

# AF non-reversing, 3-pole

For applications up to 1150 hp, 900 kW  
Electronic AC/DC operated coils



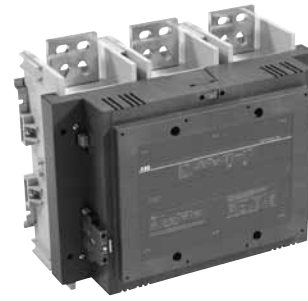
AF09...AF16



AF95...AF110



AF210...AF300



AF1350...AF2650

## Electrical ratings ①

IEC/EN 60947-4-1					UL 508, 60947-4-1A CSA C22.2 No.14, 60947-4-1-07		UL SP C US		Non-reversing		Standard auxiliary contacts ③		Catalog number
Rated operational current I <sub>e</sub> , AC-1, AC-3 (A)		Rated operational power P <sub>e</sub> , AC-3, 55°C (kW) ②			AC general purpose ratings (A)	Maximum motor switching current (A)	AC motor ratings, breaking all lines, three phase, 50/60 Hz (hp)				NO	NC	
AC-1 40°C	AC-3 55°C ②	220... 240V	380... 400V	690V	600V		200... 208V	220... 240V	440... 480V	550... 600V			
25	9	2.2	4	5.5	25	9	2	2	5	7.5	1	-	AF09-30-10-Δ
											-	1	AF09-30-01-Δ
28	12	3	5.5	7.5	28	11	3	3	7.5	10	1	-	AF12-30-10-Δ
											-	1	AF12-30-01-Δ
30	18	4	7.5	9	30	17	5	5	10	15	1	-	AF16-30-10-Δ
											-	1	AF16-30-01-Δ
45	26	6.5	11	15	45	24.2	7.5	7.5	15	20	-	-	AF26-30-00-Δ
50	32	9	15	18.5	50	30.8	10	10	20	25	-	-	AF30-30-00-Δ
50	38	11	18.5	22	50	-	-	-	-	-	-	-	AF38-30-00-Δ
100	50	15	22	30	80	54	15	20	40	50	1	1	AF50-30-11-Δ
115	65	18.5	30	37	90	68	20	25	50	60	1	1	AF63-30-11-Δ
125	75	22	37	40	105	80	25	30	60	75	1	1	AF75-30-11-Δ
145	96	25	45	55	150	88	30	30	60	75	1	1	AF95-30-11-Δ
160	110	30	55	75	150	104	30	40	75	100	1	1	AF110-30-11-Δ
250	145	45	75	110	230	130	40	50	100	125	1	1	AF145-30-11-Δ
275	185	55	90	132	250	156	50	60	125	150	1	1	AF185-30-11-Δ
350	210	59	110	160	300	192	60	75	150	200	1	1	AF210-30-11-Δ
400	260	80	140	200	350	248	75	100	200	250	1	1	AF260-30-11-Δ
500	305	90	160	250	400	302	100	100	250	300	1	1	AF300-30-11-Δ
600	400	110	200	315	550	414	125	150	350	400	1	1	AF400-30-11-Δ
700	460	132	250	355	650	480	150	200	400	500	1	1	AF460-30-11-Δ
800	580	160	315	500	750	604	250	250	500	600	1	1	AF580-30-11-Δ
1050	750	220	400	600	900	722	250	300	600	700	1	1	AF750-30-11-Δ
1260	-	-	-	-	1210	-	-	-	-	-	1	1	AF1250-30-11-Δ
1350	860	257	475	750	1350	954	-	400	800	1000	1	1	AF1350-30-11-Δ
1650	1050	315	560	900	1650	1050	-	450	900	1150	1	1	AF1650-30-11-Δ
2050	-	-	-	-	2100	-	-	-	-	-	1	1	AF2050-30-11-Δ
2650	-	-	-	-	2700	-	-	-	-	-	1	1	AF2650-30-11-Δ

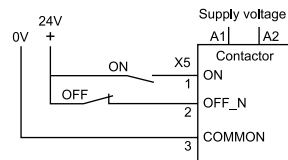
## Coil voltage selection chart (Δ)

Rated control circuit voltage U <sub>c</sub> ④	AF09... AF38	AF50... AF300	AF400... AF750	AF1250	AF1350... AF2650
20...60V DC	11	72	-	-	-
24...60V AC	11	-	-	-	-
24...60V DC	-	-	68	68	-
48...130V AC/DC	12	69	69	69	-
100...250V AC/DC	13	70	70	70	70
250...500V AC/DC	14	-	71	-	-

Example(s):  
24V DC input voltage: AF16-30-10-11  
120V AC input voltage: AF300-30-11-10

## Control inputs

AF400...AF2650 are equipped with integral low voltage inputs, allowing for direct PLC control:

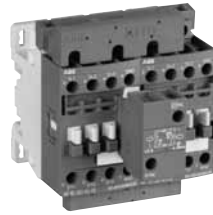


① For selection purposes; for complete electrical ratings, see Technical Data.  
② AF09... AF38 at 60°C.  
③ Auxiliary contacts integral for AF09...AF16; all others side-mount.  
④ AC coil input voltage(s) at 50/60 Hz unless specified.

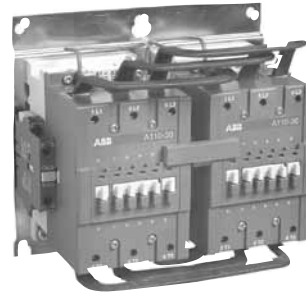
# AF mechanically interlocked, reversing, 3-pole

For applications up to 700 hp, 600 kW  
Electronic AC/DC operated coils

Across the line  
Contactors 1



AF09R...AF16R



AF95R...AF110R

## Electrical ratings ①②

UL 508, 60947-4-1A  
CSA C22.2 No.14, 60947-4-1-07



AC general purpose ratings (A)	Maximum motor switching current (A)	AC motor ratings, breaking all lines, three phase, 50/60 Hz (hp)				Mechanically interlocked		Catalog number ③	Reversing		Catalog number ③
		200... 208V	220... 240V	440... 480V	550... 600V	NO	NC		NO	NC	
25	9	2	2	5	7.5	2	2	AF09M-30-22-Δ	2	2	AF09R-30-22-Δ
-	-	-	-	-	-	-	-	-	-	-	-
28	11	3	3	7.5	10	2	2	AF12M-30-22-Δ	2	2	AF12R-30-22-Δ
-	-	-	-	-	-	-	-	-	-	-	-
30	17	5	5	10	15	2	2	AF16M-30-22-Δ	2	2	AF16R-30-22-Δ
-	-	-	-	-	-	-	-	-	-	-	-
45	24.2	7.5	7.5	15	20	-	2	AF26M-30-02-Δ	-	2	AF26R-30-02-Δ
50	30.8	10	10	20	25	-	2	AF30M-30-02-Δ	-	2	AF30R-30-02-Δ
-	-	-	-	-	-	-	-	-	-	-	-
80	54	15	20	40	50	2	2	AF50M-30-11-Δ	2	2	AF50R-30-11-Δ
90	68	20	25	50	60	2	2	AF63M-30-11-Δ	2	2	AF63R-30-11-Δ
105	80	25	30	60	75	2	2	AF75M-30-11-Δ	2	2	AF75R-30-11-Δ
150	88	30	30	60	75	2	2	AF95M-30-11-Δ	2	2	AF95R-30-11-Δ
150	104	30	40	75	100	2	2	AF110M-30-11-Δ	2	2	AF110R-30-11-Δ
230	130	40	50	100	125	2	2	AF145M-30-11-Δ	2	2	AF145R-30-11-Δ
250	156	50	60	125	150	2	2	AF185M-30-11-Δ	2	2	AF185R-30-11-Δ
300	192	60	75	150	200	2	2	AF210M-30-11-Δ	2	2	AF210R-30-11-Δ
350	248	75	100	200	250	2	2	AF260M-30-11-Δ	2	2	AF260R-30-11-Δ
400	302	100	100	250	300	2	2	AF300M-30-11-Δ	2	2	AF300R-30-11-Δ
550	414	125	150	350	400	2	2	AF400M-30-11-Δ	2	2	AF400R-30-11-Δ
650	480	150	200	400	500	2	2	AF460M-30-11-Δ	2	2	AF460R-30-11-Δ
750	604	250	250	500	600	2	2	AF580M-30-11-Δ	2	2	AF580R-30-11-Δ
900	722	250	300	600	700	2	2	AF750M-30-11-Δ	2	2	AF750R-30-11-Δ
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

## Coil voltage selection chart (Δ)

Rated control circuit voltage U <sub>c</sub> ④	AF09...AF30	AF50...AF300	AF400...AF750
20...60V DC	11	72	-
24...60V AC	11	-	-
24...60V DC	-	-	68
48...130V AC/DC	12	69	69
100...250V AC/DC	13	70	70
250...500V AC/DC	14	-	71

Example(s):

24V DC input voltage: AF16M-30-22-11

120V AC input voltage: AF300R-30-11-70

## Reversing vs. mechanically interlocked

Full voltage reversing contactors are pre-assembled using two (2) contactors, a mechanical interlock, an electrical interlock, and reversing busbars. Mechanically interlocked contactors are offered less the reversing bus.

① For selection purposes; for complete electrical ratings, see Technical Data.

② For ratings according to IEC/EN 60947-4-1, refer to AF non-reversing selection table or Technical Data.

③ AF09R(M)...AF30R(M) assembled using connection clips, AF50R(M)...AF750R(M) mounted on common baseplate.

④ AC coil input voltage(s) at 50/60 Hz unless specified.

# GAF185 - GAF2050

## DC circuit switching GAF & AF

### 3 contacts in series

#### GAF - 1000 V DC max. (IEC)



GAF185  
AF145, AF185



GAF300  
AF210 ... AF300



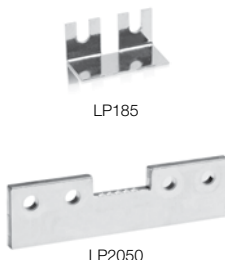
GAF460  
AF400, AF460



GAF750, GAF1250  
AF580 ... AF1250



GAF1650, GAF 2050  
AF1350 ... AF2050



LP185

LP2050

L/R 1 ms, air temperature close to contactor					Catalog number	Reference code	Pkg qty	Weight (1 pce) kg
40 °C	55 °C	60 °C	65 °C	70 °C				
A								
275	250	230	205	180	GAF185-10-11-Δ	1SFL497025RΔ11		3.60
500	400	375	350	325	GAF300-10-11-Δ	1SFL557025RΔ11		6.20
700	600	560	520	480	GAF460-10-11-Δ	1SFL597025RΔ11		12.00
1050	875	800	760	720	GAF750-10-11-Δ	1SFL637025RΔ11		15.00
1250	1040	970	920	875	GAF1250-10-11-Δ	1SFL647025RΔ11		16.00
1650	1450	1380	1325	1270	GAF1650-10-11-Δ	1SFL677025RΔ11		35.00
2050	1750	1650	1575	1500	GAF2050-10-11-Δ	1SFL707025RΔ11		35.00

#### GAF & AF - 600 V DC max. (UL/CSA) & 850...1000 V DC max. (IEC)

UL/CSA general use, 40 °C			IEC DC-1, 40 °C			Catalog number	Reference code	Pkg qty	Weight (1 pce) kg
A			A						
250			250			GAF185-10-11-Δ	1SFL497025RΔ11		3.60
400			500			GAF300-10-11-Δ	1SFL557025RΔ11		6.20
Use GAF185 - GAF300			See next page for IEC data at various voltages.			AF145-30-11-Δ	1SFL477001RΔ11		3.60
						AF185-30-11-Δ	1SFL497001RΔ11		3.60
						AF210-30-11-Δ	1SFL517001RΔ11		6.20
						AF260-30-11-Δ	1SFL537001RΔ11		6.20
						AF300-30-11-Δ	1SFL597001RΔ11		6.20
						AF400-30-11-Δ	1SFL637001RΔ11		12.00
						AF460-30-11-Δ	1SFL597001RΔ11		12.00
						AF580-30-11-Δ	1SFL617001RΔ11		15.00
						AF750-30-11-Δ	1SFL637001RΔ11		15.00
						AF1250-30-11-Δ	1SFL647001RΔ11		16.00
1350					AF1350-30-11-Δ	1SFL657001RΔ11		34.00	
1900					AF1650-30-11-Δ	1SFL677001RΔ11		35.00	
					AF2050-30-11-Δ	1SFL707001RΔ11		35.00	

#### Connection bar for contactor ①

GAF185, AF145, AF185	LP185	1SFN074712R1000	2	0.30
GAF300, AF210 ... AF300	LP300	1SFN075112R1000	2	0.40
GAF460, AF400, AF460	LP460	1SFN075712R1000	4	0.55
GAF750, AF580, AF750	LP750	1SFN076112R1000	4	0.95
GAF1250, AF1250	LP1250	1SFN076412R1000	2	1.90
GAF1650, GAF2050, AF1350, AF1650, AF2050	LP2050	1SFN076512R1000	4	2.90

① Not included with the contactor; connection diagrams must be respected

#### Auxiliary contact blocks, low energy microswitch 0.1 A, N.O or N.C.

AF145...AF2050	N.C.	CEL18-01	1SFN010716R1001		0.05
GAF185...GAF2050	N.O.	CEL18-10	1SFN010716R1010		0.05

#### AC / DC coils with electronic coil interface

##### Contactors GAF185 ... GAF300, AF145 ... AF300

Voltage	Voltage	Code	
V - 50/60Hz	V - DC	Δ	Δ
—	20 ... 60	7	2
48 ... 130	48 ... 130	6	9
100...250	100 ... 250	7	0

##### Contactors GAF460 ... GAF1250, AF400 ... AF1250

Voltage	Voltage	Code	
V - 50/60Hz	V - DC	Δ	Δ
—	24 ... 60	6	8
48 ... 130	48 ... 130	6	9
100 ... 250	100 ... 250	7	0
250 ... 500	250 ... 500	7	1

##### Contactors GAF1650, GAF2050, AF1350, AF1650, AF2050

100 ... 250	100 ... 250	7	0
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