 NA           Thermal current th         A           Coperating temperature         A600           Max         °C           Storage temperature         min           max         °C           Storage temperature         min           0perating position				min		1
min         mm²         1           max         mm²         1           Power terminal protection according to IEC/EN 60529         IP20           Auxilary contact         1 NA           Thermal current lth         A         25           IEC/EN 60347-5-1 designation         A 600           Ambient conditions         max         °C           Temperature         Operating temperature         min         °C         -50           Mix altitude         max         °C         70         Storage temperature         min         °C         -60           Max altitude         max         °C         80         Mix altitude         max         °C         80           Operating position         morrnal         Vertical plan         allowable         ±30°         *           Muntling         Screw / DIN rail           Mechanical life         Cycles         20,000,000         Electrical life	min         mm²         1           max         mm²         4           Power terminal protection according to IEC/EN 60529         IP20           Axuitary contact         1 NA           Thermal current tith         A         25           IEC/EN 60347-5-1 designation         A         6600           Ambient conditions         max         *C         -50           Temperature         min         °C         -50           Operating temperature         min         °C         -60           max         °C         70         -           Storage temperature         min         °C         -60           max         °C         80         -           Operating position         morrnal         Vertical plan           allowable         ±300*         -           Mounting         Screw / DIN rail           Screw / DIN rail         -         -           Mechanical life         Cycles         20.000.000           Electrical life         Cycles         20.000.000           Screw / DIN rail         -         -           Mechanical life         Cycles         20.000.000      Electrical life         Cycles         <				max	mm²	4
max         mm²         4           Power terminal protection according to IEC/EN 60529         IP20           Auxiliary contact characteristics         1           Type of contact         1           The of contact         1           The of contact         1           The of contact         Account of the max           Termperature         Account of the max           Operating temperature         min         °C         -50           max         °C         70         Storage temperature         min         °C         -60           Max altitude         max         °C         80	max         mm²         4           Power terminal protection according to EIC/EN 60529         IP20           Availary contact characteristics         1 NA           Type of contact         1 NA           The of contact         1 NA           The of contact         A 600           Ambient conditions         A 600           Temperature         Min         C           Operating temperature         min         C         50           Max altitude         max         °C         70           Storage temperature         min         °C         60           Max altitude         max         °C         60           Max altitude         max         °C         60           Max altitude         morrel         Vertical plan           allowable         ±30°         35rm           Mounting         S5rew / DIN Pail         35rm           Mechanical life         Cycles         20,000,000           Electrical life         Cycles         20,000,000           Electrical life         Cycles         20,000,000           Electrical life         Cycles         20,000,000           Electrical life         Cycles         20,000,000 </td <td></td> <td>Flexible with insulated</td> <td>spade lug conductor section</td> <td></td> <td></td> <td></td>		Flexible with insulated	spade lug conductor section			
Power terminal protection according to IEC/EN 60529         IP20           Auxiliary contact characteristics         1 NA           Thermal current lth         A         25           IEC/EN 60347-5-1 designation         A 6000           Ambient conditions         max         °C         -50           Temperature         min         °C         -50           Max altitude         max         °C         -60           Max altitude         m         3,000         -00           Operating position         normal         Vertical plan           allowable         ±30°	Power terminal protection according to IEC/EN 60529         IP20           Auxiliary contact characteristics         INA           Thermal current th         A         25           EC/EN 60347-5-1 designation         A 6000           Ambient conditions         max         °C         -50           Temperature         min         °C         -50           Max altitude         max         °C         70           Storage temperature         min         °C         -60           Max altitude         m         3,000         00           Operating position         normal         Vertical plan           allowable         ±30°         35mm           Weight         g         0,367           Operating position         g         0,367           Operating temperature         mechanical life         C yeles         20,000,000           Electrical life         C yeles         20,000,000         Storw / DIN rail           Storage temperature         g         0,367         Operating           Mechanical life         C yeles         20,000,000         Storw / DIN rail           Storage temperature         g         0,367         Operating         Storw / DIN rail <tr< td=""><td></td><td></td><td></td><td>min</td><td></td><td></td></tr<>				min		
Auxiliary contact characteristics	Auxiliary contact characteristics         1 NA           Type of contact         1 NA           Thermal current tith         A 25           IEC/EN 60947-5-1 designation         A600           Ambient conditions         70           Temperature         min °C - 50           Max attitude         max °C - 70           Storage temperature         min °C - 60           Max attitude         max °C - 80           Max attitude         max °C - 80           Operating position         mormal           Vertical plan         3.000           Operating position         screw / DIN rail           Mounting         Screw / DIN rail           Mechanical life         Cycles         2.0000.00           Electrical life         Cycles         2.0000.00				max	mm²	
Type of contact         1 NA           Thermal current lth         A         25           ECCIPN 603475-1 designation         A600           Annient conditions         Formation         A600           Temperature         Operating temperature         min         °C         -50           Max affitude         min         °C         -50         min         °C         -60           Max affitude         min         °C         -60         min         °C         80           Max affitude         m         3.000         -60         min         °C         80           Max affitude         m         3.000         -60         min         °C         80           Max affitude         m         3.000         -60         min         °C         80           Mounting         screw / DIN rail         35mm         -60         -6	Type of contact         1 NA           Thermal current ith         A         25           ECCIAN 60347-5-1 designation         A600           Antient conditions         Formation         A600           Temperature         Operating temperature         min         °C         -50           Max altitude         min         °C         -60         max         °C         -60           Max altitude         min         °C         -60         max         °C         80           Operating position         more command         Vertical plan         -3000			60529			IP20
Thermal current lift         A         25           IEC/EN 60947-5-1 designation         A600         A600           Anhient conditions         min         °C         -50           Temperature         min         °C         -50           Max attitude         min         °C         -60           Max attitude         m         3,000         -60           Operating position         normal         Vertical plan         -3000           Operating position         normal         Vertical plan         -30°           Mounting         Screw / DIN rail         -35m	Thermal current lifh         A         25           IEC/EN 60947-5-1 designation         A600         A600           Ambient conditions         min         °C         -50           Temperature         min         °C         -50           Max attitude         min         °C         -60           Max attitude         m         3,000         -60           Operating position         normal         Vertical plan         allowable         ±30°           Mounting         Screw / DIN rail         35mm         -60         -60           Mechanical life         Cycles         20,000,000         -60         -60         -60           Mechanical life         Cycles         20,000,000         -60		cteristics				4 1 1 4
IEC/EN 60947-5-1 designation A600 Ambent conditions Temperature Operating temperature Operating temperature Operating temperature min "C -50 max "C -60 "C -	IEC/EN 60947-5-1 designation A600 Arribert conditions Temperature Operating temperature Operating temperature Operating temperature min "C -50 max "C -60 max "C -80 max "Long m					•	
Ambient conditions       Temperature	Ambient conditions <ul> <li>Temperature</li> <li>Operating temperature</li> <li>min</li> <li>*C</li> <li>50</li> <li>storage temperature</li> <li>min</li> <li>*C</li> <li>60</li> <li>max</li> <li>*C</li> <li>80</li> </ul> <li>Max altitude</li> <ul> <li>min</li> <li>*C</li> <li>60</li> <li>max</li> <li>*C</li> <li>80</li> </ul> <ul> <li>max</li> <li>*C</li> <li>60</li> <li>max</li> <li>*C</li> <li>60</li> <li>max</li> <li>*C</li> <li>60</li> <li>max</li> <li>*C</li> <li>80</li> <li>max</li> <li>*C</li> <li>80</li> <li>max</li> <li>*C</li> <li>80</li> <li>*C</li> <li>80</li> <li>*C</li> <li>80</li> <li>*C</li>             &lt;</ul>		· · · · · · · · · · · · · · · · · · ·			A	
Temperature         Operating temperature         min         *C         -50           Max         *C         70         50           Storage temperature         min         *C         -60           max         *C         80         max         *C         80           Max altitude         momal         vertical plan         -3000         -3000         -3000           Operating position         normal         vertical plan         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -30000         -300000         -300000         -300000         -300000         -300000<	Temperature         Operating temperature         min         *C         -50           Max         *C         70         50           Storage temperature         min         *C         60           max         *C         80         max         *C         80           Max altitude         mormal         vertical plan         3000         vertical plan         310*           Operating position         mormal         vertical plan         35mm         Screw / DIN rail           Mounting         Screw / DIN rail         35mm         Screw / DIN rail         35mm           Weight         g         0.367         Operations         Cycles         20,000,000           Electrical life         Cycles         20,000,000         Starty related data         Screw / DIN rail         35mm           Veright         g         0.367         Operations         Verifical plan         Screw / DIN rail         35mm           Starty related data         Performance level B10d according to EN/ISO 13489-1         Verifical plan         Yes         Screw / DIN rail         Screw / DIN rail <td></td> <td>signation</td> <td></td> <td></td> <td></td> <td>A600</td>		signation				A600
Operating temperature         min         *C         50           Storage temperature         min         *C         70           Storage temperature         min         *C         60           Max altitude         m         3,000         0           Operating position         normal         wetrical plan           allowable         ±30°         400           Mounting         Screw / DIN rail         35mm           Weight         g         0.387           Operations         Screw / DIN rail         35mm           Mechanical life         Cycles         20,000,000           Electrical life         Cycles         20,000,000           Mitror contats according to EN/ISO/GM89-t1 @@@@Oddddddddddddddddddddddddddddddddd	$\begin{tabular}{ c c c c } \hline $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $						
min         °C         70           Storage temperature         min         °C         70           Storage temperature         min         °C         60           max         °C         80            Max altitude         m         3,000            Operating position         normal         Vertical plan         allowable         ±30°           Mounting         Screw / DIN rail         355mm             Weight         g         0.367             Operations          0.367             Mechanical life         Cycles         20,000,000             Electrical life         Cycles         20,000,000             Performance level B10d according to EN/ISO 13489-1 -         Performance level B10d according to EN/ISO 016489- 00000000            Storage at 50/60Hz         104820         Yes             EMC compatibility         Yes              AC coil operating         G         50/60Hz              Miror contats according to IEC/EN 609474-41         Yes         <	min         °C         70           Storage temperature         min         °C         70           Storage temperature         min         °C         60           max         °C         80         80           Max atitude         max         °C         80           Operating position         normal         Vertical plan           allowable         ±30°         100           Mounting         Screw / DIN rail         35mm           Weight         g         0.367           Operations          20,000,000           Electrical life         Cycles         20,000,000           Bito according to EN/ISO (3489-1 -         Performance level B10d according t	remperature	Operating temperature				
max         °C         70           Storage temperature         min         °C         60           max         °C         80           Max altitude         m         3,000           Operating position         normal allowable         +33°           Mounting         Screw / DIN rail         35mm           Mounting         g         0.367           Operations         g         0.367           Operations         g         0.367           Mechanical life         Cycles         200000           Safety related data         Performance level B10d according to EN/ISO Gl&H89+ 1 e000         Safety related data           Performance level B10d according to EN/ISO Gl&H89+ 1 e00000000000000000000000000000000000	max         °C         70           Storage temperature         min         °C         60           max         °C         80           Max altitude         m         3,000           Operating position         normal allowable         ±30°           Mounting         vertical plan allowable         ±30°           Mounting         Screw / DIN rail         35mm           Mounting         g         0.367           Operations         g         0.367           Mechanical life         Cycles         20.000,000           Electrical life         Cycles         20.000,000           Performance level B10d according to EN/ISO 013489-1         Performance level B10d according to EN/ISO 016489-9         10000000           Performance level B10d according to EN/ISO 016489-9         100000000         200000           Safety related data         Vers         Yes           Performance level B10d according to EN/ISO 016489-9         10000000000000           Mirror contats according to IEC/EN 609474-4-1         Yes         Yes           EMC compatibility         Yes         Yes         AC ool operating           Ac ool operating         0150/60Hz, 60Hz         min         V         600           Ac operat		Operating temperature		min	°C	50
Storage temperature       min       °C       -60         Max altitude       max       °C       60         Max altitude       m       3,000         Operating position       normal       Vertical plan         allowable       ±30°         Mounting       g       0.367         Operating position       g       0.367         Mechanical life       Cycles       20,000,000         Electrical life       Cycles       20,0000         Safety related data       Performance level B10d according to EN/ISO G164489-11 000000       Safety related data         Performance level B10d according to EN/ISO G164489-11 000000       Performance level B10d according to EN/ISO G164489-11 000000         Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compatibility       Yes         AC coli operating       min       V         Rated AC voltage at 50/60Hz, 60Hz       min       V       12         max       V       600       AC       600         AC operating voltage       of 50/60Hz coil powered at 50Hz       min       %Us       55         of 50/60Hz coil powered at 60Hz       min       %Us       55       55         of 50/60Hz coil powered at 60Hz       min	Storage temperature         min         °C         -60           max         °C         80           Max altitude         m         3,000           Operating position         normal         Vertical plan           allowable         ±30°           Mounting         Screw / DIN rail           Weight         g         0.367           Operations						
min     *C     -60       max     *C     80       Max altitude     m     3,000       Operating position     normal     Vertical plan       allowable     ±30°       Mounting     Screw / DIN rail       Weight     g     0.367       Operations     g     0.367       Mechanical life     Cycles     20,000,000       Electrical life     Cycles     20,000,000       Safety related data     Performance level B10d according to EN/ISO(32489-116406006ad       Performance level B10d according to EN/ISO(32489-116406006ad     Performance level B10d according to EN/ISO(32489-164606ad)       Performance level B10d according to EN/ISO(32489-164606ad)     Yes       Ac coil operating     Yes       AC coil operating     Yes       Rated AC voltage at 50/60Hz, 60Hz     min       victual     yick-up       of 50/60Hz coil powered at 50Hz     pick-up       max     %Us     80       max     %Us     55       of 50/60Hz coil powered at 60Hz     pick-up       max     %Us     85       max     %Us     85       of 50/60Hz coil powered at 60Hz     max       pick-up     min     %Us       max     %Us     85       max <td>min     *C     -60       max     *C     80       Max altitude     m     3,000       Operating position     normal     Vertical plan       allowable     ±30°       Mounting     Screw / DIN rail       Weight     g     0.367       Operations     g     0.367       Mechanical life     Cycles     20,000,000       Electrical life     Cycles     20,000,000       Safety related data     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Matter of the end o</td> <td></td> <td>Storage temperature</td> <td></td> <td>max</td> <td>C</td> <td>70</td>	min     *C     -60       max     *C     80       Max altitude     m     3,000       Operating position     normal     Vertical plan       allowable     ±30°       Mounting     Screw / DIN rail       Weight     g     0.367       Operations     g     0.367       Mechanical life     Cycles     20,000,000       Electrical life     Cycles     20,000,000       Safety related data     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Performance level B10d according to EN/ISO(2#489-116#0#000ad     Performance level B10d according to EN/ISO(2#489-116#0#000ad       Matter of the end o		Storage temperature		max	C	70
max         °C         80           Max altitude         m         3,000           Operating position         normal allowable         Vertical plan ±30°           Mounting         Screw / DIN rail 35mm           Weight         g         0.367           Operations	max         °C         80           Max altitude         m         3,000           Operating position         normal allowable         ±30°           Mounting         Screw / DIN rail 35mm           Weight         g         0.367           Operations		Siorage temperature		min	°C	-60
Max altitude m 3,000 Operating position normal Vertical plan allowable ±30° Mounting Screw / DIN rail 35mm Weight g 0.367 Operations G 0,367 Operations Cycles 20,000,000 Electrical life Cycles 20,000,000 Electrical life Cycles 20,000,000 Electrical life Cycles 20,000,000 Safety related data Performance level B10d according to EN/ISO dia#89-11 606000ad Performance level B10d according to EN/ISO dia#89-11 606000ad Performance level B10d according to EN/ISO dia#89-2060006ad Performance level B10d according to EN/ISO dia#89-206006ad Performance level B10d according to EN/ISO dia#89-20 Minror V 12 max V 600 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %US 80 max %US 55 of 50/60Hz coil powered at 60Hz pick-up min %US 85 max %US 110 min %US 85 max %US 110 min %US 20	Max attitude       m       3,000         Operating position       normal allowable       Vertical plan ±30°         Mounting       Screw / DIN rail 35mm         Weight       g       0.367         Operations       g       0.367         Mechanical life       Cycles       20,000,000         Electrical life       Cycles       20,000,000         Electrical life       Cycles       2000000         Safety related data       Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO 13489-1 20460060ad         Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compariting       Yes         AC coil operating       Max         Rated AC voltage at 50/60Hz, 60Hz       min         of 50/60Hz coil powered at 50Hz pick-up       min         of 50/60Hz coil powered at 50Hz pick-up       min         of 50/60Hz coil powered at 60Hz pick-up       min         max       %Us       55         of 50/60Hz coil powered at 60Hz pick-up       min         max       %Us       85         max       %Us       85         max       %Us       85         max       %Us       85 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Operating position       normal allowable       Vertical plan ±30°         Mounting       Screw / DIN rail 35mm         Weight       g       0.367         Operations       Mechanical life       Cycles       20,000,000         Electrical life       Cycles       20,000,000       Electrical life       Cycles       20,000,000         Safety related data       Performance level B10d according to EN/ISO (13489-1 - Performance level B10d according to EN/ISO (13489-100000ad Performance level B10d according to EN/ISO (13489-100000ad Performance level B10d according to EN/ISO (13489-1000000ad Performance level B10d according to EN/ISO (13489-10000000ad Performance level B10d according to EN/ISO (13489-1000000000000000000000000000000000000	Operating position       normal allowable       Vertical plan ±30°         Mounting       Screw / DIN rail 35mm         Weight       g       0.367         Operations	Max altitude			Παλ		
normal allowable     Vertical plan ±30°       Mounting     Screw / DIN rail 35mm       Weight     g     0.367       Operations	normal allowable     Vertical plan ±30°       Mounting     Screw / DIN rail 35mm       Weight     g     0.367       Operations						0,000
allowable         ±30°           Mounting         Screw / DIN rail 35mm           Weight         g         0.367           Operations	allowable         ±30°           Mounting         Screw / DIN rail 35mm           Weight         g         0.387           Operations	oporating position			normal		Vertical plan
Mounting       Screw / DIN rail 35mm         Weight       g       0.367         Operations	Mounting       Screw / DIN rail 35mm         Weight       g       0.367         Operations						
Mounting         35mm           Veight         g         0.367           Operations	Mounting         35mm           Veight         g         0.367           Operations						
Weight         g         0.367           Operations         Mechanical life         Cycles         20,000,000           Electrical life         Cycles         20,0000         Safety related data           Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO 03489-11 0006000ad Performance level B10d according to EN/ISO 03489-11 0006000ad Performance level B10d according to EN/ISO 03489-10006000ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-10006000ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-1000600ad Performance level B10d according to EN/ISO 03489-1000600 AC coll operating         Yes           AC operating voltage         min         V         12 max         Yes           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         min         %Us         80 max         %Us         55           of 50/60Hz coil powered at 60Hz max         min         %Us         85 max         %Us         110 max         <	Weight     g     0.367       Operations     Mechanical life     Cycles     20,000,000       Electrical life     Cycles     2000000       Safety related data     Performance level B10d according to EN/ISO/32489-11 0006000ad       Performance level B10d according to EN/ISO/32489-11 0006000ad     Performance level B10d according to EN/ISO/32489-11 0006000ad       Mirror contats according to IEC/EN 609474-4-1     Yes       EMC compatibility     Yes       AC coil operating     Yes       Rated AC voltage at 50/60Hz, 60Hz     min       of 50/60Hz coil powered at 50Hz     min       pick-up     min<%Us	Mounting					
Operations       Cycles       20,000,000         Electrical life       Cycles       200000         Safety related data       Cycles       200000         Performance level B10d according to EN/ISO 13489-1 -       Performance level B10d according to EN/ISO 016489-11 600600ad         Performance level B10d according to EN/ISO 016489-106000ad       Performance level B10d according to EN/ISO 016489-1206000ad         Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compatibility       Yes         AC coil operating       Yes         Rated AC voltage at 50/60Hz, 60Hz       min       V       12         Max       V       600       600         AC operating voltage       of 50/60Hz coil powered at 50Hz       min       %Us       80         max       %Us       110       drop-out       min       %Us       55         of 50/60Hz coil powered at 60Hz       pick-up       min       %Us       55       55         of 50/60Hz coil powered at 60Hz       max       %Us       110       max       %Us       110         drop-out       min       %Us       85       max       %Us       110         max       %Us       110       max       %Us       110       max	Operations       Cycles       20,000,000         Electrical life       Cycles       200000         Safety related data       Cycles       200000         Performance level B10d according to EN/ISO 13489-1 -       Performance level B10d according to EN/ISO 016489-11 600600ad         Performance level B10d according to EN/ISO 016489-1060600ad       Performance level B10d according to EN/ISO 016489-1206000ad         Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compatibility       Yes         AC coil operating       Yes         Rated AC voltage at 50/60Hz, 60Hz       min       V       12         Max       V       600       600         AC operating voltage       of 50/60Hz coil powered at 50Hz       min       %Us       80         max       %Us       110       drop-out       min       %Us       55         of 50/60Hz coil powered at 60Hz       pick-up       min       %Us       55       55         of 50/60Hz coil powered at 60Hz       max       %Us       55       55       55       55       55         of 50/60Hz coil powered at 60Hz       max       %Us       110       35       35       35         of 50/60Hz coil powered at 60Hz       max       %Us       110	Weight				q	
Electrical life Cycles 200000 Safety related data Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO dia489-1100000000000000000000000000000000000	Electrical life Cycles 200000 Safety related data Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO di24489-11000ed Performance level B10d according to EN/ISO di24489-11000ed Mirror contats according to IEC/EN 609474-4-1 EMC compatibility Yes AC coil operating Rated AC voltage at 50/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up min %US 80 max %US 110 drop-out min %US 20 max %US 110 drop-out min %US 85 max %US 110					Ŭ	
Safety related data Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO 024889-11000600 ad Performance level B10d according to EN/ISO 024889-11000600 ad Performance level B10d according to EN/ISO 026489-120000000 ad Performance level B10d according to EN/ISO 026489-12000000 ad Performance level B10d according to EN/ISO 026489-120000000 ad Performance level B10d according to EN/ISO 026489-12000000 ad Performance level B10d according to EN/ISO 026489-12000000 ad Performance level B10d according to EN/ISO 026489-120000000 ad Performance level B10d according to EN/ISO 026489-1200000000 ad Performance level B10d according to EN/ISO 026489-120000000 Performance level B10d according to EN/ISO 026489-12000000000 Performance level B10d according to EN/ISO 026489-120000000000 Performance level B10d according to EN/ISO 026489-120000000000 Performance level B10d according to EN/ISO 026489-12000000000000000000000000000000000000	Safety related data Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO 024889-11000600 ad Performance level B10d according to EN/ISO 024889-10000600 ad Performance level B10d according to EN/ISO 024889-10000600000 ad Performance level B10d according to EN/ISO 024889-10000600000000000000000000000000000000	Mechanical life				Cycles	20,000,000
Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO Cli2489-12006000ad Performance level B10d according to EN/ISO Cli2489-12006000ad Performance level B10d according to EN/ISO Cli2489-12006000a00cal load Mirror contats according to IEC/EN 609474-4-1 Yes EMC compatibility Yes AC coll operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 20	Performance level B10d according to EN/ISO 13489-1 - Performance level B10d according to EN/ISO Cli2489-11 000000 ad Performance level B10d according to EN/ISO Cli2489-12 00000000cal load Mirror contats according to IEC/EN 609474-4-1 Yes EMC compatibility Yes AC coll operating Rated AC voltage at 50/60Hz, 60Hz  AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110	Electrical life				Cycles	2000000
Performance level B10d according to EN/ISOCit24489-11 000000d Performance level B10d according to EN/ISOCit24489-120102000000tcal load Mirror contats according to IEC/EN 609474-4-1 Yes EMC compatibility Yes AC coil operating Rated AC voltage at 50/60Hz, 60Hz Rated AC voltage at 50/60Hz, 60Hz 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 85 max %US 110 drop-out Min %US 80 max %US 10 drop-out Min %US 80 max %US 10 max %US 10 drop-out Min %US 80 max %US 10 drop-out Min %US 80 max %US 10 drop-out Min %US 80 max %US 10 drop-out Min %US 80 drop-out Min %US 80 d	Performance level B10d according to EN/ISOCit24489-11 000000d Performance level B10d according to EN/ISOCit24489-120102000000cal load Mirror contats according to IEC/EN 609474-4-1 Yes EMC compatibility Yes AC coil operating Rated AC voltage at 50/60Hz, 60Hz Rated AC voltage at 50/60Hz, 60Hz 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 85 max %US 110 drop-out Min %US 20	Safety related data					
Performance level B10d according to EN/ISO 320489-2010200000ctal load           Mirror contats according to IEC/EN 609474-4-1         Yes           EMC compatibility         Yes           AC coil operating         Yes           Rated AC voltage at 50/60Hz, 60Hz         min         V         12           Max         V         600         600           AC operating voltage         of 50/60Hz coil powered at 50Hz         min         %Us         80           AC operating voltage         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         55           of 50/60Hz coil powered at 60Hz         min         %Us         85           max         %Us         110         max         %Us         110	Performance level B10d according to EN/ISO 320489-2010200000ctal load           Mirror contats according to IEC/EN 609474-4-1         Yes           EMC compatibility         Yes           AC coil operating         Yes           Rated AC voltage at 50/60Hz, 60Hz         min         V         12           AC operating voltage         of 50/60Hz coil powered at 50Hz         600         600           AC operating voltage         of 50/60Hz coil powered at 50Hz         yick-up         min         %Us         80           Miror-out         min         %Us         110         10         10           drop-out         min         %Us         55         5         110           drop-out         min         %Us         85         max         %Us         110           drop-out         min         %Us         85         110         10         10	Performance level B10	Dd according to EN/ISO 1	13489-1 -			
Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compatibility       Yes         AC coil operating       Yes         Rated AC voltage at 50/60Hz, 60Hz       min       V       12 max       V       600         AC operating voltage       of 50/60Hz coil powered at 50Hz pick-up       min       %Us       80 max       %Us       110         drop-out       min       %Us       55       55       55       55         of 50/60Hz coil powered at 60Hz pick-up       min       %Us       55       55         of 50/60Hz coil powered at 60Hz pick-up       min       %Us       55       55         of 50/60Hz coil powered at 60Hz pick-up       min       %Us       85 max       85 max       85 max       85         drop-out       min       %Us       110       110       110       110         drop-out       min       %Us       20       110       110	Mirror contats according to IEC/EN 609474-4-1       Yes         EMC compatibility       Yes         AC coil operating       Yes         Rated AC voltage at 50/60Hz, 60Hz       min       V       12 max       V       600         AC operating voltage       of 50/60Hz coil powered at 50Hz pick-up       min       %Us       80 max       %Us       110         drop-out       min       %Us       55       55       55         of 50/60Hz coil powered at 60Hz pick-up       min       %Us       55         of 50/60Hz coil powered at 60Hz pick-up       min       %Us       85 max       %Us       110         drop-out       min       %Us       85 max       %Us       110         drop-out       min       %Us       85       max       %Us       110         drop-out       min       %Us       85       max       %Us       110			Performance level B10d acco	ording to EN/IS	SOCI6489	-11 0:00:00:00 ad
EMC compatibility         Yes           AC coil operating         min         V         12 max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         min         %Us         80 max         %Us         110           drop-out         min         %Us         55         55         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max         %Us           drop-out         min         %Us         85         max         %Us         110	EMC compatibility         Yes           AC coil operating         min         V         12 max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         min         %Us         80 max         %Us         110           drop-out         min         %Us         55         55         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max         %Us           drop-out         min         %Us         85         max         %Us         110				ording to EN/IS	500 <b>664</b> 89	-12000000000000000000000000000000000000
AC coil operating         min         V         12 max         V         600           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           drop-out         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up           min         %Us         85 max         %Us         110           drop-out           min         %Us         85 max         %Us         110           drop-out         min         %Us         85 max         %Us         110	AC coil operating         min         V         12 max         V         600           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           drop-out         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up           min         %Us         85 max         %Us         110           drop-out           min         %Us         85 max         %Us         110           drop-out         min         %Us         85 max         %Us         110	Mirror contats according	ng to IEC/EN 609474-4-1				
min         V         12 max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         v         80 max         %Us         80 max           drop-out         min         %Us         110           drop-out         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max         %Us           min         %Us         85 max         %Us         110           drop-out         min         %Us         20	min         V         12 max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         v         80 max         %Us         80 max           drop-out         min         %Us         110           drop-out         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max         %Us           min         %Us         85 max         110         10           drop-out         min         %Us         85 max         20						Yes
min         V         12 max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         -	min         V         12 max         V         600           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         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max         %Us           drop-out         min         %Us         110         110           drop-out         min         %Us         20						
max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         min         %Us         80 max           min         %Us         110         max         %Us         20 max           drop-out         min         %Us         55         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85           max         %Us         110         110           drop-out         min         %Us         85           max         %Us         110         110           drop-out         min         %Us         20	max         V         600           AC operating voltage         of 50/60Hz coil powered at 50Hz pick-up         min         %Us         80 max           min         %Us         110         max         %Us         110           drop-out         min         %Us         20 max         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max           max         %Us         110         110           drop-out         min         %Us         85 max           max         %Us         110         110           drop-out         min         %Us         20	Rated AC voltage at 50	0/60Hz, 60Hz				
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out min %Us 80 max %Us 110 min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 min %Us 85 max %Us 110 min %Us 20 max 20 max %Us 55 min %Us 85 max %Us 110	AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out min %Us 80 max %Us 110 min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 min %Us 85 max %Us 110 min %Us 20 max 20 max %Us 55 min %Us 20 max 20 max 85 max %Us 110				min		
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 85 max %Us 110 Min %Us 85 max %Us 110 20	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 85 max %Us 110 Min %Us 85 max %Us 110 20				max	V	600
pick-up       min       %Us       80         max       %Us       110         drop-out       min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz       reick-up       min       %Us       85         min       %Us       85       110       10         drop-out       min       %Us       85         max       %Us       110       110         max       %Us       110         gick-up       min       %Us       85         max       %Us       110         drop-out       min       %Us       20         drop-out       min       %Us       20	pick-up       min       %Us       80         max       %Us       110         drop-out       min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz       reick-up       min       %Us       85         min       %Us       85       110       10         drop-out       min       %Us       85         max       %Us       110       110         max       %Us       110       10         drop-out       min       %Us       85         max       %Us       110       10         drop-out       min       %Us       20	AC operating voltage					
min       %Us       80         max       %Us       110         drop-out       min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz       min       %Us       85         pick-up       min       %Us       85         max       %Us       110         drop-out       min       %Us       85         max       %Us       110         drop-out       min       %Us       20	min       %Us       80         max       %Us       110         drop-out       min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz       min       %Us       85         pick-up       min       %Us       85         max       %Us       110         drop-out       min       %Us       85         max       %Us       110         drop-out       min       %Us       20		of 50/60Hz coil powere				
drop-out       max       %Us       110         min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz	drop-out       max       %Us       110         min       %Us       20         max       %Us       55         of 50/60Hz coil powered at 60Hz           pick-up       min       %Us       85         max       %Us       110         drop-out       min       %Us       20         min       %Us       85         max       %Us       110         drop-out       min       %Us       20			pick-up	_		
drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20	drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20						
min         %Us         20 max           max         %Us         55           of 50/60Hz coil powered at 60Hz pick-up         min         %Us         85 max           min         %Us         85 max         %Us         110           drop-out         min         %Us         20	min         %Us         20           max         %Us         55           of 50/60Hz coil powered at 60Hz				max	%Us	110
max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20	max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20			drop-out		0/11	00
of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20	of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 20						
pick-up min %Us 85 max %Us 110 drop-out min %Us 20	pick-up min %Us 85 max %Us 110 drop-out min %Us 20				max	%US	55
min %Us 85 max %Us 110 drop-out min %Us 20	min %Us 85 max %Us 110 drop-out min %Us 20		or 50/60HZ coll powere				
max %Us 110 drop-out min %Us 20	max %Us 110 drop-out min %Us 20			ріск-ир			
drop-out min %Us 20	drop-out min %Us 20					0/11~	05
min %Us 20	min %Us 20						
				drop-out			
	111dX /005 33			drop-out	max	%Us	110
				drop-out	max min	%Us %Us	110 20

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	of 60Hz coil powered at 60Hz			
	pick-up		0/11-	0.0
		min	%Us	80
		max	%Us	110
	drop-out		0/11-	00
		min	%Us	20
		max	%Us	55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		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 50Hz		W	2.5
Max cycles frequency				
Mechanical operations	; ;		Cycles/h	3,600
Operating times				
Average time for Us co	ontrol			
Ū	in AC			
	Closing NO			
	5 5 5 5	min	ms	8
		max	ms	24
	Opening NO			
	opolining i to	min	ms	10
		max	ms	20
	Closing NC	тах	ino	20
		min	ms	14
		max	ms	28
	Opening NC	Пах	mo	20
	Opening NO	min	ms	7
		max	ms	, 18
UL technical data		max	1113	10
	) for three-phase AC motor			
i ull-load current (FLA,	ווטנטו		۸	7.6
		at 480V	A	7.6
Violdod mochanist	rformanaa	at 600V	A	9
Yielded mechanical pe				
	for single-phase AC motor			0.75
		at 110/120V	hp	0.75
		at 230V	hp	2
	for three-phase AC motor		<u>.</u>	•
		at 200/208V	hp	3
		at 220/230V	hp	3
		at 460/480V	hp	5
		at 575/600V	hp	7.5
	ary contacts according to UL			SI - A600
General USE				
	Contactor			
		AC current	А	25
	Auxiliary contacts			
	-	AC voltage	V	600

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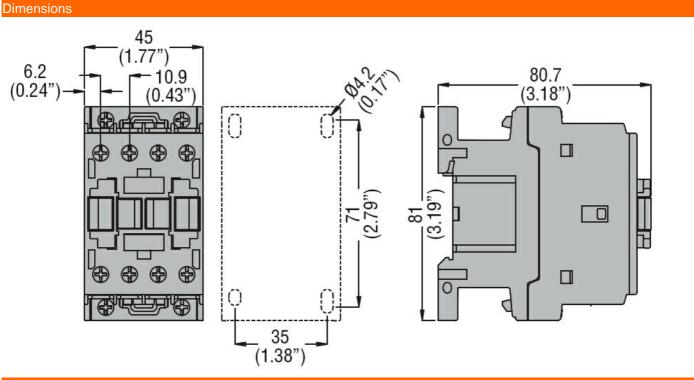
The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



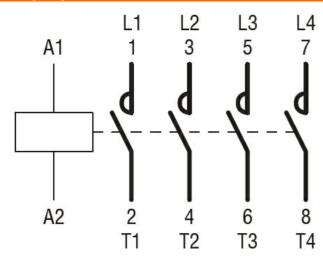
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 230VAC

AC current	А	10	
DC voltage	V	250	
DC current	Α	1	

**BF09T4A230** 



Wiring diagrams



## Certifications and compliance

Certifications	
	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
Compliance	
	CCC
	cULus
	EAC
ETIM 6 classificat	ion
	prostoriation described in this desumant are subject to undates or modifications at any time. The descriptions, technical and

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The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



**BF09T4A230** FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 230VAC

EC000066 - Power contactor, AC switching