



GUIDE

LCM Life Cycle Management Contactors

Cross reference list A(L,E), N(E,L), EH, EK to 2nd Generation AF

A range phasing out

Contactors affected by the LCM Life Cycle Management in 2022

- A9(L)... A40(L) ... A75 contactors and N(L) contactor relays will change to LIMITED phase in July 2022, **last buy date: 30.09.2022.**
- A95 ... A300 contactors including accessories will change to LIMITED phase in July 2022, **last buy date: 30.09.2022.**
- AF95... AF300 contactors entered **OBSOLETE phase in January 2022** (Including B and B...RT versions, except AF95B(RT))
- A95FP ... A110 FP for fire pump applications, entered **OBSOLETE phase in January 2022**
- EK110 ... EK370 will change to **OBSOLETE phase in January 2022**
- EH550 ... EH1200 will change to **OBSOLETE phase in January 2022**
- EHDB selected coils will change to **LIMITED phase in January 2022**
- E45DU, E80DU and E140DU Electronic Overload Relays (incl relevant accessories) will change from LIMITED to OBSOLETE phase from January 2024, **last buy date: 30.09.2022**
- TA25DU, TA42DU, TA75DU, TA80DU and TA110DU Thermal Overload Relays will change from LIMITED to OBSOLETE phase from January 2024, **last buy date: 30.09.2022**
- TA25DU-TC20, TA42DU-TC20, TA75DU-TC20 and TA80DU-TC20 Thermal Overload Relays with Trip Class 20 will change to LIMITED to OBSOLETE phase from January 2024, **last buy date: 30.09.2022**



Contactors NOT affected by the LCM Life Cycle Management in 2022



- GA75, GAE75 contactors will change to CLASSIC phase in January 2023
- GAF185 ... GAF300 will change to CLASSIC phase in January 2023
- TAL & TAE for traction
- AFZB/NFZB (Railway application)
- UA & UA...RA (Capacitor switching)



Contactors range concerned by LCM Life Cycle Management



Block Contactors and Motor Protection

3-pole
a.c. Circuit
Switching

3-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
a.c. operated		9 ... 110 A	A...
a.c. operated		145 ... 305 A	A...
a.c. / d.c. operated		400 ... 1050 A	AF...


3-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
d.c. operated, low consumption coil		9 ... 37 A	AL..., AL-2
d.c. operated, large voltage range		9 ... 37 A	TAL...


3-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
d.c. operated, standard voltage range		50 ... 110 A	AE...
d.c. operated, large voltage range		50 ... 110 A	TAE...



3-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
a.c. / d.c. operated (electronic coil interface) and wide voltage range		50 ... 110 A	AF...
		145 ... 1050 A	AF...

Block Contactors

4-pole
a.c. Circuit
Switching


4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
a.c. operated		25 ... 125 A	A...

4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
a.c. operated		200 ... 1000 A	EK...

4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
d.c. operated, low consumption coil		25 ... 45 A	AL...
d.c. operated, large voltage range		25 ... 45 A	TAL...

4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
d.c. operated, standard voltage range		70 ... 125 A	AE...
d.c. operated, large voltage range		70 ... 125 A	TAE...



4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
d.c. operated		200 ... 1000 A	EK...

4-pole Contactors			
Control circuit		Ratings (AC-3, 400 V)	Types
a.c. / d.c. operated (electronic coil interface) and wide voltage range		70 ... 125 A	AF...



Contactors for Specific Applications




3-phase
Capacitor
Switching



3-pole Contactors for Capacitor Switching			
Control circuit		I peak current	Types
a.c. operated		Unlimited	UA, RA
a.c. operated		≤ 100 x I rms current	UA...

Standard 3-pole Contactors			
Control circuit		I peak current	Types
a.c. operated		≤ 30 x I rms current	A...
a.c. / d.c. operated			AF...



d.c.
Circuit
Switching

Contactors for d.c. Switching			
Control circuit		Main pole	Types
a.c. operated		1-pole	GA...
d.c. operated		1-pole	GAE...

Standard Contactors			
Control circuit		Main poles	Types
a.c. operated		3 and 4-pole	A...
a.c. / d.c. operated (electronic coil interface)		3 and 4-pole	AF...
d.c. operated		3 and 4-pole	AL..., AE...

Standard Contactors			
Control circuit		Main poles	Types
a.c. operated		4-pole	EK...
d.c. operated		4-pole	EK...

Switching with
Magnetical
Latching

Magnetically Latched Contactors			
Control circuit		Main poles	Types
d.c. operated		3 x NO	AM...
		2 x NO + 2 x NC	AM...

Products affected by LCM

Products NOT affected by LCM

Auxiliary contactors and thermal overload relays concerned by LCM

Contactor Relays

Control
Circuit
Switching



Contactor Relays			
Control circuit		Poles	Types
a.c. operated		4 and 8-pole	N...



Contactor Relays			
Control circuit		Poles	Types
d.c. operated, low consumption coil		4 and 8-pole	NL..., NL



Contactor Relays			
Control circuit		Poles	Types
d.c. operated, large voltage range		4 and 8-pole	TNL...



TA 25 DU



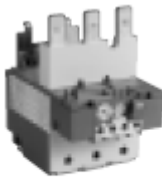
TA 42 DU



TA 75 DU



TA 80 DU



TA 110 DU

Products affected by LCM

Products NOT affected by LCM

Replacement products

Conversion tables contactors < 100 A – AC control

Standard A

A-series, Limited phase

AF have the electronic module, removing normal issues from A. AF slightly slower than A.

A9		AF(C)09
A16		AF(C)16
A26		AF(C)26
A30		AF(C)30
A40		AF(C)38
A50		AF(C)52
A63		AF(C)65
A75		AF(C)80
A95		AF(C)95

Standard N

N-series, Limited phase

NF have the electronic module, removing normal issues from N. AF slightly slower than N.

NL22E		NF(C)22E
NL31E		NF(C)31E
NL40E		NF(C)40E
NL44E		NF(C)44E
NL51E		NF(C)51E
NL62E		NF(C)62E
NL71E		NF(C)71E
NL80E		NF(C)80E
NL33/11		NF(C)53/11
NL51/11		NF(C)51/11

Replacement products

Conversion tables contactors < 100 A – DC control

AL – 3/4 poles and NL – 24 V DC

Al coil 81-series, Limited phase

Replaced by AFZ / NFZ coil 30 (low pull-in power)

AL9	AF09(Z)	NL22E	NF(Z)22E
AL12	AF12(Z)	NL31E	NF(Z)31E
AL16	AF16(Z)	NL40E	NF(Z)40E
AL26	AF26(Z)	NL44E	NF(Z)44E
AL30	AF30(Z)	NL51E	NF(Z)51E
AE45	AF38(Z)	NL62E	NF(Z)62E
AE50	AF52	NL71E	NF(Z)71E
AE63	AF65	NL80E	NF(Z)80E
AE75	AF80	NL33/11	NF(Z)53/11
		NL51/11	NF(Z)51/11

AE – 3 poles and NE – 24 V DC

AE-series, Limited Phase NE-series, Obsolete Phase

Replaced by either AFZ coil 30 or 21, or AF coil 11

AE09	AF09	NE22E	NF(Z)22E
AE12	AF12	NE31E	NF(Z)31E
AE16	AF16	NE40E	NF(Z)40E
AE26	AF26	NE44E	NF(Z)44E
AE30	AF30	NE51E	NF(Z)51E
AE45	AF38	NE62E	NF(Z)62E
AE50	AF52	NE71E	NF(Z)71E
AE63	AF65	NE80E	NF(Z)80E
AE75	AF80	NE33/11	NF(Z)53/11
		NE51/11	NF(Z)51/11

ALZ low consumption – 24 V DC

ALZ coil 15 - Limited phase

Replaced by AFZ coil 30 (low pull-in power)

AL9Z	AF09Z
AL12Z	AF12Z
AL16Z	AF16Z

AL – 3/4 poles and NL – Not 24 V DC

All other coils than 24VDC, Limited phase

Will be replaced by AFZ / NFZ

Coil voltages and codes: AL... and AE...		
Voltage - U _c V d.c.		Code
12		8 0
42		8 2
48		8 3
50		2 1
60		8 4
75		8 5
110		8 6
125		8 7
220		8 8
240		8 9
250		3 8

AE – 3 poles and NE – Not 24 V DC

AE-series, limited Phase NE-series, Obsolete Phase

Replaced by either AFZ or AF

Coil voltages and codes: AL... and AE...		
Voltage - U _c V d.c.		Code
12		8 0
24		8 1
42		8 2
48		8 3
50		2 1
60		8 4
75		8 5
110		8 6
125		8 7
220		8 8
240		8 9
250		3 8

Special versions, TAL-TAE

TAL-TAE are variants mostly dedicated to traction applications.

TAL-TAE for other applications than traction, to be replaced by AF version.

Replacement products

Conversion tables > 100A

Standard A

A-series, Classic phase

AF have the electronic module, removing normal issues from A. AF slightly slower than A.

A95		AF96
A110		AF116
A145		AF146
A185		AF190
A210		AF205
A260		AF265
A300		AF305
A320		AF370

Special versions, A...W & (T)AE

A...W – Welding variants that today can be replaced with AF version.

A110W		AF116
A185W		AF190
A300W		AF305
AE110		AF116
AE95		AF96
TAE110		AF116
TAE95		AF96

(T)AE, energy efficient coils (dual winded).

Traction version (B) of A

A...B-series, Classic phase

See AF for comparison.

AF95B		TBD
AF110B		AF116B
AF145B		AF146B
AF185B		AF190B
AF210B		AF205B
AF260B		AF265B
AF300B		AF305B

Old AF

Old AF, Classic phase

First generation AF, difference is footprint where the new are smaller by size.

AF95		AF96
AF110		AF116
AF145		AF146
AF185		AF190
AF210		AF205
AF260		AF265
AF300		AF305

UA(F)

Capacity switching devices.

Without “RA”, UA can be replaced by AF in most cases. “RA” have a better peak resistance.

UA95		-
UA110		AF116/AF140
UA115		AF116/AF140
UAF95		-
UAF110		AF116/AF140
UA95...RA		-
UAF95...RA		-
UA110...RA		-
UAF110...RA		-

Replacement products

Conversion tables

EK

Small EK sizes are convertible with AF 4-pole, AF have slightly worse ratings.

For EK550/EK1000 there is no replacements

EK110	AF116-40
EK150	AF140-40
EK175	AF190-40
EK210	AF205-40
EK370	AF370-40
EK550	-
EK1000	-

Recommending replacements

Tables above can help with the first look towards replacement. However, some of the ratings will differ and that might effect the size. The requirements needs to be checked against the catalog.

EHDB

EHDB, special variant with 2NO/1NC main pole.

Today there is no replacement product

EHDB220	-
EHDB280	-
EHDB360	-
EHDB520	-
EHDB650	-
EHDB800	-
EHDB960	-

EH

EH range is directly replaceable with AF.

EH175	AF190
EH210	AF205
EH550	AF580
EH700	AF750
EH800	AF1250
EH1200	AF1250

Adapter plates

To help conversion a number of adapter plates have been created.

From contactors	To contactor	Type	Order code	Pkg qty	Weight (1 pce) kg
A95, AF95, A110, AF110	AF116, AF140, AF146	PR146-1	1SFN094200R1000	1	0.300
EH150, EH160, EH175, EH210, EG160	AF190, AF205	PR210-1	1SFN094900R1000	1	0.440
EH250, EH260, EH300	AF265, AF305, AF370	PR300-1	1SFN095300R1000	1	0.560
EH370, EH550, EG315	AF400, AF460, AF580	PR460-1	1SFN095700R1000	1	0.900
EH700, EH800	AF750	PR750-1	1SFN096100R1000	1	0.500
OKYM150, OKYM175	AF190	PR185-2	1SFN095100R1001	1	0.500
OKYM200, OKYM250	AF265, AF305, AF370	PR300-2	1SFN095300R1001	1	0.500
OKYM315	AF400, AF460	PR400-2	1SFN095700R1002	1	0.820
OKYM400	AF400, AF460	PR460-2	1SFN095700R1001	1	0.800
OKYM500	AF580	PR580-2	1SFN096100R1002	1	0.700
EH550, EG630, OKYM630	AF580, AF750	PR750-2	1SFN096100R1001	1	1.100

ABB